APPENDIX A: COMMENT LETTERS ON THE DRAFT EA AND RESPONSES

United States Department of Agriculture | Forest Service | Rocky Mountain Region | Medicine Bow National Forest, 2468 Jackson Street, Laramie, WY 82070-6535

1

93 DEC -8 AM 10:35

Reply to: 2820/1950
WYW124783

Date: December 2, 1993

3420(LBA)
WYW124783
Eagle Butte

Bureau of Land Management
Casper District Office
1701 East E Street
Casper, Wyoming 82601-2167

District Manager:

We appreciate having the opportunity to review the draft environmental assessment for the Eagle Butte coal lease application.

None of the federal mineral estate being proposed involves surface lands managed by the Medicine Bow National Forest.

No forest comments have surfaced which may be of use to you as part of this scoping process.

Sincerely,

Michael B. Murphy

MICHAEL B. MURPHY
Staff Officer for Program Support

cc:
J.Reddick, Douglas Dist.

Caring for the Land and Serving People

FS-6200-28 (7-82)

2

United States Department of the Interior
FISH AND WILDLIFE SERVICE

Fish and Wildlife Enhancement
2617 East Lincolnway, Suite A
Cheyenne, Wyoming 82001

IN REPLY REFER TO

3420(LBA)
WYW124783
Eagle Butte

FWE-61411

December 10, 1993

MEMORANDUM

To: District Manager, Casper District Office, BLM, Casper, WY
Attn: Nancy Doelger

From: State Supervisor, FWE, Cheyenne, WY (FWE-61411)

Subject: Draft Environmental Assessment - Eagle Butte Coal Lease Application (WYI24783), Powder River Coal Region

This responds to your agency's request for comments on the Draft Environmental Assessment regarding the proposed leasing of the Eagle Butte Coal Tract in the Powder River Coal Region north of Gillette.

We have reviewed your agency's unsuitability criteria application for criterions Numbers 9 and 11 through 14 for the subject lease and concur with your findings that none of the lands located on the tract are unsuitable for leasing. You should note on page vi that the existing mine's Raptor Mitigation Plan needs to be amended to include the subject tract, if leased. The current mine's Raptor Plan only addresses in detail the raptor nesting pairs that will be affected during this five year term of permit.

We appreciate the opportunity to comment on this proposal. If we can assist further, please contact Art Anderson of my staff at the letterhead address or phone 772-2374.

Charles Davis

cc: Director, WGFD, Cheyenne, WY

3

United States Department of the Interior

NATIONAL PARK SERVICE
Devils Tower National Monument
P.O. Box 8
Devils Tower, Wyoming 82714-0008

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
N3615(DETO)

December 27, 1993

Nancy Doelger, Geologist
Casper District Office
Bureau of Land Management
1701 East E Street
Casper, Wyoming 82601

Dear Nancy:

Thank you for sending us a copy of the Draft Eagle Buttes Environmental Assessment for review and comment. We received the plan on November 7th. It is a well written and comprehensive draft. We are pleased to have the opportunity to participate in this planning document. It is important for all land stewards to take part in ecosystem management, particularly for us at Devils Tower since the monument is such a small park unit surrounded by private interests and multiple use public lands.

It appears that virtually all of the environmental effects that will result from the implementation of this preferred alternative are local and would not impact Devils Tower. The one potential exception is the affect on air quality, particularly visibility.

The large quantities of particulates released from mining and mining-related activities will continue to enter the region's airshed upwind of Devils Tower. This will negatively influence the long distance visibility from the Tower top which currently enjoys 150 mile vistas under ideal meteorological conditions. While Devils Tower National Monument is designated a Class II area under the 1977 amendments to the Clean Air Act, the Department of the Interior identified that the monument possesses air quality-related values including visibility, flora, fauna, and cultural resources. The Department also recommended that the monument be redesignated to Class I. Furthermore, the BLM's Newcastle Resource Area's draft environmental impact statement proposes to designate Devils Tower and the area around it as a Class I area for visual resources.

The important point is that maintaining the nearly-pristine visibility in this part of Wyoming is a very high priority to the National Park Service and American public. I would ask that the BLM do what it can to minimize all air quality-related impacts at the Eagle Butte Mine. In the future, I trust that the BLM will take into consideration the cumulative impacts on air quality from all sources in the region, current and planned.

Thank you for providing us with the opportunity to comment on this plan. Good luck with the mine.

Sincerely,

George L. San Miguel

George L. San Miguel
Chief of Resources Management

For:
James Schlinkmann
Acting Superintendent

RESPONSES TO FEDERAL AGENCIES

Response to Letter 1, from the Forest Service

Thank you for reviewing the draft Eagle Butte EA, although it does not include lands managed by the Forest Service. We will continue to provide Forest Service the opportunity to review and comment on all coal leasing actions, and to work with the Forest Service as a cooperating agency when Forest Service surface lands are involved.

Response to Letter 2, from the U.S. Fish and Wildlife Service

Thank you for your cooperation in reviewing the unsuitability criteria application for the Eagle Butte lease application and commenting on the proposal. We will continue to consult with the Fish and Wildlife Service on proposed future leasing actions.

The statement about the Raptor Mitigation Plan on page vi has been corrected.

Response to Letter 3, from Devil's Tower National Monument

The air quality impacts of mining the Eagle Butte LBA should not result in an incremental adverse effect on visibility at Devils Tower since no increase in production rates is proposed.

(Note: The BLM requested and received information from the Wyoming Department of Environmental Quality, Air Quality Division (WDEQ/AQD) on all comments that were received relating to the potential air quality impacts of the Eagle Butte LBA. Regarding the recommendation that Devils Tower National Monument and surrounding area be designated a Class 1 area, the WDEQ/AQD stated that the State of Wyoming has received no request for redesignation, and that WDEQ/AQD PSD regulations are the sole source of regulations governing such actions.)

4

STATE OF WYOMING
OFFICE OF THE GOVERNOR
CHEYENNE 82002

94 JAN -4 AM 10:15

MIKE SULLIVAN
GOVERNOR

MEMORANDUM

TO: Nancy Doelger
Casper BLM District Office

FROM: Rod S. Miller, Federal Lands Planning Coordinator Rod

DATE: January 3, 1994

SUBJECT: Eagle Butte Coal Lease Application Draft EA

Nancy, here are comments from state agencies on the Draft EA for the Eagle Butte Coal Lease Application. I hope this information is helpful and thanks for this opportunity to take an advance look at the document. Please feel free to give me or the appropriate agency a call if you need to follow up on any of these comments.

rms

Enclosures

5

WYOMING GAME AND FISH DEPARTMENT

December 15, 1993

EIS 319
U.S. Department of the Interior
Bureau of Land Management
Casper District Office
Draft Environmental Assessment
Eagle Butte Coal Lease
Application as Applied for by
AMAX Land Company
SIN: 93-081
Campbell County

ROD MILLER
STATE PLANNING COORDINATOR'S OFFICE
HERSCHLER BUILDING, 4TH FLOOR EAST
CHEYENNE, WY 82002

Dear Mr. Miller:

The staff of the Wyoming Game and Fish Department has reviewed the draft environmental assessment for the Eagle Butte Coal lease application as applied by AMAX Land Company. We offer the following comments for your consideration.

1) RE: Pages 35 and 60, finding "d" — wetlands. The author states, "Based on vegetation and soils, it is unlikely that any portion of the proposed lease area can be considered a wetland." This conclusion is partially based upon composition of a "drainage bottom" vegetation type delineated along East Prong Little Rawhide Creek, Revlon Draw, and upland swales. Vegetation mapping units are not defined with the objective of delineating wetlands. The composition of the bottomland type is an average of sampling units, which would merely intersect wetlands and uplands in proportion to their occurrence. The overall composition is not a reliable indicator of wetlands. Soil mapping units likewise may not be sufficiently refined to predict the potential occurrence of wetlands. Based upon vegetation, topography, and hydrology, it is reasonable to anticipate wetlands are absent or very limited in extent. However it is inappropriate to rely upon the average composition of a vegetation mapping unit to make inferences about the potential existence of vary localized departures from the average condition (ie, the possible existence of wetlands). Site reconnaissance is necessary to develop any sort of statement that merits inclusion in a decision document. In other words, wetlands are a resource that should be inventoried and disclosed prior to the leasing decision, not speculated

Headquarters 1400 Bishop Boulevard Cheyenne WY 82006-0001
TEL (307) 777-4610

based upon the composition of more encompassing plant community classifications.

2) RE: Pages 72 and 92 — method for predicting big game impacts. The approach used to predict big game impacts is analytically incorrect and leads to inappropriate conclusions. The author calculates the "average" density of antelope per square mile of occupied habitat in the herd unit as a basis for projecting the "worst case" potential mine impact. Conjecture is, the "worst case" potential reduction in the herd is a product of the average number of antelope per square mile of occupied habitat and the area of affected habitat.

This procedure has no biological value and is a digression from the kind of analysis needed to address the real impact. Using this procedure, the incremental effect of habitat loss or alteration, in most cases, is zero, and the number of animals critically dependent upon the lease area is probably zero. On the other hand, the number of animals critically dependent on a limiting habitat feature could be many times the average number per square mile of occupied habitat, assuming the herd is at carrying capacity. The point is, average density is an arbitrary assignment of the importance of any piece of habitat. The ongoing loss of average pieces of habitat will have no effect initially, because mobile species simply displace to other suitable habitats. However, as incremental losses accumulate, the elasticity of the habitat base diminishes. Also, important habitats become more scarce.

Animals which previously moved freely to access suitable habitats during severe weather events encounter more barriers and voids, and must migrate longer distances to find suitable habitats. This causes a net metabolic drain and concentrates animals on smaller areas where competition intensifies. As incremental development continues, the potential of severe weather to impart disproportionately high losses escalates. Eventually, incremental modifications of "average" pieces of habitat may lead to losses that far exceed the average number of animals per occupied unit. The idea of identifying "fail-safe" levels for development or habitat alteration is untenable. The actual increments that might be traced as having a causal effect on survival can vary depending on sequence of events and the herd's distribution and condition prior to each event. The important habitat elements (topography, shrubs, water sources, etc) of each increment must be maintained or restored to protect elasticity of the habitat base (the ability to accommodate population needs under a variety of climatological scenarios).

The kind of analysis BLM attempts to perform minimizes the importance of each spatial increment based upon it's "insignificance" relative to the amount of occupied habitat. BLM needs to view the cumulative effect of its leasing decisions in conjunction with <u>all</u> cultural land modifications preceding the decision and reasonably likely to follow the decision, in order to comment about the ongoing state of habitat

elasticity. This is much more a statistical endeavor than an absolute one. If elevated mortalities become more probable because animals have fewer options, then over time, the carrying capacity of the herd unit will decline. Using BLM's appproach, the next logical extension (by industry) is that mitigation is unnecessary because the impact is "insignificant." BLM needs to be cognizant of the implications of its historic approach to impact analysis.

3) RE: Page 73 — shrub component and big game winter use. Authors make the statement, "Pronghorn are already using reclaimed areas at the Eagle Butte Mine seasonally; as the shrub component on reclaimed land increases, more winter use of this land by pronghorn is expected." Please comment on the relative amounts of sagebrush that currently exist on reclaimed surfaces at Eagle Butte mine, and provide documentation of a time frame for recolonization by adequate densities of sagebrush in locations that will be accessible during winter storm events.

4) RE: Page 82 — Shrubland reclamation. Authors state, "Continued emphasis on increasing vegetal species diversity on reclaimed lands, and particularly on establishing shrublands, would help increase use of reclaimed land by shrub-dependent wildlife species." This interjects speculation into the analysis. Please comment on the more probable scenario based upon existing conditions — straight grassland, little surface relief, reversion to moderate to heavy grazing practices after mining. What kind of wildlife community will occupy a closely cropped grassland, no shrubs, and a few isolated rock piles? (Alternative shrubs substituted for sagebrush are eliminated by livestock or decline in this climate).

5) RE: Page 92 — percentages of herd unit affected. We question the value of this approach for impact analysis, particularly when viewed in a cumulative context (see comments 2 and 6). Also, what effect will habitat alteration within the mined area have on biological diversity (see comment 4)?

6) RE: Pages 92 — cumulative effect on big game. Authors state, "... at this point, herd population levels have not been adversely affected by more than ten years of mining." Again, this is not the impact of immediate concern. The herd objective is not set at carrying capacity. It is an intermediate figure, based largely on social and political desires of the public as well as the biology of the species. Development activities within the herd unit can affect carrying capacity without affecting the current population (see comment 2 discussion). It is highly improbable that any specific increment of development will affect the existing herd number or objective, because these figures are held beneath the carrying capacity. However, incremental developments can lower the carrying capacity by reducing elasticity of the habitat base. As the gap between carrying capacity and the actual population narrows (for whatever reason), the effects of climate and density dependent regulation increase. The annual recruitment potential of the

herd diminishes. Furthermore, such impacts compromise future management options (ie, setting a higher population objective) as well as the margin of error for existing management objectives. The point is, incremental methods of impact analysis portray a misleading image of what is actually happening, leading to a false sense of security. More damaging than that, they create a tempting argument against the need for effective mitigation. The discussion of cumulative impacts needs to address the interactive effects of all previous, existing, and future cultural modifications of the land (agricultural conversions, grazing, fences, roads and highways, urban developments, subdivisions, oil and gas, feral animals, etc) and the addition of mining related impacts. This discussion should consider the impacts of these features upon the ability of animals to access required habitat elements during the most restricting climatological periods, as well as the impact upon the animal's metabolic balance prior to entering periods of restricting conditions. That is where the true cumulative effect lies.

Thank you for the opportunity to comment.

Sincerely,

JOE WHITE
DEPUTY DIRECTOR

JW:TC:as
cc: Wildlife, Fish, HATS Divisions
USFWS

6

THE GEOLOGICAL SURVEY OF WYOMING
BOX 3008 UNIVERSITY STATION • LARAMIE WYOMING 82071
(307) 766-2286 • FAX 307-766-2605

STATE GEOLOGIST · Gary B. Glass

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PUBLICATIONS
Editor: Richard W. Jones

December 2, 1993

– M e m o r a n d u m –

TO: Rod Miller, Wyoming State Clearing House

FROM: Gary B. Glass, State Geologist GBG

SUBJECT: Eagle Butte Coal Lease Application Draft Environmental Assessment (State Identifier 93-081)

We submit the following comment on the Draft Environmental Assessment (DES) for the Eagle Butte Coal Lease Application:

Pages 26, 28, and 31

The "Roland" and "Smith" coal bed terminology used for the Wyodak-Anderson coal in the lease area is technically incorrect. We think it is important to note that these coal beds are now more appropriately called the "Anderson:" and "Canyon" beds, respectively. This nomenclatural change became the acceptable one sometime after Amax's original Eagle Butte mine plan had been submitted and after considerable coal drilling information had been made available to State and Federal coal researchers. As long as this is made clear, there is no reason to require formal changes in mining permits.

Page 28, third paragraph, fourth sentence

The word "subbituminous" is not spelled with a hyphen.

Page 38, Section 5. Ownership and Use of Land

Has anyone sampled the areas adjacent to the proposed lease tract for signs of naturally venting methane such as occurred at the Rawhide Village and Horizons subdivisions in the 1980s? Soil-gas tests could establish the existence or nonexistence of this kind of hazard prior to mining. Early detection of a naturally occurring hazard could avoid expensive litigation in the future, after the area is affected by mining.

Are coal bed methane wells in this general area reducing or eliminating the surface venting of methane in the Rawhide Village and Horizon subdivision areas? This may be a possible hazard mitigation procedure to consider if another Rawhide Village situation is discovered.

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There is no indication how close this extension is to inhabited buildings or water wells that are not owned by Amax. We note that the 7 1/2-minute topographic map for this area shows there may be inhabited dwellings within one-half mile of the mine area to the south. Also, is there still a public golf course immediately west of the lease tract? There is also a trailer park within 1.5 miles. Because this map is not very recent, there may be other dwellings as well. Several water(?) wells are shown on the topographic map (attached).

Page 56, Table 10

We have included an updated table of coal production forecasts for use by those preparing the DES. We did this because our most recent forecast is considerably higher than the one we published in May 1993.

Questions on coal bed nomenclature and forecast coal production should be directed to Gary Glass or Tim Moore. Questions on the potential for venting coal bed methane should be directed to Gary Glass.

GBG/sb

Enclosure

7

DIVISION OF PARKS
& CULTURAL RESOURCES

State Historic Preservation Office
2301 Central, Barrett Bldg
Cheyenne, Wyoming 82002-0240
(307) 777-7697
FAX (307) 777-6421

3420(LBA)
WYW0134783
Eagle Butte

BUREAU OF LAND MANAGEMENT
CASPER, WYOMING
93 NOV 22 AM 10:46

Wyoming
Department of Commerce

November 17, 1993

Casper District Manager
Bureau of Land Management
1701 E Street
Casper, Wyoming 82601
ATTN: Nancy Doelger

RE: Eagle Butte Coal Lease Application Draft Environmental Assessment (State ID #93-081), SHPO #0492JAK005

Dear Ms. Doelger:

Sandra Shelley of our staff has received information concerning the aforementioned project. Thank you for giving us the opportunity to comment.

Our office received a report on a Class III inventory of the project area done by Frontier Archaeology in 1992. We have already commented on the report and find that there will be "no effect" to cultural resources, (see attached letter dated April 14, 1992).

Please refer to SHPO project control number #0492JAK005 on any future correspondence dealing with this project. If you have any questions contact Ms. Shelley at 777-5497 or Judy Wolf, Deputy SHPO at 777-6311.

Sincerely,

Judy L. Wolf

for John T. Keck
State Historic Preservation Officer

JTK:SAS:klm
Attachment

Mike Sullivan
Governor

R.D. "Max" Maxfield
Director
Department of Commerce

8

DIVISION OF PARKS
& CULTURAL RESOURCES

State Historic Preservation Office
1825 Carey Avenue
Cheyenne, Wyoming 82002-0240
(307) 777-7697
FAX (307) 632-2748

Wyoming
Department of Commerce

April 14, 1992

Mr. David Pomerinke
Buffalo Resource Area Manager
Bureau of Land Management
189 North Cedar
Buffalo, Wyoming 82834
ATTN: B. J. Earle

RE: Amax Eagle Butte LBA Tract, SHPO #0492JAK005

Dear Mr. Pomerinke:

Josie Kantner and Ted Dunn of our staff have received information concerning the aforementioned project. Thank you for giving us the opportunity to comment.

We have reviewed the project report and find that the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48FR44716-42). Sites 48CA2734 and 48CA2735 do not meet the criteria of eligibility for the National Register of Historic Places and no further work or protective measures are necessary. We recommend that the Bureau of Land Management (BLM) allow the project to proceed in accordance with state and federal laws subject to the following stipulation: if any cultural materials are discovered during construction, work in the area should halt immediately and BLM staff and SHPO staff must be contacted. Work in the area may not resume until the materials have been evaluated and adequate measures for their protection have been taken.

This letter should be retained in your files as documentation of our determination of "no effect" for this project.

Please refer to SHPO project control number #0492JAK005 on any future correspondence dealing with this project. If you have any questions, contact Ms. Kantner at 777-6292 or Mr. Dunn at 777-6694.

Sincerely,

Gary Stephenson

Gary Stephenson
Director
Administrative Services

FOR:
Dave Kathka, Ph.D.
State Historic Preservation Officer

Mike Sullivan
Governor

R.D. "Max" Maxfield
Director,
Department of Commerce

9

THE STATE OF WYOMING

DEC 07 1993

MIKE SULLIVAN
GOVERNOR

Public Service Commission

700 W. 21ST STREET (307) 777 7427 CHEYENNE, WYOMING 82002
FAX (307) 777 5700
TTY (307) 777 7427

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CHIEF COUNSEL AND
COMMISSION SECRETARY
STEPHEN G. OXLEY
ADMINISTRATOR

MEMORANDUM

TO: MR. ROD S. MILLER
FEDERAL LANDS COORDINATOR
STATE PLANNING COORDINATOR'S OFFICE

FROM: JON F. JACQUOT
CHIEF ENGINEER
PUBLIC SERVICE COMMISSION

DATE: DECEMBER 6, 1993

RE: EAGLE BUTTE COAL MINE LEASE APPLICATION TO THE BUREAU OF LAND MANAGEMENT

Thank you for the opportunity to comment on the referenced matter. The Commission requests that no unreasonable restrictions be placed on the provision of utility service or on the construction of utility and pipeline facilities as a result of the referenced lease.

The Commission requests that, when coal leasing is being done, the costs of relocating any utility and pipeline facilities to accommodate coal production be borne by the lessee. If these costs are not borne by the lessee, they would fall unfairly on the ratepayers of the affected utility or pipeline.

If you should have any questions regarding this matter, please let me know.

10

CASPER BLM
APR 18 '94
DM MN
ADM FL
PA SL
AO GRA
OPR NRA
LRS PRA
SGR

STATE OF WYOMING
OFFICE OF THE GOVERNOR
CHEYENNE 82002

April 18, 1994

Don Heinricksen, District Manager
Casper District
Bureau of Land Management
1701 E Street
Casper, WY 82601

Dear Mr. Heinricksen:

Agencies of the State of Wyoming have reviewed the Review Draft of the Environmental Assessment for the Eagle Butte Coal Lease Application. Enclosed for your consideration and use are comments resulting from that review. You will note that the Wyoming Game and Fish Department has some specific comments regarding methodologies used in the EA. The Wyoming Geological Survey has offered some valid advice regarding the possible problems caused by soil gas in the area.

These comments, however, do not indicate fatal flaws in the EA and I support the issuance of the subject lease.

With best regards, I am

Very truly yours,

Mike Sullivan

MS/rms

cc: State Review Agencies
Wyoming Congressional Delegation

11

THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Public Service Commission

700 W. 21ST STREET (307) 777-7427 FAX (307) 777-5700 TTY (307) 777-7421 CHEYENNE WYOMING 82002

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CHIEF COUNSEL AND
COMMISSION SECRETARY
STEPHEN G. OXLEY
ADMINISTRATOR

MEMORANDUM

TO: MR. ROD S. MILLER
FEDERAL LANDS COORDINATOR
STATE PLANNING COORDINATOR'S OFFICE

FROM: JON F. JACQUOT
ENGINEERING SUPERVISOR
PUBLIC SERVICE COMMISSION

DATE: APRIL 14, 1994

RE: APPLICATION BY AMAX LAND CO. TO THE BUREAU OF LAND MANAGEMENT FOR THE EAGLE BUTTE COAL LEASE, STATE IDENTIFIER NO. 93-081

Thank you for the opportunity to comment on the referenced matter. The Commission requests that no unreasonable restrictions be placed on the provision of utility service or on the construction of utility and pipeline facilities as a result of the referenced lease.

The Commission requests that, when coal leasing is being done, the costs of relocating any utility and pipeline facilities to accommodate coal production be borne by the lessee. If these costs are not borne by the lessee, those costs would fall unfairly on the ratepayers of the affected utility or pipeline.

If you should have any questions regarding this matter, please let me know.

12

THE GEOLOGICAL SURVEY OF WYOMING
BOX 3008 UNIVERSITY STATION • LARAMIE WYOMING 82071
(307) 766-2286 • FAX 307-766-2605

STATE GEOLOGIST · Gary B. Glass

April 7, 1994

MEMORANDUM

TO: Rod Miller, Wyoming State Clearing House

FROM: Gary B. Glass, State Geologist

SUBJECT: EA for the Eagle Butte Coal Lease Application (State Identifier 93-081)

I only have one comment on this Environmental Assessment and that goes back to earlier comments I have made in regard to this lease and other coal mines and leases in and around Gillette. There is no indication that any soil-gas surveys were conducted in the areas west and south of this lease application. The report also notes that certain geological and hydrological conditions can cause the surface venting of coalbed methane such as occurred at Rawhide Village.

While the mine may not cause or aggravate the venting of coalbed methane, it seems prudent to determine whether or not there is any surface venting of methane or any methane plumes in the soil gases west and south of the lease before mining begins? A portion of the Campbell County Regional Airport is less than a mile west of the lease. Gillette is to the south. This could save many hours of time and even more dollars in potential property damage and litigation should the mine eventually be accused of something that may or may not already exist.

In hindsight, I believe the Rawhide Village problem might have been identified and mitigated if a surface and(or) a soil-gas survey had been conducted there prior to mining. A baseline soil-gas survey in the direction of populated or occupied lands is warranted based on the grief and costs associated with Rawhide Village.

If nothing else is done, perhaps the property owners in those areas and the county should be advised that a soil-gas survey would provide them some peace of mind in regard to preventing a future Rawhide Village -type problem. Perhaps it should be an element of land-use planning in this area of the State, which I realize goes beyond the scope of this EA.

GBG:ph

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13

WYOMING
GAME AND FISH DEPARTMENT

April 15, 1994

EIS 0319
U.S. Department of the
Interior
Bureau of Land Management
Review Draft
Eagle Butte Coal Lease
Application
SIN: 93-081
Campbell County

ROD MILLER
STATE PLANNING COORDINATOR'S OFFICE
HERSCHLER BUILDING, 4TH FLOOR EAST
CHEYENNE, WY 82002

Dear Mr. Miller:

On November 15, 1993, we received a request to review a draft environmental assessment prepared for the AMAX Eagle Butte Coal Lease. The proposed lease adjoins the southern boundary of the existing Eagle Butte Permit Area, approximately 3 mi north of Gillette. On December 15, 1993, we forwarded comments to the State Planning Coordinator. On March 25, 1994, we received a request to review another "draft" environmental assessment for the Eagle Butte LBA. In reviewing the current draft EA, we find that our December 15 comments were not addressed and there was no apparent effort to incorporate them. Our December 15 comments (attached) still apply to this EA.

Thank you for the opportunity to comment.

Sincerely,

Tom Collins for

JOE WHITE
DEPUTY DIRECTOR

TC:as
Attachments
cc: Wildlife, Fish, HATS Divisions
USFWS

RESPONSES TO STATE AGENCIES

Response to Letter 4, from the Office of the Governor, January 3, 1994

The BLM appreciates the responsiveness of the agencies of the State of Wyoming in reviewing and commenting on the proposed Eagle Butte leasing action. Comments from state agencies have helped improve the environmental assessments prepared by the BLM for all the leasing actions.

Response to Letter 5, from the Wyoming Game and Fish Department, December 15, 1993

Numbers in this response correspond to numbers in the comment letter.

1) RE: Pages 35 and 60, draft EA, finding "d" -- wetlands. The conclusion that it is unlikely that any portion of the proposed area can be considered a wetland is not based on an average of sampling units which intersect wetland and uplands in proportion to their occurrence. Although an Army Core of Engineers wetlands assessment has not yet been completed on the LBA, full vegetation and soil baseline studies were conducted. Site-specific field studies were conducted, and no clear indicators of wetlands were identified.

2) RE: Pages 72 and 92, draft EA -- method for predicting big game impacts. As you indicate in comment 6 of your comment letter, the herd objective is not set at carrying capacity, it is an intermediate number. Presumably then, the area of the North Black Hills herd unit would support more than the 14,000 pronghorn estimated to be in residence in 1992.

No critical or crucial habitat or limiting habitat feature exists on the LBA, and none are defined within the North Black Hills unit. Given this situation, if this tract became completely unsuitable for pronghorn following mining, the loss of AUMs would be fairly proportional to the size of the LBA in relation to the size of the occupied habitat within the herd unit.

The assumption that the area would be completely unsuitable following reclamation is an exaggeration, because some use of reclaimed habitat by pronghorn has been observed in reclaimed areas in the basin.

Therefore, the estimation of a loss of 12-14 pronghorn within the North Black Hills herd as a result of mining of the Eagle Butte LBA is considered to be a reasonable worst-case estimate of the impacts of issuing this lease on pronghorn in the North Black Hills herd. If the Wyoming Game and Fish Department (WGFD) has data supporting a different estimate, we will consider it in our analyses.

3) RE: Page 73, draft EA -- shrub component and big game winter use. Vegetation sampling in 1993 at the Eagle Butte north pit reclamation area found a sagebrush density of 3.9

sagebrush/square meter. The draft EA states on page 91 that the time required for sagebrush densities to return to pre-mining levels would probably range from 20 to 100 years. These numbers are based on estimates by BLM wildlife biologists and previous comments from WGFD. These statements have been incorporated into the Final EA in the discussion of Environmental Impacts to Wildlife (Section IV. B. 6).

4) RE: Page 82, draft EA -- Topography on reclaimed areas will be gentler than the pre-mining surface and the shrubs will not be as dense or numerous following reclamation. This is stated in the EA. The depiction of the reclaimed areas as straight grassland, little surface relief, reversion to moderate to heavy grazing practices after mining is also speculation. At this time, it is not supported by data from the existing reclaimed areas at Eagle Butte, or from other mines in the basin. The use of reclaimed areas by big game, waterfowl, predators and other faunal groups is indicated by regular observation of these groups in reclaimed areas at Eagle Butte and at other mines.

5) RE: Page 92, draft EA -- percentages of herd unit affected. Please see responses to 2, 4, and 6.

6) RE: Page 92, draft EA -- cumulative effect on big game. As you have indicated in your discussion, pronghorn herd levels are managed, and management decisions are based on social and political desires of the public as well as biology. This is not a natural system in which the pronghorn population is allowed to reach a natural equilibrium based on climatic variations, predator supply, and food supply. As a result, the impacts of ten years development on the herd may not be reflected in the herd population levels. However, given the numbers of antelope in these herds, and the amount of habitat in the Powder River Basin which is not affected by development activities, it is extremely unlikely that either the antelope population or the sagebrush habitat in the Powder River Basin are currently threatened (or will be threatened) with any significant decrease in genetic diversity as a result of the coal mining activity, even when considered with all the other activities in the basin. The BLM is a multiple use land management agency, and as such needs to balance land use, the sustainability of the native ecosystems and the sustainability of economic development.

According to the Council of Environmental Quality, cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. The action being evaluated in this environmental assessment is leasing of approximately 150 million tons of coal under approximately 915 acres. The discussion of cumulative impacts should determine if the incremental impacts of mining of 915 additional acres of coal become more significant when evaluated with other activities (mining and non-mining) in this same area. In the specific case of the Eagle Butte Mine, will mining coal underlying 4,740 surface acres have significantly greater impacts than mining coal underlying 3,825 surface acres when added to other activities in the area. [Or, perhaps more appropriately in Eagle Butte's case, would mining coal underlying 23,332 acres (federally leased coal at the mines north of Gillette including Eagle Butte LBA) have significantly greater impacts than mining coal underlying 22,417 acres (federally leased coal at the mines north of Gillette excluding Eagle Butte LBA), when added to other activities.] In the case of the cumulative

impacts of all the LBAs, would mining coal underlying 113,900 acres (acres of federally leased coal, including all the LBAs) have significantly more impact than mining 102,400 acres (acres of federally leased in 1990, prior to recent leasing) when added to other activities in the Powder River Basin.

The BLM recognizes that there are cumulative impacts associated with leasing at adjacent mines. As a result, each EA considers the cumulative impacts of all the current coal leasing in the Wyoming portion of the Powder River Basin. An analysis of the impacts of all previous, existing and future cultural modifications of the land and the all mining related impacts is beyond the scope of this document. These impacts have been analyzed in past regional environmental analyses which are referenced in the EA. These past regional analyses analyzed levels of mining activity and other activities that are greater than those which have actually occurred. The actual impacts of the mining activity and other activities in the area have not exceeded the impacts that were predicted in these previously prepared regional analyses.

Response to Letter 6, from the Geological Survey of Wyoming, December 2, 1993

Page references refer correspond to comment page references

Pages 26, 28, and 31 (draft EA)
The coal bed nomenclature changes are now discussed in the EA.

Page 28 (draft EA)
This has been corrected.

Page 38 (draft EA), Section 5, Ownership and Use of Land
Paragraph 1: See response to Letter 12, Geological Survey of Wyoming.

Paragraph 2: Eagle Butte maintains three coal monitoring wells at Rawhide Village; one well began monitoring in 1989 (DEQ2001), and two additional wells were added in 1990 (GT2001 and RHV2002). Water levels and gas pressures are monitored in these three wells, and this data is reported in Eagle Butte's annual reports to WDEQ/LQD. During the time period that the wells have been monitored, water levels have dropped almost 20 feet in DEQ2001, while gas pressures have declined by about 30 percent. Water levels have dropped about 10 feet in well GT2001, and gas pressures, which are very small, have stayed relatively constant. Water levels in the third well (RHV2002 have remained relatively constant, while gas pressures have decreased about 30 percent. In a closed system where the gas remained in place, gas pressures would be expected to increase with decreasing water levels, because more gas would be released from the coal as the water level dropped. The absence of an increase in gas pressure in the two wells where water level has dropped is probably due to production of coal bed methane from production wells in this area, or to the venting of the gas at the surface, or both. The monitoring data for these wells is included as an Attachment to these responses.

Paragraph 3: The description of occupied dwellings in the area has been expanded in the

Ownership and Used of Land Section, and a table of water wells that will potentially be impacted by the Eagle Butte Mine has been included in this final EA as Appendix B. The public golf course is no longer in operation.

Page 56 (draft EA), Table 10
This table has been updated.

Response to Letters 7 and 8, from the State Historic Preservation Office, November 17, 1993 and April 14, 1992

Thank you for your continuing cooperation with the BLM in reviewing cultural inventories and commenting on the EAs.

Response to Letter 9, from the Public Service Commission, December 6, 1993

Utility and pipeline facilities will be relocated by the coal lessee except in areas where pre-existing easements and rights-of-way or other legal obligations state otherwise.

Response to Letter 10, from the Office of the Governor, April 18, 1994

Thank you for your review of the preliminary changes made for the final EA for the Eagle Butte coal lease application. We have responded to the comments of the various agencies on the draft EA (see previous comment letters and responses), and made some changes in the final EA as well.

Response to Letter 11, from the Public Service Commission, April 14, 1994

Please see response to Letter 9, above.

Response to Letter 12, from the Geological Survey of Wyoming, April 7, 1994

Surface venting of coalbed methane west of the LBA is not known at this time, and there is no indication on the surface that there are structures in the coal in that area like those at Rawhide Village. There is potential for coal bed methane to be trapped in the coal anywhere in this area, including the area west of the LBA tract, if there are structures in the coal and a good seal on top. There are three wells completed as coal bed methane producers west of the airport in

section 31, T.51 N., R.72 W., and one northwest of the airport in the northwest corner of section 32. Prior to completion of these four wells, the operator drilled 15 test wells in section 31 to identify potential structural highs and gas shows in the coal. This production is part of Rawhide Butte Field.

As indicated in the EA (Section III. B. 1.), the studies that were done in the Rawhide Village area concluded that the mining operations did not cause or aggravate the gas seepage in the Rawhide Village area. Based on those studies, the EA concludes that mining operations on the LBA would not cause or aggravate coal bed methane problems elsewhere.

Soil gas testing would be a useful tool for identifying potential future surface methane gas problems in the area west of the LBA, and in other populated areas around Gillette. There will be a review of Eagle Butte's permit revision application by DEQ, which would provide a forum for further discussion of this topic with the city, the airport, or nearby residents.

Response to Letter 13, from the Wyoming Game and Fish Department April 7, 1994

Please see response to Letter 5, above.

Attachment to Response to Letter 6 from the Geological Survey of Wyoming
Water Levels and Gas Pressures for Coal Monitoring Wells at Rawhide Village

	Water Levels			Gas Pressures		
Date	DEQ2001	GT2001	RHV2002	DEQ2001	GT2001	RHV2002
10/89	4148.13			129.66		
06/90	4134.32					
10/90	4134.02			122.21		5.47
11/90	4133.93	4213.02	4207.33	121.45	0	5.99
12/90	4135.44	4210.84	4203.55	108.17	0	4.7
01/91	4133.64	4211.99	4201.95	86.58	−1.21	5.56
02/91	4133.94	4212.1	4202.36	88.33	−1.11	5.69
03/91	4127.02	4212.12	4202.17	113.99	−1.11	3.17
04/91	4126.71	4212.75	4202.51	114.27	−1.21	4.02
05/91	4125.88	4212.47	4201.87	114.61	−1.11	3.68
06/91	4127.42	4211.24	4203.49	110.36	−0.35	4.99
07/91	4126.83	4211.55	4202.53	112.62	−1.11	4.52
08/91	4128.47	4208.59	4204.12	103.87	−1.02	2.89
09/91	4127.81	4209.05	4202.92	107.66	−1.11	3.35
10/91	4128.82	4209.66	4203.74	104.22	−1.21	4.12
11/91	4128.28	4209.6	4203.32	106.36	−1.21	5.68
12/91	4126.77	4210.45	4205.53	108.12	−1.21	4.81
01/92	4125.48	4207.06	4204.31	98.64	0.36	1.04
02/92	4123.74	4202.02	4206.11	102.29	0.18	2.67
03/92	4124.48	4202.86	4205.56	101.98	−1.11	2.83
04/92	4125.96	4204.61	4204.75	100.62	−1.11	2.39
05/92	4125.16	4204.2	4205.08	101.33	−1.11	2.89
06/92	4125.76	4203.96	4205.48	101.62	−1.11	3.07
07/92	4126.46	4204.77	4206.34	100.92	−1.11	2.79
08/92	4128.73	4201.79	4207.53	92.33	0.05	2.18
09/92	4129.19	4203.15	4208.27	92.51	0.08	2.41
10/92	4130.96	4203.71	4209.82	94.61	0.1	3.02
11/92	4131.52	4204.16	4210.01	93.66	0.09	2.91
12/92	4132.18	4204.35	4210.23	93.07	0.13	3.02
01/93	4131.96	4204.03	4210.88	86.19	0.08	4.07
05/93	4131.51	4203.66	4210.17	87.18	0.12	3.99
09/93	4129.92	4203.45	4208.29	88.52	0.13	3.88
11/93	4129.74	4203.21	4208.21	86.88	0.1	3.91

3420(LBA)
WYW124783
Eagle Butte

14

POWDER RIVER BASIN RESOURCE COUNCIL

[illegible] North Scott • Sheridan WY 82801 • (307) 672-5809

January 12, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East E Street
Casper, WY 82601

RE: Comments on Draft EA for Eagle Butte coal lease application

Dear Ms. Doelger

We appreciate the extension of time granted by the BLM until January 14th for submission of our comments on the Draft EA for the Eagle Butte coal lease application. As you know, the Powder River Basin Resource Council is a grassroots organization of Wyoming citizens dedicated to the good stewardship and responsible development of our natural resources. Following are the comments and concerns we have regarding the draft EA.

Conformance With Land Use Plan P. 5

The EA states that the buffer zone around the City of Gillette was established in 1979 in which coal leasing is not allowed. In 1987, one exception was made for a coal lease modification for coal that was within the Gillette Buffer Zone. As a result the Buffalo Resource Management Plan was amended to allow **limited** coal leasing which consisted of emergency leases, exchanges and lease modifications with the buffer zone. In regard to this action we have the following questions. Why isn't an amendment to the Buffalo RMP necessary to process a lease by application like the Eagle Butte LBA? Under what procedure was the RMP change adding LBAs to the types of leasing actions that can be considered in the Gillette Buffer Zone issued by the BLM? How large was the 1987 lease modification as compared with the Eagle Butte lease by application?

Proposed Action and Alternatives. P. 14

Why didn't the BLM consider an alternative tract configuration that would enhance competitive bidding between the Eagle Butte Mine and other adjacent mines such as Dry Fork, Rawhide, Fort Union, or Buckskin? Doesn't NEPA require consideration of all possible alternatives? Isn't the BLM mandated to enhance competitive bidding for coal leasing according to the Federal Coal Leasing Amendments Act?

Alternative #5 on page 20. Postpone the Lease Sale - The EA states that spot prices for coal are at an all time low and that a rise in spot prices is predicted by some. Given these facts why would the BLM lease coal when prices are at an all time low? The EA also talks about the fact that a delay in leasing would limit a companies ability to negotiate higher priced contracts and rely on spot sales. However, isn't it true that almost none to very few high priced contracts are being signed and most coal is being acquired on spot sales? We would like to see more analysis of Alternative #5 and the advantages of leasing at a later date to obtain a higher bonus bid. How long can the sale be postponed and the tract still mined in a logical sequence? What about the possibility of other tract configurations?

Environmental Impacts & Cumulative Impacts
Water Resources

On page 65, the Draft EA states that a total of 31 water supply wells have been identified as potentially being impacted by the Eagle Butte Mine based on the result of the groundwater modeling. The EA states that eight of the wells are on AMAX land, 11 are permitted for domestic use, 2 are for stock use, 1 is for industrial use and 9 are for miscellaneous. Who specifically uses these wells and will be impacted? Please list them in the Final EA rather than referring to a table in another document in another location.

On page 66, the EA states that water from the spoil aquifer will enter the adjacent unmined aquifer. Since this will degrade water quality in the adjacent aquifer, how many wells will be impacted both locally and cumulatively by the spoil aquifer? Who specifically will be impacted?

On page 102 the EA states that, ".. the water from the spoils will **generally** be acceptable for its current use, which is for livestock, before and after equilibrium is re-established." However, the majority of wells that are projected to be impacted by the Eagle Butte Lease are for domestic use. The EA also states that, the incremental effect on ground water quality due to the Eagle Butte LBA would be to increase the total volume of spoil, and thus the time for equilibrium to re-establish." On p. 64, the EA states, "estimates of the time required for the groundwater system to re-establish equilibrium vary from a few tens of years to hundreds of years." This being the case, even a few months without water makes it impossible to operate. Based on recent data from spoil aquifers it is also true that many of these wells may not be usable for livestock and certainly not for domestic use due to high TDS levels. What mitigation measures is the BLM proposing to minimize and reduce the impacts to those people who depend on these wells?

As you know, NEPA notes that in cases where an environmental assessment is appropriate, certain mitigation measures may be implemented even though the agency deems the impacts to be not significant. "The appropriate mitigation measure can be imposed as enforceable permit conditions, or adopted as part of the agency final decision in the same manner mitigation measures are adopted in the formal Record of Decision that is required in EIS cases." Given the very real likelihood of grave impacts to water

resources, and the provisions available under NEPA, PRBRC suggests that BLM adopt a lease stipulation requiring the replacement of domestic and livestock water supplies that are predicted to be impacted This measure is necessary to ensure the protection and replacement of the water people depend upon. If the BLM chooses not to adopt specific mitigation measures for the impacts to water resources please state why?

Air Quality P 103

The analysis on air quality impacts is completely inadequate especially given the closer proximity of mining to Gillette and the potential impacts to people's health, particularly the young and old. The EA states that, "coal mining activities produce particles which can be released in the air. Most of these particles are created as a result of physical forces such as blasting, crushing and friction between vehicles and road surfaces **These particles are not considered to be as much of a health hazard as the generally much smaller particles produced by chemical activities such as condensation, absorption and adsorption.**" According to recent studies this may not be true. Is the BLM aware of new studies which indicate that airborne particulate can cause severe health effects which are far worse than previously assumed. Why doesn't the BLM take this information into account?

The EA goes on to state that, "the amount of additional air quality resource that is available for future mining cannot be quantified without rigorous technical evaluation." And, "the amount of air increment utilized by a particular operation is highly dependent upon the type of operation, the types of equipment, and the mining sequence." Given this lack of information how does the BLM know that the air quality impacts of the Eagle Butte Mine would not be significantly different from the past? The EA also states that increased blasting will be probably be required because of thicker overburden in the lease area. If locations of emission sources change or increase the impacts to people would also change. What are these impacts? With the closer proximity to Gillette aren't these critical questions to answer?

The EA states, "The proposed action would not directly affect air quality except to extend the life of the mine incrementally." Doesn't extending the life of the mine, even incrementally, closer to Gillette have a definite impact on air quality and a greater impact on people's health? What studies are you using to back up your statement that although the air quality would decrease it would still meet state and federal standards? What overall impacts on health would this decrease in air quality have? What if state and/or federal standards are changed? Is the BLM aware that discussions are currently taking place regarding the implementation of stricter air particulate standards based on new studies concerning health hazards? Please include some discussion about this possibility and about the studies that show adverse health effects from airborne particulate. Additional new analysis seems to also be in order based on these recent studies.

Conclusion

It is still our position that a comprehensive environmental impact study is required for all the proposed coal leasing and development in this area The overlapping impacts from adjacent mines combined with additional leasing and proposed mine expansions are not being completely analyzed while they do have significant cumulative impacts. We may be beating a dead horse reiterating this issue, but addressing these leases separately in a scatter-gun approach only impedes a rational analysis of the implications of the action and breeds mistrust of the process.

Thank you for your consideration of these comments

Sincerely,

Bob Strayer
Energy Development Committee

nm doelger 1/31/94
MKirk 1/31/94

3420(LBA)
WYW124783
Eagle Butte

JAN 31 1994

Powder River Basin Resource Council
Attn: Mr. Bob Straver
23 North Scott
Sheridan, WY 82801

Re: Comments on Draft Environmental Assessment (EA) for Eagle Butte Coal Lease Application

Dear Mr. Straver:

Thank you for your comments on the draft Eagle Butte coal lease application. At this time, we are reviewing comments and revising the draft EA. We need some additional information from you in order to address your comments concerning air quality. In your comment letter on the draft EA dated January 17, 1994, you refer to new studies which indicate that airborne particulates can cause severe health effects. Please send us the references for these studies, so that we may ensure that we review that information before completing the final EA.

Thank you very much for your consideration of this request for additional information. Please send the reference information to: BLM Casper District Office, Attn: Nancy Doelger, 1701 East "E" Street, Casper, Wyoming 82601, or phone (307)-261-7600.

Sincerely,

S/ DON L. HINRICHSEN

District Manager

cc: Gene Jonart WSO (925)

NDoelger:smo:1/30/94:PRBRCLET.NED.ND

POWDER RIVER BASIN RESOURCE COUNCIL
23 North Scott • Sheridan, WY 82801 • (307) 672-5809
P.O. Box 1178 • Douglas, WY 82633 • (307) 358-5002

94 FEB -9 AM 10:36

February 8, 1994

Nancy Doelger
BLM Casper District Office
1701 East "E" Street
Casper, WY 82601

RE: Comments on Draft Environmental Assessment (EA) for Eagle Butte Coal Lease Application

Dear Nancy,

Per a request from the District Manager, enclosed please find copies of studies concerning the health effects of airborne particulates. I have also enclosed another document which cites several other studies. I did not make extra copies of these studies so please xerox them for your files and return them to us. In the future, we hope the BLM makes a concerted effort to locate this type of important information in advance so that it can be considered and included in the Draft EA.

Call me if you have questions.

Sincerely,

Jill Morrison
PRBRC Staff

Material returned as requested, 2/9/94
Thank you for your response to our request
Nancy Doelger

COMMENT LETTERS

Response to Letter 14, from the Powder River Basin Resource Council

Headings in this response correspond to section headings in the comment letter.

Conformance with Land Use Plan

It is not necessary to amend the Buffalo RMP to add leasing by application to the types of leasing actions that can be considered within the Gillette Buffer Zone because the 1987 amendment allows leasing within the Gillette Buffer Zone under the leasing by application regulations. The objectives, and the application, evaluation and sale processes are the same for emergency coal leasing and leasing by application because the regulations are the same (Leasing on Application, 43 CFR 3425). The procedure used to add leasing by application to the types of leasing actions that can be considered within the Gillette Buffer is called plan maintenance, which can be used to further refine or document a previously approved decision incorporated in a plan (43 CFR 1610.5-4).

Lease modifications are limited to a maximum of 160 acres per lease. In 1987, Wyodak added a total of 360 acres to three leases within the Gillette Buffer Zone with three lease modifications. Prior to being modified in 1987, the three Wyodak leases contained 2,580.00 acres; after the 1987 lease modifications, these three leases contained 2,940.00 acres. This is an increase of 14 percent in the size of Wyodak's three modified federal leases.

In comparison, Eagle Butte has two existing federal coal leases, containing a total of approximately 3825 acres. The LBA contains approximately 914 acres (1059 acres under Alternative 2). This represents an increase of 24 percent (28 percent under Alternative 2) in the size of Eagle Buttes federal coal lease holdings.

Proposed Action and Alternatives

Paragraph 1:

As discussed in the EA (Alternative 1, page 17 and Alternative 4, page 20), the Eagle Butte tract is bounded on the north and east by the existing Eagle Butte lease, on the west by Highway 59 and the airport, and on the south by the Gillette Buffer zone. Because these barriers exist on all sides of the tract, BLM was not able to identify a reasonable alternative lease configuration for this particular tract that would make it accessible to any of the other mines adjacent to the Eagle Butte Mine. NEPA requires that all reasonable alternatives be considered.

The BLM is mandated to maximize economic recovery and avoid bypassing minable coal, as well as enhance competitive bidding. The Eagle Butte LBA is a potential coal bypass situation if it is not mined in conjunction with the existing mining operation at Eagle Butte. Furthermore, the environmental impacts of mining this particular tract of coal are reduced if it is mined in a logical sequence by an existing adjacent mining operation since recovery by any other operator in this area would entail more construction, a longer coal hauling distance, or both.

Paragraph 2:

As stated in the discussion under Alternative 5 in the EA (EA, page 21), the primary source of federal and state income from federal coal leases is the royalty which is paid on the coal when it is sold. When prices go up or down, it is reflected in the royalty revenue at that time. In fact, prices have recently gone up for spot coal in the basin as a result of unexpected shortages, according to a report in the Casper Star Tribune ("Coal Sees Upturn", by Michael Riley, March 14, 1994). Although spot sales represent an increasing proportion of the coal sales in the basin, having coal under lease does allow the companies to negotiate more favorable contracts when situations change unexpectedly, as they have in the early months of 1994.

Given the uncertainties in coal prices and demand, and the complexities of the leasing and permitting process, it is difficult to be specific as to an absolute date that the coal would have to be leased by. The sale could presumably be postponed for several years and still be mined in logical sequence by Eagle Butte. Please see response under paragraph 1, above regarding tract configuration.

Environmental Impacts & Cumulative Impacts

Water Resources
Paragraph 1:

A copy of the table listing potentially impacted water supply wells from the Eagle Butte mining permit is included in the final EA as Appendix B. Please note that the well names are listed as they are recorded at the State Engineer's Office, and that these names do not necessarily reflect current well ownership.

Paragraph 2:

The 31 wells potentially impacted by mining activities could also potentially be impacted by water from the spoil aquifer following reclamation. In reality, all 31 of these wells will probably not be affected by significant changes in water quality as a result of interactions between the spoil aquifer and the unmined aquifer.

Paragraph 3:

The 31 wells discussed in the EA and listed in Appendix x were identified by the Wyoming Department of Environmental Quality (WDEQ) as potentially impacted based on groundwater impact analyses, which take into account the potential cumulative effects as a result of contiguous mines. As stated in the EA (Section IV. C. Mitigation Measures), the Surface Mining Control and Reclamation Act (SMCRA) and Wyoming law require that these wells be mitigated by replacement with water from an alternate source of equivalent quality and quantity if they are interrupted by mining.

The groundwater impact analyses are conducted by Eagle Butte as part of the permitting process.

WDEQ uses information from monitoring wells to determine the extent of groundwater impacts on a yearly basis and to evaluate the accuracy of the impact analyses.

Paragraph 4:

As indicated above, the replacement of wells impacted by mining is specifically addressed in SMCRA, which is administered by the Office of Surface Mining Reclamation and Enforcement, and, in Wyoming, by WDEQ; and by Wyoming law, administered by the State Engineer's Office in the case of water rights. Therefore, the appropriate mitigation measures are already in place.

Air Quality

(Note: The BLM requested and received information from the Wyoming Department of Environmental Quality, Air Quality Division on all comments that were received relating to the potential air quality impacts of the Eagle Butte LBA.)

Paragraph 1:

The information on the referenced recent studies has been reviewed, and the statement in the EA has been modified accordingly.

Paragraph 2:

The statement that the air quality impacts would not be significantly different from the present is based on historical ambient air quality data collected at the mine and in the Powder River Basin, and a comparison of the LBA tract with the existing Eagle Butte lease. The type of operation and types of equipment will be similar to the current operation on the existing mine. The overburden is thicker on the remainder of the current lease as well as on the LBA tract, so that an increase in blasting will occur with or without the LBA. The existing lease extends as far into the Gillette Buffer Zone as the LBA does so mining the LBA will not bring mining any closer to Gillette than mining the existing Eagle Butte lease. Based on these similarities between the existing lease and the LBA tract, the EA concludes that the air quality impacts of mining the LBA will not be significantly different from the air quality impacts of mining the existing lease. Mining the LBA tract will, as stated in the EA, extend the duration of the air quality impacts.

Paragraph 3:

As stated above, the mining activities at the Eagle Butte Mine will be as close to Gillette with the existing leases as they will be with the LBA. The statement that air quality will still meet state and federal standards is based on regulatory requirements. Compliance with health-based standards in all areas exterior to mine properties is a requirement of the mine's air quality permit. An amendment to the current air quality permit will be required before operations can be expanded into the proposed lease area. An in-depth analysis and compliance with existing federal and state air quality standards at that time will be required. If the standards change, then

compliance with those standards will be required. Areas where increased impacts to nearby residents may be possible will require verification of compliance with ambient standards through additional monitoring required as part of the mine permitting process.

15

LASER

3420(LB4)
WYW124783
Eagle Butte

Legal and Safety Employer Research
DIVISION OF THE WESTERN STATES PIPE TRADES
670 KENTUCKY STREET, GRIDLEY, CA 95948 (916) 846-6352 FAX (916) 846-5274

Ms. Kate Dupont
Casper, WY
1/11/94

Dear Ms. Dupont:

I am the director of LASER, which reviews large industrial projects in the West. Thank you very much for sending a copy of the EA on the Eagle Buttes mine lease to my consultant John Williams, and for extending the comment period.

Here is a hard copy of the comments on the Eagle Buttes EA, that I faxed to you on January 8. Please continue to send future correspondence to:

John Williams
12770 SW Foothill Dr.
Portland, OR. 97225
503-626-5736 (fax) 503-641-2093

Yours,

Jim Wilson

COMMENTS ON THE AMAX EAGLE BUTTE COAL MINE EXPANSION

This project involves the leasing of 915 acres of BLM land to AMAX Eagle Butte, for the mining and processing of 150 million tons of coal. The lease would trigger the disturbance of an additional 1210 acres by mining related activities. (EA, p. 17)

SUMMARY OF CONCERNS

The proposed lease would allow the operation of the Eagle Butte mine at its existing or an expanded level of operation. Since the current operation of this facility already has a significant adverse impact, the proposal would allow the continuation of a significant adverse impact. The project would also create additional adverse impacts due to its closeness to populated areas. A environmental impact statement (EIS) should be prepared.

AIR POLLUTION IMPACTS

The mining operations which is done by truck/shovel methods. (p 24) will produce air pollution from many sources. These include blasting, drilling, truck loading, unloading and hauling. Many of these polluting activities will be moved closer to Gillette as a result of this lease. Larger populations of people and sensitive receptors such as schools and hospitals may be exposed to this increased air pollution.

EA FAILED TO IDENTIFY POSSIBLE SENSITIVE AIR POLLUTION RECEPTORS

These receptors and population which may experience increased pollution, and those groups, such as the very young and elderly that are particularly sensitive, were not identified and quantified. Predicted air pollution impacts and isopleths of pollution concentrations were not diagrammed and possible effects were not described in the EA. (p 53)

Prevailing winds may frequently carry the mine's air pollution towards populated areas, presenting a possible problem. (p. 77) Nearby Class I areas are also not identified in the EA.

PARTICULATE INFORMATION NOT COMPLETE

The EA at Table 8 provides average Total Suspended Particulate (TSP) concentrations for the local area. These numbers are averages of concentrations taken from thousands of samples. But this table does not provide an indication of the highest concentrations sampled, and where samplings of high concentrations of TSP were obtained.

Lacking these results, and the sites of the highest readings, It is possible that while the overall average concentrations of particulates remained fairly constant over the last several years, "hot spots," or limited areas for intermittent periods may have suffered higher concentrations than the averages presented in Table 8.

TSP AND GASEOUS EMISSIONS FROM HAUL ROAD BUILDING AND MINING

The haul road construction and mining operation will also cause discharges to the air from dust and equipment engines. Pollutants will include total suspended particulate (TSP), PM10 (particulate matter smaller than 10 micrometers), oxides of nitrogen (NOx), carbon monoxide (CO), hydrocarbons (HC), sulfur dioxide (SOx), and several air toxics from windblown erosion and vehicle generated road dust, blasting, vehicle and equipment engines and generators, drilling equipment, and gravel crushing for road building.

The construction and improvement of roads may require operation of heavy equipment and power tools, including bulldozers, backhoes, graders, chainsaws, and cranes. This equipment will generate additional air pollutants. Surfacing the new and improved roads may necessitate rock crushing operations, which will generate TSP from the crushing, and other air pollution from the equipment engines.

But the EA does not discuss in detail or list the types and quantities of the engines and compressors that power the roadbuilding and mining equipment, the total hours of operation for these engines, and the resulting pollution tonnage and concentrations of TSP, PM10, HC, NOx, CO, SOx, and toxics from those diesel and gasoline fumes.

The EA could have calculated these emissions from these sources with criteria developed by the Federal Environmental Protection Agency's "AP-42" methods. This omission from the EA means that this significant adverse air quality impact, and potential mitigation measures, was not discussed adequately.

MINING TSP EMISSIONS

The operation of the mine production facilities and related ore retrieval operations will emit TSP and PM10 from the non-point sources of traffic on unpaved roads, erosion from disturbed areas, and dust from drilling and explosives. These dust sources could generate potentially thousands of Tons Per Year (TPY) of particulate and PM10 from the Eagle Butte mine.[1]

Point sources of TSP and PM10 include silos, crushers, screening, truck loading and unloading, generators during construction and operation, and any conveyors and elevators.

PM AND GASEOUS EMISSIONS FROM INCREASED BLASTING

The EA says that the mine may have to increase its blasting over its current levels, because overburden will be thicker in the newly leased areas. This will be a significant adverse impact. As previously mentioned, this blasting will be taking place closer than before, to large populations and sensitive receptors.

In addition, blasting can produce large amounts of air emissions, depending on the size and frequency of blasts and the type of explosives used. This type of information was not supplied in the EA.

For instance, twice-daily blasts at one mine in the Western United States for 313 days per year, was estimated to produce annual emissions of over 64 tons per year of PM 10, 117 TPY of carbon monoxide, and 30 TPY of NOx.[2]

This demonstrates that increased blasting in the lease area, which is moved closer to the City of Gillette than current blasting from this mine, could create a significant air quality impact.

MINE VEHICLE EMISSIONS

There will be mining activity such as truck loading and hauling in the lease area. These actions also create large amounts of air pollution. One mining operation with one 700 hp bulldozer, a 13-yard loader, and 11 85-ton trucks was estimated to produce the following daily air emissions from vehicle exhausts: 600 lb of CO, 80 lb of HC, 1400 lb. of NOx, 150 lb of SOx, and 90 lb of PM10.[3] These totals do not include commercial and worker commuter traffic to the mine.

HAUL ROAD DUST

The EA did not describe the length of haul roads. This is a significant omission because dust from mine truck haul roads can produce significant amounts of particulate emissions.

At one mine with a 5000' haul road, it was estimated that about 3400 lb/day of TSP emissions were produced by the truck traffic, even with 80% effective dust controls. Loading and unloading of the haul trucks produced another 170 lb/day of TSP emissions.[4]

If air pollution in these amounts are emitted from the new lease area, there could be significant adverse air impacts on the Gillette area.

LARGE PERCENTAGES OF VERY FINE PARTICULATE PRODUCED FROM DRILLING

One important factor in determining the health effect of PM is the size of the dust; whether it is highly respirable. PM that is less than 10 microns in diameter is considered particularly dangerous. A recent study found that dust produced by rock drilling produced dust samples with a mean diameter of less than 1 micron in diameter. This means that mine dust produced by drilling will be highly respirable and present an increased health risk for those exposed to it. Amounts of drilling dusts produced should be estimated.[5]

CRYSTALINE SILICA AIR CONTAMINANT HAZARD (QUARTZ DUST)

Silica (quartz) dust is a possible pollutant from coal mining dust. This substance has been detected at levels of concern at other coal mines. The lease area may contain quartz. This substance is recently classified as a probable carcinogen by United Nations health study groups.

The amounts of respirable silica to be emitted should be closely studied. Amounts of silica in the ore to be processed, and in addition the amount and percentages of surface-available quartz should be determined.[6]

If the dust at the proposed Eagle Butte coal mine site will contain high percentages of silica dust, then there will be an increased incidence of lung injury among the mine workers. This will cause an adverse, unmitigated impact on worker health, on the human environment, and on local health services. But this health risk was not evaluated in the EA.

Second, if the large amounts of particulate to be emitted from the Eagle Butte gold mine will contain a high percentage of silica dust, this will create measurable concentrations of silica in the air offsite from the mine. But the EA did not model either the cumulative particulate concentrations, or the crystaline silica concentrations, that will drift offsite.

The problem of silica concentrations in mine particulate emissions is a well known significant adverse impact that should have been discussed in the EA. The lack of this discussion renders the EA inadequate. An EIS should be prepared.[7]

The mine's various air emissions are a significant impact. The project's air contaminants adversely affect the public health, are highly controversial, and in the case of air toxics, are highly uncertain and involve unique and unknown risks.

MOBILITY OF TOXIC METALS FROM MINING SITE

Airborne dust from the proposed lease site may contain toxic and hazardous materials, including metals, arsenic, selenium, and silica. Recent studies of the trace metal/substance toxic content of Powder River Basin coal show measureable concentrations of lead, barium, beryllium, chromium, copper, manganese, nickel, strontium, vanadium, zinc, boron, cobalt, molybdenum, thorium, uranium, arsenic, selenium, mercury, fluorine, cadmium, chlorine, and other elements and volatiles. Many of these substances could be emitted as a parts per million (ppm) fraction of the large TSP and gaseous emissions from this mine.[8]

For instance, if there is a total of 1000 tons per year of TSP emissions from this mining operation, and the TSP emissions are 6 ppm beryllium, this would result in emissions of 1.2 lb of

beryllium. This size of beryllium emission would exceed the PSD significant threshold for review of modified major sources.

The presence of these elements and substances in the TSP emissions from the lease site may have significant environmental consequences. As one EPA study pointed out:

> "Toxic metals can also be carried away from mining sites by high winds as particulates or contaminated dust ... (T)he wind may carry small particles of dust and toxic metals to populations living downwind ... The result is human exposure to toxic metals via inhalation, or the breathing of contaminated air. For certain metals, such as cadmium, this route of exposure can be particularly dangerous."

> "(T)he carcinogenic potency of arsenic is estimated by some to be approximately one order of magnitude greater when the metal is inhaled than when it is ingested. Dust ... inhaled by individuals living nearby (mines) is therefore of paramount concern."

> "Chronic inhalation of cadmium is known to cause an emphysema-like condition. Inhalation of cadmium dust is known to cause increased occurrence of prostate cancer in workers. Inhalation exposures are therefore an important concern at mining sites."

> "Nickel ... is known to be carcinogenic when inhaled."

The EA fails to evaluate the possible impacts from emissions of mineralized and toxic materials which would be entrained in the TSP emissions from the mining on the proposed lease.

RECENT STUDIES SHOW ADVERSE HEALTH EFFECTS AT LOW LEVELS OF PARTICULATE

The reason we are dwelling on particulate emissions is because of recently published studies demonstrating that PM-10 and TSP are far more harmful that previously considered. In one study of the Seattle area, days of high particulate concentrations in the air were correlated with increased hospital visits for asthma. In another series of similar studies, days of high particulate concentrations were correlated with days of high death rates in Santa Clara, California, Steubenville, Ohio, Birmingham, Alabama, and Philadelphia, Pennsylvania, among seven separate studies on this topic. Particulates have been recently, convincingly implicated in harm to pulmonary function.

Some important conclusions from these studies is that harmful health effects occur even when particulate concentrations are far below the legal limits. Harmful health effects are apparently caused by very minor increases in particulate concentrations.

It appears from these studies that any increase in PM-10 and TSP levels may cause an adverse impact for certain health conditions. This is a significant impact that should have been discussed in the DEIS.[10]

EMISSIONS INVENTORY

The existing mine operation, which will continue as a result of this lease, may have several point sources of lead, mercury, selenium, arsenic, crystaline silica, metals, CO, NOx, ammonia and other toxics, acid, HC, PM and SOx. These potential sources may include crushers, conveyors, silos, elevators, natural gas, oil or coal-fired heaters and boilers, driers, loading and unloading operations, and storage of materials including but not limited to solvents, carbon, acids, diesel, and gasoline.

But the project's expected emissions in parts per million, lb/hr. and ton/yr. from both point and non-point sources, and the average and maximum concentrations of these pollutants at different distances from the project was not provided.

An EIS should be prepared that would include but not be limited to listing of projected concentrations of air pollutants near the mine site, at populated areas, and at the nearest Class I air shed. The EIS should also contain an emissions and air pollution source inventory for the nearby mines and other air pollution sources, including but not limited to mineral exploration projects. Criteria, non-criteria and toxic pollutants should be listed.

BACT/LAER SHOULD HAVE BEEN DISCUSSED

Air pollution controls for the proposed expansion were described in the EA only in passing. There was no discussion in the EA of the Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) for the potential point and non-point air pollution sources of the proposed lease area.

An EIS should be prepared to discuss potential air emission controls and alternative control methods, including but not be limited to road watering or paving, drilling and explosive dust controls, enclosure of crushing processes, and alternative low pollution vehicle and engine fuels such as methanol and propane.

Air permits for similar facilities, and the Eagle Butte air permit application, should have been appended to the EA, to provide an overview of emissions and controls that could be expected.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) REVIEW

The EA did not contain sufficient information to determine if the project will emit more than the PSD threshold for modified major sources, of any single air pollutant from its point sources. If the Eagle Butte project exceeds this threshold then

it is required to undergo a PSD review by the Wyoming DEQ.

SUGGESTED PROJECT ALTERNATIVES THAT PROVIDE MITIGATION OF AIR QUALITY IMPACTS

Alternative low-pollution fuels for vehicle and equipment engines, the alternative of using enclosed conveyors, rather than haul trucks to move the coal, and road dust control measures should have been described in detail.

Surfacing of all roads on the project grounds, and of several public and private unpaved roads and driveways within Campbell County, would also mitigate the project's air impacts during both mine road construction, and also during the mine production phase.

Many industrial engineering sources recommend road paving as a practical dust control measure, despite its expense. For instance, one study prepared for the Federal Environmental Agency states:

> "At active sites ... bulldozers and dump trucks creates most fugitive dust emissions while loading and unloading and transporting the material over roads. Fugitive emissions from mining haul roads . . . are most effectively controlled by paving these roads."[11]

The EPA's own publications state that: "Common (dust) control techniques for unpaved roads are paving."[12]

The need for road paving is recommended in this instance because of the possibility of crystaline silica and other toxic materials in dust from the proposed Eagle Butte site.

The cost and benefits of paving are worth a comprehensive analysis. An EIS should be prepared with a detailed discussion of road paving and alternative, less expensive measures of road dust control, and their relative dust control efficiencies. But if the project does not contain paved roads, or equivalent dust controls, then road dust and the entrained cystaline silica and other toxic emissions, during construction and the mine life, are a potentially significant adverse effect.

SOLVENTS

Mines frequently use solvents and de-greasers for cleaning of equipment. These chemicals will be stored on site and will also evaporate in use and in storage, adding to HC emissions. The types of solvents should be listed and their use and storage and effects described. Effects of spills and releases should be described.

TOXIC AIR POLLUTANTS FROM DIESEL

Since nickel is emitted in diesel (and gasoline and fuel oil) exhaust from mine equipment and vehicles, the amount of emissions from

the mine and associated operations, including nickel and other toxics such as chromium, aldehydes, benzene, benzopyrene, and polyaromatic hydrocarbons (PAH) should be estimated from diesel use and other sources.

According to one recent study, floating dusts in ore mines have large surface areas. At mines using diesel vehicles, this dust accumulates high percentages of highly toxic carbon black (1,1-35%). In addition, 3,4-benzopyrene was found in some samples, and other PAHs have been found on mine dust with concentrations 10-15 times higher that those of 3,4 benzopyrene. [1]

GROUND WATER QUALITY

The aquifers will be drawn down for one mile to the south for an extended period; several years. This is a significant adverse impact that is unmitigated.

RUNOFF

There are 13 inches of rain per year. Since the disturbed area will be twelve hundred acres, there will be over 1200 acre-feet, or about 400 million gallons of rain water, discharged or infiltrated from or into this disturbed area.

This is a significant impact, because of the increased turbidity and sedimentation caused by this large rainfall on an area disturbed by mining. The EA dies not contain clear mitigations for this significant adverse impact.

SURFACE WATER QUALITY

Little Rawhide Creek and its ephemeral tributaries are within the lease area. There are alluvial valley floors within the LBA. (p. 34, 40) The EA did not have a map of this feature. At page 67, the EA referred to water discharges from areas disturbed by mining, to these drainages of the Rawhide Creek system. but these drainages may be waters of the United States. Discharges should not be allowed to this system until the mine owner obtained an NPDES permit.

WILDLIFE HABITAT

Some avian, pronghorn, grouse, deer and sagebrush habitat will be lost. Also, as mentioned above, existing water drainage systems will be filled. It is possible that many animals are dependant on the current configuration of water drainage systems. These losses of habitat should be mitigated. (p. 90. P 40-42, p. 74)

HAZARDOUS WASTE

Treatment, storage, and disposal of hazardous, toxic and solid waste was not described in the EA.

MINING NEAR AIRPORT

This site will be within the Gillette city buffer zone and close to the Campbell County regional airport. However, the Federal Aviation Administration was not on the BLM public notice list for this project.

ENDNOTES

1. For instance, non-point particulate emissions from the Amax Hayden Hill project, a gold mine covering 2922 acres, will emit 1315 tons per year of PM10. (United States Environmental Protection Agency, Region IX. Notice of Violation No. 9-92-30; In the Matter of Lassen Gold Mining, Inc.

2. Assumptions for this calculation are 2500 sq. ft. area per blast, 15 ft. depth, 2% moisture in rock. Engineering Evaluation of Hayden Hill Gold mine, by Lassen County (CA) Air Pollution Control District, November, 1991. These calculations, and assumption for the following estimates of TSP emissions from the Eagle Butte mine, are derived from estimates for the Hayden Hill facility, which is a hard road mine. Therefore certain assumptions used for Hayden Hill's emissions may not be identical to those that should be used for Eagle Butte emissions

3. Hayden Hill Engineering Evaluation, cited in endnote 3 above.

4. Hayden Hill mine Engineering Evaluation, cited above.

5. See "Size Distribution of Airborne Dust Produced by the Drilling Process." Gueyagueler, Tevfik. Mining Science and Technology. 3 Dec 1991. p. 389-394.

6. See "Estimating the Quartz-related Fibrogenic Potential of Respirable Coal Mine Dusts." Grayosn, Larry. Harison, Joel. Wallace, William. Simonyi, Thomas. New Technologies in Mine Health and Safety. p. 165-173. 1992.

7. Study of Adverse Effects of Solid Wastes From All Mining Activities on the Environment, PEDCO Environmental, Inc. (Prepared for the US EPA. 1979). Page 159.

8. Wyodak Coal analysis, submitted to Wyoming DEQ as part of application for Neil Simpson #2 power plant, Attachment 1-1. 1992.

9. United States Environmental Protection Agency. Mining Wastes in the West: Risks and Remedies. August, 1987. p. 4-6

10. Particulate Air Pollution and Hospital Emergency Room Visits for Asthma in Seattle. American Review of Respiratory Disease. Schwartz, Slater, Larson, Pierson, and Koenig. V. 147, pp 826-831, 1993.

Air Pollution and Daily Mortality in Birmingham, Alabama. American Journal of Epidemiology. Joel Schwartz. Vol. 137, No.

10, 1993. See particularly figure 6, page 1145 for an illustration of how any increase in PM10 correlates to increased deaths.

Air Pollution and Daily Mortality in Steubenville, Ohio. American Journal of Epidemiology. Joel Schwartz and Douglas Dockery. Vol. 135, No. 1. 1992.

Increased Mortality in Philadelphia Associated with Daily Air Pollution Concentrations. American Review of Respiratory Disease. Schwartz & Dockery. 145:600-604. 1992.

Pulmonary Function and Ambient Particulate Matter. Archives of Environmental Health. Chestnut, Schwartz, Savitz, and Burchfiel. May/June 1991 (Vol. 46 (No.3) p 135-144.

Particulate Air Pollution and Daily Mortality: A Synthesis. Schwartz. Public Health Review 1991/92; 19:39-60/

11. Study of Adverse Effects of Solid Wastes From All Mining Activities on the Environment, PEDCO Environmental, Inc. (Prepared for the US EPA. 1979). Page 143 and 159. Corbitt, Robert A. Standard Handbook of Environmental Engineering. McGraw-Hill, New York. 1990. P. 4.81-.85 for paving alternatives.

12.EPA AP-42 Factors, page 11.21-5. 1988.

13. Studies of the Organic and Non-organic Components of Diesel Engine Exhausts absorbed on the ore-mine aerosol Particles. Chebotarev, A. G. Goryachev, N. S. Belan, G. B. Gigiena Truda i Professorinal 'nye Zabolevaniya. 8 August 1991. p. 8-10.

Response to Letter 15, from LASER (Legal and Safety Employer Research)

The BLM requested and received information from the Wyoming Department of Environmental Quality, Air Quality Division (WDEQ/AQD) on comments that were received relating to the potential air quality impacts of the Eagle Butte LBA. WDEQ/AQD is the agency responsible for implementing air quality regulations in the State of Wyoming.

Paragraph heading in this response correspond to paragraph heading in the comment letter

Summary of Concerns

The proposed lease would allow the operation of the Eagle Butte Mine at its existing level of operation, the impacts of which have been evaluated in several site-specific and regional environmental analyses (See list of pertinent environmental analyses in the EA in Section III.A., General Setting). The purpose of this environmental assessment is to determine if the mining of the Eagle Butte LBA tract would have significantly greater impacts than the existing mining operations at Eagle Butte.

The level of analysis that you describe in some of your comments goes beyond the scope of what is analyzed during the leasing stage. These types of issues are considered in detail during the mining permit approval process after the coal is leased, but prior to mining. At that point, a mine plan containing the level of detail necessary for these types of analyses has been prepared and can be evaluated. For the purposes of leasing, the BLM must determine if there will be significantly greater impacts as a result of issuing this lease as compared with the current operation. If a mine is currently in compliance with the requirements of its existing air quality permit and the requirements of its existing mining permit, if the proposed lease tract is substantially similar to existing leases, and if the mine does not plan to alter its rate or method of production, then it is reasonable to assume that the mine can remain in compliance with all of its permit requirements in the course of mining the additional coal, and that the impacts of mining that additional coal will not be significantly different than the impacts of mining the existing leased coal other than to extend their duration. If a mine cannot stay in compliance with the requirements of federal and state regulations as specified in its permits, then it cannot stay in operation.

Air Pollution Impacts

The potential air pollution sources listed in the comment letter are discussed in the EA. The LBA does not extend any closer to Gillette than the existing lease, so mining in the proposed tract does not represent an incremental increase in impacts but a continuation of impacts of mining the existing lease.

The extension of mining into the proposed LBA tract will require an amendment to the current air quality permit which will require an in-depth analysis of all air quality impacts and compliance with federal and state ambient air quality standards. Areas where an increase in

impacts to nearby residents may be possible will require verification of compliance with ambient standards through additional monitoring.

EA Failed to Identify Possible Sensitive Air Pollution Receptors

According to WDEQ/AQD: It is not necessary to identify sensitive air quality receptors among the population which may be impacted if compliance with air quality standards, which were developed to protect the health of all the public, is maintained.

According to WDEQ/AQD: It is not necessary to identify nearby Class I areas for this analysis because this is not a PSD permitting process. The nearest PSD Class I areas are the Rosebud Indian Reservation in Montana and Wind Cave National Park in South Dakota, which are not expected to receive any incremental impact as a result of this action due to the distances involved.

Particulate Information Not Complete

The WDEQ/AQD has tracked compliance with the revised particulate standard based on PM10 since 1987 and has concluded that the PM10 standard of 150 micrograms per cubic meter on a 24 hour average has not been exceeded anywhere in the basin.

TSP and Gaseous Emissions from Haul Road Building and Mining

The discharges associated with haul road construction and mining operation in the LBA will be similar to the impacts associated with these activities on the current mine site, and these activities have been evaluated in the current air quality permit. Prior to mining in the LBA area, Eagle Butte must obtain an amendment to the existing air quality permit, for which an application must be submitted. The application for the existing air quality permit does include, and the application to amend it must also include a listing of all equipment and associated emissions to determine compliance with all air quality standards and regulations.

Mining TSP Emissions

These types of activities are ongoing with the current Eagle Butte Mine operations, and the impacts have been analyzed and evaluated in the existing Eagle Butte Mine air quality permit. An amendment to this permit will be required prior to mining the proposed LBA tract and compliance with federal and state ambient air quality standards will be required.

PM and Gaseous Emissions from Increased Blasting,
Mine Vehicle Emissions, and
Haul Road Dust

The overburden is thicker on the remaining portion of the existing lease as well as the LBA, so that any resulting increase in blasting will occur with or without the LBA. The proposed lease does not extend any closer to Gillette than the existing lease, so mining operations will occur closer to Gillette with or without the LBA.

Truck loading and hauling are ongoing in the existing mining operations at Eagle Butte, and have been evaluated in the existing air quality permit. As stated in the EA, no changes in size and numbers of machinery are being proposed at this time. As also stated in the EA, the haul distance from the LBA tract to the coal preparation plant would approximate the currently proposed haul distance from the southeastern portion of the existing lease to the plant, so there would not be a significant increase in haul road dust from current permitted levels when the LBA is mined.

As stated above (2,6), compliance with federal and state ambient air quality standards will be required when the LBA is mined, as it is for the existing operation.

Regarding the references to estimated impacts of blasting, truck loading and hauling, and haul road length at one mine in the western United States (Hayden Hill Gold Mine, California): while tailpipe emissions would not be expected to differ by any significant degree, blasting and haul road emissions may differ, depending on soil types and mitigation of potential emissions.

Large Percentages of Very Fine Particulate Produced from Drilling

According to WDEQ/AQD: Emission from the drilling of overburden and coal seams are not expected to be significant if appropriate control equipment such as fabric filter baghouses are utilized as required in all mining air quality permits.

Crystalline Silica air Contaminant Hazard (Quartz Dust)

Silica or quartz is a common component of soils and in some zones within the overburden, which are removed from the top of the coal before it is mined. The coal itself is primarily carbon, and contains very little silica dust. The coal "ore" undergoes very little in the way of processing other than crushing, and the mines are equipped with baghouses and other means of limiting coal dust at the crushing facilities.

According to WDEQ/AQD: Silica is part of the particulate matter for which ambient health standards are set to protect public health. Therefore, compliance with ambient particulate standards should be sufficient to protect the public's health with regard to silica. The safety and health of mine workers is protected by the Mine Safety and Health Administration, which conducts regular inspections of the mine operations in the Powder River Basin.

Mobility of Toxic Metals from Mining Site

Airborne dust from mining activities will most likely contain trace elements of metals in the same proportion as all the soils in and around Gillette, and therefore, the WDEQ/AQD does not believe there is any threat to public health due to these emissions.

According to WDEQ/AQD: Using concentrations from typical Powder River Basin coal, a composite of all metals would result in 12.5 lbs of emissions per hundred tons of coal emissions. Trace element concentrations in coal dust may be greater than in the other soils at the mine, but assuming all dust emissions from the mine contain trace metals in the same concentration as the coal would result in a total of 125 pounds of metal emissions for 1000 tons of TSP emissions. This equates to a concentration of around 60 parts per million total for all trace metals in TSP. The resulting concentration of metals would be around 0.002 micrograms annual average for Gillette based on the current level of TSP in Gillette of around 30 micrograms per cubic meter annual average. This is not significant.

Recent Studies Show Adverse Health Effects at Low Levels of Particulate

Recent studies have shown adverse health effects at levels of particulate matter which are lower than current federal and state standards. Several of these studies are now referenced in the EA, and the potential impacts are discussed. EPA has not completed research on this matter or determined what appropriate standards might be. If the standards change, then compliance with those standards will be required. In the meantime, the mines are required to comply with current standards. (Please see response to Letter 14, from the Powder River Basin Resource Council.)

Emissions Inventory

The WDEQ/AQD is not aware that there are any point sources at the Eagle Butte Mine which emit significant amounts of the toxic air pollutants listed in the comment letter.

BACT/LAER Should Have Been Discussed

According to WDEQ/AQD: The current mine is required by permit to utilize BACT and any expansion of the mine into new leases will require the same.

Prevention of Significant Deterioration (PSD) Review

The current mining operation is not a "major emitting" facility under PSD by definition, and therefore no analysis under PSD permit requirements is required.

Suggested Project Alternatives that Provide Mitigation of Air Quality Impacts

Mitigation of air quality impacts is addressed in the current air quality permit for the Eagle Butte Mine, and will be addressed in an amendment to that plan that will be required prior to mining the LBA tract.

The paving of haul roads is not a viable option due to the massive loads such a surface would experience.

Solvents

The use and storage of solvents at the mine is not expected to have any significant impact on air quality. Also, as indicated in the EA, the Eagle Butte Mine has taken waste minimization steps such as production substitution, technological changes and recycling to reduce the generation of hazardous waste, such as solvents.

Toxic Air Pollutants from Diesel

The combustion of all fuels gives rise to some toxic emissions. The amounts and types of such emissions as a result of mining the LBA are not expected to be significantly different from the existing mining operations. An analysis of such emissions will be performed in the permitting process to include the new lease in the air quality permit if the WDEQ/AQD determines there could be significant impacts.

Ground Water Quality

The drawdown of the aquifers is not unmitigated. As stated in the EA (Section IV. C. Mitigation Measures), the Surface Mining Control and Reclamation Act (SMCRA) and Wyoming law require that these wells be mitigated by replacement with water from an alternate source of equivalent quality and quantity if they are interrupted by mining. (Please see response to Letter 14, from the Powder River Basin Resource Council for further discussion of this issue.)

Runoff

This issue is another of the issues that is addressed in detail during the mine permitting process, when the mining sequence and reclamation procedures have been determined. The mines are required to control runoff-related impacts through the use of sedimentation ponds which trap the runoff and allow sediment to settle out before the water leaves the mine site.

Surface Water Quality

As shown in the EA (Table 3: Federal and State Permitting Requirements and Actions), and NPDES permit is one of the additional permits that the mine must obtain prior commencing mining activities on their leases.

It is also important to point out that not all of this area would be disturbed at any one time, and that reclamation is ongoing concurrently with mining.

Wildlife Habitat

BLM must consult with the U.S. Fish and Wildlife Service (USFWS) as part of the leasing process regarding application of the coal unsuitability criteria relating to wildlife to the proposed lease area (See Comment Letter 1). The U.S. Fish and Wildlife Service and the Wyoming Game and Fish Department must be consulted on a variety of wildlife issues (e.g., raptor mitigation plans, adequacy of proposed reclamation for wildlife values) as part of the mine permitting process.

Hazardous Waste

As stated in the EA (Section IV.A.14., Hazardous Waste), materials determined to be hazardous by EPA are currently disposed of at an EPA-permitted hazardous waste facility. This procedure would continue when the LBA is mined.

Mining Near Airport

The Federal Aviation Administration does not have jurisdiction over mineral leasing or permitting, however, as indicated in the EA (Section IV.A.12., Transportation Facilities), Amax is already working with the company to resolve potential areas of concern. According to a newspaper report ("Mine Plans to Expand Near City Limits of Gillette", by Michael Riley, Casper Star Tribune, November 26, 1993), the airport manager indicated that AMAX has been working with the airport to mitigate potential hazards, and that the lease sale may benefit aircraft by removing a hill that has been an obstacle.

16

BUREAU ... MANAGEMENT
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3420(LBA)
WYW124783
Eagle Butte

December 13, 1993

Nancy Dolger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Nancy;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Randy Burggraff
1005 Pioneer
Gillette, Wyoming 82718
682-0144 (Home)
687-3306 (Work)

17

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

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Thank You.

Sincerely, Shirley Manous

18

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

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Thank You.

Sincerely,

Claire Scroggins

19

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Johnnie R. Scroggins

3420 (LBA)
WYW124783
Eagle Butte

20

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Miranda Scroggins

21

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Sharon Scroggins

22

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely, Debbie Swingholm

23

December 13, 1993

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely, E. John Todea JR.

3420 (LBA)
WYW 124783
Eagle Butte

24

January 6, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Katherine J. Glenn

Katherine J. Glenn
P.O. Box 2372
Gillette, Wyoming 81717-2372
686-6487 (Home)
687-3316 (Work)

3420 (LBA)
WYW 124783
Eagle Butte

25

January 6, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

James F. Goss
1109 West Granite
Gillette, Wyoming 82718
687-7148 (Home)
687-3365 (Work)

3420(LBA)
WYW124783
Eagle Butte

26

January 6, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Marna Harrop
609 Frontier Drive
Gillette, Wyoming 82718
686-7748 (Home)
687-3317 (Work)

3420(LBA)
WYW124783
Eagle Butte

27

January 6, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Kevin Haskins
814 Wagon Trail
Gillette, Wyoming 82718
682-7089 (Home)
687-3300 (Work)

28

3420 (LBA)
WYW124783
Eagle Butte

January 6, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East "E" Street
Casper, Wyoming 82601

BUREAU OF LAND MANAGEMENT
CASPER, WYOMING
94 JAN 12 AM 10: 28

Re Eagle Butte LBA

Dear Nancy

I'm all in favor of this LBA by Eagle Butte. I believe it will contribute to the economy of Campbell County and continue the employment of its residents.

Eagle Butte has done a good job of being a neighborly and environmentally conscience company.

Sincerely
Mr and Mrs Michael Meyer

29

From the Desk of . . .

Frank Ferris

3420 (LBA)
WYW124783
Eagle Butte

WYOMING STATE OFFICE
BUREAU OF LAND MANAGEMENT
94 JAN 10 AM 10: 29

To: Nancy Doelger

Reg: Federal coal lease for Eagle Butte Mine

Dear Ms Doelger:

the coal business has helped Wyoming & Gillette. I support the continuation of active coal mines.

Thankyou

Date 1-7-93

3420(LDA)
WYW124783
Eagle Butte

30

January 7, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, WY 82601

RE: Eagle Butte Mine LBA

I am writing in support of the AMAX Coal West, Eagle Butte Mine - Lease by Application. This coal lease will have nothing but positive impacts on Campbell County, its workforce, and the State of Wyoming in terms of lease fees and royalties in the future.

It would also by pass coal that would have been mined if not acted upon now. As I understand, its environmental impacts are minimal and economic benefits are great well into the future. I also have great comfort in AMAX or the State of Wyoming to see that impacts are corrected and all the mineral is extracted in an prudent manner.

In closing, I am in support of this lease sale continuing for the good of all interested parties.

Sincerely,

Bill Gustafson

3420(LDA)
WYW124783
Eagle Butte

31

Ms. Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East "E" Street
Casper, Wyoming 82601

January 7,1994

Dear Ms. Doelger,

Please allow Peggy and me to go on record as residents in support of the Lease by Application that AMAX Coal West, Eagle Butte Mine has applied for.

We view the impact as one that will benefit Gillette, Campbell County and the Great State of Wyoming.

AMAX Coal West, Eagle Butte and the remainder of the mines in Campbell County are solid corporate citizens and genuinely add value to our area.

Thank you for your time.

Regards,

Dave Katsilometes

Peggy Katsilometes

904 Clarion Drive
Gillette, Wyoming 82718

3420(LBA
WYW124
Eagle Butte

32

January 11, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger:

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

Bill Boger
1147 Almon Street
Gillette, Wyoming 82716
682-1416 (Home)
687-3310 (Work)

3420(LBA)
WYW124783
Eagle Butte

33

January 11, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, Wyoming 82601

Dear Ms Doelger;

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank You.

Sincerely,

George VanBuren
267 Westhills Loop
Gillette, Wyoming 82718
687 0264 (Home)
687-3366 (Work)

34

3420(LBA)
WYW124783
Eagle Butte

94 JAN 12 AM 10:28

Nancy Doelger:

I'm writing this letter to express my support for the recent lease application by Cyprus Amax Minerals Company (Eagle Butte Mine) via the Lease by Application (LBA) process for additional Federally owned coal.

By granting the lease would insure jobs for the future, both directly and indirectly with in the community and around the state. With both State and Federal governments benefiting from the initial leasing fee paid by Cyprus Amax Minerals Company as well as the royalties that are paid while the coal is being mined.

While we can not predict future technological advancements for producing power, we can surely see efforts being made in that direction. By using the LBA process, it will allow us to use our resources while they are a vital necessity.

I have lived in Campbell County for 14 years and have seen the mining process up close. The wild-life impact change, would only be that it has increased around the mining areas. As far as the reclamation process goes, one only need to see for themselves the great job and effort that goes into this important operation.

Thank you for your time, and I trust that the LBA process will become an important procedure in securing the future, for the people and State of Wyoming!

Sincerely,

Mark Mayworm
Gillette, Wyoming

35

January 12, 1994
Casper District Office, BLM
Nancy Dolger
1701 East "E" Street
Casper, Wyoming 82601

Re: The Eagle Butte LBA

As a resident of Campbell County and an employee of the coal industry, I would like to express my support for the Eagle Butte LBA.

As you well know, coal mining is at the heart of the Campbell County economy and directly or indirectly provides livelihood for numerous families throughout the United States. I believe that leasing additional coal reserves to Eagle Butte can only be positive, as it will extend employment opportunities and bolster the economy. For these reasons, I look forward to a positive decision on the Eagle Butte Environmental Assessment.

Thank you for the chance to comment on this issue.

Yours sincerely,

Mike Nicholson

Mike Nicholson

36

January 13, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, WY 82601

Dear Ms. Doelger:

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank you.

Sincerely,

Alan A. Griffin
624 Oregon Ave.
Gillette, WY 82718

37

January 13, 1994

Nancy Doelger
Bureau of Land Management
1701 East "E" Street
Casper, WY 82601

Dear Ms. Doelger:

I am writing to state my support for the Amax Coal West, Inc. Eagle Butte Mine Lease by Application (LBA). As a citizen of Campbell County, and Gillette in particular I feel that the economic gains from continued employment, taxes and royalties from mining this coal will benefit the citizens in the immediate area as well as throughout the entire state. I am concerned about the environmental impacts but I feel that the various regulatory agencies involved are capable of assuring minimal environmental degradation.

Thank you.

Sincerely,

Vicki A. Griffin
624 Oregon Ave.
Gillette, WY 82718

38

January 13, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East "E" Street
Casper, Wyoming 82601

RE: Eagle Butte LBA

Dear Nancy,

I, Galen W. Lee, 38 Nathan Hale Rd., Gillette, Wyoming, am a citizen of Campbell County Wyoming and I support the lease application process for Eagle Butte Mine.

I feel it will be good for the economy for our county and state and for our community, employees, etc.

Sincerely yours,

39

January 14, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East E Street
Casper, Wy. 82601

Dear Ms. Doelger,

This letter is being sent in reference to the Lease by Application process currently under way in Campbell County by Cyprus-Amax to increase the size of the coal lease at the Eagle Butte Mine.
I am a current employee of the Eagle Butte Mine so naturally anything of significance that would help increase the job security of my co-workers and myself is of interest to my family and I, as it should be to the entire community.
As an employee I can assure you that Amax has always gone the extra step to not only comply but exceed environmental regulations. Indeed we employees see it first hand.
In todays job market security and longevity are of utmost importance, this lease will only help in both of those areas.
Thank you for your time.

Sincerely Yours,

Luther D. Martinez

Luther D. Martinez
1 Apache Ct.
Gillette, WY. 82718
(307) 682-4885

40

3420(LBA)
WYW124783
Eagle Butte

Box 409
Moorcroft, Wyo. 82721
January 14, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East "E" Street
Casper, Wyo. 82601

Dear Ms. Doelger,

As a lifelong citizen of northeastern Wyoming, I have developed a strong loyalty and concern for the good of this region. Because of the combination of abundance of needed resources and small population, the area could easily be exploited. This must be guarded against.

Not to be forgotten, the prudent harvest of these resources will help the country's need for energy, aid the economy of the area, and have no lasting negative effect on the land itself.

Cyprus Amax has proven that they can mine coal, provide aid and assistance to the economy (national, state, and area), be a good neighbor, and take excellent care of the land and environment. The mines they operate have very good reclamation records. The economy of the area has benefited greatly from their presence. Not only does Cyprus Amax supply many good paying jobs in the area and pay large amounts of taxes, they contribute to many of the local organizations and activities.

By granting Cyprus Amax the new lease, this company will be able to aid the region for years to come. By obtaining this lease, Cyprus Amax will be able to provide more financial aid to the area. Their employees will be able to continue employment for a longer period of time. The country will benefit from the recovery of the coal. Most important, the land and environment will not be harmed by this process.

In conclusion, to grant this lease would provide more needed American energy for our country; provide revenue for the national government, the state government, and the local government; provide assistance to local organizations and activities; provide good jobs for many of the area residents; and assure the land and environment will be properly maintained and returned to the original condition.

I would like to thank you for this opportunity to express my support for the Lease by Application by Cyprus Amax. The granting of this lease will benefit everyone involved.

Sincerely,

Ellen Plemmons

41

3420 (LBA)
WYW124783
Eagle Butte

Box 409
Moorcroft, Wyo. 82721
January 14, 1994

Nancy Doelger
Bureau of Land Management
Casper District Office
1701 East "E" Street
Casper, Wyo. 82601

Dear Ms. Doelger,

As a lifelong citizen of northeastern Wyoming, I have developed a strong loyalty and concern for the good of this region. Because of the combination of abundance of needed resources and small population, the area could easily be exploited. This must be guarded against.

Not to be forgotten, the prudent harvest of these resources will help the country's need for energy, aid the economy of the area, and have no lasting negative effect on the land itself.

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I would like to thank you for this opportunity to express my support for the Lease by Application by Cyprus Amax. The granting of this lease will benefit everyone involved.

Sincerely,

John Plemmons

42

3420 (LBA)
WYW124783
Eagle Butte

Nancy Doelger,

I fully support Amax Eagle Butte Mine, on getting this lease. I feel it will Benefit the Community, and it will be good for the Environment.

Linda Voegele-Heagney
Box 4386
Gillette Wy 82717
Phone: 307-686-3733

43

3420 (LBA)
WYW124783
Eagle Butte

Dear Nancy,

Eagle Butte mine has applied for a new lease to increase the mine's reserves. I encourage the approval of this lease. The state & Community would benefit through, not only the fees from leasing, but also the royalties. This community has especially benefited from Eagle Butte mines support of community activities from the National High School Rodeo, bowling leagues, Little league support, Cam Plex support, and numerous other activities.

High coal competition in the coal market has slowed the growth of this community down. Jobs are being lost & people are leaving Wyoming. Any growth in Eagle Butte mine will have more benefits for this community than disadvantages. I would like to see them stay in business as long as possible.

Thank you for your Consideration.

Carol Jandreau
5105 Rocky Pnt Dr
Gillette, WY 82718

Response to Letters 16 through 43, from local citizens and mine employees

Thanks to all of the Gillette residents who commented on issuing the proposed Eagle Butte LBA. The comments on coal leasing actions that the BLM receives from local residents are an important consideration in the leasing process.