



August 29, 2011

**BY E-MAIL**

Wyoming High Plains District Office  
 Bureau of Land Management  
 Attn: Teresa Johnson  
 2987 Prospector Drive  
 Casper, WY 82604  
 Hay\_Creek\_II\_WYMail@blm.gov

**Re: Comments on Final Environmental Impact Statement for Hay Creek II Coal Project**

Dear Ms. Johnson:

WildEarth Guardians submits the following comments in response to the Bureau of Land Management’s (“BLM’s”) Final Environmental Impact Statement (“FEIS”) for the Hay Creek II Coal Lease, notice of availability of which was published on July 29, 2011. *See* 76 Fed. Reg. 45612-45614 (July 29, 2011).

We have already provided extensive feedback on the BLM’s proposal through comments on the Draft EIS for the Hay Creek II Coal Lease. We are disappointed to see that many of our concerns were not sufficiently addressed. We hereby incorporate by reference and restate our prior comments on the Draft EIS for the Hay Creek II Coal Lease, including WildEarth Guardians’ May 11, 2010 comments on the draft EIS.

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Notably, we are concerned that air quality impacts are still being insufficiently addressed by the BLM. The Agency has not addressed impacts to the soon to be revised National Ambient Air Quality Standards (“NAAQS”) for ground-level ozone (which any decision issued after the revised NAAQS will need to address), has not adequately addressed impacts to the nitrogen dioxide NAAQS, has not adequately addressed particulate matter impacts—both PM<sub>10</sub> and PM<sub>2.5</sub>, has inadequately addressed impacts to Clean Air Act increments, including the PM<sub>2.5</sub> increments that were promulgated in October of 2010 (*see* 75 Fed. Reg. 64864-64907 (Oct. 10, 2010)), and has not adequately analyzed and assessed visibility impacts. Although these concerns relate primarily to the Agency’s duties under the National Environmental Policy Act (“NEPA”), we are also concerned that any proposal to issue the Hay Creek II Coal Lease flies in the face of substantive air quality requirements under the Federal Land Policy and Management Act (“FLPMA”) and the applicable Resource Management Plan (“RMP”).

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We are particularly concerned with regards to indirect and cumulative impacts. For one thing, the BLM’s own analyses have found that cumulatively, approval of the Hay Creek II Coal Lease will lead to violations of the annual PM<sub>2.5</sub> NAAQS, the 24-hour PM<sub>2.5</sub> NAAQS, and the 24-hour PM<sub>10</sub> NAAQS. *See* FEIS at 4-44. The FEIS also shows violations of the one-hour NO<sub>2</sub> NAAQS (although only in Montana—BLM has not assessed such impacts in Wyoming). *Id.* Although the BLM may simply claim that the State of Wyoming will ensure protection of the NAAQS, this is a self-serving argument of convenience. There is nothing in the FEIS that indicates the State of Wyoming has any mechanism in place to ensure that the NAAQS are not violated. This is particularly true for the 24-hour PM<sub>10</sub> NAAQS. Although the State of Wyoming relies on monitoring data in lieu of modeling, the State has yet to adopt and enforce any limits on PM<sub>10</sub> emissions from the Buckskin Mine, despite registered exceedances. *See* FEIS at 3-52.<sup>1</sup> Put simply, the State of Wyoming makes every effort to avoid taking any action to address air quality problems in the Powder River Basin. The BLM cannot reasonably rely on such an approach to protecting air quality, particularly when the Agency has an explicit and independent mandate to provide for compliance with air quality standards.

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To this end, we also question how the BLM will ensure compliance with visibility requirements in its RMP. Indeed, the Buffalo RMP is clear that BLM will “minimize emissions that could result in acid rain, violations of air quality standards, or reduced visibility.” BLM, APPROVED RESOURCE MANAGEMENT PLAN FOR PUBLIC LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT BUFFALO FIELD OFFICE, (April 2001) at 3, *available at* [http://www.blm.gov/pgdata/etc/medialib/blm/wy/programs/planning/rmps.Par.94672.File.dat/2001rmp\\_update.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/wy/programs/planning/rmps.Par.94672.File.dat/2001rmp_update.pdf) (last visited Aug. 29, 2011). Yet the FEIS discloses that visibility in a number of Class I areas and sensitive Class II areas will be degraded. In the case of the Northern Cheyenne Indian Reservation, a Class I area, the BLM projects that visibility will be degraded for an additional 60 days—or two months—as a cumulative effect of authorizing the sale and issuance of the Wright Area LBAS. *See* FEIS at 4-49—4-50. This not only seems to pose serious environmental concerns, but serious environmental justice concerns, particularly since it is not evident that the BLM has made any effort at all to communicate to the leaders and residents of the Northern Cheyenne Indian Reservation that their air quality will be fouled to such a significant degree.

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Finally, it is unclear why the BLM did not address the indirect air quality impacts associated with the burning of coal that will be mined from the Buckskin Mine. Data from the Energy Information Administration (“EIA”) lists every coal-fired power plant that burns coal from the Buckskin Mine. *See* <http://www.eia.gov/cneaf/electricity/page/eia423.html> (last accessed Aug. 29, 2011). Furthermore, EPA’s Clean Air Markets Database (<http://camddataandmaps.epa.gov/gdm/index.cfm?fuseaction=emissions.wizard> (last accessed Aug. 29, 2011) and Toxic Release Inventory data base ([http://iaspub.epa.gov/triexplorer/tri\\_release.facility](http://iaspub.epa.gov/triexplorer/tri_release.facility) (last accessed Aug. 29, 2011)) lists the amounts of every significant pollutant released by these coal-fired power plants. There is no reason for the BLM to not analyze how the proposed coal lease will affect emissions at these coal-fired power plants.

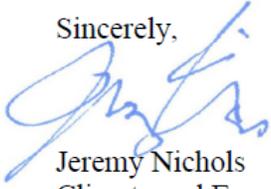
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<sup>1</sup> Although DEQ claimed these exceedances to be “exceptional” due to high winds, any claim that high winds in Wyoming are exceptional is incredibly disingenuous. It is notable that the EPA has yet to endorse DEQ’s “high wind in Wyoming exceptional events” claim.

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Thank you for the opportunity to comment on the FEIS.

Sincerely,



Jeremy Nichols  
Climate and Energy Program Director  
WildEarth Guardians  
1536 Wynkoop, Suite 301  
Denver, CO 80202  
(303) 573-4898 x 1303  
[jnichols@wildearthguardians.org](mailto:jnichols@wildearthguardians.org)

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## BLM Response

### **3A:**

As we responded in full to your comments on the draft, and no new substantial comments have been submitted aside from those listed by you above, BLM will not restate our responses to your comments on the draft. To re-visit our responses to your previous comments please see Appendix D in the Buckskin Mine Hay Creek II FEIS.

### **3B:**

There remains some uncertainty regarding implementation of a future lower ozone standard. While the FEIS states on page 3-67 that a final lower ozone standard is expected mid-2011, the EPA subsequently withdrew the draft ozone standard as described in a September 02, 2011, statement by the President: "...I have requested that Administrator Jackson withdraw the draft Ozone National Ambient Air Quality Standards at this time. Work is already underway to update a 2006 review of the science that will result in the reconsideration of the ozone standard in 2013" (<http://www.epa.gov/airquality/ozonepollution/actions.html>). The EPA has indicated that a proposal for a new ozone standard is anticipated in 2013 with a final rule tentatively in 2014. Additional information and documentation regarding the status of the ozone rulemaking process can be found at:  
[http://www.epa.gov/ttnnaaqs/standards/o3/s\\_o3\\_index.html](http://www.epa.gov/ttnnaaqs/standards/o3/s_o3_index.html).

There is no guarantee that the ozone standard will change in 2014. However, page 3-67 of the FEIS discusses the affected environment in the context of the existing ozone standard as well as a potentially lower ozone standard. Table 3.4-4 (FEIS, page 3-67) displays ozone monitoring data and the narrative that follows discloses that the recorded values are "...close to the ozone NAAQS." The FEIS continues by acknowledging that lowering of the ozone standard could potentially trigger non-attainment status for ozone in the northern PRB. In terms of the impact of a new, lower ozone standard, the FEIS states (page 3-67) that any coal mine seeking a new or renewed air quality permit from WDEQ would have to demonstrate that ozone precursor emissions (NO<sub>x</sub> and VOC) would not increase as a result. Because the applicant has no plans to increase production at the existing mining operation under the proposed action, it is unlikely that NO<sub>x</sub> or VOC would increase under the proposed action.

Efforts are currently underway to better monitor and characterize ozone in the PRB:

- The BLM - Wyoming installed a 2B Ozone Monitor at its existing Sheridan Wyoming Air Resource Monitoring Systems (WARMS) monitoring site in January 2013. Monitoring data from the Sheridan ozone monitor will be provided to the WDEQ-Air Quality Division

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and also submitted to EPA's Air Quality System (AQS) Data Mart. Data from this location can be used to evaluate cross-border transport and conditions upwind of the PRB.

- In late 2012, the Basin and Newcastle WARMS monitoring sites were upgraded to be fully compliant with, and part of, the Clean Air Status and Trends Network (CASTNET) system supported by the EPA. CASTNET provides long-term monitoring of air quality in rural areas to determine trends in atmospheric pollutant concentrations, including ozone, in order to evaluate the effectiveness of national and regional air pollution control programs. The BLM continues to work collaboratively with the EPA and Federal Land Managers to address ozone concerns in the region.
- The PRB Coal Review Phase II will assess the cumulative air quality impacts of proposed future development activities in the PRB for years 2020 and 2030. Results are anticipated to be available in summer 2013 and may be used as part of the cumulative air quality assessment component of future project-specific NEPA analyses. The BLM commits to leveraging the data from PRB II, as well as other modeling efforts being conducted in the region for project-specific NEPA analyses, to assess regional air quality and air quality related values. Pending completion of these modeling analyses, the BLM, in cooperation with an interagency review team, will evaluate impacts from proposed federal actions and identify additional emission mitigation measures necessary to prevent any modeled violations of the National Ambient Air Quality Standards (NAAQS) or Wyoming Ambient Air Quality Standards (WAAQS) or the need for a more refined modeling analyses.
- The BLM is creating the Air Resource Management Plan (ARMP) which will be part of the new Buffalo RMP. The ARMP will address current issues and conditions within the region and ensure future BLM air analyses are robust and comprehensive. The ARMP will be available spring 2013 for review and comment.

## **3C:**

WEG's comments do not provide specific detail on how the analyses are inadequate, such as reference to factual errors or lack of an appropriate analytical methodology, or submission of new information. The BLM believes the level of analyses is adequate for this proposed action (i.e., a lease) with respect to NEPA, FLPMA, and the RMP. Impacts from emissions of NO<sub>x</sub> and PM, and impacts to visibility, are addressed in the FEIS within Chapters 3 and 4.

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Regarding promulgation of the new PM<sub>2.5</sub> increment, Tables 3.4-1, 4-11, and 4-12 should have included the 24-hour and annual PM<sub>2.5</sub> increments for Class I and Class II areas, which are as follows:

Time	Class I increment ( $\mu\text{g}/\text{m}^3$ )	Class II increment ( $\mu\text{g}/\text{m}^3$ )
Annual arithmetic mean	1	4
24-hour maximum	2	9

Comparison of these PM<sub>2.5</sub> increments to the modeled values in Table 4-12 indicates potential exceedances at several Class I and sensitive Class II areas in the region. However, as noted on page 4-45 of the FEIS, the modeling analysis did not separate PSD increment-consuming sources from those that do not consume increment. The PSD increment comparison is provided for informational purposes only and cannot be directly related to a regulatory interpretation of PSD increment consumption. Since the Buckskin Mine is not subject to permitting under PSD regulations because it is not considered a major source under PSD, the emissions are not considered “increment consuming” under existing regulations.

Finally, it is important to note that these modeled potential exceedances cannot be attributed directly to impacts from the Hay Creek II coal lease. As shown in Table 4-41 (FEIS, page 4-144), the cumulative impacts of the No Action alternative indicate that exceedances may occur regardless of the selected alternative and even without the proposed action.

#### **3D:**

Approval of the coal lease will not, in and of itself, lead to violations of NAAQS. While the modeling results indicate potential exceedances, this information should be qualified in two important ways. First, modeling is only an indication of potential impacts. As stated on page 4-43, “The model results should not be construed as predicting an actual exceedance of any standard, but are at best indicators of potential impacts.” Second, the table shows cumulative impacts which may potentially occur regardless of the selected alternative. This is reinforced in Table 4-41 (FEIS, page 4-144), which shows no difference in cumulative impacts between the No Action, Proposed Action, or Alternative 2.

#### **3E:**

The WDEQ has been delegated authority by the U.S. Environmental Protection Agency (EPA) to implement federal programs of the Clean Air Act (CAA) Amendments of 1990. The WDEQ implements the Wyoming Air Quality Standards and Regulations and CAA Amendments through various air permitting programs.

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The FEIS describes the mechanisms used by the WDEQ to ensure that NAAQS are not violated. The first mechanism is monitoring, which the FEIS describes in detail. An extensive monitoring network exists in the PRB and WDEQ requires this monitoring information to document the quality of air resources in the vicinity of PRB mines. Tables 3.4-2 and 3.4-3 display monitoring results at the Buckskin and surrounding mines. Note that while the values highlighted in Tables 3.4-2 and 3.4-3 reflect exceedances, they do not indicate a violation of a standard. Under the PM10 24-hour NAAQS, a violation of the standard does not occur unless 150  $\mu\text{g}/\text{m}^3$  is exceeded more than once per year on average over three years. Subsequently, a violation of the NAAQS can only be supported and justified to EPA through the collection of actual monitoring data. A modeling analysis based on assumptions and best-available data cannot serve as an indication or support a violation of the NAAQS. While exceedances have occurred at some monitors, the exceedances do not constitute a violation of the NAAQS until it can be demonstrated, through monitoring, that the regulatory standard has been violated.

Data from a WDEQ monitor in Campbell County are shown in the following table, which displays the ten highest daily maximum values from July 2003 to June 2012. Note that all maximum values are well below the 24-hr PM10 NAAQS of 150  $\mu\text{g}/\text{m}^3$ . According to recent communication with the WDEQ, the WDEQ considers a representative 24-hr PM10 background concentration for the High Plains District of the BLM to be approximately 41  $\mu\text{g}/\text{m}^3$ .

#### Ten Highest Daily PM10 Max Values at the Campbell County Monitor

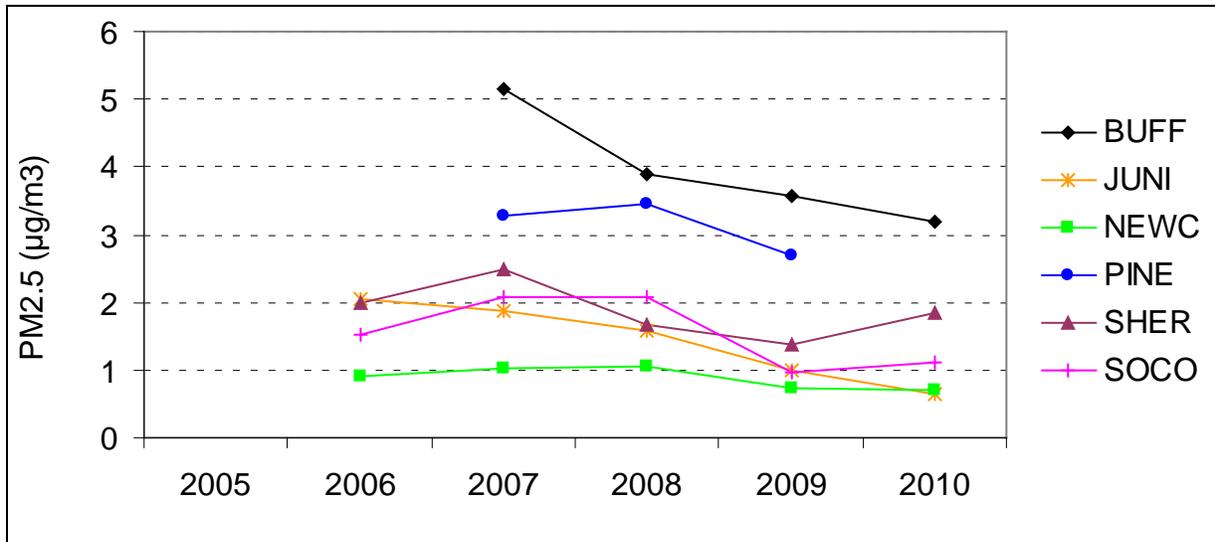
Final Validation (07/17/2003—06/30/2012)

number	date	value ( $\mu\text{g}/\text{m}^3$ )
1	6/27/2012	59.3
2	6/28/2012	53.3
3	4/11/2012	50.4
4	6/4/2012	50.3
5	6/30/2012	47.6
6	8/24/2011	47.5
7	4/10/2012	47.2
8	5/15/2012	45.5
9	6/26/2012	44.8
10	9/17/2009	44.5

The BLM operates multiple monitors as part of the BLM's Wyoming Air Resource Monitoring Systems (WARMS). Data from these monitors are shown in the following chart. With the exception of the Pinedale monitor (PINE), all monitors are located in the High Plains District of the BLM.

Annual Average Speciated Filter Pack Measurements at Wyoming WARMS Sites, 2006—2010.

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Because the WARMS PM<sub>2.5</sub> particulate monitoring is not performed according to EPA reference or equivalent methods, data cannot be used to establish regulatory compliance. However, data can be used as an indicator of concentrations present. Note that all annual averages were less than 6 µg/m<sup>3</sup>, much lower than the PM<sub>2.5</sub> annual NAAQS of 15 µg/m<sup>3</sup>.

A second mechanism for ensuring compliance with the NAAQS is through the permitting and compliance process. The WDEQ requires that surface mine permits compile detailed emissions inventories and demonstrate compliance with the NAAQS before permit amendments are granted. In 2006, WDEQ issued a permit modification for the Buckskin Mine using the modeled analysis to demonstrate that applicable air quality standards would be attained. Additionally, WDEQ used a best available control technology (BACT) to determine the appropriate emissions controls for mining operations. An air quality permit modification will be required to support compliance with ambient standards before additional mining activities are authorized. The current Buckskin Mine permit (Air Quality Permit MD-11186) includes multiple provisions for emissions controls, including but not limited to:

- Limits on particulate emissions for specific emissions sources (e.g., silos),
- Opacity limits for emissions from baghouses and truck dumps,
- Requirements for daily observations of visible emissions,
- Treatment of permanent and temporary routes with dust suppressant,
- Annual submission of reports detailing road dust control efforts,
- Actions to limit wind erosion from disturbed acres, and
- Requirement for an ambient PM<sub>10</sub> monitoring program and meteorological station.

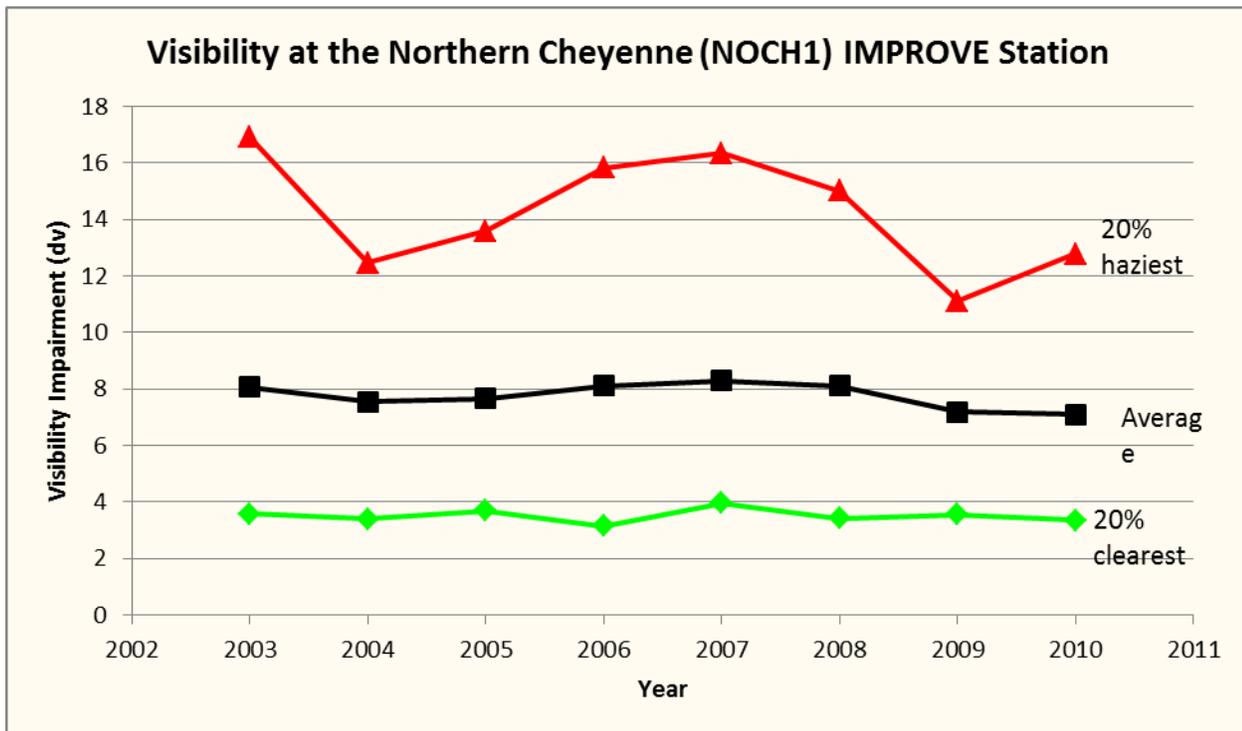
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As part of the monitoring and compliance program, the WDEQ tracks actual emissions. The combined fugitive and point emissions of PM10 were 913 tons and 1,047 tons in 2008 and 2011, respectively. The mine has operated under a production rate of approximately 25 million tons per year, and does not plan to change the production upon development of the proposed action to lease the identified tract of federal coal.

#### **3F:**

Consistent with the management objective of the Buffalo RMP referenced in the comment, mitigation measures to “minimize emissions” are included in the FEIS. The project alone is anticipated to have a minor, short-term impact on visibility (FEIS, page 3-75).

As referenced in the WEG comment, cumulative impacts suggest a potential increase in the number of days of impaired visibility at the Northern Cheyenne Indian Reservation. Data of visibility conditions at the Northern Cheyenne Indian Reservation from 2003-2010 indicate a decreasing trend (i.e., improved visibility) for the haziest 20% days. This can be seen in the following chart showing annual averages for the 20% clearest, average, and 20% haziest visibility days at the Northern Cheyenne IMPROVE monitor (NOCH1).



The impacts to visibility described on page 4-48 of the FEIS are not solely a result of leasing federal coal. These impacts may potentially occur regardless of the selected alternative. Table 4-41 (FEIS, page 4-144), shows no difference in cumulative impacts between the No Action,

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Proposed Action, or Alternative 2. Currently, the 2008 PRB Coal Review Cumulative Air Quality Effects Analysis is being updated. Known as the PRB Coal Review Phase II (or “PRB II”), this analysis will assess the cumulative air quality impacts of proposed future development activities in the PRB for years 2020 and 2030. Results are anticipated to be available in the summer of 2013 and will include analyses for visibility.

BLM has communicated with the Northern Cheyenne Indian Reservation about project impacts during the NEPA process:

- Scoping letters were sent to tribal mailing list. Letter dated January 10, 2008.
- Consultation invitation dated May 29, 2008.
- Second scoping letter was sent and dated August 26, 2008.
- Hard copy of Draft EIS mailed on March 12, 2010.
- Hard copy of Final EIS mailed on July 29, 2011.

## **3G:**

Emissions from power plants within the modeling domain were included in the cumulative impact analysis. The cumulative effects described in Chapter 4 of the FEIS are extracted from the Air Quality Technical Support Document (TSD) for the Task 3A Report Update for the Powder River Basin Coal Review Cumulative Air Quality Effects for 2015 (ENSR Corp., October 2008). Page 2-7 of the Powder River Basin TSD describes how power plants are included in the analysis and lists the plants on page 2-8 of the TSD; presumably, many of these could burn coal from the Buckskin Mine. The modeling domain for the cumulative effects analysis is shown on page 3-4 of the Powder River Basin TSD, and covers most of Wyoming and Montana as well as portions of North Dakota, South Dakota, Nebraska, and Idaho. Because of the geographic scope of the cumulative effects modeling domain, impacts from burning Buckskin Mine coal outside of this modeling domain would not likely affect the analysis area (i.e., the modeling domain) and are therefore excluded from the cumulative effects analysis. Air quality impacts and emissions from coal-fired power plants are addressed, and mitigated, through the facilities' Operating Permits which are required and administered through the various state air quality agencies where those plants reside.