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

WILDEARTH GUARDIANS,)	IBLA No. 2016-
Appellant))))	Notice of Appeal, Twentymile Coal Lease Modification, COC-54608, EA #DOI-BLM-CO-2014-0044-EA Routt County, Colorado

STATEMENT OF REASONS

On June 9, 2016, WildEarth Guardians (hereafter "Guardians") gave Notice of Appeal of a of a decision made by Bureau of Land Management ("BLM") Colorado Deputy State Director for Energy, Lands and Minerals, Lonny Bagley, authorizing a coal lease modification adding 310 acres and 340,000 tons of coal to lease number COC-54608. The lease was applied for by Twentymile Coal, LLC, a subsidiary of Peabody Energy, and would expand the Foidel Creek mine in northwestern Colorado's Routt County. Coal from the Foidel Creek mine fuels the nearby Hayden coal-fired power plant. This decision is documented in a "Ratification" signed by Mr. Bagley on May 25, 2016. *See* Exhibit 1, Bagley, L., "Ratification of the Decision dated December 31, 2015 Approving FONSI and DR to Modify Federal Coal Lease COC54608" (May 25, 2016). This decision is based on an unauthorized Decision Record ("DR"), Finding of No Significant Impact ("FONSI"), and Environmental Assessment ("EA") (EA No. DOI-BLM-CO-20140-0044-EA) prepared by the BLM Little Snake Field Office in December 2015. Pursuant to 43 C.F.R. § 4.412, Guardians now files the following Statement of Reasons.

I. Introduction

Guardians challenges the Foidel Creek lease modification Ratification, unauthorized DR, FONSI, and EA on two grounds. First, that the BLM approved the lease modification contrary to Secretarial Order No. 3338, which was signed by the Secretary of the U.S. Department of the Interior on January 15, 2016 and prohibited the approval of new lease modifications exceeding 160 acres in size.

Second, the BLM failed to analyze and assess the climate change impacts that would result from approving the lease modification and extending the life of the coal mining operations, as well as the attendant reasonably foreseeable coal burning operations at the Hayden power plant and other coal-fired generating facilities. Here, the BLM rejected utilizing a credible and valid means of assessing the climate impacts that would result from extended greenhouse gas emissions, namely quantifying climate impacts in terms of actual costs. Overall, the BLM failed to demonstrate that the impacts of approving the Foidel Creek lease modification will not be significant under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, et seq.

Guardians respectfully requests the IBLA set aside BLM's decisions to authorize the lease modification and direct the BLM to comply with Secretarial Order No. 3338 and NEPA.

II. APPELLANT IS A PARTY WHO IS ADVERSELY AFFECTED

To maintain an appeal, an Appellant must (1) be a party to the case; and (2) be adversely affected by the decision being appealed. *See* 43 C.F.R. § 4.410(a). As an initial matter, Guardians satisfies both these requirements.

WildEarth Guardians is a registered non-profit corporation whose purpose is the conservation of natural resources. With more than 100,000 members, Guardians' mission is to

protect and restore the wildlife, wild places, wild rivers, and health of the American West.

Guardians is headquartered in Santa Fe, New Mexico, but has offices in Denver, Colorado,

Missoula, Montana, Portland, Oregon, Laramie, Wyoming, and Tucson, Arizona. Through its

Climate and Energy Program, Guardians works to safeguard the climate, clean air, and

communities of the American West by promoting a sensible transition away from reliance upon

fossil fuels.

To be a party to the case, a person or group must have actively participated in the decisionmaking process regarding the subject matter of the appeal. *See* 43 C.F.R. § 4.410(b). Here, Guardians submitted comments to the BLM on April 2, 2015 regarding the Foidel Creek lease modification during the public comment period provided by the BLM on the draft EA. *See* EA at 131-138. Thus, WildEarth Guardians satisfies the "party to a case" qualification.

To demonstrate that it will "be adversely affected by the decision being appealed," a party must demonstrate a legally cognizable "interest" and that the decision appealed has caused or is substantially likely to cause injury to that interest. *Glenn Grenke v. BLM*, 122 IBLA 123, 128 (1992); 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, 326 (1993); *Animal Protection Institute of America*, 117 IBLA 208, 210 (1990). 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 related to coal leasing. 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." *Coalition of Concerned National Park Retirees*, et al., 165 IBLA 79, 84 (2005).

Attached as Exhibit 2 is the Declaration of Jeremy Nichols. It shows he is a member and employee of Guardians. *See* Exhibit 2 at ¶ 3. His Declaration shows he personally uses and enjoys the area that will be directly and indirectly affected by the Foidel Creek mine and the nearby Hayden coal-fired power plant for recreational enjoyment purposes, and that he intends to return to the area for enjoyment. *See id.* at ¶ 6-8. He regularly observes the coal mining operations at the Foidel Creek mine and the coal burning operations at the Hayden power plant and his enjoyment of public lands in the area are diminished by their sights and sounds as they detract from the natural beauty of the area. His declaration establishes that the BLM's decision to approve the Foidel Creek coal lease modification will adversely affect his recreational interests, which are legally cognizable, in these areas through increased air pollution and other environmental impacts. *See id.* at ¶ 9-13. Further, his declaration establishes that a favorable ruling in this appeal would remedy his diminished enjoyment of public lands in the area that will result from the lease modification. *See id.* at ¶ 14-15. Jeremy Nichols' Declaration establishes that the BLM's decision adversely affects WildEarth Guardians.

III. STATEMENT OF REASONS

A. Approval of the Foidel Creek Lease Modification Violates Secretarial Order 3338

The BLM approved the Foidel Creek lease modification on May 25, 2016 in spite of an express prohibition on new coal leasing, including approval of new lease modifications, imposed under Secretarial Order 3338. *See* Secretary of the Interior, "Discretionary Programmatic

Environmental Impact Statement to Modernize the Federal Coal Program," Secretarial Order 3338 (Jan. 15, 2016), available online at

http://www.blm.gov/style/medialib/blm/wo/Communications_Directorate/public_affairs/news_re_lease_attachments.Par.4909.File.dat/FINAL%20SO%203338%20Coal.pdf (last accessed July 11, 2016). Signed on January 15, 2016, the Order came after extensive deliberation on behalf of the U.S. Department of the Interior and not only imposed a pause on new coal leasing, but directed the BLM to prepare a programmatic EIS to address a "broad range of issues raised over the course of the past year (and beyond) and the lack of any recent analysis of the Federal coal program as a whole[.]" Secretarial Order 3338 § 4.

In her Order, the Secretary expressly declared that, "For pending [coal lease] applications, no lease sales will be held, leases issued, *or modifications approved* for thermal (steam) coal[.]" Secretarial Order 3338 § 5(a)(ii) (emphasis added). Although this prohibition was not absolute and subject to several "Exclusions," the only exclusion specific to lease modifications was that they "not exceed 160 acres or the number of acres in the original lease, whichever is less." *Id.* § 6(b).

Here, the Foidel Creek lease modification was approved on May 25, 2016, more than four months after the issuance of the Secretary's Order. Given that the lease modification application was pending, its approval was subject to the pause on leasing set forth under the Order. Further, given that the lease modification is 310 acres in size, it was not subject to any of the exclusions set forth under the Order. Mr. Bagley's approval therefore contravenes the Secretary's directive.

While it is true that the Secretarial Order provides the BLM may issue a coal lease modification if a "Decision Record has been issued by the BLM" (see Secretarial Order 3338 §

6(e)), an authorized DR has not been issued in this case. Indeed, in a motion filed on May 25, 2016 in case number IBLA 2016-0080, the agency acknowledged that the BLM Little Snake Field Office Manager, an employee with no delegated authority to approve the lease modification inappropriately signed a DR on December 31, 2015. *See* Exhibit 3, "BLM's Motion for Leave to Submit Ratification," IBLA No. 2016-0080 (May 25, 2016). According to the IBLA's prior holdings, this DR was therefore "not properly considered a decision of the BLM." *WildEarth Guardians*, 187 IBLA 353. Thus, until the date that the DR was "ratified" by Mr. Bagley, it had "no legal effect." *Id.* Once the DR was "confirmed" by Mr. Bagley, who had delegated authority, approval of the lease modification actually occurred. Given that this approval occurred on May 25, 2016, it was not allowed pursuant to Secretarial Order 3338.

Given this, the IBLA must set aside the BLM's approval of the Foidel Creek lease modification and direct the agency to comply with Secretarial Order 3338.

B. Failure to Comply with NEPA—Background

Guardians further challenges the BLM's approval of the Foidel Creek coal lease modification for failing to comply with NEPA. NEPA is our "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). The law requires federal agencies to fully consider the environmental implications of their actions, taking into account "high quality" information, "accurate scientific analysis," "expert agency comments," and "public scrutiny," prior to making decisions. *Id.* at 1500.1(b). This consideration is meant to "foster excellent

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¹ In a response filed on May 31, 2016, WildEarth Guardians opposed BLM's motion, arguing that the motion indicated the IBLA lacked jurisdiction to hear the case of 2016-0080 based on the absence of an actual BLM decision. Guardians argued the proper course of action would be for the IBLA to dismiss 2016-0080 and entertain any appeals filed over the May 25, 2016 "Ratification" as the actual decision with "legal effect." As of the date of this Statement of Reasons, the BLM's motion has yet to granted or denied.

action," meaning decisions that are well informed and that "protect, restore, and enhance the environment." *Id.* at 1500.1(c).

To fulfill the goals of NEPA, federal agencies are required to analyze the "effects," or impacts, of their actions to the human environment prior to undertaking their actions. 40 C.F.R. § 1502.16(d). To this end, the agency must analyze the "direct," "indirect," and "cumulative" effects of its actions, and assess their significance. 40 C.F.R. §§ 1502.16(a), (b), and (d). Direct effects include all impacts that are "caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a). Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *Id.* at § 1508.8(b). Cumulative effects include the impacts of all past, present, and reasonably foreseeable actions, regardless of what entity or entities undertake the actions. 40 C.F.R. § 1508.7. The scope of any impacts analysis and assessment must include both "[c]umulative" actions, as well as "[s]imilar actions," which are defined as actions with "similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography." 40 C.F.R. § 1508.25(a)(2) and (3).

The significance of impacts is based on the "context" and "intensity" of the impacts. 40 C.F.R. § 1508.27. While context is based on consideration of impacts to society as a whole, the affected region, and the locality, consideration of intensity must be based on, among other things, "[t]he degree to which the proposed action "affects public health or safety," the "[u]nique characteristics of the geographic area," the degree to which impacts are likely to be "highly controversial" or "highly uncertain," and whether the action may be significant on a cumulative basis. 40 C.F.R. § 1508.27(b).

An agency may prepare an environmental assessment ("EA") to analyze the effects of its actions and assess the significance of impacts. *See* 40 C.F.R. § 1508.9; *see also* 43 C.F.R. § 46.300. Where effects are significant, an Environmental Impact Statement ("EIS") must be prepared. *See* 40 C.F.R. § 1502.3. Where significant impacts are not significant, an agency may issue a FONSI and implement its action. *See* 40 C.F.R. § 1508.13; *see also* 43 C.F.R. § 46.325(2).

Here, the BLM failed to assess the significance of the reasonably foreseeable climate change impacts that would result from greenhouse gas emissions released as a result of the mining and inevitable combustion of coal. In particular, the BLM failed to assess the climate change impacts using a readily available, credible, and widely utilized (even by the BLM) method of calculating the costs associated with the carbon dioxide emissions that would be released as a result of the decision. Accordingly, the BLM has no basis to conclude that the impacts of the coal lease modification would not be significant according to NEPA and therefore no basis for issuing a FONSI and foregoing preparation of an EIS.

C. Climate Change Impacts are a Significant Issue

To begin with, it is critical to point out that even the BLM recognizes that climate change impacts caused by the release of greenhouse gas emissions are a significant issue. *See* EA at 29-30. The BLM explained:

There is broad scientific consensus that humans are changing the chemical composition of the Earth's atmosphere. Activities such as fossil fuel combustion, deforestation, and other changes in land use are resulting in the accumulation of trace greenhouse gases (GHGs) such as carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and several industrial gases in the Earth's atmosphere. An increase in GHG emissions is said to result in an increase in the earth's average surface temperature, primarily by trapping and thus decreasing the amount of heat energy radiated by the Earth back into space. The phenomenon is commonly referred to as global warming. Global warming is expected in turn, to affect weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, which is collectively referred to as climate change. The

Intergovernmental Panel on Climate Change (IPCC) has predicted that the average global temperature rise between 1990 and 2100 could be as great as 5.8°C (10.4°F), which could have massive deleterious impacts on the natural and human environments.

EA at 29. The BLM also detailed a number of major environmental impacts that are occurring as a result of climate change, including in the State of Colorado. The agency explains that, within Colorado, "[t]he region will experience warmer temperatures with less snowfall," increased average temperatures, earlier snowmelt, more frequent and severe droughts, less soil moisture, drier conditions that will diminish forests, and stressed ecosystems. EA at 40.

The BLM also acknowledges that carbon dioxide is a primary greenhouse gas emitted by human activities that is contributing to climate change and that the main activity producing carbon dioxide is the combustion of fossil fuels, including the combustion of coal. EA at 29. To this end, the BLM actually took steps in the EA to disclose the likely greenhouse gas emissions that would result from approval of the Foidel Creek lease modification. *See* EA at 33-34 and 36.

Thus, it is clear that climate change resulting from greenhouse gas emissions caused by human activities is a significant issue in relation to the Foidel Creek coal lease modification. This is underscored by the Secretary of the Interior's January 15, 2016 Order, which imposed a halt to new coal leasing, including new lease modifications, citing, among other concerns, the climate change impacts of coal leasing decisions. *See* Secretarial Order No. 3338 § 2(b)(ii). In her Order, the Secretary further directed the BLM to prepare a programmatic EIS addressing, among other things, "how best to assess the climate impacts of continued Federal coal production and combustion and how to address those impacts in the management of the program to meet both the Nation's energy needs and its climate goals, as well as how best to protect the public lands from climate change impacts." Secretarial Order No. 3338 § 4(c).

D. The BLM Failed to Assess Climate Impacts Under NEPA and Failed to Justify a FONSI

While the BLM acknowledged human-induced climate change as a significant issue and actually quantified the emissions that would result from approval of the Foidel Creek lease modification, the agency entirely failed to assess the significance of these emissions in the context of their climate impacts. This is a significant shortcoming and indicates there is no support, implicit or otherwise, that the impacts of the greenhouse gas emissions will not be significant and therefore justify a FONSI.

Here, acknowledging the importance of addressing the climate impacts of its mining approval, the BLM rightfully disclosed the lease modification would result in 29,285.55 tons of direct carbon dioxide emissions and 1,020,000 tons of indirect emissions (other greenhouse gas emissions are also quantified). The BLM, however, fell short of providing any explanation as to whether this level of emissions is significant pursuant to NEPA. Instead, the agency asserts it cannot assess the significance of these emissions, claiming it is "not possible" to estimate the climate change impacts that would result from the predicted emissions. EA at 39. In other words, according to the BLM, the best the agency can do is calculate emissions, but not assess at all the degree to which these emissions may or may not be significant under NEPA.

While procedurally, this indicates the climate change impacts are significant given that, as the BLM implicitly acknowledges, the impacts appear to be "highly uncertain" and therefore significant pursuant to 40 C.F.R. § 1508.27(b)(5), substantively, the agency is simply incorrect. There is a method to assess impacts.

The social cost of carbon protocol for assessing climate impacts is a method for "estimat[ing] the economic damages associated with a small increase in carbon dioxide (CO2) emissions, conventionally one metric ton, in a given year [and] represents the value of damages

avoided for a small emission reduction (i.e. the benefit of a CO2 reduction)." Exhibit 4, U.S. Environmental Protection Agency ("EPA"), "Fact Sheet: Social Cost of Carbon" (Nov. 2013) at 1, available online at http://www.epa.gov/climatechange/Downloads/EPAactivities/scc-fact-sheet.pdf (last accessed July 11, 2016). The protocol was developed by a working group consisting of several federal agencies, including the U.S. Department of Agriculture, U.S. Environmental Protection Agency ("EPA"), CEQ, and others, with the primary aim of implementing Executive Order 12866, which requires that the costs of proposed regulations be taken into account.

In 2009, an Interagency Working Group was formed to develop the protocol and issued final estimates of carbon costs in 2010. These estimates were revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies, including the Department of Agriculture, and again revised in 2015. *See* Exhibit 5, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory

Impact Analysis Under Executive Order 12866" (July 2015), available online at https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf (last accessed July 11, 2016).

Depending on the discount rate and the year during which the carbon emissions are produced, the Interagency Working Group estimates the cost of carbon emissions, and therefore the benefits of reducing carbon emissions, to range from \$11 to \$212 per metric ton of carbon dioxide. *See* Chart Below. In its most recent update to the Social Cost of Carbon Technical Support Document, the White House's central estimate was reported to be \$36 per metric ton. *See* Exhibit 6, White House, "Estimating the Benefits from Carbon Dioxide Emissions

Reductions," website available at https://www.whitehouse.gov/blog/2015/07/02/estimating-benefits-carbon-dioxide-emissions-reductions (last accessed July 11, 2016). In July 2014, the U.S. Government Accountability Office ("GAO") confirmed that the Interagency Working Group's estimates were based on sound procedures and methodology. *See* Exhibit 7, GAO, "Regulatory Impact Analysis, Development of Social Cost of Carbon Estimates," GAO-14-663 (July 2014), available online at http://www.gao.gov/assets/670/665016.pdf (last accessed July 11, 2016).

Revised Social Cost of CO₂, 2010 - 2050 (in 2007 dollars per metric ton of CO₂)

Discount Rate Year	5.0% Avg	3.0% Avg	2.5% Avg	3.0% 95th
2010	10	31	50	86
2015	11	36	56	105
2020	12	42	62	123
2025	14	46	68	138
2030	16	50	73	152
2035	18	55	78	168
2040	21	60	84	183
2045	23	64	89	197
2050	26	69	95	212

Most recent social cost of carbon estimates presented by Interagency Working Group on Social Cost of Carbon. The 95th percentile value is meant to represent "higher-than-expected" impacts from climate change.

Although often utilized in the context of agency rulemakings, the protocol has been recommended for use and has been used in project-level decisions. For instance, the EPA recommended that an EIS prepared by the U.S. Department of State for the proposed Keystone XL oil pipeline include "an estimate of the 'social cost of carbon' associated with potential increases of GHG emissions." Exhibit 8, EPA, Comments on Supplemental Draft EIS for the Keystone XL Oil Pipeline (June 6, 2011).

More importantly, the BLM has also utilized the social cost of carbon protocol in the context of oil and gas leasing. In recent Environmental Assessments for oil and gas leasing in Montana, the agency estimated "the annual SCC [social cost of carbon] associated with potential

development on lease sale parcels." Exhibit 9, BLM, "Environmental Assessment for October 21, 2014 Oil and Gas lease Sale," DOI-BLM-MT-0010-2014-0011-EA (May 19, 2014) at 76, available online at

http://www.blm.gov/style/medialib/blm/mt/blm_programs/energy/oil_and_gas/leasing/lease_sale_s/2014/oct__21_2014/july23posting.Par.25990.File.dat/MCFO%20EA%20October%202014%2_0Sale_Post%20with%20Sale%20(1).pdf (last accessed July 11, 2016). In conducting its analysis, the BLM used a "3 percent average discount rate and year 2020 values," presuming social costs of carbon to be \$46 per metric ton. *Id.* Based on its estimate of greenhouse gas emissions, the agency estimated total carbon costs to be "\$38,499 (in 2011 dollars)." *Id.* In Idaho, the BLM also utilized the social cost of carbon protocol to analyze and assess the costs of oil and gas leasing.

Using a 3% average discount rate and year 2020 values, the agency estimated the cost of carbon to be \$51 per ton of annual CO₂e increase. *See* Exhibit 10, BLM, "Little Willow Creek Protective Oil and Gas Leasing," EA No. DOI-BLM-ID-B010-2014-0036-EA (February 10, 2015) at 81, available online at https://www.blm.gov/epl-front-

office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-

<u>EA_UPDATED_02272015.pdf</u> (last accessed July 11, 2016). Based on this estimate, the agency estimated that the total carbon cost of developing 25 wells on five lease parcels to be \$3,689,442 annually. *Id.* at 83.

To be certain, the social cost of carbon protocol presents a conservative estimate of economic damages associated with the environmental impacts climate change. As the EPA has noted, the protocol "does not currently include all important [climate change] damages." Exhibit 4. As explained:

The models used to develop [social cost of carbon] estimates do not currently include all of the important physical, ecological, and economic impacts of climate change

recognized in the climate change literature because of a lack of precise information on the nature of damages and because the science incorporated into these models naturally lags behind the most recent research.

Id. In fact, more recent studies have reported significantly higher carbon costs. For instance, a report published this month found that current estimates for the social cost of carbon should be increased six times for a mid-range value of \$220 per ton. See Exhibit 11, Moore, C.F. and B.D. Delvane, "Temperature impacts on economic growth warrant stringent mitigation policy," Nature Climate Change (January 12, 2015) at 2. In spite of uncertainty and likely underestimation of carbon costs, nevertheless, "the SCC is a useful measure to assess the benefits of CO2 reductions," and thus a useful measure to assess the costs of CO2 increases. Exhibit 4.

That the economic impacts of climate change, as reflected by an assessment of social cost of carbon, should be a significant consideration in agency decisionmaking and should be used to assess the significance of climate impacts, is emphasized by a recent White House report, which warned that delaying carbon reductions would yield significant economic costs. *See* Exhibit 12, Executive Office of the President of the United States, "The Cost of Delaying Action to Stem Climate Change" (July 2014), available online at

https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_clima te_change.pdf (last accessed July 11, 2016). As the report states:

[D]elaying action to limit the effects of climate change is costly. Because CO_2 accumulates in the atmosphere, delaying action increases CO_2 concentrations. Thus, if a policy delay leads to higher ultimate CO_2 concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher CO_2 concentrations. Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting CO_2 concentration to given level, then that delay means that the policy, when implemented, must be more stringent and thus more costly in subsequent years. In either case, delay is costly.

Exhibit 12 at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA, specifically supported in federal case law. As explained, NEPA requires agencies to analyze the consequences of proposed agency actions and consider include direct, indirect, and cumulative consequences.

To this end, courts have ordered agencies to assess the social cost of carbon pollution, even before a federal protocol for such analysis was adopted. In 2008, the U.S. Court of Appeals for the Ninth Circuit ordered the National Highway Traffic Safety Administration to include a monetized benefit for carbon emissions reductions in an Environmental Assessment prepared under NEPA. Center for Biological Diversity v. National Highway Traffic Safety Administration, 538 F.3d 1172, 1203 (9th Cir. 2008). The Highway Traffic Safety Administration had proposed a rule setting corporate average fuel economy standards for light trucks. A number of states and public interest groups challenged the rule for, among other things, failing to monetize the benefits that would accrue from a decision that led to lower carbon dioxide emissions. The Administration had monetized the employment and sales impacts of the proposed action. *Id.* at 1199. The agency argued, however, that valuing the costs of carbon emissions was too uncertain. Id. at 1200. The court found this argument to be arbitrary and capricious. Id. The court noted that while estimates of the value of carbon emissions reductions occupied a wide range of values, the correct value was certainly not zero. *Id.* It further noted that other benefits, while also uncertain, were monetized by the agency. Id. at 1202.

More recently, a federal court has done likewise for a federally approved coal lease. That court began its analysis by recognizing that a monetary cost-benefit analysis is not universally required by NEPA. *See High Country Conservation Advocates v. U.S. Forest Service*, 52 F.Supp.3d 1174 (D. Colo. 2014), citing 40 C.F.R. § 1502.23. However, when an agency prepares

a cost-benefit analysis, "it cannot be misleading." *Id.* at 1182 (citations omitted). In that case, the NEPA analysis included a quantification of benefits of the project. However, the quantification of the social cost of carbon, although included in earlier analyses, was omitted in the final NEPA analysis. *Id.* at 1196. The agencies then relied on the stated benefits of the project to justify project approval. This, the court explained, was arbitrary and capricious. *Id.* Such approval was based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country. *Id.*

A recent op-ed in the New York Times from Michael Greenstone, the former chief economist for the President's Council of Economic Advisers, confirms that it is appropriate and acceptable to calculate the social cost of carbon when reviewing whether to approve fossil fuel extraction. *See* Exhibit 13, Greenstone, M., "There's a Formula for Deciding When to Extract Fossil Fuels," *New York Times* (Dec. 1, 2015), available online at http://www.nytimes.com/2015/12/02/upshot/theres-a-formula-for-deciding-when-to-extract-fossil-fuels.html?_r=0 (last accessed July 11, 2016).

In light of all this, it appears more than reasonable to have expected the BLM to take into account carbon costs as part of its NEPA analyses to assess the potential significance of any climate impacts. The agency did not. Instead, the BLM rejected the notion that a social cost of carbon analysis was appropriate, implicitly (and erroneously) concluding that there would be no cost associated with the lease modification.

In response to Guardians' comments, the BLM asserted that, while social cost of carbon is a valid tool, that an assessment of carbon costs was seemingly inappropriate unless it was paired with a comprehensive cost-benefit analysis. The BLM asserts that, independently calculating social cost of carbon would be "misleading." EA at 135.

This response is confusing, to say the least, particularly given that the BLM did disclose in great detail other economic impacts associated with the lease modification. For instance, the agency notes that approval of the lease modification would extend payrolls, payments to local governments, taxes, and royalty payments. *See* EA at 64. The EA provides specific dollar disclosures related to wages, rentals, royalties, and other economic benefits *See id*. The EA specifically details the money that Peabody Energy has paid to local, state, and local governments, charitable organizations, and the other economic development that it has spurred. *See* EA at 65. The EA also discloses that, if the No Action Alternative, no economic benefits related to the lease modification would be realized. *See* EA at 66. Here, it appears that the BLM believes it is appropriate to disclose the economic benefits associated with the lease modification, but somehow not appropriate to disclose costs—particularly climate costs—using readily available, scientifically endorsed, and widely used methods.

Regardless, the BLM's response is belied by the fact that social cost of carbon, while certainly providing information regarding the costs of carbon emissions, is not limited to being utilized solely as a factor in a "thorough cost benefit analysis." Rather, using the social cost of carbon protocol provides a monetary context for the potential significance of climate impacts of an action. In this sense, this method is no different than the BLM quantifying the air quality impacts of the Foidel Creek lease modification. The BLM does not need to (and does not) undertake a deeply probing examination of the costs and benefits of air pollution, it simply discloses air quality impacts as part of its duty to disclose effects to he human environment under NEPA. Disclosing carbon costs, while involving dollar signs, sheds light on the negative impacts of climate change resulting from greenhouse gas emissions. It is unclear how the BLM has determined that such disclosure is "misleading."

Although the BLM may assert that the projected carbon emissions are too small to matter (as the agency claims in the EA, the emissions represent a fraction of global greenhouse gas emissions), there is no support for this claim as the BLM has established no specific threshold of significance for greenhouse gas emission impacts under NEPA. Further, this claim is undermined by the fact that the BLM did not accurately analyze all reasonably foreseeable greenhouse gas emissions associated with the Foidel Creek lease modification. Notably, the agency failed to actually disclose greenhouse gas emissions associated with all reasonably foreseeable cumulative actions, as well as all similar actions, consistent with 40 C.F.R. § 1508.25(b)(2) and (3).

Here, although the BLM appears to acknowledge that issuance of the lease modification will provide access to the Wolf Creek seam, which contains "State and fee coal," and extend the live of the Foidel Creek mien by 10 years or more (EA at 19), the EA makes no effort to disclose how much state or privately owned coal may be accessed and what emissions are likely to result from the mining and burning of this coal. It is also disconcerting that, even though the BLM apparently believes that the proper scope of its climate analysis should be global (EA at 19 (comparing greenhouse gas emissions to "global figures")), the EA completely overlooks impacts from similar actions occurring with in this area. Notably, the EA fails to disclose the impacts of all BLM coal leasing occurring within the United States, including in Colorado and other western states. Although nationally, a number of coal leases are under consideration by the BLM, in western Colorado the BLM is considering approval of the Book Cliffs coal lease, which contains 78 million tons of coal and would require construction of a new mine. *See* Exhibit 14, BLM, "Proposed Book Cliffs Coal Lease by Application Project Description," website available at

http://www.blm.gov/co/st/en/BLM Programs/land use planning/rmp/Book Cliffs LBA.print.ht

ml (last accessed July 11, 2016). The BLM is also considering new leases in the Powder River Basin of northeastern Wyoming, including the North Hilight, Maysdorf II South, and Hay Creek II leases, which have been approved through Records of Decision, but not yet sold. *See* Exhibit 15, BLM, Information on North Hilight, Maysdorf II South, and Hay Creek II Lease by Applications, available online at

http://www.blm.gov/wy/st/en/programs/energy/Coal_Resources/PRB_Coal/lba_title.html (last accessed July 11, 2016). Together, these leases, which are similar in timing, geography, agency control (and clearly are occurring within the scope of the global climate analysis area) contain more than 700 million tons of coal, which when burned together with coal from the Foidel Creek lease modification, stands to unleash far more carbon pollution that the lease modification alone. The greenhouse gas emissions and climate impacts of these and other similar BLM coal leasing action should have been addressed together with the impacts of the lease modification in the EA. The failure of BLM to analyze and assess the impact of these similar actions, consistent with NEPA, renders the agency's FONSI wholly unsupported.

Notwithstanding the BLM's failure to adequately analyze and assess all greenhouse gas emissions associated with the lease modification, the fact that the BLM has, in the context of other environmental analyses, clearly acknowledged that social cost of carbon analyses are appropriate, useful, and possible, the refusal of the agency to similarly undertake such analyses in the context of the Foidel Creek lease modification means the EA is unsupported under NEPA and cannot stand to support a FONSI and the decision by the Deputy State Director.

IV. Conclusion

For the aforementioned reasons, WildEarth Guardians requests that the IBLA set aside and remand the BLM's decision approving the modification of coal lease number COC-54608. The BLM failed to comply with Secretarial Order 3338 and failed to analyze the potentially significant climate impacts of the proposed lease, in turn rendering the EA and FONSI legally unsupported under NEPA.

Respectfully submitted this 11th day of July 2016

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CERTIFICATE OF SERVICE

I certify that on July 11, 2016, I served this Statement of Reasons via U.S. Post, Priority

Mail, upon:

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