



February 5, 2003

Bureau of Land Management  
Casper Field Office  
Nancy Doelger  
2987 Prospector Drive  
Casper, WY 82604

Dear Nancy:

The following comments are submitted by Biodiversity Conservation Alliance regarding the Draft Environmental Impact Statement (DEIS) for the South Powder River Basin Coal Project dated January 2003.

We are adamantly opposed to the proposed action. As the Bureau of Land Management (BLM) is certainly aware, public lands belong to all U.S. citizens, not just to local coal miners in the Powder River Basin. It is to be expected that local residents will come out in support of a project like this, but we look to the federal government to bring a larger perspective to the decision process. Since the none of the alternatives put forth in the EIS mean significant long-term employment increases in the region (as shown in Tables ES 1-4), and the applications merely serve the interest of Triton Coal Company, Powder River Coal Company, and Ark Land Company and posses environmental costs to public resources; the project does not serve the national interest. The BLM must choose the No Action Alternative.

**The purpose and need for the Proposed Action is invalid.**

The DEIS includes in its purpose and need for action:

- the fact that there is coal in the arca,
- that the coal companies have put in lease applications,
- that the action will increase the annual production and production life of the existing mines, and
- that the federal government would collect royalties.

Considering the adverse direct, indirect, and cumulative impacts that may result from the proposed action, these reasons do constitute valid purpose and need for the project. First of all, just because there is coal present in the area does not mean that anyone is obligated to mine it. Secondly, it is not the job of any branch of the federal government to line the pockets of coal companies. Moreover, the benefits to area residents will not be substantial or sustainable, and the benefits to the national public will be inconsequential over the long-term, further invalidating the proposed action. And lastly, we do not feel that the royalties earned by state

and federal governments will outweigh the loss in inherent and existence values of the areas natural resources (c.g. wildlife and their habitat). We would argue that the area involved has much more value than any royalties that would be collected. It has high biological diversity and provides habitat to many species, several of which are rare and/or sensitive to human disturbance.

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**The Proposed Action will constitute an irreversible and irretrievable commitment of resources.**

In reviewing the DEIS, we see that the difference between the No Action Alternative and the Proposed Action is: 113 acres of disturbed or destroyed wetlands, an increase of between 27% and 60% in disturbed area (only including land on the site, i.e., not considering cumulative impacts to the region), diversion of Porcupine Creek, Little Thunder Creek, and North Prong Little Thunder Creek, complete vegetation removal on 17,375 acres, reduced plant species diversity, permanent loss of wildlife habitat and thus reduced carrying capacity,

The DEIS notes that most of the wetlands on the tracts would be completely destroyed (DEIS 4-60). And indeed, the DEIS admits that the "replaced wetlands may not duplicate the exact function and landscape feature of the premine wetlands" (DEIS 4-60). No monitoring or specific mitigation is proposed in the DEIS. However, even if it were, it would not likely serve as an acceptable or effective remedy to this irreversible commitment of public land resources. Wetland ecology is extremely complex, and it is both arrogant and short-sighted for the BLM to assume that, through artificial manipulations, even with the most current scientific knowledge, fully functioning ecosystems can be created. In the case of wetlands, this assumption has been debunked time and time again. Moreover, the BLM and other government agencies can do nothing to ensure the mitigation of non-jurisdictional wetlands that will be destroyed as a result of the Proposed Action, which can be of great importance to native wildlife.

3

**The DEIS does not ensure future protection of Threatened and Endangered species nor does it adequately analyze impacts to sensitive species or management indicator species.**

First, we would like to note that this DEIS was released prior to required Section 7 consultation with the Fish and Wildlife Service (FWS), as stated on numerous occasions in Appendix G. The DEIS only makes the vague statement that consultation will occur sometime prior to permit approval. The BLM must include these consultations in the FEIS in order to ensure that the threats to listed and candidate species are adequately understood and disclosed to the public for comment.

In addition, the cumulative impacts discussions only include a laundry list of activities that have the potential for adverse cumulative impacts within the analysis area. There are two flaws here. First, a list of activities is not the same as an analysis of impacts. Second, the general analysis area does not include the wider area over which cumulative impacts are likely to be a factor (the entire Powder River Basin) but rather only the acres directly disturbed by the mining activities included in the Proposed Action.

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In regards to Ute's ladies tresses the DEIS states that leasing "is not likely to adversely affect Ute's ladies tresses" (G-9) even while admitting that this listed species was discovered and undetected on some sites and subsequently destroyed by mining activities. The impacts of such a loss should have been assessed in the DEIS. This mistake must not be repeated in the FEIS. In regards to Black-tailed prairie dogs, the DEIS states that on the tracts "colonies and individuals in those colonies would be likely to be adversely affected if a federal coal lease is issued" (G-13). However, the DEIS makes no claims to whether these impacts will affect the viability of the species. Considering that this species has been extirpated from 98% of its former range and was deemed warranted for listing by the FWS, a more in depth analysis is needed.

In regards to the sage grouse, the DEIS states that mining activities "could diminish the survival and reproductive success of grouse, resulting in a decline of the Rochelle sage grouse population. If precautions are taken to avoid direct mortalities and disturbances to nests and leks during breeding season, grouse will have the opportunity to disperse away from mine activities" (G-46). Is the BLM saying that if these precautions are taken, there is no harm, no foul (pun intended)? The BLM cannot ensure that sage grouse will successfully disperse when no analysis was conducted of the larger surrounding area for suitable habitat and cumulative impacts that may preclude dispersal. Moreover, what are these "precautions" that are to be taken? We cannot find any other mention of them in the DEIS. A similar discussion could be applied to all species which the DEIS determines may be impacted by the Proposed Actions.

In regards to USFS Sensitive and Management Indicator Species and BLM Sensitive Species, while Appendix G lists occurrences of these species in the General Analysis Area, in most cases, it does not adequately discuss what the direct, indirect, and cumulative impacts may affect these specific species. It only puts forth unexamined assumptions which do not constitute an adequate analysis under NEPA. For example, the DEIS states that "[d]isturbance of habitats during mining could impact individual burrowing owls, loggerhead shrikes, and upland sandpipers, but is not likely to cause a trend to federal listing or loss of viability" (G-41). The BLM cannot be certain, when lacking population monitoring data, that this statement is accurate. Moreover, for many species no information about potential impacts or even occurrences in the project area was provided. This does not constitute an adequate analysis under NEPA.

**The DEIS does not adequately analyze cumulative impacts.**

While this DEIS is rather more thorough when addressing cumulative impacts than many we have seen, it fails to address certain cumulative impacts of the Proposed Action. For example, how will the groundwater drawdown associated with this proposal add to the groundwater drawdown which is on-going outside the General Analysis Area, and how then will these cumulative impacts affect plants and animals in the region? It is likely that drawdown of the magnitude discussed in the DEIS will have an adverse affect upon wetlands due to a diminished flow of seeps and natural springs, as documented by Cooper (Sustaining and Restoring Western Wetland and Riparian Ecosystems Threatened by Water Development Projects, pp. 27-33, USDA Gen. Tech. Report 247) who found that a reduction in the water table of 9 inches is extremely detrimental to spring dependent wetlands.

In regards to surface water quality, there is no discussion of the degradation of water quality (and subsequent impacts to wildlife and humans) through the leaching of toxic pollutants resulting from mining activities. If the BLM feels that these types of impacts are not relevant to this project they must say so in the FEIS.

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In regards to wildlife, the DEIS (Appendix G) only takes into account development on the proposed site and thus does not constitute a cumulative impacts assessment. Likewise not provided are analyses on total acres of lost and degraded habitat, not just "disturbed surface" for certain vulnerable species. The DEIS appears to try to get around this by constantly reminding us that reclamation will be ongoing. However, this is not a valid justification for short-term habitat destruction, because the DEIS itself notes that post-mine conditions will in many ways not replicate pre-mine conditions. And where is the assessment of impacts to global climate change?

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In addition, a mere mapping exercise does not constitute cumulative impact analysis. Stating that a total of such and such acres is currently disturbed and so many more acres will be disturbed under the Proposed Action says nothing about the fragmentation of habitat, the loss of connectivity in habitats, or the distribution of useable, effective habitat for any species. There are many such examples. The DEIS's failure to adequately consider cumulative impacts violates NEPA.

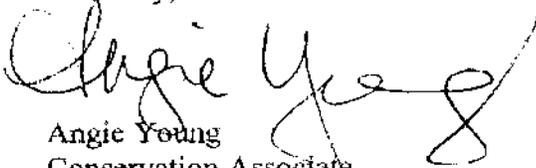
**Conclusion**

The DEIS paints a picture of a house of cards – the Proposed Action is built on "inventorying," "monitoring," "modeling," "mitigating," and "reclaiming." Under this scenario, there are no restrictions; every development is allowed regardless of the environmental impacts. Has the BLM made up its mind to convert this part of Wyoming into some sort of massive sacrifice area? Coal mining, oil and gas development, road building, and power plants are not benign, short-term uses of the land. As members of the public, we and our supporters are opposed to the growing, *de-facto* industrial park which is now irreversibly changing the landscape in the Powder River Basin, all of which is being overlooked, or even approved of, by the BLM in the name of profit and politics. We call on the BLM to deny the applications, selection of the No Action Alternative is called for.

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Please send Biodiversity Conservation Alliance all subsequent NEPA documents and other public communications concerning this project. Note that we have recently changed our name and address (formerly Biodiversity Associates). Please update your records accordingly.

Sincerely,



Angie Young  
Conservation Associate  
angie@voiceforthewild.org



REPLY TO  
ATTENTION OF:

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, OMAHA DISTRICT  
WYOMING REGULATORY OFFICE  
2232 DELL RANGE, BLVD., SUITE 210  
CHEYENNE, WYOMING 82009-4842

February 12, 2003

2  
BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE

03 FEB 18 AM 10:58

Chandler Peter  
Regulatory Project Manager

Ms. Nancy Doelger  
Bureau of Land Management  
Casper Field Office  
2987 Prospector Drive  
Casper, Wyoming 82604

Dear Ms. Doelger:

This is in response to your agency's request for comments on the Draft South Powder River Basin Coal Environmental Impact Statement received January 28, 2003. The proposal addresses potential Lease By Applications (LBA) from the Antelope, North Antelope/Rochelle Complex (NARC), North Rochelle, and Black Thunder Mines in Converse and Campbell Counties. Thank you for the opportunity to comment.

As you know, the Corps of Engineers regulates the discharge of dredged and fill material into wetlands and other waters of the United States primarily under the authority of Section 404 of the Clean Water Act. The EIS discusses wetlands and Corps jurisdiction as well as generalized permit processes. The document identifies jurisdictional and non-jurisdictional wetlands and waters associated with each proposed action and associated alternatives. However, portions of all proposed LBAs have not been the subject of formal wetland and waters delineations confirmed by the Corps and appear to contain jurisdictional and/or non-jurisdictional waters. For example, the NARC South LBA includes Sections 28-30, Township 41N, Range 70W as well as Sections 24 and 25, Township 41N, Range 71W. These areas have not been reviewed nor confirmed by the Corps. Based on this, clarification is recommended relative to figures contained in Sections 3.8 and 4.1.7, as well as Table 4-11. The Corps recognizes that the EIS does not need to portray exact acreages of jurisdictional wetlands and waters.

If you have any questions concerning this matter, please contact Chandler Peter at (307) 772-2300. Please refer to File No. 200340022 in any future correspondence.

Sincerely,

Matthew A. Bilodeau  
Program Manager  
Wyoming Regulatory Office



**Triton Coal Company, LLC**  
 North Rochelle Mine

510 Reno Road  
 Gillette, Wyoming 82718  
 (307) 464-0533

BUREAU OF LAND  
 MANAGEMENT  
 CASPER FIELD OFFICE

03 APR -9 AM 10: 52

**3**

Ms. Nancy Doelger  
 Bureau of Land Management  
 Casper Field Office  
 2987 Prospector Drive  
 Casper, Wyoming 82604

Re: South Powder River Basin Coal Environmental Impact Statement  
 West Roundup Lease by Application - WYW151134

Dear Ms. Doelger,

Triton Coal Company, LLC - North Rochelle Mine ("TCC") applied for the West Roundup Lease by Application tract on July 28, 2000. The Bureau of Land Management ("BLM") reconfigured the lease and informed TCC via letter received on April 19, 2002. Although TCC has objected and continues to object to this lease tract reconfiguration (shown as Alternative 2 - "Draft" South Powder River Basin Coal Environmental Impact Statement, Page 2-29), engineering design work has proceeded under the assumption that the reconfigured lease tract might be the configuration offered for bid.

However, BLM's reconfigured lease, as communicated in the April 19, 2002 letter, contained Lot 13 of T.42N., R.70W., 6th P.M., Wyoming, Section 9. This lot appears to have been inadvertently omitted from Alternative 2 - "Draft" South Powder River Basin Coal Environmental Impact Statement. TCC requests that the Alternative 2 description be corrected to include Lot 13.

In reviewing the "Draft" South Powder River Basin Coal Environmental Impact Statement, it has come to TCC's attention that an additional tract configuration is being proposed (Alternative 3 - "Draft" South Powder River Basin Coal Environmental Impact Statement, Page 2-31). TCC objects to the Alternative 3 configuration for several reasons:

1. The added acres are of a much higher strip ratio than the original lease configuration, which will substantially increase mining cost,
2. Engineering design work has already taken place on the original lease configuration and on BLM's first reconfiguration. Additional drilling and engineering design expenditures would be required to obtain sufficient information and geologic data to formulate a competitive bid and mine plan design for the new Alternative 3 reconfiguration, and
3. Alternative 3 recoverable tonnages increase 58% from TCC's original configuration and 22% from BLM's reconfiguration (Alternative 2). A corresponding increase in Bonus Bid payments would result. However, the

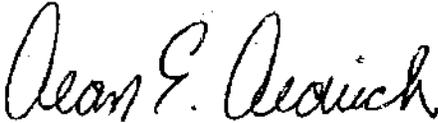
increased bid cost would include primarily high strip ratio reserves that are currently uneconomical to mine, and which were not considered initially for this very reason. Due to the "Fair Market Value" assessments unpredictability, these bonus bid increases may be financially onerous.

In addition, TCC objects to the inclusion of North Rochelle Mine Lease WYW-127221 Proposed Modification and the coal contained under the lands of North Rochelle's USFS special use permit, in any lease configuration scenario. TCC feels these coals are unsuitable for mining and will be by-passed as the result of sound economic decisions now and in the future. The development of a competitive bid that includes valuing coal reserves that will never be mined unnecessarily inflates the reserve cost beyond reasonable fair market value.

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In conclusion, TCC requests that the West Roundup Federal Coal Lease WYW-151134 be offered as originally applied for by TCC, that Alternatives 2 be corrected to include Lot 13 of T.42N., R.70W., 6th P.M., Wyoming, Section 9, that Alternative 3 be eliminated from consideration, and that the coals under the lands included in North Rochelle Mine Lease WYW-127221 Proposed Modification and North Rochelle's USFS special use permit be eliminated from any configuration due to negative economics.

Thank you,



Alan E. Aldrich, P.E.  
North Rochelle Mine  
Triton Coal Company, LLC  
510 Reno Road  
Gillette, Wyoming 82718  
(303) 464-2610

DIRECTOR OF LAND  
MANAGEMENT  
CASPEN FIELD OFFICE  
03 APR -9 AM 10:52



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
NATIONAL PARK SERVICE  
CASPER FIELD OFFICE  
INTERMOUNTAIN REGION

03 APR 10 AM 10:57  
1795 West Alameda Parkway  
PO Box 25287  
Denver, Colorado 80225-0287



IN REPLY REFER TO:  
DES-03/0005

Nancy Doelger  
Bureau of Land Management  
Casper Field Office  
2987 Prospector Drive  
Casper, WY 82604

April 8, 2003

RE: Subject: Comments on Bureau of Land Management's Draft Environmental Impact Statement on South Powder River Basin Coal, Wyoming

Dear Ms. Doelger:

Thank you for the opportunity to review the South Powder River Basin Coal Draft Environmental Impact Statement. The National Park Service provides the following comments to you for your consideration. These comments are a compilation of concerns from a number of National Park units, primarily located in the Midwest Region.

The pace of resource and other development in the Powder River Basin has increased substantially. Several Midwest Region parks are located downwind of this development, including Class I air quality areas at Wind Cave, Badlands, and Theodore Roosevelt National Parks. These National Park units in particular are concerned about potential adverse impacts to their air quality resulting from implementation of the proposed project.

We understand Wyoming will analyze the impacts of coal mining related to these leases during the permitting process. We also understand these coal-mining operations, by themselves, may not have a pronounced impact on air quality in Midwest Region parks. However, the National Park Service has become increasingly concerned about the cumulative air quality impacts of the many individual air pollution sources on Federal, State, and private lands appearing upwind of these parks. While the incremental impacts of any given activity, such as the coal leases in question, may be negligible, the additive effects of many such activities may indeed be significant.

We encourage the BLM, and by extension the State of Wyoming, to continue to consider not only the incremental air quality degradation which will be caused by these coal leases but also the cumulative impacts of other activities to which this additional degradation will be added. Again, we understand that incremental impacts of mine development tend to be relatively minor, but the cumulative impacts from the likely outcome of mining, increasing energy production, is the greatest threat to the Class I air quality areas in the Midwest Region. We have great concerns over what we feel are existing and increasing

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impacts to our air quality resulting from energy development, and we will continue to monitor the development of these facilities in the Powder River Basin and elsewhere.

The National Park Service also has concerns regarding the potential effects of the proposed project to Land and Water Conservation Fund (L&WCF) properties that are in proximity to the project area. Following our review of the document, we note that a number of L&WCF properties were not included in the impact assessment:

- L&WCF Project # 56-00569 - Conner Battlefield State Historic Site
- 56-00471 - D/Ranchester Community Park
- 56-00623 - Ranchester Park Improvements
- 56-00721 - Tongue River Recreation Area
- 56-00758 - Ranchester Rotary Pond

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Environmental consequences to L&WCF properties must be analyzed in accordance with Section 6(f) of Land and Water Conservation Fund Act.

Again, we appreciate the opportunity to review the subject document and provide these comments. If you have any questions about these comments please contact Cheryl Eckhardt, Intermountain Regional Office, Planning and Compliance at 303-969-2851, or Nick Chevance, Midwest Regional Office, Planning and Compliance, 402-221-7286.

Sincerely,

Cheryl Eckhardt  
NEPA/106 Specialist, IMRO

BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE  
03 APR 10 AM 10:57

- cc:
- Nick Chevance, MWRO
  - Terree Klanecky, MWRO
  - Steve Cinnamon, MWRO
  - David Pohlman, MWRO
  - Linda Stoll, WICA
  - William Supermaugh, BADL
  - Sandee Dingman, BADL
  - Brian Kenner, BADL
  - Valerie Naylor, THRO
  - Date Morlock, WASO

# Office of Federal Land Policy

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MANAGEMENT  
CASPER FIELD OFFICE

03 APR 10 AM 10: 5

122 West 25th Street \* Herschler Bldg., 1 West \* Cheyenne, WY 82002-0600 \* 307-777-3736 \* 307-777-3524 fax

April 8, 2003

Nancy Doelger  
BLM, Casper Field Office  
2987 Prospector Drive  
Casper, Wyoming 82604

**Re: South Powder River Basin Coal (formerly Powder River/Ark Land/Triton/Antelope  
Coal LBAs) - DEIS  
State Identifier Number: 2001-141**

Dear Ms. Doelger:

This Office has reviewed the referenced Draft Environmental Impact Statement on behalf of the State of Wyoming. This Office also distributed the referenced document to all affected state agencies for their review, in accordance with State Clearinghouse procedures. Attached please find comments from the Wyoming Game and Fish Department. Comments from the Wyoming Department of Environmental Quality should have been received by your office. We ask that you give these comments due consideration.

Issues such as air quality, ground water, surface water, wildlife and overlapping development continue to be concerns and topics for discussion in order for the resources in the Powder River Basin to be developed in an orderly and responsible manner

Please continue to provide this office with either (2) two hard copies or electronic copy (submit to [OFLP@state.wy.us](mailto:OFLP@state.wy.us)) of continued information for review and distribution to interested agencies. Thank you for the opportunity to comment.

Sincerely,

*Julie Kozlowski*  
Ex - Julie Kozlowski  
Assistant Director

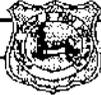
JK:tjw

Enclosures: (1)

Wyoming Game and Fish Department

WYOMING  
GAME AND FISH DEPARTMENT

Gene Freudenenthal, Governor



Scott Manning, Director

"Conserving Wildlife - Serving People"

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BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE

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March 21, 2003

WER 10137.02  
Bureau of Land Management  
Casper Field Office  
Draft Environmental Impact Statement  
South Powder River Basin Coal  
State Identifier Number: 2001-141  
Campbell and Converse Counties

Office of Federal Land Policy  
Herschler Building, 1W  
122 W. 25<sup>th</sup> Street  
Cheyenne, WY 82002

Dear Sir/Madam/Staff:

The staff of the Wyoming Game and Fish Department has reviewed the Draft Environmental Impact Statement for the South Powder River Basin Coal. We offer the following comments.

**Terrestrial Considerations:**

The wildlife sections adequately cover the affected environment to include accounting for seasonal ranges, wildlife species within the area, and potential impacts during coal mining operations.

A remaining concern is the lost recreational opportunity on federal lands during mining and reclamation activities. The DEIS addresses this point, but does not offer any mitigation to alleviate the impact. On page 4-49 (Section 4.1.12), it states that as many as 4,076.4 acres of federal lands would be removed from public access if these Lease by Application (LBA) tracts were leased under the maximum tract area configurations. These lands represent a significant portion of the currently accessible public lands for recreational opportunity within Antelope Hunt Area 27, Deer Hunt Area 10, and small/upland game Hunt Area 36. The loss of hunting access to these lands may decrease the ability of our Department to manage big game species toward objective levels.

It is indicated that the loss of recreational opportunity would be temporary, but temporary is not described or defined. Reclamation may not begin for up to five years after mining begins. It will then take a minimum of ten years before bond release occurs and lands could be available for public access. Other mined lands within the Powder River Basin have been inaccessible for

as long as twenty years. It is reasonable to assume that the temporary loss of public access will be at least fifteen years and most likely closer to twenty years.

The DEIS states that the coal companies have been involved in land exchanges to create additional public access. However, efforts to date do not equal the land previously lost, nor is there any mention in this DEIS that these efforts will continue. The FEIS should include mitigation to address the significant loss of public access.

Alternatives exist for mitigating this impact. The company could lease adjacent private lands and make them available for public recreational opportunity. Landowners allowing free public access would be protected from liability under existing state statutes. The companies could also offer their privately owned lands for public access, within operational safety constraints.

### **Aquatic Considerations:**

Overall, the Draft South Powder River Basin Coal Environmental Impact Statement (DEIS) does not adequately address the potential impacts on aquatic species and their habitats within the project area. Additionally, the DEIS does not discuss the cumulative impacts of coalbed methane (CBM) discharges on channel and floodplain connectivity throughout the watersheds and perhaps even sub-basins. Assessment and monitoring of aquatic species and their habitats need to be developed and included in the DEIS. Specific concerns and comments of the Wyoming Game and Fish Department pertaining to the DEIS are listed below.

P. 3-49 (3.10.6): the DEIS states that “under natural conditions, aquatic habitat is extremely limited by the ephemeral nature of surface waters ...” and that “all perennial streamflow and bodies of water in the area are now the result of coalbed methane (CBM) associated discharges”. The DEIS makes the inference that since CBM water is present, all is well that was not well before by saying: “the lack of deep-water habitat and extensive and persistent water sources limits the presence and diversity of fish and other aquatic species”. While the Department does not disagree that CBM water has effectively made these drainages perennial, the DEIS does not supply supporting evidence for these statements. Data is extremely lacking in this document on the pre- and post-mining effects on fish and other aquatic species presence in the drainages impacted or proposed future impacts. These cumulative impacts, open pit coal removal and CBM-associated aquifer depletion and surface water discharges, have likely changed the aquatic habitat community in this area and it should not be assumed that it is for the “good” (i.e., more water will make it better).

P.3-69 (3.11): The DEIS repeats the above argument about limited aquatic habitat and thereby makes the inference that public fishing opportunities are extremely limited, noting Little Thunder Creek supports channel catfish and a “variety of non-game fish.” These “variety of non-game fish” should be treated with equal concern as game fish species in this area, as it is likely a community of native non-game species may be affected. Inventory of the aquatic species community likely to be affected should be done to document what species are present,

Sir/Madam/Staff

March 21, 2003

Page 3 -- WER 10137.02

what types of habitat they occupy, and how they might be affected by this development, including the additional water scenario. Although it appears it will not be directly impacted by this proposed leasing, Little Thunder Reservoir (R71 T43 S22) is immediately adjacent to the project area and supports an important rainbow trout, bluegill, and largemouth bass fishery. Flow enhancement, due to CBM produced water, has benefited this fishery and should be noted. However, this does not suggest that this same flow enhancement is good for the stream channel or the native fish and amphibian species that occupy it. Only good inventory work and subsequent monitoring can provide some clue to those effects.

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P. 4-6 (4.1): The DEIS notes, "if necessary, streams would be diverted into temporary channels or blocked to prevent flooding of the pits." The Department would recommend that the design of these channels be such as to maintain stream channel and floodplain integrity (considering reference reach channel morphology; designing for hydraulically stable channels, etc.). The design should minimize impacts on species presently using these channels, even if that use is just seasonal. Again, pre-assessment of species presence and habitat needs should be taken into account, and then channel modification be designed to address those needs. Simply "blocking" the channel should not be done unless it can be shown that this will not impact the movement of fish and/or impact the stream channel and floodplain integrity.

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Further on in this section, the DEIS notes that a direct "beneficial" impact of this expanded coal mining and landscape alteration would be to "lower and flatten terrain". The benefit from "lower and flatten terrain" would be the reduction of water runoff and increased infiltration. The Department is concerned that this "benefit", coupled with the unknown duration of CBM discharge water, might substantially and permanently alter the hydrograph for the drainage, with subsequent alteration in aquatic species distribution within the drainage. Again, the DEIS does not address whether this watershed may ultimately be impacted, negatively or positively, by having more water than it ever had for a period of time, followed by a much more extended period of decreased flows (noted under 4.5.5, P. 4-116). A good survey of existing aquatic species presence and distribution and their habitats followed by post-development monitoring would begin to address the Department's concern.

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P. 4-68 (4.1.10): This section seems relatively thorough regarding terrestrial wildlife in the project area, with only one short reference to aquatic wildlife, where 3 fish species in Antelope Creek are mentioned, based on a 1980 survey. Although Antelope Creek is not planned for disturbance during mining, a re-assessment of species in this stream, as well as the ephemeral channels should be conducted. Of the 3 fish species, they list one as "flathead minnow". This should be clarified to either be the "flathead chub" or the "fathead minnow" - a common mistake, but certainly very different fish. The correct identification of this species is very important since the Department has categorized the flathead chub as a Status 3 species. Status 3 species are widely distributed throughout its native range and populations appear to be stable, but its habitat is declining or vulnerable. The Wyoming Game and Fish Commission mitigation category for this type of resource is "High". The mitigation objective for this resource category is to realize "no net loss of habitat function within the biological community which encompasses the project site". Under these guidelines, it will be important that the project be

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conducted in a manner that either avoids the impact, enhances similar habitat or results in the creation of an equal amount of similarly valued fishery habitat. Specific measures should be included in the decision to meet this mitigation objective.

P. 4-117 (4.5.5): In this section, the DEIS indicates cumulative impacts are “minimal” to the Cheyenne River drainage because “most streams in the area are naturally dry throughout most of the year”, or “typically dry for a substantial portion of the year”. This sounds like an attempt to degrade an ephemeral stream flow to something less important. Regardless of the flow regime of these channels, intermittent and/or ephemeral flows might be very important to the life cycle of some fish species and most amphibians, and should not be discounted as “minimal” impacts by changing this regime. Again, an assessment of aquatic species and their habitats should be completed, and potential impacts, positive or negative, should be discussed. The DEIS further understates the importance of these habitats on P. 4-135 with the statement “Cumulative impacts on fish habitat and populations would be minimal because local drainages generally have limited value due to intermittent or ephemeral flows.”

The Wyoming Game and Fish Department has not conducted investigations in this portion of the watershed and we have no current records that sufficiently detail fish, amphibian and reptile species occurrence and distribution. However, based on our records from the Cheyenne River drainage, we expect that several fish species could be present, including the following native species: black bullhead, channel catfish, white sucker, mountain sucker, flathead chub, fathead minnow, longnose dace, plains killifish, plains minnow, sand shiner, and river carpsucker. Introduced species could include green sunfish and common carp. Amphibian and reptile species are also highly dependent on these watersheds and stable riparian conditions. The specific habitat needs for many of these species are relatively unknown, but their reliance on these smaller tributaries suggests a strong dependence on, and adaptation to, the ambient water quality conditions and the normal hydrographic flow regime. We recommend that information be collected on the species presence and distribution in the watershed that is to be affected and the impact to these species be assessed.

The mountain sucker, flathead chub, and plains minnow are listed on the Department's “Species Watch List” database. This database contains a “watch list” of species that may need special management attention in Wyoming. The list is a combination of species identified by the Wyoming Game and Fish Department, U.S. Fish and Wildlife Service, U.S. Forest Service (Regions 2 and 4), Bureau of Land Management, Partners in Flight, the Wyoming Natural Diversity Database, and the University of Wyoming Cooperative Fish and Wildlife Research Unit. Current Threatened and Endangered species, and those currently petitioned or proposed for designation under the Endangered Species Act, are included. Species that various entities perceive as possibly needing Endangered Species Act protection in the foreseeable future are also included. We certainly do not expect Endangered Species Act petitions on all of these species. This database is intended to identify species that could potentially be petitioned, among which, it is assumed, are those for which Endangered Species Act actions are the likeliest to occur. Identification of these species can result in additional management attention to be focused on them. Both the flathead chub and plains minnow formerly had a Federal listing as category 2

species by the US Fish and Wildlife Service. The US Fish and Wildlife Service encourages the protection of former category 2 species, and many agencies have implemented guidelines and policies to ensure protection of these species to preclude the need for listing.

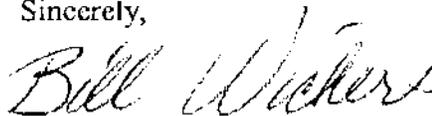
Finally, P. G-44 (Mitigation and Monitoring): Terrestrial wildlife mitigation and monitoring is outlined, but virtually nothing is proposed for aquatic wildlife and their habitats. The Department has briefly outlined some mitigation recommendations that might be considered when stream channels are moved. However, since the DEIS has not completed an assessment of aquatic species or their habitats, suggesting additional mitigation recommendations are premature. Regretfully, due the extensive mining development in this region of the watershed, it has left Wyoming with a de-facto sacrifice zone for cumulative impacts to the watershed. The lack of pre-data, continuing monitoring data, and post-impact data suggest that cumulative impacts, since un-measurable, are not occurring. Although we might agree that this part of the watershed may not have ever supported a substantial aquatic ecosystem, and impacts to what remains might be slight to what has occurred already; assessment and monitoring of what is there now, and potential impacts, is needed.

In summary, the Department recommends the following:

- Additional ambient and background information on fish, amphibian and reptile species presence and distribution should be collected and the applicant should provide their assessment of potential impacts to these species to the Wyoming Game and Fish Department for review.
- Present and expected hydrological and geomorphic stream channel and riparian conditions in the affected drainage subject to these added discharges should be assessed and a detailed plan of action developed that will address how changes to the integrity of these stream channels, and the present habitat features they provide, will be dealt with.

The Department would like to be involved with the site-specific analysis to suggest measures to minimize aquatic impacts. The Bureau of Land Management should contact Bob McDowell, our Sheridan Region Fish Supervisor, at (307) 672-8003, Ext. 236, in this regard.

Sincerely,



BILL WICHERS  
DEPUTY DIRECTOR

## Tindall Operating Company

12741 East Caley - Suite 142  
Englewood, Colorado 80111  
(303) 850-7272 Fax (303) 850-0175

7

BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE  
03 APR -9 AM 11:09

March 31, 2003

United States Department of the Interior  
Bureau of Land Management  
Casper Field Office  
2987 Prospector Drive  
Casper, WY 82604-2968

Attn: Nancy Doelger

RE: South Powder River Basin Coal Draft EIS  
Case File WYW150210, NARO North Coal Lease Application

Dear Ms. Doelger:

Tindall Operating Company ("Tindall") and a number of other oil and gas operators own oil and gas leasehold interests, including a number of producing oil and gas wells, in the immediate vicinity of the above-referenced coal lease application by the Powder River Coal Company ("Powder River Coal"). Tindall and others also own numerous other producing and non-producing leasehold interests within Powder River Coal's existing LBA lease boundaries and/or mining permit boundaries. Many of these oil and gas leasehold interests ("Senior Leasehold Interests") are senior-in-time to the proposed coal lease under which Powder River Coal would conduct its proposed coal mining operations ("Junior Coal Lease").

The issuance of the NARO North Coal Lease Application may have serious adverse effects on the operation of existing oil and gas wells and the development of any future wells on the lands included within the Senior Leasehold Interests. Such adverse affects include, but are not limited to, access issues for the operation of existing or future wells, right of way conflicts for gas sales lines for gas well gas and casinghead gas, and the damage or destruction of surface facilities and/or downhole equipment.

These concerns are particularly important given: 1) the first-in-time status of these Senior Leasehold Interests; and 2) the federal policy embodied by 43 CFR § 3400.1(b), which provides that a coal lease may not be issued for lands on which there is a pre-existing lease for another mineral resource, unless the coal lease includes "suitable stipulations for simultaneous operations." Thus, any Junior Coal Lease must recognize, and be made subject to, valid and existing senior rights in the same lands.

Although the Draft EIS acknowledges a significant amount of oil and gas development is currently taking place on lands included within the proposal, it fails to adequately address the conflicts which will inevitably arise between the proposed coal mining operations and oil and gas operations conducted under senior-in-time oil and gas leases. For example, when the Draft EIS states in section 4.1.2.1 that "[a]ll oil and gas production equipment would have to be removed to a level below the coal," it ignores the seniority of valid and existing rights and the required stipulations which would expressly make the Junior Coal Lease subject to those senior rights. Thus, the BLM's analysis is incomplete because, in its consideration of existing land uses, it does not discuss the priority of senior existing rights or the impacts of the leasing proposal on those senior leasehold rights.

Page 2

Powder River Coal/BLM Letter

BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE

The Draft EIS also states in section 4.1.12 that "[n]egotiations are ongoing between the applicant mines and the existing oil and gas leases on how to proceed with both operations if the coal tracts are leased. **03 APR - 9 AM: 09**  
To the contrary, Powder River Coal abruptly and unilaterally terminated any such negotiations with Tindall in November of 2002. In fact, due to Powder River Coal's refusal to conduct any further negotiations, Tindall was forced to protect its senior interests against another proposed mine plan change by commencing a contested case proceeding which is currently pending before the Wyoming Environmental Quality Council. Unfortunately, the Draft EIS's reliance appears to be misplaced when it assumes the Powder River Coal is negotiating with the various senior oil and gas interest holders to resolve the inevitable conflicts which will result from this proposal. Accordingly, Tindall respectfully requests additional analysis on the impact of this leasing proposal on valid and existing senior leasehold rights in the same lands.

Thank you in advance for your attention to and consideration of these issues. Should you have any questions or require additional information, please feel free to contact me.

Yours truly,



R. Lee Tucker, President  
Tindall Operating Company

Cc: Wanda I. Berget  
Powder River Coal Company  
Call Box 3034  
Gillette, WY 82717

Victor E. Garber  
Manager of Western Lands  
Peabody Energy Company  
PO Box 1508  
Gillette, WY 82717-1508



**Triton Coal Company, LLC**  
 North Rochelle Mine

Signature  
 Confirmation # 91 3408 2133 3930 1036 4050

510 Reno Road  
 Gillette, Wyoming 82718  
 (307) 464-0533

April 9, 2003

Nancy Doelger  
 Casper Field Office  
 Bureau of Land Management  
 2987 Prospector Drive  
 Casper, WY 82604

BUREAU OF LAND  
 MANAGEMENT  
 CASPER FIELD OFFICE  
 03 APR 11 AM 11:01

**Re: Draft Environmental Impact Statement (DEIS) South Powder River Basin Coal -  
 Campbell and Converse Counties, Wyoming; 3425 (LBA)**

Ms. Doelger:

Triton Coal Company, LLC (Triton) appreciates the opportunity to submit comments concerning the South Powder River Basin Coal Draft Environmental Impact Statement (DEIS). This DEIS assesses the environmental consequences of decisions to hold five separate competitive, sealed-bid sales and issue leases for five tracts of federal coal located adjacent to four existing surface coal mines in Campbell and Converse Counties, Wyoming. Triton's comments are included below.

There is a minor error in the first two sentences of the third full paragraph in the Executive Summary page ES-21. The sentences, "The PM<sub>10</sub> 24-hour NAAQS was not exceeded at the North Rochelle Mine prior to 2002. During 2001 and early 2002, there were a total of 10 exceedances of the PM<sub>10</sub> 24-hour NAAQS at the North Rochelle air quality monitoring sites." are in disagreement. The first sentence should end "... through the first quarter of 2001." to be correct and in agreement with the second sentence of this paragraph.

There is also a minor error on page 3-29 where the first full sentence on the page states, "Table 3-6 shows the existing ANC monitored in some mountain lakes and their distance from the General Analysis Area." No distance to the General Analysis Area is reflected on Table 3-6 of this page.

Thank you for the opportunity to comment on the Draft Environmental Impact Statement. If you have any question, please feel free to contact me at (307) 464-2657.

Sincerely,

*Shane Gasvoda*

Shane Gasvoda  
 Environmental Engineer



# ARK LAND COMPANY

9

BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE

**DOUGLAS M. DOWNING**  
Vice President - Land

03 APR 14 AM 11:09

April 10, 2003

Bureau of Land Management  
Casper Field Office  
Attn: Ms. Nancy Doelger  
2987 Prospector Drive  
Casper, WY 82604

**RE: South Powder River Basin Coal Draft Environmental Impact Statement (DEIS)**

Dear Ms. Doelger:

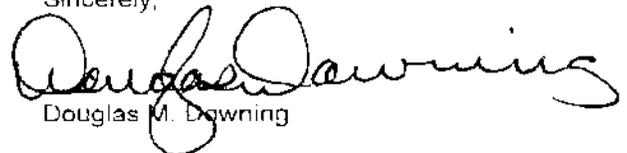
Upon review of the DEIS, we are submitting the following comments:

1. DEIS Page 2-18 states, "An average recovery factor of approximately 92 percent is therefore assumed, based largely upon TBCC's estimate of the unmineable reserves within the ROWs." To be more accurate, we would like to replace that sentence with the following: *"An average recovery factor of approximately 92 percent of the mineable coal is therefore assumed."*
2. Please add on page 2-20 of the DEIS at the beginning of the paragraph concerning Topsoil removal: *"Prior to disturbance, sediment control structures will be built as needed downstream of the mine to control runoff. Additional support structures will be constructed in advance of mining, such as roads, power lines, substations, flood control measure, etc."*
3. There is a slight error on Figure 4-3 "Maximum Modeled PM10 concentrations at BTM Ambient Air Boundary for 2002". There is one area source shown in Sections 1, 6, 5, & 4, in the north part of BTM, which needs to be removed. This area source does not exist in 2002. I believe the consultant who drafted this exhibit must have misread the permit figure from which it derives, which shows this as an area source in 2012, not 2002. All other area sources depicted on the figure are correct.

In addition Ark Land Company would like again to support leasing Alternative 2 as defined in the Draft Environmental Impact Statement to promote timely recovery of the coal resource and reduce potential permitting delays.

Thank you for the opportunity to comment. If you have any questions, please call Wendy Hutchinson at 307-464-2113.

Sincerely,

  
 Douglas M. Downing

DMD:cav

A Subsidiary of



1 CityPlace Drive, Suite 300 St. Louis, Missouri 63141 (314) 994-2700 Fax (314) 994-2940  
Direct (314) 994-2954 e-mail: ddowning@archcoal.com



United States Department of the Interior

BUREAU OF LAND  
MANAGEMENT  
CASPER FIELD OFFICE

FISH AND WILDLIFE SERVICE

03 APR 14 PM 3:12

Ecological Services  
4000 Airport Parkway  
Cheyenne, Wyoming 82001

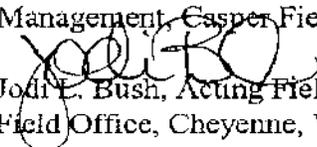
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ES-61411  
br/W.02/WY6823

April 11, 2003

Memorandum

To: Nancy Doelger, Environmental Protection Specialist, Bureau of Land Management, Casper Field Office, Casper, Wyoming

From:  Jodi L. Bush, Acting Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, Cheyenne, Wyoming

Subject: Comments on the South Powder River Basin Coal Draft Environmental Impact Statement

This responds to your requests for comments on the South Powder River Basin Coal Draft Environmental Impact Statement (DEIS) dated January 24, 2003, received in the Wyoming Field Office on January 27. The DEIS analyzes the impact of the sale and issuance of leases for five separate tracts of Federal coal located adjacent to four existing surface coal mines in Campbell and Converse Counties, Wyoming.

**GENERAL COMMENTS**

The U.S. Fish and Wildlife Service (Service) does not believe that the DEIS and Appendix G provide an adequate assessment of the effects of coal mining once these tracts are leased. The Bureau of Land Management (Bureau) defers discussion of the effects to endangered, threatened, proposed and candidate species, and migratory birds to future consultations between the Service and the Wyoming Department of Environmental Quality, Land Quality Division (WDEQ/LQD) which acts as the Office of Surface Mines' (OSM) representative for section 7 consultation. However, the Bureau is the only agency with discretionary authority to issue a coal lease. Once these leases are issued the lessee has the right to mine the coal. Therefore, we recommend that the Bureau determine the effects to listed and proposed species, if any, of all future actions which are reasonably certain to occur as a result of these leasing actions, prior to their issuance.

**Threatened and Endangered Species**

The Bureau should work with the Service in developing surveys, impact minimization measures and conservation measures for all Federally listed species. Section 7(a)(1) of the Endangered Species Act of 1973 (Act), as amended, (50 CFR 402) authorizes

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the Bureau to use their programs to further the conservation and recovery of threatened and endangered species. Therefore, we encourage the Bureau to incorporate measures for the conservation of listed species into the lease stipulations.

} 1

**SPECIFIC COMMENTS**

Page ES-25, Executive Summary: The Executive Summary states that “Bald eagle roosts and unique or concentrated sources of carrion or prey have not been documented in the study area for any of the Lease-by-Application (LBA) tracts”. However, coal bed methane (CBM) development is occurring on the Little Thunder LBA tract and near the other LBA tracts. The Bureau’s final Biological Assessment (BA) for the Powder River Basin Oil and Gas Project states that increased traffic, road kills and carrion, resulting from CBM activities, potentially increases vehicle collision hazard to bald eagles”. In the Services’s biological and conference opinion for the Powder River Basin Oil and Gas Project (USFWS 2002), page 28, it states “the Service believes that as a direct result of the construction of approximately 7,136 miles of new improved roads and 5,311 miles of overhead distribution lines, there will be direct loss of bald eagles”. The Service recommends that the cumulative effects section analyze the impact of CBM development on and near the LBA tracts. In addition, the EIS should have a Service approved system for monitoring compliance with raptor proof construction techniques as outlined in *Suggested Practices For Raptor Protection on Power Lines. The State of the Art* (Avian Power Line Interaction Committee 1996).

} 2

Page ES-25, Executive Summary: The Executive Summary states that portions of the surface estate of the North Antelope/Rochelle (NARO) North, Little Thunder, and West Roundup LBA tracts are part of the Thunder Basin National Grasslands, which are administered by the Forest Service. Access to these public lands would be restricted during mining and reclamation. The Service recommends that a stipulation be placed on the appropriate LBA tracts with Federal lands that the mining companies would pursue an equivalent acreage of leased private lands from willing landowners for habitat conservation and public recreation including wildlife viewing, hunting, etc. In lieu of this the mining companies affected could make an equivalent annual payment to the Wyoming Game and Fish Department’s Access Yes program.

} 3

Page 1-7, Introduction: The DEIS states that this document will be used by OSM to make decisions related to the approval of the Mineral Leasing Act of 1920 (MLA) mining plans for these tracts... The DEIS does not fully analyze the potential impacts of all phase of mining that are likely to occur if these leases are issued. The Service recommends using *An Environmental Guide To Western Surface Mining Part Two: Impacts, Mitigation and Monitoring* (Moore and Mills 1977). This document is an excellent reference for identifying all the phases of mining operations which should be analyzed in the leasing Environmental Impact Statement (EIS).

} 4

Page 2-50, Table 2-5, Summary Comparison: The DEIS indicates that the magnitude and duration of impacts to sage grouse habitat from the proposed action and the alternatives would be moderate and short term on the expanded mine areas. However, Appendix G, page G-46 states “Mining could potentially eliminate all suitable habitat (for sage grouse) within the lease areas”.

} 5

Additionally, the DEIS states that ...development of those tracts could potentially affect (sage) grouse through habitat disturbance and degradation. The EIS analysis should clearly identify the amount and type of sage grouse habitat (lek, nesting, brood rearing) affected by this project.

5

Page 2-50, Table 2-5, Summary Comparison: The DEIS states that there is “no effect due to the lack of occurrence in the area” for black-footed ferrets for all proposed alternatives listed in this table. However in Appendix G, the DEIS (pages G-11,15, 19 and 24) refers to a “may affect, but not likely to adversely affect” determination for the black-footed ferret. The DEIS and Appendix G should be consistent in their evaluations of affects to this species.

The DEIS identifies black-tailed prairie dog towns on the NARO, South LBA tract, the area added under alternatives 2 and 3 to the West roundup LBA tract, and the West Antelope LBA tract. It is the Service’s understanding that the mines have conducted annual surveys for black-footed ferrets over the past 20 years. The DEIS and Appendix G should determine if the black-tailed prairie dog towns occurring on the LBA tracts are part of a larger complex which meets the Service’s criteria for black-footed ferret surveys. If the issuance of these leases is expected to results in adverse affects to the black-footed ferret or if black-tailed prairie dog colonies or complexes greater than 79 acres will be disturbed, surveys for ferrets are recommended in order to determine if the action will result in an adverse effect to the species. However, if additional information is available regarding the history of surveys, plague, poisoning, sign and sittings in the area which clearly indicate the absence of ferrets within the analysis area in recent history, this information should be included in the EIS and BA. The Service could consider this as supporting the likelihood of ferrets being present in the analysis area. Until such time that this information is collated, the Service recommends additional surveys in accordance with the guidelines.

6

Page 3-48, Section 3.10.4 Game Birds: The DEIS does not mention that the sage grouse has been petitioned for listing under the Act because of rangewide population declines. Please include the following information in your discussion of sage grouse:

The Service has received several petitions to list the greater sage-grouse (*Centrocercus urophasianus*) under the Act. The causes for the greater sage-grouse range wide decline are not completely understood, and may be influenced by local conditions. However, habitat loss and degradation, as well as loss of population connectivity are important factors (Braun 1998, Wisdom et al. 2002). Any activities that result in loss of sagebrush, or degrade important sage-grouse habitats, should be closely evaluated for their impacts to sage grouse.

7

Greater sage-grouse are dependent on sagebrush. Population and habitat analyses suggest that wintering habitat can be as limiting as mating and breeding habitats. Therefore, you should work with the local Wyoming Game and Fish biologist to identify important greater sage-grouse habitats within the project area, and appropriate mitigative measures to minimize potential impacts from the proposed project. The Service recommends surveys and mapping of important greater sage-grouse habitats where local information is not available. The results of these

surveys should be used in project planning, to minimize potential impacts to this species. No project activities that may exacerbate habitat loss or degradation should be permitted in important habitats.

In Wyoming, anecdotal information, from several sources in Wyoming, suggests that greater sage-grouse populations are negatively affected by construction (energy development) activities, especially those that degrade important sagebrush habitat, even when mitigative measures are implemented (Braun 1998, Lyon 2000). There is some evidence that grouse populations do repopulate areas developed for resource extraction after reclamation for the species (Braun 1987). However, there is no evidence that populations attain their previous levels and reestablishment of sage grouse in a reclaimed area may take 20-30 years, or longer (Braun 1998). Therefore, this project should be carefully evaluated for long-term effects on the greater sage-grouse, since reclamation may not restore populations to pre-activity levels. The Bureau should ensure this activity does not exacerbate greater sage-grouse declines on either a local, or range-wide level.

In 2000, the U.S. Forest Service, the Bureau, and the Service signed a Memorandum of Understanding with the Western Association of Fish and Wildlife Agencies to conserve the greater sage-grouse and its habitat. This Memorandum of Understanding outlined the participation of Federal and State wildlife agencies, including the Wyoming Game and Fish Department, in greater sage-grouse conservation, and these commitments should be considered in project planning in sage-grouse habitat. Additionally, unless site-specific information is available, greater sage-grouse habitat should be managed following the guidelines by Connelly *et al.* 2000.

Page 4-60, Section 4.1.7, Wetlands: The DEIS states that “during the period of time after mining and before replacement of wetlands, all wetland functions would be lost”. This section goes on to mention that replaced wetlands may not duplicate the exact function and landscape features of the pre-mine wetlands... The Service recommends that in lieu of site-specific studies to determine the functions and values of the wetlands being affected, a wetland mitigation ratio of at least 1.5:1 be used (USFWS 1997). The higher mitigation is recommended for the following reasons (King and Adler 1991):

1. time is required for the created or restored wetland to replace the functions lost in the natural wetlands.
2. the functions performed by wetlands created or restored in the future are not equal, in terms of present worth, to the impacted wetlands
3. created or restored wetlands cannot always provide full replacement of functions even if they are considered successful.
4. created or restored wetlands do not always function as expected so there is a need for some margin of safety to replace lost functions.

5. the higher mitigation ratio addresses our above concerns and is consistent with the Service mitigation policy, and the Service's Region 6 mitigation guidelines.

In addition, the need for minimum ratios of greater than 1:1 for created or restored wetlands is recognized by the Environmental Protection Agency (EPA) in their regional draft guidelines, in the 1990 MOA between EPA and the U.S. Army Corps of Engineers regarding determination of mitigation under the Clean Water Act Section 404(b)(1) and in compensatory mitigation issue papers published in August 1994, by the Baltimore District of the U.S. Army Corps of Engineers.

Due to the high failure rate of mitigation projects, and of created wetlands in particular, we request that the mitigation plan include goals and objectives, success criteria, and monitoring of sufficient duration to determine if the mitigation is successful

Page 4-68, Section 4.1.0, Wildlife, West Antelope LBA Tract: The DEIS States "losses (of migratory birds) would also occur when habitat disturbance coincides with egg incubation and rearing of young". The Service would like to remind the Bureau that the Migratory Bird Treaty Act, 16 U.S.C. 703, enacted in 1918, prohibits the taking of any migratory birds, their parts, nests, or eggs except as permitted by regulations and does not require intent to be proven. Section 703 of the Act states, "Unless and except as permitted by regulations ... it shall be unlawful at any time, by any means or in any manner, to ... take, capture, kill, attempt to take, capture, or kill, or possess ... any migratory bird, any part, nest, or eggs of any such bird...". The Bald and Golden Eagle Protection Act, 16 U.S.C. 668, prohibits knowingly taking, or taking with wanton disregard for the consequences of an activity, any bald or golden eagles or their body parts, nests, or eggs, which includes collection, molestation, disturbance, or killing.

Work that could lead to the take of a migratory bird including an eagle, their young, eggs, or nests (for example, if you are going to construct roads, or power lines in the vicinity of a nest), should be coordinated with our office before any actions are taken. Removal or destruction of such nests, or causing abandonment of a nest could constitute violation of one or both of the above statutes. Removal of any active migratory bird nest or nest tree is prohibited. Permits for nest manipulation, including removal or relocation may, under certain circumstances, be issued for inactive nests only. For golden eagles, inactive nest permits are limited to activities involving resource extraction or human health and safety. Mitigation, as determined by the local Service field office, may be required for loss of these nests. No permits will be issued for an active nest of any migratory bird species, unless removal of an active nest is necessary for reasons of human health and safety. Therefore, if nesting migratory birds are present on, or near the project area, timing is a significant consideration and needs to be addressed in project planning.

If nest manipulation is proposed for this project, the project proponent should contact the Service's Migratory Bird Office in Denver at 303-236-8171 to see if a permit can be issued for this project. No nest manipulation is allowed without a permit. If a permit cannot be issued, the project may need to be modified to ensure take of a migratory bird or eagle, their young, eggs or nest will not occur.

The EIS should identify mitigation measures that would avoid the take of migratory birds and their nests. One measure to reduce the effects of mining on nesting migratory birds would be restricting the removal of surface vegetation during mining to the non-nesting season (August 15 - March 31). The Service recommends that this measure be included in the Bureau's Special Stipulations found in Appendix D.

9

Page 4-85, Section 4.4.10, Threatened, Endangered, Proposed, and Candidate Species and USFS Region 2 Sensitive Species: The DEIS states that "no residual impacts to endangered, threatened, proposed or candidate species are expected". The Service disagrees with this statement. Present WDEQ/LQD mine reclamation standards preclude the restoration of mountain plover habitat.

10

Page D-1, Appendix D, Bureau Special Stipulations: The header states "BLM will attach the following special stipulations to each LBA tract that is leased:". However, the Bureau does not identify a single special stipulation for endangered, threatened, proposed or candidate species, or migratory birds or wildlife. The Service recommends that all measures to minimize the affects to listed species that will be developed during the section 7 consultation for the South Powder River Basin Coal Leasing Project be incorporated as lease stipulations. In addition the Service recommends that the following stipulation be attached to each of the LBA tracts:

11

- All suitable habitat for threatened and endangered species on Federal lands within the lease tracts that is disturbed during mining will be reclaimed in kind at a 1:1 ratio during reclamation. If reclamation cannot restore suitable habitat then conservation easements will be acquired on the closest existing habitat for threatened and endangered species from willing landowners.

Title Page, Appendix G: The Service is unclear if Appendix G is to serve as the BA to meet the Bureau requirements pursuant to section 7(a)(2) of the Act (50 CFR §402.13). The DEIS and Appendix G do not currently provide adequate information on the effects of the proposed action and alternatives on endangered, threatened, proposed and candidate species. The Service recommends that if it is the Bureau's intention that Appendix G function as the BA for the South Powder River Basin Coal Leasing include the following information:

12

1. a clear description of the project, including any interrelated/interdependent actions and cumulative effects;
2. a description of the specific area potentially affected by the action;
3. the current status, habitat use, and behavior of threatened and endangered species in the project area;
4. discussion of the methods used to determine the information in item 3;
5. direct and indirect impacts of the project to threatened and endangered species, including impacts of interrelated and interdependent actions;
6. an analysis of the effects of the action on listed and proposed species and their habitats including cumulative impacts from Federal, State, or private projects in the area;
7. measures that will reduce or eliminate adverse impacts to threatened and endangered species;

8. the expected status of threatened and endangered species in the future (short and long term) during and after project completion;
9. determination of "is likely to adversely affect" or "is not likely to adversely affect" for listed species;
10. determination of "is likely to jeopardize" or "is not likely to jeopardize" for proposed species;
11. Alternatives to the proposed action considered, a summary of how impacts of those alternatives on listed and proposed species would differ from the proposed action, and the reasons for not selecting those alternatives;
12. citation of literature and personal contacts used in the assessment.

12

Page G-9, Appendix G, Effects of the Proposed Project: The DEIS and Appendix G state that "If a lease is issued for this tract, mining operations could not be initiated until the MLA mining plan and the State mining and reclamation permit are approved. Prior to permit approval, additional surveys and consultation with the Service would be required". As stated in the Service's letter of May 28, 2002, issuance of a new coal lease is a discretionary Federal action, and therefore, the Bureau needs to consult with the Service if the issuance of the lease may negatively affect a listed species or jeopardize a proposed species. This consultation needs to include all future reasonably foreseeable actions which will occur as a result of this leasing decision. If there may be adverse affects to species protected by the Act, as a result of leasing, or subsequent coal mining and reclamation activities, the Bureau must address those impacts at this time. The ultimate responsibility for section 7 compliance for Federal actions remains with the Federal agency.

13

Page G-12 Appendix G: The DEIS states that "no plovers have been observed in any prairie dog colonies or elsewhere during baseline surveys of the NARO North and South LBA tracts". In addition, on pages G-16 and G-20 the DEIS states that no surveys specifically targeting these species (mountain plover) were conducted for the Little Thunder or West Roundup LBA tracts. Although most mines include plovers in their annual migratory bird surveys, the survey methodology is usually not specific for mountain plovers. Mountain plovers are extremely difficult to detect, particularly during the breeding season. The Service has developed survey guidelines for the mountain plover (USFWS 2002). In order to eliminate the potential for adverse affects to mountain plovers it is important to determine if they occur within the LBA tracts and/or the additions proposed in alternatives in the EIS. The Service recommends that surveys be conducted on all the LBA tracts and any of the proposed additions in accordance with the Services's 2002 Mountain Plover Survey Guidelines. The results of those surveys should be included in the EIS and BA. A copy of those guidelines are attached for your convenience.

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Pages G-12, 16, 20 and 25, Appendix G, Effects of the Proposed Project: In the DEIS the Bureau makes a determination of "not likely to jeopardize mountain plovers" for all the LBA tracts. The Department of the Interior will make a decision on whether to list the mountain plover as a threatened species by September 3, 2003. The Service recommends that the EIS and BA determine the effects of leasing these LBA tracts on mountain plover habitat now and formally conference. If listed, while the Bureau still retains discretionary authority over these leases and conferencing has not previously occurred, the Bureau will need to reinitiate consultation, under

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section 7 of the Act. Any changes to potential plover habitat resulting in a permanent habitat impact, regardless of the timing of the project, could result in a may effect, likely to adversely effect determination.

Page G-14, Ute ladies'-tresses Habitat and Occurrences: The DEIS states that additional surveys were conducted in 1996 and prior years... However, the DEIS does not provide additional information regarding who conducted these surveys, the timing of those surveys, the area covered and if Ute ladies'-tresses was the specific target of these surveys. Ute ladies'-tresses orchid can only be reliably found and identified when it is flowering, which typically occurs sometime during the period from mid-July through mid-September (USFWS 1995). Additionally, this orchid has the ability to remain dormant (without above ground growth) for at least 1 year. The Service recommends that the EIS include additional information on all surveys conducted on these LBA tracts and any additions proposed in alternatives in the EIS. Furthermore, the Service recommends that multiple surveys be conducted in areas of moderate to high potential habitat quality during the flowering season (July 20 - August 31, 2003), if they have not already been conducted.

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Page G-40, Direct and Indirect Effects on Sensitive Species: The DEIS states that "a more detailed BA, Biological Evaluation and Appraisal of Management Indicator Species is in preparation for these LBA tracts and will be available upon request prior to the Forest Service's decision to consent or not consent to leasing the Forest Service lands included in the three tracts". The Service recommends that these documents be included in the Bureau's EIS.

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Page G-29, Cumulative Impacts: The DEIS identifies that there are direct effects that will result from the issuing of these coal leases for sale but does not adequately address the direct, indirect or cumulative effects of all development occurring in the Powder River Basin. The EIS should fully disclose the direct and indirect effects of all aspects of the project as well as the cumulative impacts of past (as of December, 2002 there were 21,899 oil and gas wells in the Powder River Basin of Wyoming, (Marvel 2003), and coal mining has disturbed 54,000 acres), present (the impacts of the Powder River Basin Oil and Gas Project and the Montana Statewide Oil and Gas Project) and reasonably foreseeable future actions (the impacts of four to six new power plants and connecting high voltage distribution lines have been proposed for the Powder River Basin); regardless of who is responsible for those actions.

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The cumulative effects section on page G-29 makes an assumption that reclaimed lands would be available and suitable for threatened and endangered species. However, at present WDEQ/LQD reclamation standards do not allow for the replacement of mountain plover habitat. Additionally, to date no black-tailed prairie dog, a candidate for listing under the Act, towns have been restored on reclaimed lands.

The Service appreciates the opportunity to comment on this DEIS. If you have any questions regarding this letter or your responsibilities under the Act, please contact Bradley Rogers of my staff at the letterhead address or phone (307) 772-2374, extension 25. In your response, please refer to (W.02/WY6823).

Attachment (1)

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cc: BLM, Wyoming State Office, Cheyenne, WY (J. Carroll)  
EPA, Denver, CO (D. Allen)  
FWS, Acting NEPA Coordinator, FWS, Denver, CO (O. Jose)  
WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (T. Collins)  
WGFD, Non-Game Coordinator, Lander, WY (B. Oakleaf)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 REGION 8  
 999 18<sup>TH</sup> STREET - SUITE 300  
 DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

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April 16, 2003

Ref: 8FPR-N

Nancy Doelger  
 Casper Field Office  
 Bureau of Land Management  
 2987 Prospector Drive  
 Casper, WY 82600

Re: South Powder River Basin Coal  
 DEIS, # 030046

Dear Ms Doelger:

The Environmental Protection Agency -- Region 8 has reviewed the *Draft Environmental Impact Statement for South Powder River Basin Coal*. The DEIS assesses the environmental impacts of five lease by application (LBA) tracts submitted by four coal mines located south of Gillette, WY. We submit the following comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

We appreciated the multi-agency coal meeting held earlier this month regarding coal leasing in the Powder River Basin and some of the specific issues for this EIS. We hope these types of discussions will continue and would welcome any further opportunities to discuss our comments on this and future coal mining EISs.

EPA's main concern is air quality in the Powder River Basin (PRB). These coal mines are some of the many sources in the PRB contributing to air quality degradation. EPA has been working closely with the BLM and WY DEQ through the PRB Coalbed Methane EIS to address air quality concerns in the Basin. Although the WY DEQ has by statute, the authority and responsibility to implement air quality mitigation, the FEIS should disclose all mitigation for air quality impacts regardless of BLM's jurisdiction (CEQ 40 Questions #19b). The FEIS should outline the regulatory and nonregulatory processes that are underway to address air concerns through the PRB EIS process, as well as include all mitigation under BLM jurisdiction.

Recent air quality monitoring for two of these coal mines has shown exceedances of the PM<sub>10</sub> (particulate matter less than 10 micrometers in diameter, commonly referred to as fugitive dust) air standard. Air quality models also predict additional increases in PM<sub>10</sub> emissions for this mining area, potentially increasing exceedances of the air quality standards. As we will discuss later in this letter, there are some difficulties in the air quality modeling and permitting for this

area that will not be resolved during the time frame for this EIS. We are, therefore, recommending that the FEIS concentrate on more fully disclosing the air quality impacts, including potential human health effects and developing additional mitigation to reduce dust at the mines and in the surrounding area.

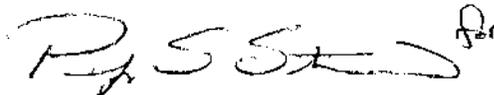
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EPA also has concerns about the impacts of nitrogen dioxide emissions from blasting activities and whether or not existing mitigation is sufficient. EPA is also concerned about wildlife impacts to raptors, sage grouse and the long-term implications of coal mining on wetlands in the basin.

Based on the procedures EPA uses to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS, the proposed alternative will be listed in the Federal Register in the category EC-2 (EC - Environmental Concerns, 2 - Insufficient Information). This rating means that the review identified environmental impacts that should be avoided in order to fully protect the environment and the DEIS does not contain sufficient information to thoroughly assess environmental impacts that should be avoided to fully protect the environment. Please see the following detailed comments for specifics on our environmental and information concerns.

We appreciate your interest in our comments. If you have any further questions, please contact Dana Allen of my staff at (303) 312-6870.

Sincerely,



Cynthia Cody  
Director, NEPA Program  
Office of Ecosystems Protection  
and Remediation

**Environmental Protection Agency - Region 8 Detailed Comments**  
**South Powder River Basin Coal DEIS**  
**April 16, 2003**

**Air Quality**

**PM<sub>10</sub>, Fugitive Dust**

1. As discussed in recent meetings and other EIS reviews, there are cumulative and site specific PM<sub>10</sub> air quality problems in the Powder River Basin. Air monitors have recorded exceedances of National Ambient Air Quality Standards (NAAQS) for fugitive dust (PM<sub>10</sub>) at two of the coal mines. The air quality situation is further complicated by inconsistencies between two different models and monitoring data that already exceeds the maximum values both models predicted for PM<sub>10</sub>. Because much of this problem cannot be resolved in this EIS process, we recommend that the FEIS focus on disclosing the air quality impacts (environmental consequences) including human health and discussing the major information and modeling problems. The FEIS should also more fully evaluate mitigation for reducing PM<sub>10</sub> through future actions tiering from this NEPA analysis such as the coal mining permits and other area wide and/or voluntary mitigation efforts.
2. Annual PM<sub>10</sub> NAAQS Exceeded in the PRB The FEIS needs to accurately reflect exceedances of the annual NAAQS in the Powder River Basin.
  - a. For example the FEIS states on page 4-34, fourth paragraph that there has not been exceedances of the PM<sub>10</sub> annual NAAQS, North Rochelle Mine 0874 monitor (AIRS ID 56-005-0874) had an annual arithmetic mean in 2000 of 55 µg /m<sup>3</sup>. When calculated in accordance with 40 CFR Part 50, Appendix K (equally weighted mean of 4 quarterly means) the annual mean is 51 µg /m<sup>3</sup>. The annual NAAQS is 50 µg /m<sup>3</sup>. This exceedance is shown in Table AQ-2 of the Air Quality Appendix (Appendix E).
  - b. Similarly, the North Rochelle Mine 0907 monitor (AIRS ID 56-005-0907) recorded an annual average (40 CFR Part 50, Appendix K) of 51 µg /m<sup>3</sup> in 2001. This exceedance is also shown in Table AQ-2 of the Air Quality Appendix (Appendix E)
3. Current Monitoring Data Exceeds Predictions of Wyoming DEQ Permit Model The theory of PM<sub>10</sub> control in the Wyoming PRB coal mines is: (1) Wyoming DEQ uses a conservative Fugitive Dust Model to determine coal production levels that will not exceed annual NAAQS at any monitor when required BACM (Best Available Control Methods) is used. (2) Monitoring data is used (in the absence of accurate short term models) to show that at actual production levels, 24-hour PM<sub>10</sub> NAAQS exceedances do not occur (and confirm compliance with the Annual NAAQS)

When monitoring does not correspond to the predictive model, this indicates that the assumptions and input to the model need to be reassessed. This is particularly important when we have data documenting exceedances and the model predicts that the mines will be in

compliance with the standard. Unfortunately, monitoring data showing exceedances at Black Thunder and North Rochelle since 2000 have shown the current air quality control approach to be flawed. Both annual and 24-hour  $PM_{10}$  exceedances have occurred. We have listed below some potential causes of the disparity between the air permit model and monitoring data.

- a. The current DEQ Permit model under predicts mine emissions even with implemented BACM.
- b. BACM, while required, was not in place when exceedances occurred.
- c. The background level is higher than that assumed.
- d. New, unmodeled sources have been introduced near the problem monitors.

No matter which of these situations is the actual cause or a combination, either mine emissions or other emissions must be reduced before production at the permitted level will be in compliance with  $PM_{10}$  standards.

4. Air Modeling Discrepancies The DEIS combines information from two separate and incompatible air quality analyses: (1) The Air Quality Analysis for the Wyoming and Montana CBM EIS, and (2) permit analyses by the Wyoming DEQ for each individual mine. Unfortunately, the two air quality analyses use different techniques, which in some cases are incompatible. As shown in the table below, the direct and indirect  $PM_{10}$  impacts from the coal mines (average = 29.2) are greater than the cumulative impact (21). Cumulative impacts include: the sum of direct and indirect impacts from the proposed project, and impacts from all other current and reasonably foreseeable activities.

The following sections describe some of the discrepancies between the analyses.

- a. Inconsistent Use of Background  $PM_{10}$  Concentration The CBM EIS uses a background annual  $PM_{10}$  level of  $17 \mu\text{g}/\text{m}^3$ ; the SPRB Coal EIS states that this is also the background assumed for this EIS on page 3-19, Table 3-1. In contrast, the DEQ air permit analyses use a background level of  $15 \mu\text{g}/\text{m}^3$ . For some mines, the DEQ permits production that would lead to  $PM_{10}$  concentration increases of  $34.94 \mu\text{g}/\text{m}^3$  ( $49.94 \mu\text{g}/\text{m}^3 - 15 \mu\text{g}/\text{m}^3 = 34.94 \mu\text{g}/\text{m}^3$ ), page 4-21. If the CBM/South PRB Coal background is used, the DEQ permit analyses result in predicted NAAQS exceedances for annual  $PM_{10}$ . The simple presentation of results using two different backgrounds without explanation gives the EIS the appearance of selectively choosing background levels to give predictions less than the NAAQS. More explanation and justification for using two different background levels is needed, particularly in light of existing measurements near or above the annual NAAQS for production levels less than those permitted or expected in the future.
- b. Inconsistency in Air Quality Analysis Results The CBM analysis assumes the higher background level, and includes more sources than the Wyoming DEQ permit analyses, but results in lower concentration predictions. The table below illustrates how the differences in treatment of mine sources by the two analyses lead to radically different results.

Direct and Indirect Impacts Section			
	DEQ Maximum predicted annual PM <sub>10</sub> concentration	DEQ Mine PM <sub>10</sub> <sup>1</sup> (background 15)	DEIS Page
North Antelope/Rochelle mine	49.94 µg/m <sup>3</sup>	34.94 µg/m <sup>3</sup>	4-21
Black Thunder mine	34.96 µg/m <sup>3</sup>	19.96 µg/m <sup>3</sup>	4-25
North Rochelle mine	42.7 µg/m <sup>3</sup>	27.7 µg/m <sup>3</sup>	4-31
Antelope mine	49.2 µg/m <sup>3</sup>	34.2 µg/m <sup>3</sup>	4-36
Cumulative Impact Section			
	BLM Max	BLM, all RFAA <sup>2</sup> (back ground 17)	Page
All mine operations, Coal Bed Methane development, and all other existing and permitted sources, and background concentrations	21 µg/m <sup>3</sup>	4	4-106, Table 4-21

The PM<sub>10</sub> cumulative impact of 21 µg/m<sup>3</sup> from the CBM analysis is clearly incompatible with a direct impact of permitted mines of 19.96 to 34.96 µg/m<sup>3</sup>, and a cumulative impact of mining plus background of 34.96 to 49.96 µg/m<sup>3</sup>. If both these results are to be presented in the same document, some effort to reconcile these contradictory predictions must be made. Since the Wyoming DEQ predictions are more relevant for the subject DEIS, the Air Quality Appendix should at least mention this analysis, and preferably emphasize the mine analysis over the Coal Bed Methane analysis which does not represent near field mine impacts as accurately as does the DEQ Analysis.

- 5 Wyoming DEQ Permit Analysis The DEQ analysis process is not described adequately in the Air Quality appendix. The results are first presented in the Executive Summary without attribution. The results in the Executive Summary should be labeled as annual PM<sub>10</sub> to differentiate from 24 hour concentrations. We recommend the figures in the Executive Summary be labeled as "Wyoming DEQ Permit Analysis Results," and the reader be directed to the portion of the Air Quality Appendix where the method and appropriateness of these analyses are discussed.
- 6 Use of High Winds as an Explanation for PM<sub>10</sub> Exceedances On pages 4-28, 4-29, 4-31 and 4-34, drought conditions along with higher wind speeds in the December 2001 through

<sup>1</sup>DEQ Mine PM<sub>10</sub> - DEQ maximum - background

<sup>2</sup> RFFA -- Reasonably Foreseeable Future Action

February 2002 time frame are suggested as an explanation for some of the PM<sub>10</sub> exceedances observed at the Black Thunder and North Rochelle mines. Only in very limited conditions, can high winds and drought conditions be used as acceptable reasons for NAAQS exceedances. The NAAQS apply and are to be met in worst case, as well as typical, normal meteorological conditions. EPA guidance (Areas Affected by PM-10 Natural Events, Mary D. Nichols, 1996) defines when data may be excluded from regulatory consideration because of high winds. This can only occur if (1) sources of dust are natural, or (2) sources are anthropogenic but have BACM required and in-place at the time of the wind event (winds are shown to be great enough to overcome the implemented BACM). To date, Wyoming has only placed a high wind flag on one of the 19 exceedances recorded at the South PRB mines since 2001.

The Wyoming DEQ permit model should be using some representative year of winds for its meteorological inputs which include both high and low wind days. With annual NAAQS exceedances in both 2000 and 2001 at the North Rochelle monitors, sustained winds greater than average over a 3 year period are unlikely to be the explanation for all the exceedances observed, and should not be implied without acceptable statistical justification. There is no drought flag to excuse particulate exceedances, except when it can be shown that drought reduces the wind speed at which BACM is no longer adequate. In other words, sources are expected to comply with the NAAQS during drought and typical high wind events.

7. Cumulative Impacts Above the PSD Class II Increment The maximum cumulative annual PM<sub>10</sub> impact presented in the Wyoming DEQ permit analyses is 34.9 µg/m<sup>3</sup> at the North Antelope/Rochelle Mine (page 4-20). This exceeds the PSD Class II allowable increment for annual PM<sub>10</sub> of 17 µg/m<sup>3</sup>. This impact should be reported in table 4-21, Cumulative Impacts. The State's reasoning behind this permitted level should be discussed (i.e., only some stated fraction of the mine emissions consume increment based on the permits in place in the baseline year of 1997, and this portion of emissions when combined with other new actual and permitted emissions, results in less than 17 µg/m<sup>3</sup> of cumulative impact).

## Nitrogen Dioxide

8. Nitrogen Dioxide Some progress has been made by the State and the mining industry in reducing the risk to local residents and travelers from the discharge of nitrogen dioxide from mining blasts. However, releases of nitrogen dioxide are still of concern because of the toxicity of the gas at relatively low levels, the large percentage of the population with respiratory conditions which would render them sensitive to NO<sub>2</sub>, and the lack of a technical method to reliably prevent NO<sub>2</sub> generation.

There are several areas that should be addressed more fully to disclose potential impacts and determine if additional mitigation may be needed. The FEIS should be revised to:

- a. Use a concentration of nitrogen dioxide in analyzing the risk and developing mitigation which will prevent adverse health effects, including sensitive members of the population,
- b. Identify receptors that may be impacted by nitrogen dioxide releases (e.g., residences, public roads, bus stops, etc.),

- c. Describe more fully the actions and implementation procedures that the mines and the State have already implemented to reduce NO<sub>2</sub> releases from blasting.
9. Safe Concentrations of Nitrogen Dioxide As discussed in the DEIS, EPA recommends that concentrations not exceed 0.5 ppm to protect sensitive members of the public. Similarly the NIOSH recommendation, which is applicable only to workers, is a limit of 1 ppm based on a 15 minute exposure that should not be exceeded at any time during the workday. The NIOSH recommendation is only for adult, healthy workers, during the workday. It is not designed to protect the general public, which includes infants, the elderly and other sensitive members of the population. The OSHA permissible exposure limit is 5 ppm, determined as a ceiling value. This means that the concentration must not be exceeded during any part of the workday, as measured instantaneously. This value was developed for workers, considering not just their health, but their remuneration and costs to industry to implement the standard. It is not protective of the general public (as described above for the NIOSH recommendation), and is inappropriate for those who are involuntarily exposed to toxicants. The Immediately Dangerous to Life or Health (IDLH) concentration is 20 ppm.

In reviewing the DEIS, it appears that less protective criteria were used in analyzing the impacts and in developing mitigation. The Thunder Basin Coal Company's study of developing safe setback distances for blasting activities recommended a criteria of 8 ppm NO<sub>2</sub> and it appears that the setback study used 5 ppm (based on a 10 minute average), exceeding EPA's and NIOSH recommendations, and OSHA limits. The impacts analysis needs to assess if there is still a potential for nitrogen dioxide levels to exceed 0.5 ppm on public roads, residences or other public access areas. The BLM and OSM need to ensure that public health is protected from mining operations. We recommend that the blasting setback distances be recalculated using 0.5 ppm.

10. Nitrogen Dioxide Concentrations Pages 4-18 & 19, summarize information on nitrogen dioxide emissions from an April 2000 study prepared by the Wyoming Mining Association. The fourth paragraph on page 4-19 states "The maximum 15 minute average valid values observed for each of the six monitors ranged from 0 to 1.65 ppm NO<sub>2</sub>" in areas accessible to the public near mining operations. Although we have not seen this report, it appears that additional monitoring has been conducted that shows nitrogen dioxide levels exceeding levels of concern. For example in the *Black Thunder Mine Report for Development of Safe Setback Distances for Blasting Activities at the Black Thunder Mine*, dated July 2002, the 10 minute average for NO<sub>2</sub> ranged from nondetectable to 20.4 ppm (IDLH = 20 ppm). We assume that the 20.4 ppm (overburden shot # 198202) value was measured in an area that was not accessible to the public. However, the wide range of concentrations demonstrates that nitrogen dioxide concentrations are highly variable and do range into toxic levels. Of more concern, are several of the monitoring events which measured concentrations exceeding the health recommendations several thousand feet from the mining blasts. Appendix J. of the report lists 5.5 ppm NO<sub>2</sub> at 5,267 feet (cast # 844), 2.1 ppm at 5,368' (cast # 860), and 16.5 ppm at 2,186' (cast # 887). This section in the FEIS should be revised to more fully reflect the range of known nitrogen dioxide emissions. If the data are available, this section should

also incorporate the changes in nitrogen dioxide emissions since the mines began developing new blasting methods to reduce nitrogen dioxide emissions.

11. Affected Environment for Nitrogen Dioxide Emissions The FEIS needs to identify the residences, roads and other potential avenues of exposure to nitrogen dioxide. As described in section 3.16, there is one occupied dwelling immediately adjacent to the NARO North LBA tract and one dwelling near the Little Thunder LBA tract (alternative 2). As described in section 3.17, there are several roads that cross these tracts such as State Highway 450, Piney Canyon Road, Antelope Road, Reno Road, etc. The FEIS should describe the potential risks to people living or traveling in this area. Are there any additional residences or school bus stops in this area? How much public traffic crosses through the mines during blasting?
12. Mitigation for Nitrogen Dioxide Emissions According to pages 3-24 & 25, the mines have already implemented voluntary measures to reduce NO<sub>2</sub> emissions. Because the measures are voluntary, mines may choose not to implement the mitigation measures. The FEIS needs to disclose the impacts for both scenarios. It appears that the Black Thunder Mine has some more rigorous measures as listed on page 3-26. However, it is not clear if these measures are mandatory or are also voluntary. It should also be noted that the measures for the mines do not include a prohibition of blasting when conditions are unfavorable (large blast, wet conditions, weather inversions, little wind, wind direction towards residences/road, etc.) The existing mitigation merely requires notification and monitoring. We recommend that a stipulation be added to the lease prohibiting blasting when conditions are unfavorable. The mines would then need to analyze the size of blasts in conjunction with weather conditions and potential public exposure, to prevent exceedances of the EPA and NIOSH recommended toxicity levels.

The FEIS also needs to more fully describe the types and levels of mitigation and how the mitigation will be implemented to reduce exposure to nitrogen dioxide. For example we understand that several of the mines have reduced the sizes of blasts, changed the composition of the material used for blasting, and/or changed the placements of blasting agents. Are these measures required or are they voluntary? Are all four mines implementing these measures? It appears that blasting setback distances have been calculated only for the Black Thunder mine. The FEIS should explain how the setback distances will be implemented and if there are any setback distances calculated for the other mines. Also as mentioned above, we recommend that the setback distances be recalculated using the EPA recommended 0.5 ppm NO<sub>2</sub>.

### **Cumulative Impacts**

13. Direct & Indirect Impact Analysis Vs. Cumulative Impacts In the DEIS, there are some inconsistencies between the direct and indirect impact analysis and the cumulative impact sections. This is understandable as the majority of the cumulative impact sections were taken from the PRB Coalbed Methane EIS and the direct and indirect analyses were prepared specifically for this EIS. These inconsistencies become an issue for resources which are

substantially affected by cumulative impacts. For several of these resources, the direct and indirect impacts predicted in the DEIS are likely to be different from the actual impacts because of expected changes to the resource as a result of other activities (e.g., the wells that are predicted to be affected or unaffected by coal mining may already be dry because of coalbed methane production). The relative magnitude of direct and indirect impacts may also change as a result of cumulative impacts (e.g., wildlife habitat) or there may be synergistic impacts from the coal mines and other development (e.g., noxious weeds).

We recommend that the impact sections for resources that are substantially impacted by cumulative impacts be reevaluated to determine how the impacts will overlap in time and for the resource as a whole. For example, does the timing of maximum impact from other activities (e.g., coalbed methane) coincide with the peak of impacts from coal mining? Are any resources impacted by coal mining approaching sustainability limits because of cumulative impact levels? The relationship between project and cumulative impacts might be more easily understood if the FEIS were to combine the Environmental Consequences and Cumulative Impact sections to more clearly disclose the overall condition or impacts on each resource. The BLM may also want to consider this approach in general for future EISs. EPA has seen several EISs which are organized on a resource or issue basis, eliminating the duplication found when discussing the resource in separate Affected Environment, and Environmental Consequences and Cumulative Impacts sections. The following comments explain our concerns in more detail and on a resource specific basis

14. Groundwater Cumulative Impacts The direct and indirect impacts analysis for groundwater drawdown on pages 4-42 → 4-56 is misleading without the information from the cumulative impacts discussion on pages 4-121 → 4-126. By analyzing coal mining drawdown independently of the larger drawdown predicted from coalbed methane, the EIS predicts a relatively limited number of wells will be impacted by drawdown instead of the large number predicted as a result coalbed methane development. Although the cumulative impacts section eventually discusses these issues, the direct and indirect analysis also needs to reflect the condition of the resource that will be likely during coal mining. For example, the wells that are predicted to be impacted by the coal mines are listed in various tables such as Table 4-1-*Water Supply Wells Possibly Subject to Drawdown If West Antelope LBA Tract Is Mined*. This table identifies six wells which are anticipated to be impacted by drawdown. However, when the drawdown impacts of coalbed methane are added, it appears that all of the wells evaluated (78) are likely to be impacted by the combined drawdown. The section should be revised to more fully explain the total number of wells that will be impacted by drawdown and how the drawdown impacts will be mitigated or compensated when there are several activities which are causing the impacts.

For example page 4-57 (3rd paragraph) states that the mine operator would be required to replace water supply wells if they are impacted by mining. According to page 4-129 (paragraph 4), for wells impacted by coalbed methane, there is only an agreement for water well monitoring and mitigation will be on a case-by-case basis. How will the obligation for well replacement be implemented for wells that are impacted both by mining and coalbed methane?

15. Cumulative Impacts, Reasonably Foreseeable Future Actions The cumulative impact analysis should include additional coal and energy development activities. The reasonably foreseeable future activities list on page 4-5 only looks at projects with firm plans. However, it is apparent from the history of the area, current trends, existing infrastructure, and coal and other energy reserves; that coal mining and energy development will continue to expand. For example, the 16 active coal mines are in a row from north of Gillette to the David Johnston mine. It appears likely that these mines will continue to grow and fill in this area creating a continuous strip of mines and reclaimed mines for 100 miles. Estimating a width of mining of 10 miles, this potential strip of coal mines would cover one thousand square miles. Given the huge scale of energy development in this area, there is a strong potential for permanent large-scale impacts for habitat (fragmentation, loss of vital habit) ground water, riparian ecosystems, wetlands and noxious weeds. Areawide air and water quality impacts will also be significant.

This broader cumulative impact analysis should also factor in the success of reclamation/mitigation plans for various resources. Mining reclamation works well for restoring some aspects of resources such as grazing livestock and wildlife, and visual aesthetics. Other resource values may take a long time to return to a full function or may not be restorable at all (e.g., wetlands, groundwater, unique habitats).

16. Noxious weeds are an increasingly difficult problem on western lands. It appears that with coalbed methane development, noxious weeds will be an increasingly greater problem in the Powder River Basin. We note in particular that there are already several weeds identified in the grazing section which are on Wyoming's restricted list – poverty weed or on other states' lists of noxious weeds – cheatgrass. If the drought continues, this area may begin to experience cheatgrass/fire cycles forcing out even more desirable plant species. The FEIS should address if additional mitigation is needed to control the spread of noxious weeds and what types of programs are being developed on an area wide basis to prevent the spread of seeds along roads via mining/construction/drilling equipment.

## Wetlands

17. Wetlands Mitigation The wetlands mitigation plan needs to be amended to compensate for the long-term loss of wetlands values during and following mining. The mitigation ratios may need to be increased to compensate for the temporal loss of wetlands. Wetlands obviously cease to function during the 10 to 20 years of mining. However, wetlands fed by groundwater will not regain function until the ground water table recovers. We recommend that additional mitigation be established to compensate for the long-term loss of wetland values. The mitigation plans for previous or current reclamation may provide good locations for increasing wetlands in the area. Alternatively, the mines may want to improve other wetlands damaged by over grazing, poorly constructed roads or off-road vehicle damage.
18. Mitigation of Non-jurisdictional Wetlands It is not clear from the DEIS if all non-jurisdictional wetlands impacts will be mitigated. Executive Order 11990 requires that all

Federal Agencies protect wetlands. The wetlands protection provisions of E.O. 11990 to apply to all wetlands (i.e., jurisdictional and non-jurisdictional). The first paragraph on page 4-61 discusses playa type wetlands which may no longer be identified as jurisdictional waters. The DEIS states “. . . the applicant mines plan to continue establishing playa/depression features within the reclaimed topography if the LBA tracts are mine extensions of existing operations.” The remainder of the paragraph then implies that reclamation costs may be a factor in determining whether or not non-jurisdictional wetlands will be restored. The FEIS should clarify if all non-jurisdictional wetlands will be mitigated.

## **Wildlife**

19. The analysis for wildlife impacts should be based on the habitat needs of the species of concern, rather than the specific boundaries of the mines and lease tracts. There also needs to be sufficient analysis to understand the impacts of the LBA decisions. For example, on page 4-65, the DEIS states that there are no sage grouse leks on the NARO LBAs, there are nesting areas in the NARO complex and recent sage grouse activity nearby. It is not clear if these nesting areas are important to the sage grouse population or if there are sufficient numbers of leks nearby to sustain the population. In addition, this information does not appear to be consistent with the cumulative impacts discussion in the last paragraph of page 4-134, which states that “Few vital sage grouse wintering areas or leks to have been, or plan to be, disturbed as a result of already approved mining and no additional wintering areas or leks would be disturbed if the LBA tracts included in this EIS are leased and mined.” By looking at sage grouse habitat on a component by component basis and mainly on LBA and mining properties, the impacts of the LBA decisions are not apparent on the health and sustainability of the grouse population in this area.

DUCKER, MONTGOMERY, LEWIS & ARONSTEIN, P.C.

ATTORNEYS AT LAW  
ONE CIVIC CENTER PLAZA  
1560 BROADWAY, SUITE 1400  
DENVER, COLORADO 80202  
303-861-2628  
TELECOPIER 303-881-4017

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JAMES K. ARONSTEIN  
E-mail: jaronstein@denverlaw.com

June 9, 2003

**VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

United States Department of the Interior  
Bureau of Land Management  
Wyoming State Office  
P.O. Box 1828  
Cheyenne, Wyoming 82003  
Attn: Mr. Robert A. Bennett, State Director

United States Department of the Interior  
Bureau of Land Management  
Casper District Office  
2987 Prospector Drive  
Casper, Wyoming 82604  
Attn: Ms. Nancy Doelger

Office of Surface Mining Reclamation and Enforcement  
Denver Regional Office  
1999 Broadway, Suite 3320  
Denver, Colorado 80202-5733  
Attn: Mr. Ranvir Singh

Re: Protest of NARO and West Roundup LBA  
Campbell County, Wyoming

Dear Messrs. Bennett and Kline and Ms. Doelger:

This firm represents Bill Barrett Corporation (“BBC”) and previously represented Independent Production Company, Inc. (“IPC”) in connection with certain oil and gas holdings in the Powder River Basin. On March 20, 2003, BBC acquired the oil and gas properties of IPC situated in the Powder River Basin.

In October 2001, this firm filed, on behalf of IPC, certain scoping comments and protests with respect to Powder River Coal Company’s NARO LBA (WYW 150210) and Triton Coal Company LLC’s West Roundup LBA (WYW 151134). A copy of my October 8, 2001 letter

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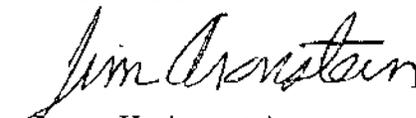
DUCKER, MONTGOMERY, LEWIS & ARONSTEIN, P.C.

Mr. Robert A. Bennett, State Director  
 Ms. Nancy Doelger  
 Mr. Ranvir Singh  
 June 9, 2003  
 Page 3

The letters from Mr. Stenger state that "[a] portion of the referenced [oil and gas] lease is scheduled to be mined for coal within the next five to ten years." We strongly object to this statement. As set forth in detail in the October 2001 Letter, the BLM has no legal right to approve surface coal mining that would effectively destroy the vested senior rights of its oil and gas lessees. Moreover, Mr. Stenger's statement assumes that the West Roundup LBA will be approved and that surface coal mining will occur within the stated period of time. Such an assumption is inconsistent with the BLM's obligations under the National Environmental Policy Act of 1969 and numerous other authorities to consider and analyze Triton's proposed LBA without assumption as to outcome and with due regard for competing resource values and the vested property rights of third parties. We trust that you will take all action necessary to safeguard the constitutionally protected property rights of BBC and your other senior oil and gas lessees.

If you have any questions or comments, or wish to discuss any aspect of this matter further, please do not hesitate to contact me. Thank you for your time and consideration.

Very truly yours,

  
 James K. Aronstein

JKA/dr  
 Encl.

cc: Mr. William C. Mitchell

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