

**UNITED STATES DEPARTMENT OF THE INTERIOR
OFFICE OF HEARINGS AND APPEALS
BOARD OF LAND APPEALS**

)	IBLA Docket No. _____
)	
WILDEARTH GUARDIANS, and)	Appeal of the Decision Record for
SIERRA CLUB,)	the Elk Creek East Tract Coal Lease,
)	DOI-BLM-CO-150-2008-0053 EA,
Appellants.)	Casefile/Project Number COC70615,
)	Gunnison County, Colorado
)	

NOTICE OF APPEAL AND PETITION FOR STAY

NOTICE OF APPEAL

Pursuant to 43 C.F.R. §§ 4.21, 4.410-4.413, WildEarth Guardians and the Sierra Club (collectively, “Appellants”) file this Notice of Appeal and Petition for Stay of a decisions made by Bureau of Land Management (“BLM”) Colorado State Office Director, Helen M. Hankins. On January 21, 2011, Ms. Hankins signed a Decision Record “to offer for lease the coal seams in the Elk Creek East Tract Coal Lease,” identified as DOI-BLM-CO-150-2008-0053 EA, and Casefile/Project Number COC70615.¹

This appeal is timely filed.²

¹ BLM, Decision Record (Jan. 21, 2011) at 1, attached as Exh. 1.

² The 30th day following the date of issuance of the decision herein challenged fell on Sunday, February 19. Today is the first business day following February 19. Therefore, this appeal is timely. 43 C.F.R. § 4.22(e). In addition, Earthjustice, on behalf of WildEarth Guardians and Sierra Club, received formal notice, via letter, of BLM’s January 21, 2011 no earlier than February 8. See letter of B. Sharrow, BLM to Interested Party (Feb. 8, 2011), attached as Exh. 2. This Notice is thus filed well within the 30-day appeal period. 43 C.F.R. § 4.411(a)(2)(i).

PETITION FOR STAY

I. BACKGROUND.

On September 12, 2006, Oxbow Mining LLC (“Oxbow”), the operator of the Elk Creek Mine near Somerset, Colorado, submitted to BLM a request for a lease-by-application (LBA) for about 786 acres of federal coal adjacent to Oxbow’s existing leases.³ The Elk Creek East Coal LBA will permit Oxbow to produce between 4 and 6 million tons of coal, extending the life of the Elk Creek Mine for about a year.⁴

BLM announced its environmental evaluation of the Elk Creek East Coal LBA and sought initial “scoping” comments in August 2008.⁵ One year later, in August 2009, BLM issued an environmental assessment (“EA”) upon which it sought public comment.⁶ In February 2010, BLM issued a final EA and Finding of No Significant Impact (“FONSI”).⁷ BLM prepared a notice proposing to lease the coal at a competitive auction on May 12, 2010.⁸ Prior to the scheduled lease sale, however, BLM notified the public that it was “continuing to review” its

³ D. Dyer (BLM), Combined Geologic and Engineering Report (GER) and Maximum Economic Recovery Report (MER) (May 2009) at 1 (“Elk Creek GER/MER”, attached as Exh. 3).

⁴ See BLM, Environmental Assessment, Elk Creek East Tract Coal Lease, No. COI-BLM-CO-150-2008-53 EA (Jan. 2011) (“Jan. 2011 EA”) at 1 (lease by application “will allow [Oxbow] to continue producing coal at or near current levels for approximately one additional year”; the Elk Creek Mine “produces approximately 6,000,000 tons of coal annually”), attached as Exh. 4. See also Elk Creek GER/MER (Exh. 3) at 3 (estimating the recoverable coal reserves in the Elk Creek East tract at 3.96 million tons).

⁵ Letter of B. Sharrow, BLM to Interested Party (Aug. 20, 2008), attached as Exh. 5.

⁶ Jan. 2011 EA (Exh. 4) at 9.

⁷ See, e.g., BLM, Finding of No Significant Impact (Feb. 2, 2010), attached as Exh. 6.

⁸ See “Notice of competitive coal lease sale,” attached as Exh. 7.

February 2010 FONSI and the proposed lease.⁹ In January 2011, BLM issued a new, final EA, a new FONSI, and a Decision Record approving the lease.¹⁰

BLM's January 2011 decision approved the offer of the 786-acre Elk Creek East tract for lease.¹¹ To access the coal, the Mine must remove dangerous levels of methane, an explosive gas. Oxbow plans to drill up to 15 methane drainage wells (AKA "gob vent boreholes" or GVBs) from a total of nine drill pads, disturbing over 2 acres of land.¹² Accessing the well pads will require the construction of 2.05 miles of reopened, reclaimed roads and 0.25 miles of new roads on BLM lands.¹³ This construction will destroy vegetation and wildlife habitat in a scenic, natural area of BLM land that is adjacent to Forest Service roadless lands.

Extending the life of the Elk Creek Mine – one of the largest underground mines in Colorado – for one year will also harm the environment, as exhaust from trucks, heavy equipment and rail transport will pollute the air. Mine operation will also require the removal through drainage wells and the Mine's ventilation system of huge amounts of methane, a greenhouse gas with more than 20 times the heat-trapping capacity of carbon dioxide (CO₂). BLM estimates that methane emissions caused by the LBA will amount to greenhouse gas emissions equivalent to 1 million tons of CO₂.¹⁴ Such GHG pollution is equivalent to that

⁹ Letter of B. Sharrow, BLM to Interested Party (May 6, 2010), attached as Exh. 8.

¹⁰ See Jan. 2011 EA (Exh. 4); Decision Record (Exh. 1); and BLM, Finding of No Significant Impact (Jan. 20, 2010) ("Jan. 2011 FONSI"), attached as Exh. 9.

¹¹ Decision Record (Exh. 1) at 1.

¹² Jan. 2011 EA (Exh. 4) at 2.

¹³ Id. at 3.

¹⁴ Id. at 15.

caused by the use of over 170,000 passenger cars for a year, and to the carbon sequestered by 23 million tree seedlings over a 10-year period.¹⁵

Appellants WildEarth Guardians and Sierra Club file this appeal and petition for stay to set aside BLM's decision. BLM violated the National Environmental Policy Act (NEPA) by failing to consider environmental impacts of the proposed lease, and by failing to evaluate all reasonable alternatives to the proposed action. BLM's violations mean Appellants are likely to succeed on the merits. Appellants provide a declaration demonstrating that the air pollution, road, well-pad construction, and other project impacts that imminently may occur will cause the environment, Appellants, and their members irreparable harm. In contrast, a brief stay while this Board deliberates will not harm BLM or any other party. Finally, the public interest favors environmental protection and legal compliance in this case. Appellants therefore meet all the requirements for a stay.

II. APPELLANTS ARE ADVERSELY AFFECTED PARTIES TO THE CASE.

“A petition for a stay pending appeal may be filed only by a party who may properly maintain an appeal.” See 43 C.F.R. § 4.21(a)(2). To maintain an appeal, Appellants must: (1) be a party to the case; and (2) be adversely affected by the decision being appealed. 43 C.F.R. § 4.410(a); National Wildlife Federation v. BLM, 129 IBLA 124, 125 (1994). Appellants meet both tests.

¹⁵ See EPA, Greenhouse Gas Equivalencies Calculator, available at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results> (last visited Feb. 22, 2011).

First, both of the Appellants are parties to the case.¹⁶ “A party to the case ... is [inter alia] one who has ... participated in the process leading to the decision under appeal, e.g., by ... commenting on an environmental document” concerning the proposed action. 43 C.F.R. § 4.410(b). Here, WildEarth Guardians and the Sierra Club submitted written comments to BLM regarding the Elk Creek East Coal Lease during the public comment periods provided by BLM. WildEarth Guardians and the Sierra Club submitted joint comments on “scoping” on the Elk Creek East Coal Lease on September 29, 2008.¹⁷ WildEarth Guardians and the Sierra Club also filed joint comments on the August 2009 draft Environmental Assessment (“EA”) on September 25, 2009.¹⁸ WildEarth Guardians and the Sierra Club are thus “parties to the case.”

Second, both of Appellants will “be adversely affected” by the Elk Creek East Coal Lease. 43 C.F.R. § 4.410(a). To show a party will be adversely affected, the party must

¹⁶ WildEarth Guardians is a registered non-profit corporation whose purpose is the conservation of natural resources. With more than 4,500 members in the United States, WildEarth Guardians’s mission is to protect and restore the wildlife, wild places, and wild rivers of the American West. WildEarth Guardians is headquartered in Santa Fe, New Mexico, and has offices in Denver, Colorado and Phoenix, Arizona. Through its Climate and Energy Program, WildEarth Guardians works to safeguard the climate, clean air, and communities of the American West by promoting a sensible transition to renewable energy. See Declaration of Jeremy Nichols (Feb. 21, 2011) at ¶¶ 3-4 (“Nichols Decl.”), attached as Exh. 10.

The Sierra Club is a national nonprofit organization of approximately 1.3 million members and supporters dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth’s ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club’s concerns encompass climate change, air quality impacts, water quality, wildlife, and other environmental concerns. The Sierra Club’s highest national priority campaign is its “Move Beyond Coal” Campaign, which aims to transition the nation away from coal and toward clean energy solutions. The Rocky Mountain Chapter of the Sierra Club has approximately 14,000 members in the State of Colorado. Id. at ¶ 6.

¹⁷ See letter of J. Nichols, WildEarth Guardians et al. to B. Sharrow, BLM (Sept. 29, 2008), attached as Exh. 11 (attachments omitted).

¹⁸ See letter of E. Zukoski, Earthjustice to D. Dyer, BLM (Sept. 25, 2009), attached as Exh. 12 (attachments omitted).

demonstrate that it has a “legally cognizable interest” and that “the decision on appeal has caused or is substantially likely to cause injury to that interest.” 43 C.F.R. § 4.410(d). This requisite “interest” can be established by cultural, recreational, or aesthetic uses as well as enjoyment of the public lands. Southern Utah Wilderness Alliance, 127 IBLA 325, 327 (1993); Animal Protection Institute of America, 117 IBLA 208, 210 (1990); Colorado Environmental Coalition et al., 171 IBLA 256, 260-61 (2007) (hiking in area impacted sufficient to establish required “interest”); Wyoming Outdoor Council et al., 153 IBLA 379, 383 (2000) (legally cognizable interest in the land “need not be an economic or a property interest. Use of the land will suffice.”) The IBLA does not require a showing that an injury has actually occurred. Rather, a colorable allegation of injury suffices. Powder River Basin Resource Council, 124 IBLA 83, 89 (1992).

Moreover, it is not necessary for parties to show that they have actually set foot on the impacted parcel or parcels to establish use or enjoyment for purpose of demonstrating adverse effects. Rather, “one may also establish he or she is adversely affected by setting forth interests in resources or in other land or its resources affected by a decision and showing how the decision has caused or is substantially likely to cause injury to those interests.” The Coalition of Concerned National Park Retirees, et al., 165 IBLA 79, 84 (2005).

In his declaration, Jeremy Nichols testifies that he is a member and employee of WildEarth Guardians, and a member of Sierra Club. He states that he has personally used and enjoyed the BLM lands that are part of the Elk Creek East Coal Lease – including the resources that will be damaged by the proposed action – for recreational, aesthetic, and conservation purposes, and that he intends to return to these areas for enjoyment. See Nichols Decl. (Exh. 10) at ¶¶ 8-14. He testifies that he has also visited areas adjacent to, and with views of, the lease for

the same purposes, and that he intends to return to those areas as well. Id. Mr. Nichols' declaration establishes that the BLM's decision to sell the Elk Creek East Coal Lease will adversely affect his legally cognizable interests in recreation, aesthetic enjoyment, and conservation in these areas through road and well-pad construction, and increased air pollution and other environmental impacts. Thus, Mr. Nichols's declaration establishes that WildEarth Guardians and Sierra Club will be adversely affected by BLM's decision to approve the Elk Creek East Coal Lease.

In sum, WildEarth Guardians and Sierra Club are parties to the case who will be adversely affected by the decision to offer the Elk Creek East Coal Lease. They may properly maintain this appeal.

III. STANDARD OF REVIEW.

Appellants seeking a stay must demonstrate that:

- (1) the balance of harms weighs in favor of granting a stay,
- (2) the appellant is likely to succeed on the merits of the appeal,
- (3) irreparable harm to the appellant and resources is likely if a stay is not granted, and
- (4) the public interest favors granting a stay.

43 C.F.R. § 4.21(b)(1). "The appellant requesting the stay bears the burden of proof to demonstrate that a stay should be granted." 43 C.F.R. § 4.21(b)(2).

This Board's review of BLM's decision "is de novo in scope because it is [the IBLA's] delegated responsibility to decide for the Department 'as fully and finally as might the Secretary' appeals regarding use and disposition of the public lands and their resources." National Wildlife Federation, 145 IBLA 348, 362 (1998), citing 43 C.F.R. § 4.1.

IV. APPELLANTS ARE LIKELY TO SUCCEED ON THE MERITS.

In deciding to approve the Elk Creek East Coal LBA, BLM has violated NEPA. First, BLM failed to analyze or disclose a number of climate-change related impacts of the LBA decision. BLM failed to analyze the impacts that will result from the very purpose of the action: coal combustion. Further, while the LBA will extend the life of the mine for a year, BLM did not analyze the greenhouse gas emissions (other than methane venting) caused by operating the mine that time. BLM also failed to analyze or disclose the impacts of emissions of black carbon, a significant contributor to climate change.

Second, BLM failed to adequately analyze the impacts of the project on air quality, relying instead on state air permits that do not regulate at all many important air pollutants. BLM's failure is arbitrary given that the agency has recently prepared NEPA documents that analyzed air quality impacts from other coal leases in Colorado and Wyoming. BLM also ignored Oxbow's admission that this LBA would likely result in more methane emissions than BLM assumed.

Third, BLM failed to consider reasonable alternatives that would reduce the coal lease's methane and climate change impacts. BLM failed to even address an alternative that would require Oxbow to offset the lease's climate change impacts, or an alternative that would require Oxbow to reduce methane emissions from the Mine's ventilation system. Both alternatives are technically feasible, are in wide use around the world and in the U.S., and have been pushed by the EPA. BLM's failure to analyze these alternatives violates NEPA.

Finally, BLM should have analyzed this coal LBA together with a pending lease modification currently before BLM and the Forest Service that will also permit the expansion of

Oxbow's Elk Creek Mine. These two actions are both "connected" and "similar," requiring BLM to review them in a single NEPA document.

A. BLM Failed To Evaluate Or Quantify Numerous Climate Change-Related Impacts Of The Proposed Action, In Violation of NEPA.¹⁹

1. BLM Failed To Evaluate Or Quantify The Indirect Impacts Caused By Combustion Of The Mined Coal.

a. NEPA Requires BLM To Disclose Indirect Impacts Of Proposed Actions.

Environmental assessments must take a hard look at the "environmental impacts" of proposed actions, 40 C.F.R. § 1508.9(b), which include direct, as well as indirect and cumulative impacts. See 40 C.F.R. § 1508.8 (effects include ecological, aesthetic, historical, cultural, economic, social or health impacts, whether direct, indirect or cumulative); 40 C.F.R. § 1508.25(c) (EIS shall consider three types of impacts, including direct, indirect, and cumulative effects); 40 C.F.R. § 1508.25(a)(2) (EISs must analyze the effects of actions "which when viewed with other proposed actions have cumulatively significant impacts"). Indirect effects

are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water quality and other natural systems, including ecosystems.

40 C.F.R. § 1508.8(b); BLM NEPA Handbook (H-1790-1) § 6.8.2 (Jan. 2008).

Federal caselaw amplifies that agencies must disclose the direct and indirect environmental effects a federal action will have on non-federal lands. See City of Davis v. Coleman, 521 F.2d 631, 677-81 (9th Cir. 1975) (where federal approval of highway project

¹⁹ Each of the issues concerning climate change discussed in this section was raised by Appellants in their September 2009 comment letter on the EA. See letter of E. Zukoski (Exh. 12) at 15-21.

likely to have impacts on development of surrounding area, agency must analyze development impacts in EIS); Coalition for Canyon Preservation v. Bowers, 632 F. 2d 774, 783 (9th Cir. 1980) (same); Sierra Club v. Marsh, 769 F.2d 868, 877-89 (1st Cir. 1985) (striking down EA where agency failed to account for private development impacts likely to result from its approval of causeway and port facility); Mullin v. Skinner, 756 F. Supp 904, 920-22, (E.D. N.C. 1990) (striking down EA where agency failed to account for private development impacts likely to result from agency approval of bridge). Such impacts must be disclosed, particularly where facilitating private development may be the project's "reason for being." See Citizens Comm. Against Interstate Route 675 v. Lewis, 542 F. Supp. 496, 562 (S.D. Ohio 1982).

b. BLM Failed To Disclose The Impacts Of Coal Combustion.

NEPA requires BLM to assess all impacts of the Elk Creek East Tract lease and mining, including the impacts of the end use of the coal mined from that tract: the combustion of the coal. The GHG emissions and air quality impacts of coal combustion are indirect effects of the Elk Creek East Coal Lease because they "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b).²⁰ Absent BLM's decision, the coal would be neither removed nor burned. Jan. 2011 EA at 4. Further, coal combustion is the lease's "reason for being." Citizens Comm. Against Interstate Route 675 v. Lewis, 542 F. Supp. at 562. Oxbow would not mine the coal if it could not sell it for combustion. Further, BLM claims that one of the "benefits" of the project is the "contribution to supply of coal to meet the nation's energy needs." Jan. 2011 FONSI (Exh. 9) at 3. If BLM

²⁰ Even if BLM does not consider the end use of coal combustion as a direct or indirect impact, it must consider it in its analysis of cumulative effects. See 40 C.F.R. § 1508.7.

considers energy production to be a foreseeable beneficial impact of the lease, it must disclose and analyze the environmental effects of that energy production.²¹

The facts here are strikingly similar to those in South Fork Band Council v. U.S. Dept. of Interior, 588 F.3d 718 (9th Cir. 2009). There, BLM prepared an EIS on a proposal to expand a mine, as here. The ore in South Fork Band would be transported off-site for future processing, just as the coal here will be transported off-site for combustion. The Ninth Circuit found that BLM should have examined the impacts of off-site processing because they met NEPA's definition of indirect impacts. "The air quality impacts associated with transport and off-site processing of the five million tons of refractory ore are prime examples of indirect effects that NEPA requires be considered." Id. at 725. Here, too, the impacts of coal combustion are also "prime examples" of indirect impacts that BLM must disclose.

The Elk Creek East Coal Lease will permit Oxbow to produce between 4 and 6 million tons of coal. See supra at 2 & n.4. The EA states that "[c]oal will be developed and produced as part of the proposed action and subsequently utilized to produce electricity using current, conventional coal combustion and emission technologies." Jan. 2011 EA (Exh. 4) at 45.

This project's very purpose is to produce coal for use in power plants, which will cause air pollution from, inter alia, carbon dioxide. See id. at 46 ("almost all of the coal that would be mined in the Elk Creek Mine area would be used by coal-fired power plants to generate electricity. This ... results in the production of GHG."); id. at 45 ("Use of the coal would also contribute to GHG emissions."). Oxbow has no other purpose in mining the coal except to sell it

²¹ The President has also ordered BLM and this Department to specifically address the indirect impacts of agency actions that may impact climate change. Executive Order 13514 (Oct. 5, 2009) makes "reduction of greenhouse gas emissions a priority for Federal agencies" and establishes a national policy that Federal agencies "shall ... measure, report, and reduce their greenhouse emissions from direct and indirect activities ..." 74 Fed. Reg. 52117 (Oct. 8, 2009).

for combustion; that is why coal is mined. Coal burning is one of the leading causes of climate-change inducing GHGs.

In Mid-States Coalition for Progress v. Surface Transp. Board, the Eighth Circuit held that the agency must analyze the impacts from increased use of coal caused by the agency action: construction of a railroad to deliver coal from Wyoming's Powder River Basin to Midwestern and Eastern utilities. 345 F.3d 520 (8th Cir. 2003). The court noted that the increased coal use was likely and foreseeable, and that the environmental effects of burning more coal must be included in the EIS. Id. at 549. The court held:

The increased availability of inexpensive coal will at the very least make coal a more attractive option to future entrants into the utilities market when compared with other potential fuel sources, such as nuclear power, solar power, or natural gas. Even if this project will not affect the short-term demand for coal, which is possible since most existing utilities are single-source dependent, it will most assuredly affect the nation's long-term demand for coal.

Id. EPA has agreed, stating in comments on another recent coal LBA, that BLM "should ... include an estimate of the greenhouse gases emitted in the burning of the mined coal, as that is a logical consequence of mining the coal." EPA, Comments on South Gillette Area Coal Lease Applications Draft EIS (Dec. 19, 2008) at 5th page (emphasis added), attached as Exh. 13.

In addition, this Board has upheld BLM analysis of coal leases where that analysis disclosed the volume of GHGs likely to result from combustion of coal mined from the lease. In Powder River Basin Resource Council, this Board noted

BLM assumed that coal mined from the WAI [West Antelope II coal lease] tracts, like coal from other mines in the area, will be burned in coal-fired power plants to generate electricity. It then estimated the likely emissions of CO₂ and other GHGs from plants burning coal from the Mine and other coal mines in the Basin.

180 IBLA 119, 132 (2010) (citations omitted).

By contrast, in this case the Elk Creek East Coal LBA EA admits that the combustion of 4-6 million tons of coal would produce GHGs, but fails to quantify the volume of GHG emissions resulting from the burning the coal to be leases, much less translate those emissions into a contribution to climate change or any air quality impact. The EA's failure to address or disclose these impacts violates NEPA.

The EA's rationale for failing to disclose the impact of coal combustion is that such impacts will be analyzed "in the environmental analysis for [electric] generation facilities." Jan. 2011 EA (Exh. 4) at 45. BLM's approach is unlawful for at least two reasons. First, NEPA requires the disclosure of environmental impacts at the earliest possible time. "[A]ssessment of all 'reasonably foreseeable' impacts must occur at the earliest practicable point, and must take place before an 'irretrievable commitment of resources' is made." New Mexico ex rel Richardson v. BLM, 565 F.3d 683, 717 (10th Cir. 2009). The impacts of coal burning are foreseeable now and thus must be disclosed.

Second, there is not likely to be any later environmental analysis under NEPA on coal combustion, as plant operators are generally not required to perform NEPA analyses for a decision to burn coal in existing plants on private land. BLM certainly does not identify any future federal action or required analysis that would take place later.

BLM cannot argue that disclosing the nature and extent of GHG emissions from coal combustion is burdensome. The agency clearly has the ability to undertake such analysis. In fact, BLM did this very analysis for the West Antelope II lease tract in Wyoming just a few months ago. See Powder River Basin Resource Council, 180 IBLA at 132.²²

²² BLM was able to make similar calculations in the recent Draft EIS for the South Gillette LBAs in the Powder River Basin, providing an analysis both of the greenhouse gas emissions associated with coal combustion from the proposed LBAs and also of cumulative

Several U.S. protocols further show that BLM can undertake such analysis. The U.S. EPA, which regulates air emissions, has long employed a system for estimating the quantity of airborne pollutants using “emissions factors.”²³ The agency has developed a formula for “Default CO₂ Emissions Factors for U.S. Coals.”²⁴ Further, the Energy Information Agency estimated in 1994 that one pound of coal will produce between two and three pounds of CO₂.²⁵ Thus, for the East Tract, the estimated production of 4-6 million tons of coal will cause the release of an estimated 8 to 18 million tons of CO₂.²⁶

Assuming that the combustion of the East Tract’s 4-6 million tons of coal produces a mid-range 13 million tons of CO₂ equivalents, in addition to its estimated direct emission of 1.2 million tons of CO₂ equivalents,²⁷ the total carbon footprint of the project, 14.2 million tons of CO₂ equivalent GHG emissions, would be more than ten times greater than that currently

greenhouse gas emissions and associated climate change impacts related to coal mining across the Powder River Basin. See Wyoming BLM, “Draft EIS, South Gillette Area Coal Lease Applications,” at 4-103 - 4-113 (Oct. 2008), excerpt attached as Exh. 14.

²³ An emission factor is a “representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.” See U.S. EPA, Emissions Factors & AP 42, www.epa.gov/ttn/chief/ap42/index.html, attached as Exh. 15 (last viewed Feb. 22, 2011).

²⁴ See U.S. EPA, AP 42, Fifth Edition, Volume I, Chapter I: External Combustion Sources (1998) at 1.1-42, excerpts attached as Exh. 16, and available at www.epa.gov/ttn/chief/ap42/ch01/final/c01s01.pdf (last viewed Feb. 22, 2011).

²⁵ See B.D Hong and E.R. Slatick, Carbon Dioxide Emission Factors for Coal (originally published in Energy Information Administration, Quarterly Coal Report, January-April 1994, DOE/EIA-0121(94/Q1) (Washington, DC, August 1994) at 2, attached as Exh. 17 and available at www.eia.doe.gov/cneaf/coal/quarterly/co2_article/co2.html (last viewed Feb. 22, 2011).

²⁶ Yet another protocol for estimating GHG emissions from coal combustion is discussed in the Declaration of Jeremy Nichols. See Nichols Decl. (Exh. 10) at ¶¶ 33-38. That protocol concludes burning 3.9 million tons of Elk Creek coal will release 10.4 millions tons of CO₂.

²⁷ See Jan. 2011 EA (Exh. 4) at 15.

disclosed in the EA, sharply increasing the significance of lease's impact.²⁸ It is thus neither speculative, nor unreasonable, for BLM to fully analyze the impacts of coal combustion caused either directly or indirectly, by the Elk Creek East Coal LBA. BLM's failure to analyze these impacts violates NEPA.

NEPA also requires that the impacts of coal combustion should be compared to other reasonable alternatives, such as increased use of alternative fuels and improving energy efficiency and thus reducing demand for coal. BLM did not discuss such alternatives, much less analyze them, nor did the agency analyze the impact that coal production would have on demand for these other alternatives. Moreover, coal production will assuredly affect the nation's long-term demand for coal. That is the purpose of coal development. Thus, under the reasoning of Mid-States Coalition, BLM was required to consider this in the EA and its failure to do so violates NEPA.²⁹

2. BLM Failed To Evaluate Or Quantify The Impacts From GHG Emissions Caused By Operation Of The Mine For An Additional Year.

Another direct, or at a minimum, indirect impact of the Elk Creek East Coal LBA will be to keep the Elk Creek Mine running for about a year more than it would run without the LBA.

²⁸ This is true using the protocol described by Mr. Nichols as well. See Nichols Decl. (Exh. 10) at ¶ 38.

²⁹ An undated, unattributed document in BLM's files, obtained by Appellants through the Freedom of Information Act in April 2010, contains several additional rationales for BLM's omission, none of them convincing, and none of them adopted by BLM in the EA. See "Summary of public concerns on Oxbow Draft Coal Leasing EA," (no date), attached as Exh. 18. The document asserts that "[c]onsideration of the effects of the end-use of coal is outside the scope of indirect effects of this action." Id. at un-numbered 5th page. This ignores the fact that coal is being leased at Elk Creek so that it may be sold for combustion. Coal combustion is the lease's "reason for being." Supra at 10. The unattributed document also asserts: "If this action is not approved, the end users will obtain their coal from another source." Summary of Public Concerns (Exh. 18) at un-numbered 5th page. Clearly, end-users will not obtain this coal from this source if the LBA is not approved. Further, by increasing the supply of coal, this LBA will impact the coal market, coal prices, and ultimately coal consumption.

Jan. 2011 EA (Exh. 4) at 1 (lease by application “will allow [Oxbow] to continue producing coal at or near current levels for approximately one additional year”); Jan. 2011 FONSI (Exh. 9) at 1 (same); Jan. 2011 Decision Record (Exh. 1) at 1 (the LBA will “provide an opportunity to extend the life of the mine”).

The EA admits that a year’s worth of mining operations will result in additional GHG pollution, but fails to quantify or even estimate that contribution.

The mining, processing, and shipping of coal from the coal lease would contribute to Green House Gas (GHG) emissions through carbon fuels used in mining and processing, including those consumed by heavy equipment and stationary equipment, electricity used on site, methane release from mined coal, and rail transport of the coal.

Jan. 2011 EA (Exh. 4) at 45. This general statement does not permit either BLM or the public to determine whether the impacts of GHG emissions from these activities are significant or not, nor does it provide any basis for such a determination, nor does it permit BLM or the public to understand the types of emissions or their impacts. BLM’s failure to disclose the nature of these emissions, and the failure to quantify or otherwise characterize them, violates NEPA.

The EA’s failure to even attempt to quantify these emissions stands in stark contrast to BLM’s contemporary environmental reviews of coal leases in the Powder River Basin. For example, in the Final EIS for the Wright Area Coal Lease Applications, BLM stated that mines in the Basin had undertaken inventories of GHG emissions from mine operations.

Emissions inventories [for GHGs] included from all sources, including all types of carbon fuels used in the mining operations, electricity used on site (i.e., lighting for facilities, roads, and operations and electrically powered equipment and conveyors) and mining processes (i.e., blasting, coal fires caused by spontaneous combustion and methane released from exposed coal seams).

BLM, Final EIS, Wright Area Coal Lease Applications (July 2010) at 3-324 – 3-325, excerpts attached as Exh. 19. The Wright Area FEIS includes a table that discloses GHG emissions from

“fuel,” “electricity,” and the “mining process” for three mines that will likely result from extending the life of those mines from the LBAs. Id. at 3-325.

BLM clearly can undertake this analysis in this case, as it did for the Wright Area Final EIS. Oxbow almost certainly keeps track of its electricity use and of the volume of fuel used at the Elk Creek Mine, as any reasonable business would. NEPA requires that BLM disclose these impacts, but the agency failed to do so.

3. BLM Failed To Evaluate Or Address The Potential Impacts Of Black Carbon, A Significant Contributor To Climate Change.

The EA violates NEPA because it fails to contain any analysis of another potent climate change contributor: black carbon. Black carbon, also known as soot, is made up of particles or aerosols released through the inefficient burning of fossil fuels, biofuels, and biomass.³⁰ A rapidly growing body of scientific literature, published since the Intergovernmental Panel on Climate Change’s (IPCC’s) Fourth Assessment in 2007, identifies black carbon, a component of fine particulate matter (PM_{2.5}), as a critical climate forcing agent, and suggests that reducing these emissions may be among the most effective near-term strategies for slowing Arctic warming and the melting of sea ice, the Greenland ice sheet, and glaciers and snow pack around the world.³¹ Scientists have described the average global warming potential of black carbon as about 500 times that of carbon dioxide over a 100 year period.³² Similarly, it has been estimated that the “soot effect on snow albedo may be responsible for a quarter of observed global

³⁰ P.K. Quin, et al., Short-Lived Pollutants in the Arctic: Their Climate Impact and Possible Mitigation Strategies (2007), attached as Exh. 20.

³¹ Ramanathan and Carmichael, “Global and Regional Climate Changes Due to Black Carbon,” Nature Geoscience (April 2008), attached as Exh. 21.

³² J. Hansen, et al., “Climate change and trace gases,” The Royal Society (May 18, 2007), attached as Exh. 22; see also M.S. Reddy, et al., “Climate impact of black carbon emitted from energy consumption in the world’s regions,” Geophysical Research Letters, Vol. 34 (2007), attached as Exh. 23.

warming.”³³ This powerful warming impact is remarkable given that black carbon remains in the atmosphere for only about four to seven days, with a mean residence time of 5.3 days.³⁴

While black carbon warms the atmosphere like a GHG, it is a solid, not a gas. Unlike greenhouse gases, which warm the atmosphere by absorbing longwave infra-red radiation, soot has a warming impact because it absorbs shortwave radiation, or visible light.³⁵ Soot also contributes to heating when it is deposited on snow because it reduces reflectivity of the white snow and instead tends to absorb radiation. A recent study indicates that the direct warming effect of black carbon on snow can be three times as strong as that due to carbon dioxide during springtime in the Arctic.³⁶ “Soot deposition increases surface melt on ice masses, and the melt water spurs multiple radiative and dynamic feedback processes that accelerate ice disintegration.”³⁷ Melting reveals darker water or ground below; these darker surfaces in turn absorb more incoming sunlight, which causes additional warming.

Additionally, the direct absorption of sunlight by black carbon heats the atmosphere; it is here that the ratio of black to organic carbon, and the net climate forcing effect, is critical to consider.³⁸ But black carbon also nucleates clouds, increasing cloud droplet concentrations and thickening low-level clouds that trap more of the Earth’s radiated heat.³⁹ Moreover, the radiative

³³ J. Hansen and L. Nazarenko, Soot Climate Forcing Via Snow and Ice Albedos, 101 Proc. of the Nat’l Acad. Of Sci. 423 (2004), attached as Exh. 24.

³⁴ See Exh. 23 (Reddy et al. (2007)).

³⁵ W. Chameides, “Soot Takes Center Stage,” Science Vol. 297 (Sept. 27, 2002), attached as Exh. 25.

³⁶ M. Flanner, et al., “Present-day climate forcing and response from black carbon in snow,” J. of Geophys. Res. Vol. 112 (2007), attached as Exh. 26.

³⁷ See Exh. 24 (Hansen & Nazarenko (2004)).

³⁸ T.C. Bond, et al., A technology-based global inventory of black and organic carbon emissions from combustion, J. Geophys. Res. 109(D14203) (2004), attached as Exh. 27.

³⁹ Id.

forcing of suspended black carbon particles is thought to be amplified at the poles, where there is more light reflected from the Earth's surface, and thus more light available for the black carbon particles to absorb.

Further, black carbon may be transported long distances from the source of emissions. For example, most black carbon that deposits in the Arctic originates as fuel combustion by-products emitted in northern hemisphere in Eurasia and North America, primarily north of 40° latitude.⁴⁰ Each region of the world has a unique mix of natural and pollution aerosol sources that cause complex climate effects. The diesel vehicle and certain industry sectors are particularly important sources in North America and Europe. Black carbon emissions in the Arctic from diesel vehicles and generators, oil and gas flaring and marine transport have a significant impact as well.⁴¹ The top two U.S. sources of net climate forcing black emissions according to the Environmental Protection Agency are non-road diesel and on-road diesel.

Extending the life of the Elk Creek Mine will result in additional multiple, significant sources of black carbon/PM_{2.5} emissions.⁴² Mine operations require the use of a myriad of on- and off-road diesel vehicles, generators, construction equipment and mining equipment associated with Mine construction, coal extraction, and coal transport. All of these engines and equipment are significant and direct sources of particulate matter, and thus black carbon.

Because black carbon is a significant contributor to global climate change, like methane and carbon dioxide, BLM should have disclosed black carbon emissions likely to result from the proposed project and their impacts on global warming and climate change. Despite comments

⁴⁰ Id.

⁴¹ J.R. McConnell, et al., 20th-Century Industrial Black Carbon Emissions Altered Arctic Climate Forcing, Science 317: 1381-1384 (2007), attached as Exh. 28.

⁴² See also infra at 31-36 (discussing PM₁₀ and PM_{2.5} emissions).

urging BLM to address black carbon,⁴³ BLM failed to even mention it in the EA. The EA only mentions PM_{2.5} to state that Colorado does not regulate it through permitting. Jan. 2011 EA at 13. This discussion fails to meet NEPA's "hard look" requirement.

B. BLM Failed To Evaluate Or Disclose Numerous Air Quality Impacts, In Violation of NEPA.⁴⁴

BLM entirely failed to analyze and assess impacts to a number of air quality standards. This, despite the fact that BLM acknowledges that development of the Elk Creek East Coal LBA will release a number of harmful air pollutants. See Jan. 2011 EA (Exh. 4) at 13. This is a significant oversight. Not only does NEPA require BLM to take a hard look at environmental impacts, including air quality impacts, but the Federal Land Policy and Management Act ("FLPMA") explicitly requires the Agency to protect federal air quality standards. See 43 U.S.C. § 1712(c)(8). This duty is echoed in the Uncompahgre Resource Management Plan governing the area of the Elk Creek Mine, which states: "Present air quality standards will be adhered to throughout the entire planning area. This is required by law." BLM, Uncompahgre Basin Resource Management Plan (July 1989) at 31. The EA's failure to adequately analyze and assess air quality impacts violates NEPA as well as other laws.

BLM apparently made no effort to independently analyze and assess air quality impacts. This is a significant departure from BLM's general practice. In other recent NEPA documents analyzing coal leasing and mining, including NEPA documents analyzing such actions in Colorado, BLM analyzed a number of air quality impacts.

⁴³ See letter of E. Zukoski (Exh. 12) at 16-18.

⁴⁴ Appellants raised air quality issues in commenting on the EA. See id. at 48-54.

1. The EA Fails to Analyze the Elk Creek Mine's Impacts to Ambient Ozone Concentrations.

The EA fails to analyze and assess impacts to ambient concentrations of ozone air pollution. Ozone is a pollutant of concern for which the Clean Air Act has established National Ambient Air Quality Standards (“NAAQS”). As BLM notes, ozone is formed when two key air pollutants – volatile organic compounds (“VOCs”) and nitrogen oxides (“NOx”) – react with sunlight. Jan. 2011 EA (Exh. 4) at 13. Nevertheless, BLM entirely fails to analyze the Elk Creek Mine's impacts to ambient concentrations of ozone – including impacts from construction and production operations.

BLM's failure to analyze and assess at all impacts to ambient ozone concentrations is troublesome in light of increasing ozone trends in the Rocky Mountain West, including western Colorado, and the link between rising ozone and industrial development and associated increases in VOC and NOx emissions. For example, a large region in western Wyoming has been declared a “nonattainment” area because the region violated the ozone NAAQS in 2008.⁴⁵ While the NAAQS limit ozone concentrations to no more than 0.075 parts per million (ppm) over an eight-hour period, ozone concentrations reached 0.122 ppm in parts of Western Wyoming in 2008, higher than most urban areas. As Wyoming Governor Freudenthal noted in a letter to Acting EPA Region 8 Administrator Carol Rushin, these high ozone concentrations are linked to increasing natural gas drilling and production in the region.⁴⁶

⁴⁵ See Wyoming Department of Environmental Quality news release, available at http://deq.state.wy.us/aqd/Ozone/Press%20Release_nonattainmentmarch12_3%2520CE.pdf (last viewed Feb. 22, 2011), and attached as Exh. 29.

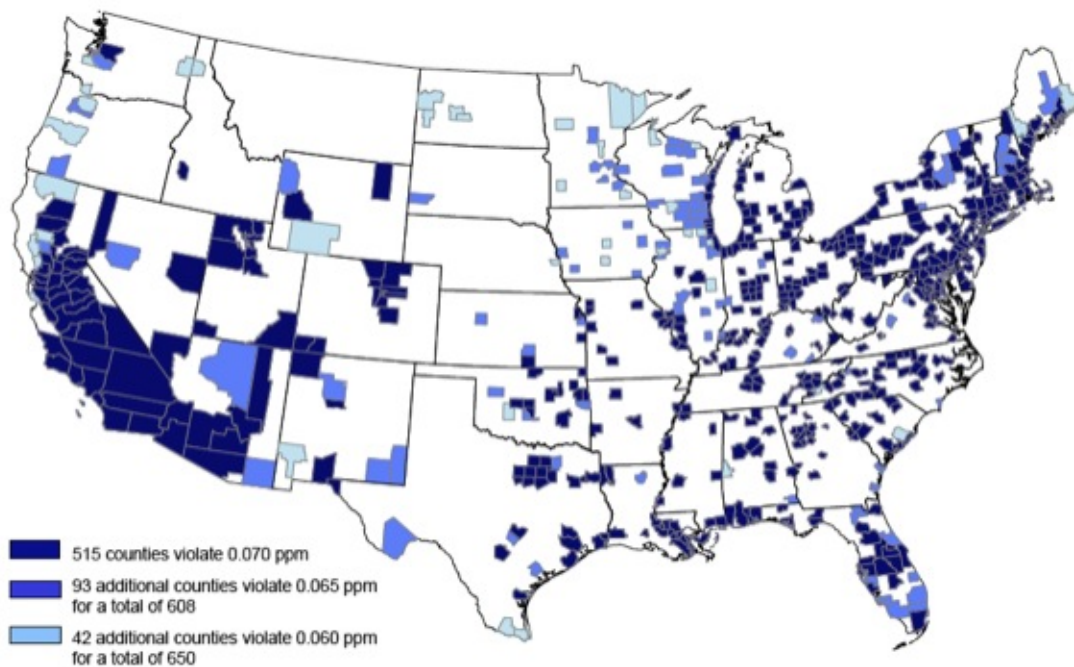
⁴⁶ See letter from Wyoming Governor, Dave Freudenthal, to Acting EPA Region 8 Administrator, Carol Rushin (March 12, 2009), available at [http://deq.state.wy.us/aqd/Ozone/Gov%20Ozone%20to%20EPA%20\(Rushin\)_Final_3-12-09.pdf](http://deq.state.wy.us/aqd/Ozone/Gov%20Ozone%20to%20EPA%20(Rushin)_Final_3-12-09.pdf) (last viewed Feb. 22, 2011), and attached as Exh. 30.

While the current NAAQS limit ozone concentrations to no more than 0.075 ppm, EPA has proposed to establish an even lower NAAQS of between 0.06 and 0.07 ppm.⁴⁷ The EPA expects to finalize the new NAAQS in July 2011.⁴⁸ Under the proposed standards, a number of regions in the Rocky Mountain West that have never exceeded or violated the ozone NAAQS are expected to do so. The map below shows the counties expected to violate the new ozone NAAQS.⁴⁹

**Counties With Monitors Violating Proposed Primary 8-hour Ground-level Ozone Standards
0.060 - 0.070 parts per million**

(Based on 2006 – 2008 Air Quality Data)

EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.



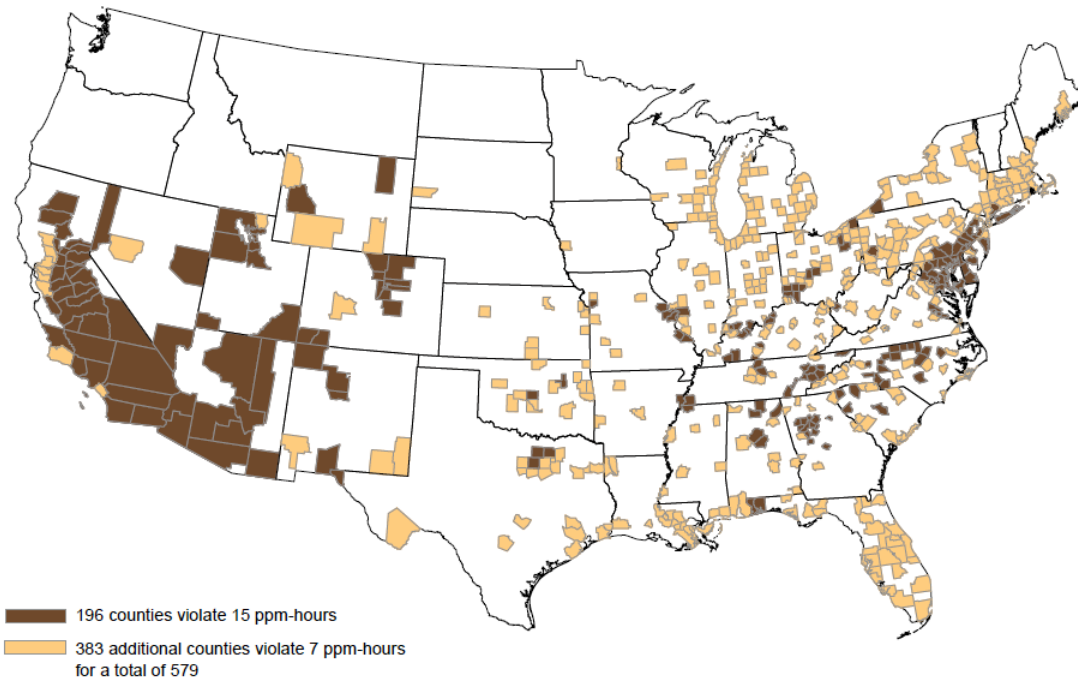
⁴⁷ See EPA, “National Ambient Air Quality Standards for Ozone, Proposed Rule,” 75 Fed. Reg. 2930-3052.

⁴⁸ See U.S. EPA, Declaration of Regina McCarthy (Dec. 8, 2010), available at <http://www.epa.gov/glo/pdfs/20101208declaration.pdf> (last viewed Feb. 22, 2011) and attached as Exh. 31.

⁴⁹ See EPA, Ozone Map at <http://www.epa.gov/groundlevelozone/pdfs/20100104maps.pdf> (last viewed Feb. 22, 2011), attached as Exh. 32.

Furthermore, the EPA has also proposed secondary ozone NAAQS to protect public welfare in accordance with the Clean Air Act. Secondary NAAQS ensure protection of vegetation and other natural values. According to EPA’s recent proposal, the secondary NAAQS will limit ground-level ozone on a seasonal basis to no more than 7-15 parts per million-hours, which is a measure of overall exposure. Under the EPA’s proposal, Gunnison County, Colorado – the county in which the Oxbow Mine and Elk Creek East Coal LBA are located – would violate a secondary ozone NAAQS set at 7 parts per million-hours. The map below shows the counties expected to violate the new secondary ozone NAAQS.⁵⁰

Counties With Monitors Violating Proposed Secondary Seasonal Ground-Level Ozone Standards
 7 – 15 parts per million - hours
 (Based on 2006 – 2008 Air Quality Data)
 EPA will not designate areas as nonattainment on these data, but likely on 2008 – 2010 data which are expected to show improved air quality.

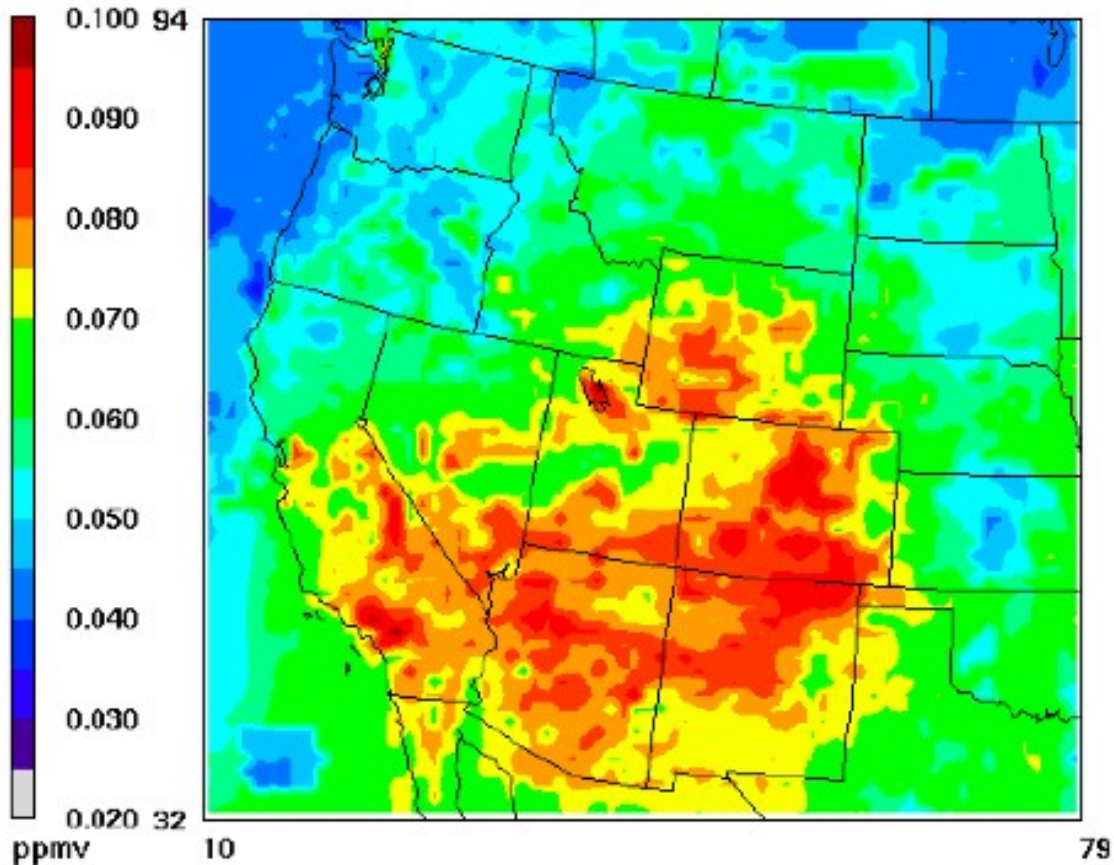


Recent modeling prepared for the Western Regional Air Partnership (“WRAP”) confirms that large areas of the Rocky Mountain West, in particular much of Colorado, are projected to exceed and/or violate the ozone NAAQS by 2018. In 2008 presentation given at a WRAP

⁵⁰ See id.

Technical Analysis Meeting in Denver, it was reported that the modeling “predicts exceedance of the 8-hour average ozone standard in much of the southwestern U.S., mostly in spring.”⁵¹ The image below, presented at the WRAP Technical Analysis Meeting, shows areas projected to exceed and/or violate the current ozone NAAQS by 2018 in orange and red. Under the EPA’s proposed ozone NAAQS, areas projected to exceed and/or violate the NAAQS include yellow and green. Importantly, much of western Colorado is expected to exceed and/or violate not only the current ozone NAAQS of 0.075 ppm, but also the EPA’s proposed NAAQS of between 0.060 and 0.070 ppm.

⁵¹ Tonnesen, G., Z. Wang, M. Omary, C. Chien, Z. Adelman, and R. Morris, et al., “Review of Ozone Performance in WRAP Modeling and Relevance to Future Regional Ozone Planning,” presentation given at WRAP Technical Analysis Meeting (July 30, 2008) at unnumbered slide 30, available at http://wrapair.org/forums/toc/meetings/080729m/RMC_Denver_OzoneMPE_Final2.pdf (last viewed May 20, 2010), and attached as Exh. 33.



Projected eight-hour ozone concentrations in Western U.S.⁵²

In addition, findings of recent scientific studies show that ozone in the Western United States is uniquely influenced by atypical factors. For instance, the National Oceanic and Atmospheric Administration (NOAA) recently completed a study finding that ozone air pollution can be problematic in winter in the Rocky Mountain West. After studying the phenomenon in Western Colorado, NOAA stated in a press release:

The NOAA team found ozone was rapidly produced on frigid February days in 2008 when three factors converged: ozone-forming chemicals from the natural gas field, a strong temperature inversion that trapped the chemicals close to the ground, and extensive snow cover, which provided enough reflected sunlight to jump-start the needed chemical reactions.⁵³

⁵² Id. at unnumbered slide 28.

⁵³ See NOAA Press Release (Jan. 18, 2009), available at http://www.noaanews.noaa.gov/stories2009/20090118_ozone.html (last viewed Feb. 22, 2011), attached as Exh. 34.

NOAA reported, “the problem could be more widespread,” explaining: “Rapid production of wintertime ozone is probably occurring in other regions of the western United States, in Canada, and around the world.”⁵⁴ A 2008 Colorado Air Pollution Control Division analysis suggests that many areas Western Colorado could be susceptible to high wintertime ozone levels given the propensity for winter-time inversions and other conditions that favor ozone formation.⁵⁵

The issue of wintertime ozone may be linked to coal mining, among other activities. The *Denver Post* reported in 2009:

Since the initial [NOAA] findings were published January in the journal *Nature GeoScience*, there have been more incidents. Elevated ozone levels have been detected in eastern Wyoming in the Thunder Basin, where there is no oil and gas drilling, [NOAA researcher] Schnell said. But there are coal mines and the ozone may be linked to methane and the diesel fumes from large earth-moving machines, Schnell said.⁵⁶

There is also increasing evidence that global warming is affecting ambient ozone concentrations. As the United Nations Environmental Programme (UNEP) notes, global warming is an increasingly significant factor “promot[ing] the formation of surface ozone.”⁵⁷ One of the principle effects of global warming is an increase in the “frequency and intensity of heat waves.”⁵⁸ As a result of the tendency of global warming to produce longer and hotter summer peak temperatures, the IPCC projects increases in July mean ozone concentrations over

⁵⁴ Id.

⁵⁵ See P. Reddy, “Late Winter Early Spring Ozone in Wyoming, Implications for Colorado,” presentation to Colorado Air Quality Control Commission (March 2008), attached as Exh. 35.

⁵⁶ See M. Jaffe, “The cold truth about ozone,” *Denver Post* (Mar. 4, 2009), available at http://www.denverpost.com/ci_11829606 (last viewed Feb. 22, 2011), attached as Exh. 36.

⁵⁷ UNEP, *How Will Global Warming Affect My World: A Simplified Guide to the IPCC's “Climate Change 2001: Impacts, Adaptation and Vulnerability,”* 14, GE.03-03327-December 2003-2,000, attached as Exh. 37.

⁵⁸ Id.

the industrialized continents of the northern hemisphere will climb above 0.07 ppm by the year 2100.⁵⁹ A 2007 study by scientists at Harvard, NASA, and the Argonne National Laboratory specifically reported that global warming is likely to increase maximum eight-hour ozone concentrations by 2-5 parts per billion (0.002-0.005 ppm) over large swaths of the United States, including Colorado, by mid-century.⁶⁰ A 2009 synthesis study further found that, although the impacts of climate change on ozone concentrations is anticipated to be uneven from region to region, climate change is expected to cause increases in summertime ozone concentrations over substantial regions of the country.⁶¹ Additional research estimated that the area affected by elevated ozone within the continental United States was projected to increase (a 38% in areas with levels exceeding the 0.075 ppb ozone standard at least once a year), and that the length of the ozone season was projected to increase.⁶²

This evidence demonstrates that ozone is a significant issue, and that BLM should have analyzed and disclosed the impacts of the Elk Creek East Coal LBA on ozone levels in areas impacted by the Mine's emissions. Bolstering this conclusion, EPA has noted the need for federal land management agencies to address impacts to ambient ozone concentrations. In comments to BLM regarding expansion of oil and gas drilling and production operations in the Pinedale Anticline Project Area of Wyoming, EPA commended BLM for "using the

⁵⁹ IPCC, *Climate Change 2001: Working Group II: Impacts, Adaptation and Vulnerability, Technical Summary* at Part 3.5.

⁶⁰ S. Wu, et al., *Effects of 2000-2050 Global Climate Change on Ozone Air Quality in the United States*, Journal of Geophysical Research, 113 (2008), attached as Exh. 38.

⁶¹ C. Weaver, et al., A preliminary Synthesis of Modeled Climate Change Impacts on U.S. Regional Ozone Concentrations, Bulletin of the American Meteorological Society 90:1843-1863 (2009) at 1858, attached as Exh. 39.

⁶² J. Chen et al., The effects of global changes upon regional ozone pollution in the United States, Atmospheric Chemistry and Physics, 9:1125-1141 (2009) at 1137-1138, attached as Exh. 40.

photochemical grid model, CAMx” in analyzing ozone impacts and noted: “This level of analysis is particularly important given the elevated ozone levels that have been recorded at ambient air monitoring stations neighboring the [project area].”⁶³ Similarly, in comments to the BLM regarding the West Tavaputs Plateau natural gas development project in Utah, EPA stated that “additional cumulative and project-specific air impact modeling should be completed” to address ozone impacts.⁶⁴ BLM itself undertook a rudimentary ozone analysis for the coal lease for the proposed, nearby Red Cliff Mine in Colorado, estimating NOx and VOC emissions caused by mine construction as well as mine operation.⁶⁵

Furthermore, state regulations will not ensure that the Elk Creek Mine will not cause or contribute to exceedances and/or violations of the ozone NAAQS. First, state regulations will not address any mobile source emissions, particularly exhaust emissions, that could cause or contribute to ozone exceedances and/or violations. At Elk Creek East, those emissions – from trucks, rail transport, and other heavy equipment such as loaders – could be considerable. Second, the air permits issued by CDPHE for the Elk Creek Mine do not even limit VOC emissions.⁶⁶ Third, CDPHE does not analyze the impacts of permitting stationary sources to

⁶³ Letter from Robert E. Roberts, EPA Region 8 Administrator, to Robert A. Bennett, Wyoming BLM State Director, re: Revised Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project, Sublette County, Wyoming CEQ #20070542 (Feb. 14, 2008) at 3, attached as Exh. 41.

⁶⁴ Letter from Robert E. Roberts, EPA Region 8 Administrator, to Selma Sierra, Utah BLM State Director, re: West Tavaputs Plateau Natural Gas Full Field Development Plan, Draft Environmental Impact Statement Carbon County, Utah CEQ #20080028 (May 23, 2008), available online at [http://yosemite.epa.gov/oeca/webeis.nsf/\(PDFView\)/20080028/\\$file/20080028.PDF?OpenElement](http://yosemite.epa.gov/oeca/webeis.nsf/(PDFView)/20080028/$file/20080028.PDF?OpenElement) (last viewed Feb. 22, 2011), attached as Exh. 42.

⁶⁵ BLM, “Draft Environmental Impact Statement – Proposed Red Cliff Mine Project and Federal Coal Lease by Application” (January 6, 2009) at 4-66 – 4-67, excerpts attached as Exh. 43.

⁶⁶ See Jan. 2011 EA (Exh. 4) at 13 (“VOCs are not address[ed] in the permit”).

ambient ozone levels. CDPHE has explicitly stated that, “ozone modeling is not routinely requested for construction permits[.]”⁶⁷

Given growing concern over ozone in the Rocky Mountain West, given that BLM has recently analyzed ozone impacts of a coal lease in Colorado, and given that state and federal regulations, including permitting requirements, fall short of ensuring full protection of the ozone NAAQS, BLM was required to take a “hard look” at the potential impacts on ozone creation caused by the Elk Creek East Coal LBA, including extending the life of the Elk Creek Mine for a year. BLM cannot ensure that the LBA will comply with the ozone NAAQS, both the current and the proposed, without first preparing a quantitative analysis of impacts.

BLM, however, failed to take that hard look, or indeed any look at all. Instead, BLM relies on an a non-federal, non-NEPA document for the agency’s “analysis”:

The state rarely regulates ozone in permits, but instead looks at the precursors to ozone, such as NOs and volatile organic compounds (VOCs). The State regulates NOx at the Elk Creek Mine. VOCs are not address[ed] in the permit, suggesting that VOC calculations were shown to be below the reportable limits.

Jan. 2011 EA (Exh. 4) at 13.

BLM’s analysis fails to comply with NEPA’s hard look requirement for at least three reasons. First, BLM’s “analysis” fails to disclose anything about either VOC or NOx emissions. The EA provides no quantitative information about either NOx or VOC emissions. It provides only conjectural, qualitative information about VOCs. The EA’s assertion that the State’s failure to address VOC emissions “suggests” that the Mine’s VOC emissions were below reportable limits is also unfounded. As noted, VOC emissions from mobile sources are not regulated by the State, and further, there are questions about whether VOC emissions related to methane venting

⁶⁷ See CDPHE, “Colorado Modeling Guidance for Air Quality Permits” (December 27, 2005) at 21, available online at <http://www.colorado.gov/airquality/permits/guide.pdf> (last viewed May 20, 2010), excerpts attached as Exh. 44.

have been adequately calculated (if BLM calculated them at all). This does not constitute a “hard look.”

Second, federal courts have long and repeatedly held that an action agency, as BLM here, cannot rely on the mere fact that another agency may permit certain environmental impacts as an excuse for neglecting to disclose those impacts. See Calvert Cliffs’ Coordinating Committee, Inc. v. U.S. Atomic Energy Commission, 449 F.2d 1109 (D.C. Cir. 1971). There, the D.C. Circuit held that doing so “neglects the mandated balancing analysis. Concerned members of the public are thereby precluded from raising a wide range of environmental issues in order to affect particular Commission decisions. And the special purpose of NEPA is subverted.” Id. at 1123. Similarly, in South Fork Band, the Ninth Circuit explicitly rejected BLM’s argument that NEPA did not require the agency to consider air impacts from certain mining operations because the facility was regulated under a state air permit. “This argument also is without merit. A non-NEPA document -- let alone one prepared and adopted by a state government -- cannot satisfy a federal agency’s obligations under NEPA.” 588 F.3d at 726; see also Klamath-Siskiyou Wildlands Ctr v. Bureau of Land Management, 387 F.3d 989, 997-98 (9th Cir. 2004) (rejecting effort to avoid EIS by “tiering” to non-NEPA documents). As in South Fork Band, BLM here also attempts to avoid its NEPA duties by referring to a state air permit. This BLM cannot do.

Third, even if BLM could rely on state air permits, those permits fail to address the impacts to ozone levels of mine operation because: (1) they fail to address mobile sources (such as heavy equipment, trucks and trains that move coal); (2) they fail to address VOCs; and (3) they fail to address contributions to ozone levels.

The EA contains one other statement concerning all air emissions that similarly finds no support in analysis required by NEPA. The EA states that: “[a]ctivities under the Proposed

Action are ... not expected to exceed the NAAQS.” Jan. 2011 EA (Exh. 4) at 13. The EA fails to explain why no exceedances are expected, nor how BLM reached this conclusion since the agency neither prepared or obtained any information concerning air quality except for a state permit. Further, federal courts have rejected the argument that action agencies need not disclose environmental impacts simply because the impacts may not lead to violations of other laws. See, e.g., United States v. City of Detroit, 329 F.3d 515, 530 n.2 (6th Cir. 2003) (Moore, J., concurring) (“The decision whether to prepare a NEPA analysis does not depend on whether the proposed action will [meet other environmental standards]; if it did, federal agencies would have to consider the environmental consequences of their actions only if the action was prohibited by federal law.”).

For all of these reasons, BLM failed to take the required “hard look” at the impacts of the Elk Creek East Coal LBA on ambient ozone concentrations.

2. The EA Fails To Analyze The Elk Creek Mine’s Impacts To PM-2.5 Concentrations.

The EA also fails to analyze impacts to concentrations of PM_{2.5}, a harmful air pollutant. PM_{2.5} includes all particles less than 2.5 microns in diameter, or 1/28th the width of a human hair. According to EPA, the health effects of PM_{2.5} include:

- Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing;
- Decreased lung function;
- Aggravated asthma;
- Development of chronic bronchitis;
- Irregular heartbeat;
- Nonfatal heart attacks; and

- Premature death.⁶⁸

Although the NAAQS limited PM_{2.5} concentrations to no more than 35 micrograms/cubic meter over a 24-hour period and 15 micrograms/cubic meter annually, the D.C. Circuit Court of Appeals overturned these standards in 2009 on the basis that EPA failed to demonstrate that the standards sufficiently protected public health.⁶⁹ EPA's own Clean Air Scientific Advisory Committee has expressed "serious scientific concerns regarding the public health and welfare implications" of the PM_{2.5} NAAQS.⁷⁰

Colorado BLM has previously recognized the need to analyze and disclose PM_{2.5} impacts that may result from coal mine operations, as it did in evaluating the proposed Red Cliff coal mine in Mesa County, Colorado in 2008.⁷¹ That analysis, contained in a draft EIS, estimated likely PM_{2.5} emissions and levels predicted to result from the mine during its production phase, as well as those caused by mine construction.⁷² Both near- and far-field impacts were analyzed.⁷³ Similarly, BLM in Wyoming recently analyzed and assessed direct, indirect, and cumulative PM_{2.5} impacts prior to issuing coal LBAs.⁷⁴

⁶⁸ See U.S. EPA, Particulate Matter, Health and Environment, available at <http://www.epa.gov/particles/health.html> (last viewed Feb. 22, 2011), attached as Exh. 45.

⁶⁹ See American Farm Bureau Federation, et al. v. EPA, No. 06-1410 (D.C. Cir. Feb. 24, 2009). Although the D.C. Circuit remanded the PM_{2.5} NAAQS, the standards remain in place until updated.

⁷⁰ See Clean Air Scientific Advisory Committee Letter to Stephen Johnson, EPA Administrator, EPA-CASAC-LTR-06-003 (September 29, 2006), available at [http://yosemite.epa.gov/sab/sabproduct.nsf/1C69E987731CB775852571FC00499A10/\\$File/casa-c-ltr-06-003.pdf](http://yosemite.epa.gov/sab/sabproduct.nsf/1C69E987731CB775852571FC00499A10/$File/casa-c-ltr-06-003.pdf) (last viewed Feb. 22, 2011), attached as Exh. 46.

⁷¹ See Red Cliff Mine Draft EIS (Exh. 43) at Appendix H.

⁷² See, e.g., id. at H-13 – H-15.

⁷³ Id. at H-1.

⁷⁴ See e.g., Wright Area FEIS (Exh. 19) at 3-50 - 3-78 (analyzing direct and indirect impacts) and 4-46 ("The impacts for the baseline year (2004) and for 2015 and 2020 lower and

The EA at issue here, however, fails to contain any analysis at all of the Elk Creek East Coal LBA's impacts to PM_{2.5} concentrations, an oversight that violates NEPA. The EA merely notes: "Colorado does not regulate PM_{2.5} in permits." Jan. 2011 EA at 13.⁷⁵ We are unaware of any caselaw that supports the notion that an agency can rely on a state agency's failure to regulate a pollutant in a permit as a proxy for NEPA compliance.

BLM's lack of analysis is particularly troublesome because the EPA's 2002 National Emission Inventory data indicates that at the time, the Elk Creek Mine released 28 tons of PM_{2.5}.⁷⁶ Although this data is from 2002 and is likely outdated, it suggests that development of the Elk Creek East Coal LBA may result in significant impacts to PM_{2.5} concentrations.⁷⁷

Finally, as noted above, the fact that BLM does not expect PM_{2.5} NAAQS exceedances from prolonging the life of the mine does not, by itself, represent the "hard look" NEPA requires. See supra at 31. This is particularly true here, where EPA is under a court order to revisit the PM_{2.5} NAAQS because EPA failed to show that the current standards sufficiently protect public health. Under NEPA, BLM cannot simply avoid analyzing the impacts of the Elk Creek East Coal LBA to ambient PM_{2.5} concentrations.

3. The EA Fails to Adequately Analyze the Mine's PM-10 Impacts.

BLM should have analyzed and assessed impacts to PM₁₀, or particulate matter less than 10 microns in diameter, which is currently limited by the NAAQS to no more than 150

upper coal production scenarios were directly modeled and the criteria pollutants modeled were particulates (PM₁₀ and PM_{2.5}), NO₂ [nitrogen dioxide], and SO₂ [sulfur dioxide]).

⁷⁵ Nor does CDPHE analyze the impacts of any stationary source to PM_{2.5} concentrations prior to issuing any construction permit. See CDPHE Colorado Modeling Guidance Exh. 44 at 21.

⁷⁶ See EPA, National Emission Inventory Data for Oxbow Mining, Gunnison County, CO (2002), attached as Exh. 47.

⁷⁷ In 2004 and 2005, the Mine produced more than 10 times the coal it produced in 2002. Jan. 2010 EA (Exh. 4) at 14. It is thus likely that PM_{2.5} emissions have increased since 2002.

micrograms/cubic meter over a 24 hour period.⁷⁸ PM₁₀, like PM_{2.5}, can have harmful health impacts.⁷⁹ The activities approved by this BLM decision will lead to new construction at, and prolonged operation of, the Elk Creek Mine, both of which will cause PM₁₀ emissions.

As with PM_{2.5}, BLM has recognized the need to disclose and analyze PM₁₀ impacts in NEPA documents for coal mine proposals. In proposing the Red Cliff Mine and coal lease in Colorado, BLM prepared a Draft EIS that addressed and analyzed the mine's potential contributions to PM₁₀ emissions.⁸⁰ BLM in Wyoming has also analyzed and assessed direct, indirect, and cumulative PM₁₀ impacts prior to issuing coal LBAs.⁸¹

The need to address PM₁₀ emissions is acute here for at least two reasons. First, areas close to the Elk Creek Mine have recorded exceedances of the NAAQS limits. Although there are no PM₁₀ monitors in the area where the Elk Creek Mine is located, PM₁₀ in both Grand Junction, Colorado (approximately 60 miles from Elk Creek) and Delta, Colorado (less than 40 miles from Elk Creek) have registered exceedances of the PM₁₀ NAAQS in the last several years. According to the EPA's AirExplorer website, a PM₁₀ monitor in Delta exceeded the NAAQS in 2009 and a PM₁₀ monitor in Gunnison County exceeded the NAAQS in 2010.⁸² According to

⁷⁸ See 40 C.F.R. § 50.6.

⁷⁹ See EPA, "Particulate Matter (PM-10)," available at <http://www.epa.gov/airtrends/aqtrnd95/pm10.html> (last viewed Feb. 22, 2011), attached as Exh. 48.

⁸⁰ See Red Cliff Mine DEIS (Exh. 43) at Appendix H.

⁸¹ See e.g., Wright Area FEIS (Exh. 19) at 3-50 - 3-78 (analyzing direct and indirect impacts) and 4-46 ("The impacts for the baseline year (2004) and for 2015 and 2020 lower and upper coal production scenarios were directly modeled and the criteria pollutants modeled were particulates (PM₁₀ and PM_{2.5}), NO₂ [nitrogen dioxide], and SO₂ [sulfur dioxide]").

⁸² See Delta County PM₁₀ monitoring data for 2009 at http://www.epa.gov/cgi-bin/broker?msaorcountyName=&msaorcountyValue=&poll=81102&county=08029&site=-1&msa=-1&state=-1&sy=2009&flag=Y&query=view&debug=2&service=data&program=dataprog.query_daily_3P_dm.sas (last viewed Feb. 21, 2011). According to this data, Delta County exceeded the

the AirExplorer website, in 2009, PM₁₀ levels in Delta and Gunnison County were moderate to unhealthy on 16 days, and in 2010, there were 15 days recorded where PM₁₀ levels were moderate to unhealthy.⁸³ Additionally, according to EPA's AirData and AirExplorer website, Grand Junction exceeded the PM₁₀ NAAQS nine times between 2000 and 2010.⁸⁴

Second, the State of Colorado recently brought enforcement actions against Oxbow and one of its subsidiaries for, among other things, violating PM₁₀ limits in those permits at the Elk Creek Mine. The State tallied 14 violations of PM₁₀ permit limits in Elk Creek's permits in 2008 and 2009.⁸⁵ BLM thus cannot rely on permit compliance at Elk Creek. The State's compliance documents also show BLM can obtain from the State data on current PM₁₀ levels associated with at least some of the Mine's operations (though not all of them, since, as stated above, the State does not regulate mobile sources).

Despite the potential significance of PM₁₀ emissions from the Elk Creek East Coal LBA, the EA contains no analysis of PM₁₀ concentrations caused by surface impacts on the LBA tract

PM₁₀ standards on March 29, 2009. Through the EPA's AirExplorer website, one can download Google Earth map files that provide data gathered from PM₁₀ monitors throughout the United States. See http://www.epa.gov/mxplorer/monitor_kml.htm (last viewed Feb. 22, 2011).

⁸³ See EPA, Daily Air Quality Index Data for Delta and Gunnison County, attached as Exh. 49.

⁸⁴ See EPA, AirData website <http://iaspub.epa.gov/airdata/adaqs.monvals?geotype=co&geocode=08077&geoinfo=co~08077~Mesa+Co%2C+Colorado&pol=PM10&year=2008+2007+2006+2005+2004+2003+2002+2001+2000&fld=monid&fld=siteid&fld=address&fld=city&fld=county&fld=stabbr&fld=regn&rpp=50> (last viewed Feb. 22, 2011), attached as Exh. 50. See also EPA, AirExplorer website, http://www.epa.gov/cgi-bin/broker?msaorcountyName=&msaorcountyValue=&poll=81102&county=08077&site=-1&msa=-1&state=-1&sy=2010&flag=Y&query=view&_debug=2&_service=data&_program=dataprog.query_daily_3P_dm.sas (last viewed Feb. 20, 2011). This data shows that Mesa County exceeded the PM₁₀ NAAQS at three monitoring locations on May 23, 2010.

⁸⁵ See State of Colorado, Compliance Advisory (Aug. 5, 2010) at 2 ("Oxbow exceeded the permitted limits of PM₁₀ on 14 days at Elk Creek"), attached as Exh. 51.

or by extending the Mine's life for an additional year. There is no analysis or assessment whatsoever of PM₁₀ impacts other than the statement that a state permit sets limits for PM₁₀. Again, BLM states only that a State permit sets limits on PM₁₀ for one facility. Jan. 2011 EA (Exh. 4) at 13. As noted, however, Oxbow has repeatedly violated those limits. For the reasons set forth above, BLM's "analysis" violates NEPA because it fails to take a hard look (or any look) at the potential impacts of PM₁₀ emissions.

4. The EA Fails To Adequately Analyze And Assess Volatile Organic Compound Emissions Associated With Methane Emissions.

The EA fails to address VOC emissions that will stem from methane venting at the Elk Creek Mine, in violation of NEPA. VOC emissions accompanying methane venting have the potential to be significant based on at least three pieces of data.

First, the U.S. Geological Survey studies of coal gas in the Mesaverde Group have found that, although methane is the primary constituent, "[h]eavier hydrocarbon gas content ranges from 0.1 to almost 18 percent."⁸⁶ This is particularly the case for coals in the Piceance Basin, which include those that will be extracted from the Elk Creek Mine.⁸⁷ While heavier hydrocarbons in the Mesaverde Group include ethane, they also may include other alkanes like propane, pentane, and hexane, as well as other hydrocarbon groups including alkenes, aldehydes, and benzene and benzene derivatives, all of which are regulated VOCs under the Clean Air Act. See 40 C.F.R. § 51.100(s).

⁸⁶ See Spencer, C.W., "Uinta-Piceance Basin Province," at 22, available at certmapper.cr.usgs.gov/data/noga95/prov20/text/prov20.pdf (last viewed Feb. 22, 2011), and attached as Exh. 52.

⁸⁷ See D. Rice, *Composition and Origins of Coalbed Gas* (2000), at 161 <http://www.searchanddiscovery.net/documents/rice/index.htm> (last viewed Sept. 25, 2009), excerpts attached as Exh. 53 (map showing North Fork coal fields considered to be in the Piceance Basin).

Second, BLM elsewhere has indicated that VOCs are released in addition to methane gas from the same coal formation. For the proposed Red Cliff coal mine in Mesa County, Colorado, BLM disclosed that low concentrations of non-methane organic compounds would be released. This disclosure prompted the EPA to recommend that BLM disclose in any subsequent NEPA document for the Red Cliff Mine the NMOC (or VOC) emissions from the mine.

[G]iven the high methane emission rates associated with the [Red Cliff] mine, the NMOC [nonmethane organic compound] emission rates may be considerable. The Final EIS should present an actual compositional analysis and estimate of emissions of major NMOCs for the mine. Furthermore, EPA recommends that air modeling for NMOCs be conducted for high NMOC emission rates.⁸⁸

Third, testing of coal mine methane emissions from a nearby mine indicate that VOC emissions from Elk Creek could be significant. Methane testing in 2009 by the Mountain Coal Company (MCC) at the West Elk Mine, which is just a few miles from Oxbow's Elk Creek Mine, indicates that non-methane hydrocarbon are emitted at about 2% the rate of methane emissions.⁸⁹ If methane and non-methane hydrocarbons are vented in roughly the same relative amounts at Elk Creek East as at West Elk, the Elk Creek East Mine would emit about 788 tons of VOCs annually,⁹⁰ which is more than triple the 250 ton/year major source thresholds under the

⁸⁸ See EPA Letter to Glenn Wallace, BLM Colorado State Office, in re: Proposed Red Cliff Mine Project (March 31, 2009), available online at [http://yosemite.epa.gov/oeca/webeis.nsf/\(PDFView\)/20090005/\\$file/20090005.PDF?OpenElement](http://yosemite.epa.gov/oeca/webeis.nsf/(PDFView)/20090005/$file/20090005.PDF?OpenElement) (last viewed Feb. 22, 2011), and attached as Exh. 54.

⁸⁹ See Mountain Coal Co., West Elk Mine E-seam Gas Economic Evaluation Report (Sept. 24, 2009) at Appendix 2 to Appendix F, excerpts attached as Exh. 55. MCC presented this analysis to BLM in September 2009.

⁹⁰ At a minimum, Elk Creek East is expected to emit 5.1 million cubic feet of methane per day. Jan. 2011 EA (Exh. 4) at 14 (methane emission rates from LBA expected to equal rate between 2004 and 2006; lowest methane emission rate for those 3 years was 5.1 million cf / day). According to the EPA, 5.1 million cubic feet of methane equals 216,546 pounds, or 108 tons per day. See EPA, "Interactive Units Converter," available at <http://www.epa.gov/cmop/resources/converter.html> (last viewed Feb. 20, 2011). This equals 39,420 tons per year (108 tons/day * 365 days/year). Assuming that VOCs are emitted at a rate

Clean Air Act's prevention of significant deterioration program.⁹¹ Thus, it is very likely that the Elk Creek East Mine would be defined as a "major source" of VOCs, which would place an affirmative duty upon BLM to ensure that the Mine obtained the necessary prevention of significant deterioration permit before authorizing the proposed action.

Data thus shows that venting methane from the Elk Creek Mine for an additional year, which is one of the LBA's direct impacts, may result in significant VOC emissions; emissions that BLM failed to analyze in any way. Even if VOC emissions related to methane venting at the Elk Creek Mine occur at half the rate reported at West Elk, emissions at Elk Creek would still exceed the major source thresholds under the Clean Air Act. Thus, BLM's failure to take a hard look at VOC emissions related to methane venting violates NEPA. Given that VOCs are a precursor to ozone, it is doubly important that the BLM should analyze VOC emissions to ensure an adequate analysis and assessment under NEPA, and to ensure compliance with the ozone NAAQS. See supra at 21.

5. The EA Fails To Analyze And Assess Impacts To Other Air Quality Standards.

BLM also entirely failed to analyze and assess the impacts of the Elk Creek East Coal LBA to the following air quality standards.

a. 1-hour Nitrogen Dioxide NAAQS

BLM failed to analyze and assess the potentially significant impacts to the current NAAQS for nitrogen dioxide. On February 9, 2010, the EPA finalized revisions to the nitrogen dioxide NAAQS, supplementing the current annual standard of 53 parts per billion with a 1-hour

equal to 2% of all methane emissions, the rate at West Elk, this would equal 788 tons/year (39,420 * 0.02) at the Elk Creek Mine.

⁹¹ See 42 U.S.C. § 7491(g)(7).

standard of 100 parts per billion.⁹² These NAAQS were originally proposed on July 15, 2009. See 74 Fed. Reg. 34404-34466 (July 15, 2009). These NAAQS became effective on April 12, 2010.

The EA does not even mention the EPA's 1-hour NO₂ NAAQS. The EA identifies applicable NAAQS, but does not identify the 1-hour nitrogen dioxide NAAQS. See Jan. 2011 EA (Exh. 4) at 11-12 (table). This is a major oversight given that operations at the Elk Creek Mine will release nitrogen dioxide emissions. Although referred to as nitrogen oxides, or NO_x, as the EPA states, "NO₂ [nitrogen dioxide] is the component of greatest interest and the indicator for the larger group of nitrogen oxides."⁹³ BLM's failure to address impacts to the 1-hour nitrogen dioxide NAAQS violates NEPA.

b. Class I Increments

BLM failed to analyze and assess the potentially significant impacts to PSD (Prevention of Significant Deterioration) increments for Class I areas. Increments are air quality standards similar to the NAAQS, although they apply based on whether an area is designated as Class I or Class II. Under the Clean Air Act, increments "shall not be exceeded." 42 U.S.C. § 7473(a). The EPA has established Class I increments for PM₁₀, nitrogen dioxide, and, most recently, PM_{2.5}.⁹⁴

In this case, BLM did not even address impacts to PSD increments for Class I areas. This, despite the fact that in other NEPA documents prepared by the Agency for other coal

⁹² See 75 Fed. Reg. 6474-6537 (Feb. 9, 2010).

⁹³ See EPA, "Nitrogen dioxide," available at <http://www.epa.gov/oaqps001/nitrogenoxides/> (last viewed Feb. 20, 2011).

⁹⁴ The PM₁₀ and nitrogen dioxide increments are set forth at 40 C.F.R. §§ 51.166(c) and 52.21(c). The PM_{2.5} increments were adopted on October 20, 2010. See 75 Fed. Reg. 64864-64907.

leasing activities, such as the Red Cliff Draft EIS, the Agency has addressed such impacts.⁹⁵

BLM in Wyoming also recently analyzed and assessed the direct, indirect, and cumulative impacts to PSD increments as part of its coal leasing NEPA documents.⁹⁶

It is unclear why BLM in this case ignored the impacts to PSD increments, and indeed, there is no explanation in the EA as to why these air quality standards were overlooked. The oversight is significant given that there are several Class I areas near the Elk Creek East Coal LBA, including the West Elk Wilderness, Maroon Bells/Snowmass Wilderness, Flat Tops Wilderness, and Weminuche Wilderness.⁹⁷ Given that PSD increments “shall not be exceeded,” the BLM’s failure to analyze and assess impacts to these air quality standards renders the decision to offer the Elk Creek East Coal LBA for sale and issuance fatally flawed.

c. Visibility in Class I Areas

BLM has an affirmative duty to protect visibility in Class I areas under the Clean Air Act.⁹⁸ Despite its duty, BLM did not analyze or assess how the Elk Creek East Coal LBA would affect visibility in Class I areas, particularly areas near the Elk Creek East Coal LBA, including the West Elk Wilderness Area, Maroon Bells/Snowmass Wilderness Area, and the Weminuche Wilderness Area.⁹⁹ In fact, there is no mention in the EA of visibility impacts, despite the fact that development of the Elk Creek East Coal LBA will release pollutants that impair visibility, or create haze, including particulate matter, VOCs, and NO_x. As BLM noted in its 2008 Draft EIS for the Red Cliff Mine, a coal mine and lease proposal in Colorado:

⁹⁵ See, e.g. Red Cliff Mine DEIS (2008) (Exh. 43) at 3-35.

⁹⁶ See Wright Area FEIS (Exh. 19) at 4-50 (analyzing cumulative impacts to Class I increments).

⁹⁷ These Class I areas are identified at 40 C.F.R. § 81.406.

⁹⁸ See 42 U.S.C. § 7476(d)(2)(B).

⁹⁹ See 40 C.F.R. § 81.406.

Examples of pollutants that directly contribute to regional haze include soot from diesel combustion, smoke from fires, fly ash from coal combustion, and wind-blown dust. Gaseous emissions that reduce visibility through the formation of secondary aerosols via chemical reactions in the atmosphere include emissions of SO₂, NO₂, and VOCs, resulting primarily from fuel combustion.¹⁰⁰

BLM in Wyoming undertook a similar analysis, assessing the direct, indirect, and cumulative visibility impacts of coal leasing.¹⁰¹ Despite the fact that BLM analyzed and assessed visibility impacts in the Red Cliff Draft EIS, BLM failed to address such impacts at all in the Elk Creek EA. In doing so, BLM not only violated NEPA, but BLM's an "affirmative duty" to protect such air quality values.

6. The EA Erroneously Under-Represents The Level Of Methane Emissions From The Lease.

Methane emissions are one of the most significant impacts of the proposed action. As noted above, BLM estimates that methane emissions from the LBA will represent the equivalent GHG emissions of 1 million tons of CO₂, or an amount equal to the annual emissions of 170,000 cars. See supra at 3-4. BLM bases this predicted level of methane emissions on the assumption that methane emissions will be "consistent with rates observed during mining operations [of the Elk Creek Mine] between 2004 and 2006." Jan. 2011 EA (Exh. 4) at 14. However, BLM knew in September 2009 that its estimates were likely to be low. Near the close of the comment period on the draft EA, Oxbow told BLM: "we expect that due to the increased overburden," (that is, due to the increased depth of the coal seam beneath the surface,) "increased levels of methane will be encountered in the underground tract" at issue in this LBA.¹⁰² Despite the fact that

¹⁰⁰ See Red Cliff Mine Project DEIS (Exh. 43) (2008) at 3-36 - 3-39.

¹⁰¹ See Wright Area FEIS (Exh. 19) at 3-91 - 3-96 (analyzing direct and indirect visibility impacts of issuing coal leases) and 4-51 (analyzing cumulative visibility impacts)

¹⁰² Letter of J. Cooper, Oxbow to Uncompahgre Filed Office Manager, BLM (Sept. 25, 2009) at 2 (emphasis added), attached as Exh. 56.

Oxbow expects more methane from the LBA than it normally encounters in its mining operations, BLM's final EA assumes that methane levels would remain as they were at the mine years ago. BLM's erroneous assumption renders inadequate its analysis of air quality and climate change impacts, both of which are built on assumptions of the prior, lower rate of methane emissions. BLM's failure to properly disclose the predicted volume of methane emissions from the LBA violates NEPA.¹⁰³

C. BLM Failed To Consider All Reasonable Alternatives, Including Alternatives To Reduce Methane Emissions.

1. NEPA Requires That BLM Consider All Reasonable Alternatives In An EA.

NEPA requires agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternatives uses of available resources.” 42 U.S.C. § 4332(2)(E). To achieve these ends, an EA must analyze a range of alternatives. 40 C.F.R. § 1508.9(b). The alternatives analysis is “the heart” of any environmental review pursuant to NEPA. 40 C.F.R. § 1502.14. The requirement that an agency evaluate a range of reasonable alternatives applies equally to agency preparation of an EA as well as an EIS. See Defenders of Wildlife, 152 IBLA at 9. “[A]ny proposed federal action involving unresolved conflicts as to the proper use of resources triggers NEPA’s consideration of alternatives requirement, whether or not an EIS is also required.” Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1229 (9th Cir. 1988).

¹⁰³ Appellants did not raise this issue in comments on the Elk Creek East Coal LBA, because it only became aware of Oxbow’s letter in 2010 after receiving it from BLM in response to a FOIA request. Oxbow’s letter was submitted the same day the EA comment period closed; the letter was not made public at that time. For this reason, Appellants may properly raise the issue before this Board. 43 C.F.R. 4.410(c)(2) (appellants may raise issues “[t]hat arose after the close of the opportunity for ... participation”).

NEPA's implementing regulations emphasize that NEPA documents must "[r]igorously explore and objectively evaluate all reasonable alternatives," giving "each alternative substantial treatment" in the NEPA document. Colo. Env'tl. Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999) (emphasis added). Federal courts have applied this rule to the consideration of alternatives in EAs as well as EISs. "By considering reasonable alternatives to the proposed action, the agency ensures that it has considered all possible approaches to, and potential environmental impacts of, a particular project; as a result, NEPA ensures that the 'most intelligent, optimally beneficial decision will ultimately be made.'" Wilderness Soc'y v. Wisely, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007) (emphasis added) (citation omitted) (case setting aside a BLM EA for failure to consider fully a reasonable alternative). Further, an agency "must ... explain its reasoning for eliminating an alternative" from consideration in an EA. Id.

NEPA also requires federal agencies to discuss appropriate measures to mitigate damaging environmental impacts. 40 C.F.R. § 1502.14(f); 40 C.F.R. § 1502.16(h); 40 C.F.R. § 1508.25(b)(3). If "all practicable means to avoid or minimize environmental harm from the alternative selected" have not been adopted, the agency's record of decision must explain "why they were not." 40 C.F.R. § 1505.2(c).

In addition, CEQ has issued draft guidance concerning climate change that bears on the consideration of alternatives. The guidance address concerning "when and how Federal agencies must consider the impacts of proposed Federal actions on global climate change, as well as the expected environmental effects from climate change that may be relevant to the design of the proposed Federal action." 75 Fed. Reg. 8046 (Feb. 23, 2010). The draft guidance states:

Examples of proposals for Federal agency action that may warrant a discussion of the GHG impacts of various **alternatives**, as well as possible measures to mitigate climate change impacts, include: approval of a large solid waste landfill; approval

of energy facilities such as a coal-fired power plant; or authorization of a methane venting coal mine.¹⁰⁴

The draft guidance also recommends that where a source of CO₂ equivalent emissions would reach 25,000 tons annually, it “would be appropriate” for the agency to “discuss measures to reduce GHG emissions, including consideration of reasonable alternatives.”¹⁰⁵ Here, BLM estimates that just one source of CO₂ emissions from the mine – methane – will amount to 1 million tons of CO₂ equivalent emissions, or 40 times CEQ’s suggested threshold. See Jan. 2011 EA at 15. The President has also directed agencies to reduce GHG emissions, supporting the notion that considering such alternatives is reasonable. See E.O. 13514, 74 Fed. Reg. 52117 (Oct. 8, 2009) (Federal agencies “shall ... reduce their greenhouse emissions from direct and indirect activities”).

2. The EA Fails To Analyze In Detail A Reasonable Alternative To Offset The Lease’s Greenhouse Gas Emissions.

Appellants requested that BLM consider in detail an alternative that would require the winner of the LBA to offset GHG emissions from the lease.¹⁰⁶ Appellants explained that such an alternative was reasonable. First, BLM can estimate the total amount of GHG emissions from its decision. In fact, BLM did estimate one component of lease’s contribution to GHG emissions – those from methane over the year it will take to mine the lease – at 1 million tons of CO₂

¹⁰⁴ N.H. Sutley, Chair, Council On Environmental Quality, “Draft NEPA Guidance On Consideration Of The Effects Of Climate Change And Greenhouse Gas Emissions,” (Feb. 8, 2010) at 3 (emphasis added), available at http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FI_NAL_02182010.pdf (last viewed Feb. 22, 2011), and attached as Exh. 57. This Board has relied on CEQ’s draft guidance. See Powder River Basin Resource Council, 180 IBLA 119, 133 n.16 (2010).

¹⁰⁵ Id.

¹⁰⁶ Letter of E. Zukoski (Sept. 25, 2009) (Exh. 12) at 39.

equivalent.¹⁰⁷ Further, as noted above, BLM can (but failed to) estimate CO₂ emissions from coal combustion, as several U.S. agency protocols demonstrate.¹⁰⁸

Second, there are numerous precedents and existing mechanisms through which project developers can offset their global warming impacts. California state agencies have, on several occasions, required such offsets as a condition of approving construction of projects that would release significant quantities of greenhouse gases. For example, the State of California and ConocoPhillips entered an agreement in 2007 that required the company to offset greenhouse gas emissions caused by the company's proposed refinery.¹⁰⁹

Third, the U.S. EPA has repeatedly urged land management agencies to consider offsets as a way to reduce the global warming impacts of agency actions, including, specifically, impacts of coal mine methane. In a 2007 letter to the Forest Service concerning a proposal to permit methane drainage wells at the nearby West Elk Mine, EPA specifically rejected a Forest Service statement that the alternative of GHG offsets was not reasonable:

EPA believes that it is reasonable to consider offset mitigation for the release of methane, as appropriate. Acquiring offsets to counter the greenhouse gas impacts of a particular project is something that thousands of organizations, including private corporation, are doing today. For example, the U.S. Forest Service and National Forest Foundation launched a plan on July 23, 2007 to sell credits to those seeking to offset their greenhouse gas footprint by measuring carbon stored in trees on areas reforested after wildfires, tornados, and other catastrophic events. The asking price for the two pilot projects is \$6 per metric ton of carbon dioxide.¹¹⁰

¹⁰⁷ As noted above, the EA likely understates the methane emissions attributable to the LBA. See supra at 41-42. Further, the EA fails to address GHG emissions from, inter alia, the direct and indirect impacts of operating mine equipment for a year, and from coal combustion. See supra at 10-17.

¹⁰⁸ See supra at 10-15.

¹⁰⁹ Settlement Agreement (Sept. 10, 2007), attached as Exh. 58.

¹¹⁰ Letter of L. Svoboda, EPA to C. Richmond, GMUG National Forest (Aug. 6, 2007) at 7, attached as Exh. 59.

As EPA suggested, numerous entities exist that permit developers to purchase carbon offsets that are third-party verified. The Carbon Fund, the Chicago Climate Exchange, and the Climate Action Reserve all permit entities to purchase carbon “credits.”¹¹¹ In 2009, the total U.S. carbon offset market was worth \$74 million, with 19.4 million metric tons of CO₂ equivalents (CO₂e) in traded volumes. The supply of credits in 2009 reached 29 million tons of CO₂e.¹¹²

EPA made a similar recent request that the Forest Service consider alternatives that would offset GHG emissions concerning a proposal to log and burn certain forest lands in Colorado. In its letter, EPA recommended that the Forest Service’s final NEPA document should: “[D]iscuss reasonable alternatives and/or potential means to mitigate or offset the GHG emissions from the action.”¹¹³

Finally, Oxbow has prepared itself to shoulder costs for emitting GHGs. In a letter to BLM addressing the reasonable price of the coal, Oxbow President James T. Cooper stated that “costs to account for methane emissions by EPA under a GHG Cap and Trade scenario will also increase the cost to recover this coal resource.”¹¹⁴ While offsets differ from cap and trade, both would effectively put a price on GHG emissions.

Despite the fact that BLM could estimate GHG impacts from the project, the fact that offsets have been required by other agencies, the fact that EPA has repeatedly requested that federal land managers consider offsetting the GHG impacts of proposed actions, the fact that

¹¹¹ See, e.g., www.carbonfund.org/ (Carbon Fund); www.chicagoclimatex.com/ (Chicago Climate Exchange); www.climateregistry.org/ (Climate Registry) (all viewed Fed. 20, 2011).

¹¹² See Point Carbon Research, “US Offset Markets in 2010: The Road Not Yet Taken” (Mar. 1, 2010) at 1, attached as Exh. 60.

¹¹³ See letter of L. Svoboda, EPA Region 8 to T. Malecek, Rio Grande National Forest (Oct. 27, 2010) at 8 (emphasis added), attached as Exh. 61.

¹¹⁴ Letter of J. Cooper, Oxbow (Exh. 56) at 2.

numerous mechanisms exist to offset GHG impacts in the U.S., the fact that Oxbow understood it might have to pay to mitigate the LBA's GHG impacts, and despite Appellants' request that BLM consider an offset alternative, BLM failed to analyze such a reasonable alternative. BLM's EA does not mention offsets. Nor does it explain why BLM cannot consider offsets as a reasonable alternative.¹¹⁵ BLM thus failed to "explain its reasoning for eliminating an alternative" from consideration in an EA, as required by NEPA. Wilderness Soc'y, 524 F. Supp. 2d at 1309.

BLM cannot allege that an alternative that would permit the agency to offer the Elk Creek East Coal LBA while requiring offsets would not fulfill the proposed action's purpose and need. Such an alternative would allow Oxbow to expand its underground operations and continue producing coal. Jan. 2011 EA at 1. It would simply increase Oxbow's cost of doing so while mitigating some of the proposal's damaging impacts. Further, because BLM has failed to evaluate this alternative in any way, it cannot allege that the alternative is not economically feasible. BLM certainly cannot argue that such an alternative is not technically feasible since purchasing carbon offsets is not technically demanding. It simply would require Oxbow to quantify the amount of CO₂ equivalent emissions (in tons) that it would offset, find a reputable vendor or exchange, and pay the appropriate price per ton for verifiable credits.¹¹⁶

¹¹⁵ The undated, unattributed "Summary of public comments" in BLM's files states only: "No carbon equivalent for unregulated gas emissions has been established as a basis for off-site mitigations such as carbon offsets (or 'carbon credits')." See "Summary of public concerns" (Exh. 18) at un-numbered 1st page. This explanation lacks a rational basis. BLM can simply estimate the carbon equivalent of GHG emissions caused by the lease, and require the Mine to purchase offsets for the entire (or a partial) amount. Further, the EA does not adopt this reasoning, since the EA fails to mention offsets at all.

¹¹⁶ One company, Terrapass, is selling carbon offsets on the web for \$5.95 per ton. See www.terrapass.com (last viewed Feb. 20, 2011), pages printed at Exh. 62.

For these reasons, BLM's failure to consider the reasonable alternative of requiring Oxbow to purchase carbon credits, and its failure to explain why it dismissed such an alternative, violate NEPA.

3. The EA Fails To Analyze In Detail Reasonable Alternatives To Reduce The Lease's Greenhouse Gas Emissions By Combusting Ventilation Air Methane.

The largest source of methane emissions from the Elk Creek East Coal LBA will not be methane drainage wells, but the mine's ventilation system. Although more attention has been given to drainage and related methane capture techniques, ventilation air methane ("VAM") emissions are a critical component of an underground coal mine's environmental impact. According to EPA, VAM accounted for 56 percent of total U.S. coal mine methane emissions and 80 percent of emissions from underground mining alone in 2008 – totaling 101 billion cubic feet of methane.¹¹⁷ At Oxbow's Elk Creek Mine, the story is similar. VAM accounts for a steady 75% of all methane emissions at the Mine between 2004 and 2006.¹¹⁸ BLM expects rates of methane emissions for the additional year of mine life caused by the Elk Creek East Coal LBA "to be consistent with rates observed during mining operations between 2004 and 2006."¹¹⁹ Given that BLM predicts "total methane emissions" from the proposed action are 1.0 millions tons of CO₂ equivalent, VAM would account for approximately 750,000 tons of CO₂ equivalent

¹¹⁷ U.S. EPA, U.S. Underground Coal Mine Ventilation Air Methane Exhaust Characterization (July 2010) at 1, attached as Exh. 63.

¹¹⁸ Jan. 2011 EA (Exh. 4) at 14, Table 5. For 2004, VAM = 75% of all methane emissions ($3.8 / 5.1 = .745$). For 2005, VAM = 75% of all methane emissions ($4.1 / 5.5 = .745$). For 2006, VAM = 76% of all methane emissions ($5.6 / 7.4 = 0.756$).

¹¹⁹ Id. As noted above, supra at 41-42, BLM's figures are likely underestimates.

over life of the project.¹²⁰ That amount is 30 times the 25,000-ton significance threshold recommended in CEQ's draft NEPA guidance on climate change.

Because VAM represents the lion's share of the damaging methane pollution caused by the LBA, Appellants requested that BLM consider an alternative that would require Oxbow to mitigate or eliminate VAM emissions.¹²¹ BLM failed to do so.

A wealth of data demonstrates that VAM mitigation measures are technically and economically feasible, since such measures have been adopted at coal mines in the U.S. and around the world. In fact, there is a long history of capturing and/or combusting methane, including VAM.¹²² Unlike methane emissions from drainage wells, VAM cannot be flared because the concentrations of methane in ventilation air are too dilute; so other technologies must be used to combust VAM. EPA reports that technology is available and in use to harness VAM.¹²³ These technologies permit coal mines to combust VAM even at very low concentrations.¹²⁴ This combustion has been shown to destroy 95% or greater of VAM, greatly

¹²⁰ Id. at 15.

¹²¹ Appellants urged BLM to consider an alternative requiring Oxbow to mitigate VAM at both the scoping stage, and in comments on the draft EA. See letter of J. Nichols et al. (Sept. 29, 2008) (Exh. 11) at 10; letter of E. Zukoski (Sept. 25, 2009) (Exh. 4) at 41-42. Appellants also provided BLM with supplemental documents after the close of the comment period (but before BLM issued its Final EA and decision last month) addressing the reasonableness of a VAM combustion alternative. See, e.g., letter of E. Zukoski, Earthjustice, to B. Sharrow, BLM (June 5, 2009) (attachments omitted) attached as Exh. 64.

¹²² J. Somers and H. Schultz, Coal mine ventilation air emissions: project development planning and mitigation technologies, 13th United States/North American Mine Ventilation Symposium, 2010, at 116, attached as Exh. 65.

¹²³ U.S. EPA, "Ventilation Air Methane (VAM) Utilization Technologies," September 2009, at 1 attached as Exh. 66.

¹²⁴ Id. at 1. See also United Nations Economic Commission for Europe & Methane to Markets Partnership, "Best Practices Guidance for Effective Methane Drainage and Use in Coal Mines," ECE Energy Series No. 31, 2010, at 36, excerpts attached as Exh. 67 ("Current VAM

reducing global warming pollution emitted by a mine.¹²⁵ MSHA has approved VAM mitigation projects and has established procedures for continuing to do so.¹²⁶ Further, a variety of mechanisms exist to fund and/or partially offset the cost of coal mine methane mitigation systems.¹²⁷

EPA's Coalbed Methane Outreach Project has recently identified four U.S. VAM mitigation projects using oxidation that are completed, underway, or planned¹²⁸:

- CONSOL Windsor Mine (closed) (MEGTEC vocsidizer)
- Jim Walter Resources Mine No. 4 (Biothermica VAMOX)
- CONSOL McElroy mine in West Virginia (Durr Ecopure technology) – to go online in the second quarter of 2011
- CONSOL Enlow Fork mine in Pennsylvania – scheduled to be operational in late 2010

The first VAM oxidation demonstration in the United States was carried out by CONSOL Energy at their abandoned Windsor coal mine. This project illustrated that the oxidizer could “reliably convert very low concentrations of methane present in mine ventilation exhaust air to

technologies are generally not able to process methane concentrations below 0.2% without use of additional fuel, but research efforts are underway to lower the concentration threshold because VAM concentrations at many mines worldwide fall below 0.2%.”).

¹²⁵ D. Kosmack, “Capture and Use of Coal Mine Ventilation Air Methane,” (undated) at 79, excerpts attached as Exh. 68. See also Durr Environmental and Energy Systems, “Securing Your VAM Investment with Proper RTO Technology,” presented at the 6th session of the Ad Hoc Group of Experts on Coal Mine Methane, United Nations Economic Commission for Europe, (Oct. 2010) at 4, attached as Exh. 69 (claiming methane conversion rate of up to 99% with Regenerative Thermal Oxidation technology).

¹²⁶ E. Sherer, “MSHA and Coal Mine Methane,” presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference, October 2010, at 16-21, attached as Exh. 70.

¹²⁷ See, generally, U.S. EPA, Coal Mine Methane (CMM) Finance Guide, EPA-400-D-09-001, July 2009 attached as Exh. 71.

¹²⁸ P. Franklin, F. Ruiz, and J. Somers, “CEPA Activities to Promote Coal Mine Methane Recovery,” presented at the U.S. EPA Coalbed Methane Outreach Programs 2010 U.S. Coal Mine Methane Conference, October 2010 at 13, attached as Exh. 72.

carbon dioxide and water” and determined “the quantity of useful energy that can be produced by the oxidation reaction.”¹²⁹ The project achieved an efficiency of at least 95%.¹³⁰

Jim Walter Resources’ No. 4 Mine in Alabama has operated VAM-reduction technologies since March 2009.¹³¹ This project has been registered with the U.S. Climate Action Reserve (CAR) which helps fund the project.¹³² The Mine Safety and Health Administration (MSHA) approved this project, which has destroyed up to 98% methane and avoided over 42,000 tons of CO₂ equivalent emissions.¹³³ Jim Walter Co. intends to implement similar projects at “all current and future suitable ventilation shafts at Walter Energy’s coal mines,” with the first such project to be operational in 2011.¹³⁴

Another CONSOL Energy project has been developed to mitigate VAM emissions at an active West Virginia coal mine (CONSOL’s McElroy mine in Marshall County). This project is “intended to demonstrate significant reductions in methane emissions, in a safe and proven manner, and without any impact on mine operations or production.”¹³⁵ A third CONSOL Energy

¹²⁹ U.S. EPA CMOP, “Case Study: U.S. Demonstration of Ventilation Air Methane Oxidation Technology,” (July 2010) at 1, attached as Exh. 73.

¹³⁰ *Id.* See also J. Sommers and H. Schultz, “Thermal Oxidation of Coal Mine Ventilation Air Methane (VAM),” presented at 12th U.S./North American Mine Ventilation Symposium (June 9-11, 2008), at 12-14, available at <http://www.smenet.org/uvc/mineventpapers/ppt/045.ppt> (last viewed Jan. 20, 2011), attached as Exh. 74.

¹³¹ N. Duplessis, “Pioneering VAM Oxidation” (October 2010) at 4, attached as Exh. 75.

¹³² U.S. EPA, Coalbed Methane Extra, Summer 2010, at 4, attached as Exh. 76.

¹³³ Duplessis (Exh. 75) at 4, 5, and 11.

¹³⁴ PR Newswire, “Biothermica and Walter Energy Agree to develop Ventilation Air Methane Projects,” October 5, 2010, available at <http://www.prnewswire.com/news-releases/biothermica-and-walter-energy-agree-to-develop-ventilation-air-methane-projects-104336578.html> (last viewed Jan. 20, 2011), attached as Exh. 77 at 1.

¹³⁵ Coalbed Methane Extra (Exh. 76) at 3-4.

project will reduce VAM emissions by 190,000 tCO₂e a year at the Enlow Fork Mine in Pennsylvania. This project was scheduled to be operational by late 2010.¹³⁶

EPA has compiled a number of other examples of the use or destruction of VAM in coal mines in the U.S. and around the world.¹³⁷ For example, in Australia, one coal mine is using ventilation air to generate power.¹³⁸ In 2009, the U.S. and Chinese governments announced that technology developed in the United States to oxidize VAM would be used at a coal mine in China. It is “expected to reduce greenhouse gas emissions by up to 200,000 tons of CO₂ equivalent per year. The VAM project is expected to ... commence operations by the end of 2010.... The VAM project will ... capture[] and destroy[] about 95 percent of methane within the exhaust stream before it is released into the atmosphere.”¹³⁹ The U.S. and China have also agreed to a joint project “to generate electricity from ventilation air methane (VAM) at a Chinese coal mine.”¹⁴⁰ At least four more Chinese VAM projects are expected to be operational in the next two years.¹⁴¹

Data from the Elk Creek Mine demonstrates that VAM reduction technologies in use in the U.S. and around the world are technically feasible at this mine. MSHA data from 2008-2009 demonstrates that the Elk Creek Mine is producing methane in sufficient concentrations to operate a VAM oxidizer. These data show methane concentrations of a minimum of 0.31%, a

¹³⁶ Id. at 4.

¹³⁷ See EPA, “Ventilation Air Methane (VAM) Utilization Technologies” (Exh. 66).

¹³⁸ See BHP Billiton website, “World’s First Power Plant To Use Coal Mine Ventilation Air As Fuel,” available at <http://www.bhpbilliton.com/bb/sustainableDevelopment/caseStudies/2008/worldsFirstPowerPlantToUseCoalMineVentilationAirAsFuel.jsp> (last viewed Feb. 22, 2011) attached as Exh. 78.

¹³⁹ Environmental Protection Agency, Coalbed Methane Extra (Dec. 2009) at 2, attached as Exh. 79.

¹⁴⁰ Id. at 1.

¹⁴¹ EPA, Coalbed Methane Extra (Exh. 76) at 4.

maximum of 0.56%, and an average of 0.46%.¹⁴² VAM oxidizers are proven to operate reliably at concentrations as low as 0.2%.¹⁴³

BLM acknowledged and described VAM destruction technologies, including those that could be used to generate power, in an appendix to its abandoned, February 2010 EA.¹⁴⁴ While that appendix identified financial issues with capturing methane from drainage wells (a different potential alternative), it provided no basis for dismissing VAM combustion as an alternative.¹⁴⁵ The January 2011 Final EA, however, eliminated any description of VAM technologies, and fails to address an alternative that would require Oxbow to adopt VAM reduction as an alternative. The final EA fails to address the economic or technical feasibility of a VAM reduction alternative, despite the existence of substantial evidence showing such technologies in use in the U.S. and around the world, and the likelihood that such technologies would be effective at the Elk Creek Mine, based on mine data. Nor does the final EA provide any basis for rejecting such an alternative, in violation of NEPA.¹⁴⁶ See Wilderness Soc’y, 524 F. Supp. 2d at 1309.¹⁴⁷

¹⁴² EPA Underground Coal Mine VAM 2010 (Exh. 63) at 11.

¹⁴³ Id. at 1.

¹⁴⁴ BLM, Environmental Assessment, Elk Creek East Tract Coal Lease (Feb. 2010) at Appendix A, A-4, excerpts attached as Exh. 80.

¹⁴⁵ Id. at A-2 – A-4.

¹⁴⁶ The January 2011 final EA contains a cursory dismissal of methane capture and flaring alternatives, but both of these alternatives relate only to emissions from methane drainage wells, not VAM. Jan. 2011 EA (Exh. 4) at 5-6. VAM reduction technologies do not involve either “capture” or “flaring” of methane, but rather methane combustion in a controlled reaction. Further, the final EA’s dismissal of capture does not mention VAM, and consistently addresses the need for gathering pipelines and other infrastructure relate to methane drainage wells. Id. VAM reduction technologies require facilities only at the site of the ventilation system, not at the remote sites of the drainage wells. None of the VAM technologies BLM specifically identified in the February 2010 EA are mentioned (let alone, analyzed or dismissed) in the January 2011 final EA.

Instead of a “hard look” at the alternative of VAM reduction, BLM took no look at all. This, too, violates NEPA.

D. BLM Failed To Analyze And Disclose The Impacts Of Leasing The Elk Creek East Tract Together With The Pending Proposal To Modify Oxbow’s Coal Lease 61357.

Pending before the BLM prior to BLM’s decision on the Elk Creek East Coal LBA was Oxbow’s proposal to approve a lease modification for coal lease COC-61357. BLM joined the Forest Service in issuing a “scoping” letter on the project in December 2010.¹⁴⁸ Coal Lease Modification COC-61357 would add about 235,000 tons of coal to Oxbow’s lease that can be addressed from the Elk Creek Mine.¹⁴⁹ It will also, according to BLM documents, permit Oxbow to mine an additional 3.6 million tons of coal.¹⁵⁰ The lease modification will cause venting of millions of cubic feet a day of methane, a powerful greenhouse gas. This Lease Modification is approximately 1 mile from the Elk Creek East Tract; it would result in mining the same coal seam (the “D-Seam”); it would be mined by the same company; it would prolong the life of the same mining operation; and it underlies the same watershed.

For these reasons, BLM should have evaluated the impacts of the Elk Creek East Coal LBA together with the COC-61357 Lease Modification in a single NEPA document. Failing that, and at an absolute minimum, the Forest Service should have evaluated the cumulative

¹⁴⁷ As with carbon offsets, a VAM reduction alternative would fit the project’s purpose and need because it would still allow Oxbow to expand its underground operations and continue producing coal. Jan. 2011 EA at 1.

¹⁴⁸ See USFS and BLM, Opportunity to Comment, Modification to Federal Coal Lease COC-61357 (Dec. 14, 2010) at 1 (both the Forest Service and BLM invite comments on the proposed lease modification), attached as Exh. 81.

¹⁴⁹ See D. Dyer, BLM, Combined Geologic and Engineering Report (GER) and Maximum Economic Recovery Report (MER) for Coal Lease by Application [sic] dated June 3, 2010 (COC61357) (Aug. 2010) (“Lease Mod. GER/MER”) at 3, attached as Exh. 82.

¹⁵⁰ Id. at 5.

impacts of these two proposals together. The agency's failure to evaluate these two proposals together or to consider their cumulative effects violates NEPA.¹⁵¹

1. NEPA Requires Agencies To Analyze And Disclose In A Single NEPA Document Those Actions That Are Connected Or Similar.

Regulations implementing NEPA require an agency to consider connected actions – those “closely related” – and similar actions together in a single EIS. 40 C.F.R. § 1508.25(a)(1); (a)(3). The purpose of the “connected action” requirement “is to prevent an agency from dividing a project into multiple actions, each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” Great Basin Mine Watch v. Hankins, 456 F.3d 955, 969 (9th Cir. 2006); see also Haines Borough Assembly, 145 IBLA 14, 22 (1998) (overall purpose of the regulation is to ensure that “closely related” actions which may have cumulatively significant impacts, and therefore should be discussed in the same environmental impact statement, are not improperly segmented into separate actions, each having less than significant impacts, thus “overlook [ing] or, worse, deliberately ignor[ing]” their cumulatively significant impacts.)

A connected action is defined as being “closely related” to other actions, and are considered “connected” if they:

- (i) Automatically trigger other actions which may require environmental impact statements;
- (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously;
- (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

¹⁵¹ Appellants did not raise this issue in comments on the Elk Creek East Coal LBA. However, Appellants may properly raise the issue before this Board because BLM's issued its public notice that it would evaluate Lease Modification COC-61357 in December 2010, after the September 2009 close of comments on the Elk Creek LBA. 43 C.F.R. 4.410(c)(2) (appellants may raise issues “[t]hat arose after the close of the opportunity for ... participation”).

Id. BLM’s NEPA guidance states: “Connected actions are limited to actions that are currently proposed....” BLM NEPA Handbook H-1790-1 (Jan. 2008), Section 6.5.2.1. The requirement that an agency examine connected actions in one NEPA document applies to EAs as well as EISs. Defenders of Wildlife, 152 IBLA 1, 6 (2000).

Similar actions are those that “when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” 40 C.F.R. § 1508.25(a)(3).

2. Because The Elk Creek East Tract Lease By Application Is A Connected And Similar Action To Lease Modification COC-61357, BLM Must Analyze The Two Proposals In A Single NEPA Document.

Oxbow’s Elk Creek East Coal LBA and Oxbow’s application for Lease Modification COC-61357 are both part of the company’s larger plan for removal of federal and private minerals at the Elk Creek Mine. The Lease Modification was “currently proposed” before BLM completed its EA and decision in January 2011.¹⁵² The Elk Creek East Tract is less than one mile from the Lease Modification. The Elk Creek East Tract is located in the Elk Creek drainage in the northern half of Sections 5 and 6 of Township 13 South Range 90 West.¹⁵³ Lease Modification COC-61357 is less than a mile to the north in Section 32 of Township 12 South Range 90 West in the upper part of the Elk Creek drainage.¹⁵⁴ Both projects seek to mine coal in

¹⁵² See Lease Modification Scoping Notice (Exh. 81) at 1 (scoping notice dated December 14, 2010).

¹⁵³ Jan. 2011 EA (Exh. 4) at 8, Figure 2.

¹⁵⁴ Compare id. with Map, Oxbow COC-61357 Lease Modification Tract #5, attached as Exh. 83, and available at http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nea/74054_FSPLT2_031528.pdf (last viewed Jan. 20, 2011).

the same coal seam (the D-Seam).¹⁵⁵ BLM's approval to mine the Elk Creek East Tract will extend the life of the same mine that the Lease Modification also seeks to extend. Thus, the development of the Elk Creek East Coal LBA is connected to the Lease Modification for COC-61357.

Based on these facts, these two actions are “interdependent parts of a larger action” – namely the Elk Creek Mine's operations – that “depend on the larger action for their justification.”¹⁵⁶ These two proposals are thus “connected actions” that must be analyzed together in the same NEPA document.¹⁵⁷ BLM's failure to do so violates NEPA.

Even if the two proposals may not be “connected actions,” the two Oxbow proposals are “similar actions” that “when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.”¹⁵⁸ The Lease Modification and the East Creek Elk Tract lease-by-application share common geography, as they are less than a mile apart and both connect to the same mine. They could be approved within months of each other, sharing common timing. They have similarities in terms of impacts – methane venting, coal mining, prolonging the life of the mine, etc. – that provide a basis for evaluating their environmental consequences together. Further, analyzing the two projects together may enable the agencies to consider more effectively mitigation measures for methane venting, for example. Mitigation measures that may not appear cost effective when applied to just one of the projects may

¹⁵⁵ See Elk Creek East GER/MER (Exh. 3) at 2 (Oxbow Mining “has applied for the D-Seam”); Lease Mod. COC61357 GER/MER (Exh. 82) at 2 (Oxbow Mining “has applied for the D-Seam reserves”).

¹⁵⁶ 40 C.F.R. § 1508.25(a)(1).

¹⁵⁷ Id.

¹⁵⁸ 40 C.F.R. § 1508.25(a)(3).

demonstrate a better rate of return when used over a longer period or when applied to both projects instead of just one. For these reasons, the Elk Creek East Tract and the Lease Modification are “similar actions” that must be analyzed in a single NEPA document. The BLM’s failure to do so is reversible error.

Finally, and at an absolute minimum, BLM was required to disclose the cumulative impacts of the Elk Creek East Coal LBA together with the lease modification for COC-61357, which the EA also fails to do, in violation of NEPA. The Elk Creek East EA contains absolutely no mention of lease modification COC-61357, and only the vaguest discussion of ongoing and future coal mining in the region. See, e.g., Jan. 2011 EA (Exh. 4) at 44 (coal mining “would continue” in the area). That discussion identifies no individual future project, and provides no quantitative analysis of any future impact. BLM’s failure to evaluate cumulative impacts also violates NEPA.

V. APPELLANTS FACE IRREPARABLE HARM IF A STAY IS NOT GRANTED.

Appellants demonstrate at least two types of irreparable harm if a stay is not granted. First, damage to the environment is likely to occur shortly if a stay is not granted. Second, if BLM approves the lease and work on the lease goes forward in the absence of the required environmental review, NEPA’s purpose of requiring agencies to “look before they leap” will be undermined.

A. Appellants Will Suffer Direct And Irreparable Environmental Harm If A Stay Is Not Granted.

The “irreparable harm requirement is met if a plaintiff demonstrates a significant risk that he or she will experience harm that cannot be compensated after the fact by monetary damages.” Greater Yellowstone Coalition v. Flowers, 321 F.3d 1250, 1258 (10th Cir. 2003) (emphasis omitted) (quoting Adams v. Freedom Forge Corp., 204 F.3d 475, 484-85 (3d Cir. 2000)).

Environmental harms, by their nature, cannot be compensated by monetary damages, and as such, are typically irreparable. See Amoco Production Co. v. Village of Gambell, AK, 480 U.S. 531, 545 (1987); see also Utahns For Better Transp. v. U.S. Dept. of Transp., No. 01-4216, 01-4217, 01-4220, 2001 WL 1739458, *2 (10th Cir. Nov. 16, 2001) (making finding of irreparable harm to wetlands from highway construction).

Appellants face a significant risk of environmental harm if a stay is not granted. Oxbow's exploitation of the lease will harm the surface environment above the coal mined. The Elk Creek East Coal LBA will result in clearing of 9 well pads and the drilling of 15 methane drainage wells, and miles of road construction or reconstruction. See supra at 3. Surface construction will harm the environment, destroy vegetation, eliminate wildlife habitat, scar the scenery, and irreparable harm Appellants' members who use and enjoy the area for scenic, wildlife, and recreational purposes. See Nichols Dec. (Exh. 10) at ¶¶ 10-21. These scars and damage, and the harm they cause, are likely to persist for years.

Physical damage to the land is likely to occur in the near future in the absence of a stay. BLM may hold the lease in a matter of weeks, thereby assigning rights to Oxbow that cannot easily be revoked. Once the leases are sold, BLM will immediately issue the leases in accordance with 43 C.F.R. § 3422.4 to the highest bidder, and, upon receiving a completed signed lease form and associated payments, BLM is obligated to execute the lease. The lease grants rights to mine, including the right to construct surface facilities necessary to remove coal. Further, in executing the lease, the successful bidder will be under an affirmative obligation to diligently develop the lease. See 43 C.F.R. § 3475.5. BLM indicates that Oxbow is likely to mine the lease in the near future. Mining the LBA area is likely to take 18 months, and that 18 months of work is, according to BLM, likely to be completed well before July 2014. See Jan.

2011 EA (Exh. 4) at 2 (mining LBA will require 6 months of prep work and 12 months of mining); id. at 13 (mining will be complete before July 2014 expiration of Oxbow's air permits).

Federal courts have repeatedly found that the drilling wells – the same type of surface disturbance anticipated here – cause irreparable harm where, as here, they will destroy vegetation, impact a natural area, cause noise, and degrade recreational and aesthetic enjoyment of such areas. See, e.g., San Luis Valley Ecosystem Council v. U.S. Fish and Wildlife Service, 657 F. Supp. 2d 1233, 1237, 1248 (D. Colo. 2009) (drilling two exploratory oil wells inside wildlife refuge constitutes irreparable harm); Anglers of the Au Sable v. U.S. Forest Service, 402 F. Supp. 2d 826, 838 (E.D. Mich. 2005) (finding irreparable harm from limited exploratory oil and gas drilling). Courts have also held that mine construction can also irreparable harm. See S.E. Alaska Conservation Council v. U.S. Army Corps of Eng'rs, 472 F.3d 1097, 1100 (9th Cir. 2006) (finding irreparable harm sufficient to warrant injunction pending appeal where plaintiffs demonstrated that inundating lands for a proposed mine “will adversely affect the environment by destroying trees and other vegetation”).

Further, courts in NEPA cases have held aesthetic harm to recreational interests – which Appellants allege here – are irreparable and enjoined them. See, e.g., Fund for Animals, Inc. v. Espy, 814 F. Supp. 142, 151 (D.D.C. 1993) (finding potential injury to plaintiffs' aesthetic interest in wildlife, and stating “[n]or can money damages compensate plaintiffs' procedural injury caused by defendant's NEPA violation”); Nichols Decl. (Exh. 10) at ¶¶ 22-25 (alleging harm to such interests).

B. Appellants Will Suffer Irreparable Harm From Uninformed Agency Decisionmaking.

If the LBA is approved, permitting drilling and road construction to go forward, Appellants will also suffer irreparable injury from the exact harm NEPA is intended to prevent:

uninformed agency decision making. NEPA aims to protect the environment by requiring an agency to “carefully consider[] detailed information concerning significant environmental impacts.” Methow Valley, 490 U.S. 332, 349 (1989). If, while this case is before the Board, BLM issues the lease, which will allow drilling to start without the benefit of an adequate NEPA review, it will defeat much of the purpose of the NEPA analysis on remand. “[W]hen a decision to which NEPA obligations attach is made without the informed environmental consideration that NEPA requires, the harm that NEPA intends to prevent has been suffered.” Sierra Club v. Marsh, 872 F.2d 47, 504 (1st Cir. 1989). See also id. at 500-01 (“NEPA’s object is to minimize ... the risk of uninformed choice, a risk that arises in part from the practical fact that bureaucratic decisionmakers (when the law permits) are less likely to tear down a nearly completed project than a barely started project”); Foundation on Economic Trends v. Heckler, 756 F.2d 143, 157 (D.C. Cir. 1985) (“If plaintiffs succeed on the merits, then the lack of an adequate environmental consideration looms as a serious, immediate, and irreparable injury.”); Jones v. D.C. Redevelopment Land Agency, 499 F.2d 502, 512 (D.C. Cir. 1974) (“the harm with which the courts must be concerned in NEPA cases is not, strictly speaking, harm to the environment, but rather the failure of the decisionmakers to take environmental factors into account the way that NEPA mandates.”).

The Supreme Court long ago concluded that failure to disclose environmental impacts of coal mining on federal lands should result in an injunction because of the potential harm to citizens’ rights to know and to participate in agency decisionmaking under NEPA.

It is axiomatic that if the Government, without preparing an adequate impact statement, were to make an “irreversible commitment of resources,” a citizen’s right to have environmental factors taken into account by the decisionmaker would be irreparably impaired. For this reason, the lower courts repeatedly enjoined the Government from making such resource commitments without first preparing adequate impact statements. Indeed this past Term, we indicated that it would have been appropriate for the Court of Appeals to have enjoined the approval of mining plans had that court concluded that “the impact statement covering the mining plans

inadequately analyzed the environmental impacts of, and the alternatives to, their approval.”

New York v. Kleppe, 429 U.S. 1307, 1312 (1976) (citations omitted) (emphasis added).

Lower courts faced with similar cases have reached the same conclusion. In enjoining a drilling project, one court explained the irreparable nature of such an injury. “[T]he Plaintiffs’ procedural interest in a proper NEPA analysis is likely to be irreparably harmed if [the company] were permitted to go forward with the very actions that threaten the harm NEPA is intended to prevent, including uninformed decisionmaking.” San Luis Valley Ecosystem Council, 657 F. Supp. 2d at 1241.

Allowing work to begin on a project when NEPA claims are at issue threatens to unleash the “bureaucratic steamroller” that will make it impossible for the agency to look before it leaps. Davis v. Mineta, 302 F.3d 1104, 1115 (10th Cir. 2002), citing Sierra Club v. Marsh, 872 F.2d at 504 (both discussing the “bureaucratic steam roller”); see also Colorado Wild, Inc. v. United States Forest Serv., 523 F. Supp. 2d 1213, 1221 (D. Colo. 2007) (allowing project to go forward “represents a link in the chain of bureaucratic commitment that will become progressively harder to undo.”).

The legal principle that stays in NEPA cases are appropriate to avoid uninformed decisionmaking comports with precedent requiring stays of those activities that will foreclose or impair remedies for alleged wrongs. See, e.g., Sierra Club v. Norton, 207 F. Supp. 2d 1310, 1340-41 (S.D.Ala. 2002) (finding irreparable harm because allowing development to go forward “would potentially preclude or limit the court’s ability to craft a meaningful remedy. Failure to enjoin the construction would seriously diminish plaintiff’s opportunity to obtain relief in this case.”). This Board has recognized that a stay may be necessary to ensure that appellants obtain effective relief. W. Wesley Wallace, 156 IBLA 277, 278 (2002). If a stay is not granted, and if

Appellants later succeed in this appeal, alternatives may have been foreclosed and environmental harms realized prior to an ultimate decision on the merits. Therefore this Board must issue a stay to ensure that no surface-disturbing activities can occur until this case is decided and any new NEPA analysis completed.

VI. IRREPARABLE HARM TO APPELLANTS OUTWEIGHS ANY HARM TO BLM OR ANY OTHER PARTY.

In cases involving the preservation of the environment, the balance of harms usually favors granting a stay:

Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment.

Amoco Production Co. v. Village of Gambell, 480 U.S. 531, 545 (1987). In the instant case, the balance of harms weighs heavily in favor of granting a stay.

As shown above, the Appellants face substantial and irreparable harm if BLM is allowed to issue the lease, which will permit drill pad construction, drilling, and road construction to go forward.

On the other hand, BLM faces little harm from a brief stay. The agency has no legal or cognizable interest in allowing immediate development of the coal to be leased. Given that it took BLM nearly four and a half years to reach a decision on the application, the agency itself can hardly complain that it is suddenly in a hurry. Further, BLM's interest in promoting mineral production from the public lands and generating royalties is contingent on first performing adequate analysis and land use planning to assure that the development is environmentally sound – as required under FLPMA and NEPA. See, e.g., 43 U.S.C. 1701(a)(8) (public lands should be managed in a manner to protect environment). BLM's multiple use mandate and resource conservation interests will be better served by a stay and a decision requiring further NEPA

analysis in compliance with BLM's legal duties. See San Luis Valley Ecosystem Council, 657 F. Supp. 2d at 1240-42 (minimal harm to federal government and lessee from delaying exploratory drilling outweighed by irreparable harm to plaintiffs).

In contrast to the harms the groups, their members, and the environment would suffer, any harm asserted by the BLM or Oxbow would be "economic, and therefore not irreparable." National Wildlife Federation v. National Marine Fisheries Service, 235 F. Supp. 2d 1143, 1162 (W.D. Wash. 2002) (citing Northern Alaska Env'tl. Ctr. v. Hodel, 803 F.2d 466, 471 (9th Cir. 1986). See also Wisconsin Gas Co. v. FERC, 758 F.2d 669, 674-75 (D.C. Cir. 1985) ("Economic loss does not, by itself, constitute irreparable harm"); Acierno v. New Castle County, 40 F.3d 645, 653 (3rd Cir. 1994) (same). Further, it is unclear that Oxbow would suffer any immediate economic harm since, with its current reserves, the Elk Creek Mine can continue operations until at least 2015.¹⁵⁹

VII. THE PUBLIC INTEREST FAVORS GRANTING A STAY.

The public interest tips heavily in favor of a stay. Protecting public lands, compliance with the law, and in particular complying with laws that protect the environment and public participation are all in the public interest.

First, the public has a strong interest in protecting public lands. Wyoming Outdoor Coordinating Council v. Butz, 484 F.2d 1244, 1250 (10th Cir. 1973); Earth Island Inst. v. Forest Serv., 442 F.3d 1147, 1177 (9th Cir. 2006).

Second, the public has an interest in ensuring that federal agencies comply with laws designed to protect public lands and the environment. Davis v. Mineta, 302 F.3d at 1116; Colo.

¹⁵⁹ See GER/MER (Exh. 3) at 5 (predicting in May 2009 that the Elk Creek Mine had recoverable reserves equal to 6-8 years of mine life).

Wild, 523 F. Supp.2d at 1223. A preliminary injunction in this case would serve the public interest by protecting the Elk Creek area pending the outcome of this case.

Specifically, courts have noted that the public interest supports an injunction halting agency action pending full compliance with NEPA: “[T]his invokes a public interest of the highest order: the interest in having government officials act in accordance with law.” Public Service Company of Colorado v. Batt, 825 F. Supp. 1483, 1509 (D. Idaho 1993), quoting Seattle Audubon Soc’y v. Evans, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991). The public interest strongly favors a stay because, with NEPA, Congress mandated that environmental impacts and alternatives be considered before the agency takes action. Thus compliance with NEPA after an agency authorizes an action is severely disfavored and not in the public interest.¹⁶⁰

On the other side of the scale, a preliminary injunction will not harm the public. At most, such an injunction may put off coal mining at one location for a relatively short time period while this Board completes its deliberation on the merits. And while development of the nation’s mineral resources may be in the public interest, that interest must be weighed against the public interest in clean air and honest decisionmaking. Courts have recognized that our need for energy

¹⁶⁰ The law, and federal courts, require that agencies complete NEPA documentation before deciding to take a federal action. CEQ regulations require the. 40 C.F.R. § 1500.1 (“NEPA procedures must insure that environmental information is available to public officials before decisions are made and before actions are taken.” (emphasis added)). See also Robertson v. Methow Valley, 490 U.S. at 349 (“Simply by focusing the agency’s attention on the environmental consequences of a proposed project, NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after the resources have been committed or the die otherwise cast.” (emphasis added)); Friends of the River v. F.E.R.C., 720 F.2d 93 (D.C. Cir. 1983) (“And of particular importance, the EIS requirement inhibits post hoc rationalizations of environmental decisionmaking.”); Sierra Club v. Lujan, 716 F. Supp. 1289, 1293 (D.Ariz. 1989) (“While the agency has broad discretion in determining when to do an EA/EIS and while NEPA only prescribes the necessary process and does not mandate particular results, post hoc compliance with NEPA is unlawful.”).

does not trump environmental considerations. In a case involving natural gas (methane) development in neighboring Wyoming, a court held:

The Court is cognizant of the importance of mineral development to the economy of the State of Wyoming. Nevertheless, mineral resources should be developed responsibly, keeping in mind those other values that are so important to the people of Wyoming, such as preservation of Wyoming's unique natural heritage and lifestyle. The purpose of NEPA ... is to require agencies ... to take notice of these values as an integral part of the decisionmaking process.

Wyoming Outdoor Council v. U.S. Army Corps of Engineers, 351 F.Supp.2d 1232, 1260 (D. Wyo. 2005).

For all of these reasons, the public interest favors granting a stay in this case.

CONCLUSION AND PRAYER FOR RELIEF

For the above-stated reasons, Appellants WildEarth Guardians and Sierra Club respectfully request that the Board of Land Appeals grant the following relief:

- (1) Stay BLM's decision to offer the Elk Creek East coal lease-by-application pending a decision by the Interior Board of Land Appeals on the merits of DOW's appeal;
- (2) Rescind the Decision Record approving the LBA until such time as BLM complies fully with the National Environmental Policy Act, 42 U.S.C. § 4321 et seq. and implementing regulations, and the Administrative Procedure Act, 5 U.S.C. § 706;
- (3) Award Appellants their costs of litigation, including reasonable attorneys fees, under the Equal Access to Justice Act, 28 U.S.C. § 2412, et seq., and 43 C.F.R. § 4.601, et seq.; and
- (4) Provide Appellants any other relief the Board deems just and proper.

Respectfully submitted this 22nd of February, 2011.



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CERTIFICATE OF SERVICE

I certify that on February 22, 2011, I served this Notice of Appeal and Petition for Stay, together with four volumes of exhibits, by certified mail, return receipt requested, upon:

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