

ENCOURAGING RESPONSIBLE DEVELOPMENT TODAY – FOR TOMORROW

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February 23, 2009

Sarah Bucklin
Casper Field Office
Bureau of Land Management
2987 Prospector Drive
Casper, WY 82604

RE: Final Environmental Impact Statement for the West Antelope II Coal Lease Application

Dear Ms. Bucklin,

Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) and present additional comments and concerns on the West Antelope II Coal Lease by Application (West Antelope). This information is being submitted in response to a Federal Register Notice published January 23, 2009¹ announcing the availability of the West Antelope FEIS. These comments are timely submitted within thirty days of that notice.

Our organization submitted comments on the Draft EIS last year and these comments are designed to supplement, not replace, information previously submitted to the BLM.

I. BLM should not lease new tracts without first ensuring compliance with SMCRA's reclamation mandates for existing tracts.

SMCRA requires the operator to restore the affected land to a condition capable of supporting pre-mining uses or "higher or better uses." Additionally, SMCRA requires that reclamation of mined land be "as contemporaneous as possible." 30 U.S.C. § 1202(e). However, contemporaneous reclamation is not happening at mines throughout the Powder River Basin according to OSM reports and other information. For instance,

the rate at which lands are being reclaimed in Wyoming compared to the rate of disturbance...is about 3 to 1... Ideally the ratio should be 1 to 1... The gap between the acres disturbed versus reclaimed is widening, thereby creating a backlog of lands available for reclamation, contributing to a delay in contemporaneous reclamation and subsequent bond release.²

¹ Volume 74, Number 14, Pages 4228-4229 (Jan. 23 2009)

² Office of Surface Mining Reclamation and Enforcement, Annual Evaluation Summary Report, Administered by the Land Quality Division of the Wyoming Department of Environmental Quality for Evaluation Year – 2005 (July 1, 2004 to June 30, 2005) August 24, 2005, available at <http://www.osm.gov/oversight/wyoming04.pdf>.

BLM provides no analysis or information on reclamation at the Antelope Mine for which leasing would expand operations. At a minimum, the agency must analyze compliance with existing reclamation requirements at the mine prior to the creation of additional leasing for expanded operations.

BLM and OSM must assess reclamation goals and achievements prior the lease of any new coal tracts. If contemporaneous reclamation is not occurring, BLM and OSM must delay the lease of these new tracts until reclamation consistent with SMCRA objectives and requirements occurs at these mines.

II. BLM should not lease new tracts without first ensuring compliance with SMCRA's hydrologic balance protection requirements.

We appreciate the inclusion of additional background information on groundwater drawdown impacts in the FEIS; however, we continue to believe that the EIS does not properly disclose or analyze site-specific and cumulative impacts to groundwater compliant with NEPA. Nor does the EIS disclose how mining activities will comply with SMCRA's requirements to restore the aquifer to "pre-mining" conditions. Our members who live north and west of the Antelope Mine have reported wells losing water and overall significant depletion of the coal aquifer. Ranchers in the area depend on this water for livestock and in some cases domestic purposes. The EIS must fully disclose, using scientific information and analysis, how site specific and cumulative impacts will contribute to additional groundwater drawdown, most of which may be irreversible. This analysis is important to "insure the professional integrity, including scientific integrity, of the discussions and analyses" in this NEPA document. 40 C.F.R. § 1502.24.

BLM details that "coal and overburden aquifers within the tract would be completely dewatered and removed and the area of drawdown caused by coal and overburden removal would be extended further to the northwest and southwest of the active mine area."³ It is therefore incumbent upon the agency to analyze how additional leasing (and subsequent coal development) would serve to minimize disturbance to ground and surface water, restore the recharge capacity of both the mined and leased area and restore the aquifer to pre-mining conditions. At a minimum, the agency must analyze aquifer recharge capacity, what engineering techniques would be used to restore the aquifer to pre-mining capacity and water quality conditions, and what timetable and costs would be involved with such reclamation.⁴ The same must be done for surface water.

Additionally, the ongoing damage to ground and surface water by current coal mining operations warrants additional bonding in an amount that covers mine-wide restoration of the hydrologic balance of the surface and ground water to pre-mining conditions --and for each of the four mines which would gain additional leased acreage. Under the Federal Coal Leasing Act Amendments, the need for additional bonding for a mine must be evaluated by the agency during

³ FEIS at 3-59.

⁴ All the FEIS says is that "The postmining backfill may take in excess of 100 years to reach equilibrium water levels and water quality." FEIS at 3-71. There is no scientific basis for this statement nor does it accurately reflect recharge information for the aquifer.

the NEPA process prior to leasing and any analysis should be re-noticed to the public. 30 U.S.C. § 201 et al.

III. BLM must consider the significance of climate change impacts of the new lease tracts and should consider alternatives to mitigate these impacts.

Global warming, or climate change, is widely acknowledged to pose “serious and well recognized” impacts to the human environment and is a pollutant under the Clean Air Act. *Massachusetts v. EPA*, 127 S. Ct. 1438, 1455 (2007). It is also widely acknowledged that coal-fired power plants are one of the leading causes of climate change. Approximately 772.1 million tons of coal will be mined under the preferred alternative of the EIS⁵ and this coal will “be used primarily for electric power generation.”⁶

The heating value of the coal seam for the West Antelope tract “is expected to range from 8,500 to 9,200 Btu/lb.”⁷ Powder River Basin coals have considerably less heating value than coals from other parts of the country, including Appalachia, Illinois Basin, and the Rocky Mountain Region.⁸ Correspondingly, more Powder River Basin coal must be burned to generate the same amount of power and using this coal will produce more carbon dioxide at a power plant. If coal from this mine will be replacing coal from other regions at various power plants, please disclose and analyze those impacts.

The EIS must fully and adequately disclose climate change impacts of this mine expansion. Sierra Club and other public interest organizations have submitted extensive scientific information on global warming impacts of coal mining and reasonably foreseeable activities, such as train transport and coal-fired power plants through the public comment process for this EIS. We believe BLM must incorporate this information into the FEIS.

Moreover, the BLM must discuss not only projected global impacts but the anticipated dramatic local impacts that Wyoming and other Western states will face as a result of global warming. Numerous studies have documented that climate change will dramatically impact states like Wyoming. For instance, the National Wildlife Federation estimates that “Global warming is likely to alter essential habitat in the Greater Yellowstone Ecosystem” and impact plant and animal species across the state.⁹ Global warming could also impact industries that depend on snow and water resources, such as skiing, tourism, and agriculture. In a report released in May 2008, even the U.S. Department of Agriculture found “climate change is already affecting U.S. water resources, agriculture, land resources, and biodiversity, and will continue to do so.”¹⁰ State Climatologist, Steve Gray, has warned that global warming could dramatically impact Wyoming, especially water supplies in the state. Communities in Wyoming are already facing water

⁵ FEIS at 3-13.

⁶ FEIS at 1-9.

⁷ FEIS at 3-11.

⁸ See Energy Information Administration, <http://www.eia.doe.gov/oiaf/archive/aeo01/assumption/tbl76.html>

⁹ National Wildlife Federation, *Global Warming and Wyoming*, available at <http://www.nwf.org/GlobalWarming/pdfs/Wyoming.pdf>.

¹⁰ USDA, *US Climate Change Science Program Releases Report on the Effects of Climate Change on Agriculture, Land and Water Resources, and Biodiversity*, Press Release, May 27, 2008. The report is available at <http://www.climate-science.gov/Library/sap/sap4-3/default.php>.

shortages and climate change impacts caused by increased coal mining could intensify those impacts. The EIS needs to assess both local and global climate change impacts caused by mining these coal tracts.

Additionally, the BLM must fully disclose climate change impacts resulting from methane release during coal mining operations. BLM notes that

CBNG resources that have not been recovered from the Wyodak-Anderson zone prior to mining would be lost when coal is removed. Coal seam dewatering in advance of, and as a result of, open pit mining also reduces hydrostatic pressure, which may allow CBNG to desorb and escape from the coal bed.¹¹

Although BLM acknowledges that “CBNG resources not recovered prior to mining would be vented to the atmosphere and permanently lost,”¹² the agency does not disclose the significance of methane venting, especially as related to climate change impacts. Methane is a powerful greenhouse gas – an estimated 20 times as potent as carbon dioxide.

Despite the damaging global warming impacts from the methane to be released, and the wanton waste of a much sought-after non-renewable natural resource, the BLM and Interior Department are approving additional mine leasing and expansion without analyzing the potential for capturing and using the methane. Nor did these agencies analyze the alternative of flaring – i.e., burning – the methane to drastically reduce the project’s global warming impacts. The agencies failed to examine these alternatives despite the fact that methane is routinely captured at working coal mines in the United States and around the world, and despite the fact that methane is flared at working mines in Europe and Australia. The federal agencies’ failure to even consider these reasonable alternatives and failure to account for the impacts of methane venting on climate change all violate NEPA.

IV. BLM must consider mitigation measures to reduce air quality impacts

We appreciate the inclusion of additional information on background air quality conditions and projected air quality impacts of the proposed mine in the FEIS. Nevertheless, our organization remains very concerned about air quality conditions in the Powder River Basin in the face of increased industrial activities. As noted in the EIS, a number of exceedances of air quality standards have been observed at the various mines in the area and monitoring data shows that levels of PM₁₀ are close to NAAQS limits.¹³ As overburden production increases relative to coal production,¹⁴ particulate matter and NOx levels will increase in the Antelope Mine and surrounding areas. The EIS must disclose site-specific and cumulative air quality impacts of this proposed federal action.

¹¹ FEIS at 3-17.

¹² FEIS at 3-19.

¹³ FEIS at 3-28.

¹⁴ See FEIS at 3-32: “overburden thicknesses are greater and coal thicknesses are less on the West Antelope II LBA tract as compared to existing leases at the Antelope Mine.”

The BLM must also discuss and require enforceable mitigation measures through this EIS and Record of Decision to ensure that compliance with air quality standards is ensured both now and in the future and as a result of cumulative increases of particulates and NOx from this mine.

Thank you for your time and consideration of these comments. If you have any questions, please do not hesitate to contact me at 307-672-5809 or via email at sanderson@powderriverbasin.org.

Sincerely,

A handwritten signature in black ink, appearing to read "Shannon Anderson", with a long horizontal line extending to the right.

Shannon Anderson
Organizer, Powder River Basin Resource Council