



## COLUMBIA LAW SCHOOL

SABIN CENTER FOR CLIMATE CHANGE LAW

October 23, 2017

Jacqueline Buchanan, Reviewing Officer  
U.S.D.A. Forest Service  
Rocky Mountain Region  
1617 Cole Blvd. Building 17  
Golden, CO 80401

*Sent via electronic mail to:* [R02admin-review@fs.fed.us](mailto:R02admin-review@fs.fed.us)

### **Re: Federal Coal Lease Modifications COC-1362 and COC-67232**

Dear Ms. Buchanan:

The Sabin Center for Climate Change Law at Columbia Law School submits the following objection to the U.S. Forest Service's decision to implement the proposed action alternative in the supplemental final environmental impact statement (SFEIS) for *Federal Coal Lease Modifications COC-1362 and COC-67232* by adding 800 and 920 additional acres (respectively) to the existing federal coal leases. This decision affects Forest Service lands within the Grand Mesa, Uncompahgre and Gunnison National Forests, Paonia Ranger District, in Gunnison County, Colorado.

#### **I. Interests and participation of objecting party**

The Sabin Center for Climate Change Law is an academic center located within Columbia Law School that seeks to advance knowledge and utilization of legal techniques to address climate change. One of our key goals is to ensure that government decision-makers adequately account for the effects of greenhouse gas (GHG) emissions and climate change when conducting environmental reviews and making decisions based on those reviews, pursuant to their obligations under the National Environmental Policy Act (NEPA). To this end, we frequently submit comments to federal agencies on the scope of the emissions and climate change impacts that should be considered in the environmental review for a particular project.

On June 28, 2017, we submitted comments on the supplemental draft environmental impact statement (SDEIS) for Federal Coal Lease Modifications COC-1362 and COC-67232. We

highlighted several deficiencies in the analysis prepared by the U.S. Forest Service (USFS) quantifying and evaluating the significance of the GHG emissions that would be generated if the proposed action were approved. In particular, we expressed concern that: (i) USFS erroneously concluded there was “no credible reason to deny the modification on the basis of climate change”, and (ii) USFS arbitrarily decided to monetize the benefits of the lease modifications while ignoring the costs of the GHG emissions that would be generated as a result of those modifications. As discussed below, we believe these deficiencies are still present in the SFEIS.

**II. Issues to which the objection applies and suggested remedies**

We object to USFS’s decision because we believe that the environmental analysis underpinning the decision does not satisfy the requirements of NEPA. The NEPA deficiencies include the two issues noted above (which we raised in our comment letter on the SDEIS) as well as one new deficiency which has arisen in the SFEIS – specifically, the fact that USFS’s estimates of combustion emissions have been dramatically revised without any opportunity for public comment on the revised analysis.

***A. USFS Has Dramatically Revised Its Emissions Estimates in the SFEIS Without Any Explanation of the Change or Opportunity for the Public to Comment on Its Analysis.***

In the SDEIS and the SFEIS, USFS recognizes that the lease modifications outlined in the selected alternative would permit the production of approximately 17.6 million tons of additional coal (as compared with the no action alternative). USFS also recognizes that the GHG emissions from the combustion of this coal should be treated as indirect effects in the NEPA analysis. However, USFS’s estimates of those indirect emissions have been dramatically revised in the SFEIS. The following table illustrates the differences between the estimates included in the SDEIS and the SFEIS.

**Table: Different Estimates of Combustion Emissions in the SDEIS and SFEIS for Federal Coal Lease Modifications COC-1262 and COC-67232, in Million Metric Tons (MMT)**

	Coal Produced (MMT)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>No Action</b>					
SDEIS	53.5	137.11	16.16	2.36	1,244.04
SFEIS	53.5	137.11	0.016	0.002	138.22
<b>Alt. 3 (selected)</b>					
SDEIS	71.1	182.22	21.47	3.13	1,653.29
SFEIS	71.1	182.22	0.021	0.003	183.69

	Coal Produced (MMT)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>Alt. 4</b>					
SDEIS	70.3	180.17	21.23	3.09	1,634.39
SFEIS	70.3	180.17	0.021	0.003	181.62

These changes are not explained in the sections of the FDEIS that deal with: (i) document changes between the SDEIS and the FDEIS, or (ii) the analysis of GHG emissions and climate change. The only explanation of the changes is located in Appendix K, which reviews the responses to comments received in the SDEIS. There, USFS acknowledges that there was a unit conversion error in the CH<sub>4</sub> and N<sub>2</sub>O calculations and states that it has corrected the error.<sup>1</sup> USFS does not, however, provide a clear quantitative explanation of how it corrected its previous errors and reached the new emissions estimate. The lack of transparency in the analysis is problematic.

Moreover, USFS did not give the public any opportunity to review and comment on the new analysis. CEQ regulations require federal agencies to circulate a revised draft of an EIS (or a portion of an EIS) for public comment where the analysis is “so inadequate as to preclude meaningful analysis” or where there is “significant new...information relevant to environmental concerns and bearing on the proposed action or its impacts.”<sup>2</sup> Certainly, the dramatic revisions to the emissions estimates are precisely the sort of “significant new information” that would warrant an additional opportunity for public review.

**Suggested remedy:** Before adopting a final decision on this matter, USFS should publish a draft supplemental analysis with the revised emissions estimates and re-open the public comment period. The revised analysis should contain a clear quantitative explanation of how USFS estimated emissions (e.g., USFS should note the calculations and conversion factors that it used).

***B. USFS Erroneously Dismissed the Significance of the Direct and Indirect GHG as a Result of Lease Modifications COC-1362 and COC-67232***

In the SDEIS, USFS projected that the 17.6 million tons of additional coal produced under the proposed (now selected) alternative would generate approximately 410 MMT of CO<sub>2</sub>e when combusted. As we noted in our comments, this would be approximately 6.2% of the total CO<sub>2</sub>e emissions generated in the United States in 2015 (and thus a significant amount). Nonetheless, USFS concluded that “there is no credible reason to deny the modification on the basis of climate change” because “[a]bsent policy, or a demand shift away from coal, there are still far too many

---

<sup>1</sup> SFEIS at 981.

<sup>2</sup> 40 C.F.R. s 1502.9.

suppliers that could substitute their coal for West Elk’s in the market place.”<sup>3</sup> In our comment letter, we noted that this conclusion was unsupported by the analysis in the EIS and urged USFS to drop this conclusory statement.

As noted above, USFS has substantially revised its estimates of combustion emissions. The updated estimates are still quite large. Indeed, in the SFEIS, USFS acknowledges that annual CO<sub>2</sub> emissions from combustion of the maximum projected West Elk production would be approximately 0.22% of U.S. total emissions (relative to 2014) and overall CO<sub>2</sub>e emissions would be “roughly an order of magnitude higher.”<sup>4</sup> USFS also acknowledges that “the cumulative difference between the no action and other alternatives represents approximately 2.4% of what the U.S. fleet combusts annually.”<sup>5</sup> However, USFS then reaches the seemingly contradictory conclusions that:

“It is not currently foreseeable to determine if the no action alternative would result in cumulative (global) GHG reductions as the result of not making the coal available to the existing fleet. All that can be gleaned from this analysis is that relative to the alternatives themselves, the no action produces the least amount of incremental GHG increases. This does not however translate directly into climate change impact reductions due to the complexities involved with estimating the coal supply market responses to current demand, current fuel substitution transitions to non-coal fuels (beyond the scope of this analysis), and how other governments and sectors of the global economy implement or fail to implement GHG emissions reduction strategies.”<sup>6</sup>

There are two fundamental problems with USFS’s analysis and conclusions.

The first problem is that the analysis is incoherent – on the one hand, USFS says that the no action alternative will produce the least amount of incremental GHG increases (and even quantifies the potential differences in GHG increases under the no action alternative and the selected alternative). On the other hand, USFS says that it cannot predict whether selecting the no action alternative would result in cumulative GHG reductions. This makes no sense as any decrease in incremental emissions would also result in a corresponding decrease in cumulative emissions.

Putting aside this confusion, it appears that USFS has reached a conclusion similar to that which it reached in the SDEIS – that there is no basis for denying the modification on the basis of combustion emissions because there are other sources of coal that could be substituted for the West Elk coal if USFS does not approve the lease modifications. This brings us to the second

---

<sup>3</sup> SDEIS at 129.

<sup>4</sup> SFEIS at 128.

<sup>5</sup> Id.

<sup>6</sup> SFEIS at 128.

fundamental problem with USFS’s analysis, which is that USFS has deployed a variation of an argument that has been rejected by federal courts – specifically, the argument that federal actions which authorize coal production have no real effect on coal consumption because there are third party sources of coal that would act as a “perfect substitute” for the federally leased coal if the agency does not grant the authorization.

In *High Country Conservation Advocates v. USFS*, the court that initially reviewed and remanded this EIS made clear that such an assumption was arbitrary and capricious. Specifically, regarding the Colorado Roadless Rule EIS, the court noted that this assumption was illogical because “[t]he production of coal in the North Fork exemption will increase the supply of cheap, low-sulfur coal” and this increase in supply “will impact the demand for coal relative to other fuel sources, and coal that would otherwise have been left in the ground will be burned.”<sup>7</sup>

The 10<sup>th</sup> Circuit Court of Appeals recently issued a similar decision in *WildEarth Guardians v. BLM*, where it found that “BLM’s assumption of ‘replacement’ lack[ed] any support in the administrative record” because:

“BLM did not point to any information (other than its own unsupported statements) indicating that the national coal deficit... incurred under the no action alternative could be easily filled from elsewhere, or at a comparable price. It did not refer to the nation’s stores of coal or the rates at which those stores may be extracted. Nor did the BLM analyze the specific difference in price between [Powder River Basin] coal and other sources; such a price difference would affect substitutability.”<sup>8</sup>

Moreover, the court noted that: (i) the perfect substitution argument is “irrational (i.e., contrary to basic supply and demand principles)”<sup>9</sup> and (ii) BLM had cited an EIA Energy Outlook report in its analysis which contained information contradicting BLM’s assumption – specifically, sections of the EIA report describing how an increase in coal prices would affect national demand for coal because it would compete less effectively against other sources of energy.<sup>10</sup> (Notably, USFS also cited the EIA Energy Outlook in its SFEIS – specifically, it used the coal pricing information to project economic impacts.) The 10<sup>th</sup> Circuit Court of Appeals ultimately held that the perfect substitution argument was more than a “mere flyspeck” in BLM’s NEPA analysis and remanded to the agency for further analysis.

We recognize that USFS has taken a slightly different tact in the SFEIS for Coal Lease Modifications COC-1362 and COC-67232: rather than arguing that additional coal production will have no effect on coal consumption and corresponding emissions, USFS asserts that it is

---

<sup>7</sup> *High Country Conservation Advocates v. U.S. Forest Service*, 52 F.Supp. 3d 1174, 1198 (D. Colo. 2014).

<sup>8</sup> *WildEarth Guardians v. U.S. Bureau of Land Management*, No. 15-8109 (10<sup>th</sup> Cir. 2017) at \*20.

<sup>9</sup> *Id.* At \*24.

<sup>10</sup> *Id.* At \*21-\*22.

impossible to determine whether there will be an increase in combustion emissions due to uncertainties about substitution. But the effect of USFS's approach is the same as the effect of the statements made by the agencies in the cases cited above: USFS has dismissed the significance of combustion emissions on the basis that perfect substitution may occur without actually analyzing this possibility in any detail or acknowledging the existence of contradictory evidence, including basic principles of supply and demand as well as the more sophisticated analysis performed by the EIA (which USFS relied upon in other sections of the SFEIS). Nowhere does USFS acknowledge the basic principle outlined in the *High Country* and *WildEarth Guardian* decisions: that the production of coal from these lease modifications will increase the supply of cheap, low-sulfur coal, which will in turn affect coal prices and coal demand relative to other energy sources.

**Suggested remedy:** USFS should prepare a revised analysis of combustion emissions in which it discusses questions pertaining to substitution and energy markets in a coherent and transparent way. At minimum, USFS should discuss, in qualitative terms, how increased coal supply can affect coal prices and demand for coal relative to other energy sources. USFS could also perform an economic analysis using the National Energy Modelling System (NEMS), as it did in the Colorado Roadless Rule EIS.

### ***C. USFS Arbitrarily Decided Not to Monetize the Cost of GHG Emissions While Monetizing Other Benefits***

Another concern we highlighted in our comment letter was the fact that USFS arbitrarily decided not to monetize the cost of GHG emissions while monetizing other benefits in the SDEIS. The same defect is present in the SFEIS.

In the SDEIS, USFS argued that “[s]tandardized protocols designed to measure factors that may contribute to climate change at the project scale, and to quantify climatic impacts, are presently unavailable.”<sup>11</sup> We noted in our comment that such metrics were in fact available – specifically, we referred to the existing metrics for assigning monetary value to the impact of each ton of carbon dioxide, methane, and nitrous oxide generated as a result of the proposed action,<sup>12</sup> and noted that this monetary value can serve as a proxy for measuring the “climatic impacts” of those emissions. Nonetheless, USFS still asserts in the SFEIS that no standardized protocol exists for

---

<sup>11</sup> SDEIS at 123.

<sup>12</sup> These metrics include the social cost of carbon, the social cost of methane, and the social cost of nitrous oxide. See Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (May 2013, Revised August 2016); Interagency Working Group on the Social Cost of Greenhouse Gases, Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide (Aug. 2016).

quantifying climatic impacts.<sup>13</sup>

We also noted in our comment that NEPA requires USFS to conduct a balanced and unbiased analysis of costs and benefits accruing from this action and that USFS had violated its NEPA obligations by failing to monetize the costs of GHG emissions when it had monetized other economic benefits of the action. In *High Country Conservation Advocates v. USFS*, the court reviewing the prior version of this EIS made clear that such an unbalanced assessment of benefits (without costs) is arbitrary and capricious and runs afoul of the agency's obligation to present a balanced impact assessment to decision-makers and the public. It explained:

“Even though NEPA does not require a cost-benefit analysis, it was nonetheless arbitrary and capricious to quantify the benefits of the lease modifications and then explain that a similar analysis of the costs was impossible when such an analysis was in fact possible and was included in an earlier draft EIS.”<sup>14</sup>

Similarly, in *Center for Biological Diversity v. NHTSA*, the 9th Circuit Court of Appeals held that it was arbitrary and capricious for an agency to ignore the impacts of GHG emissions in a regulatory impact analysis, noting that an agency “cannot put a thumb on the scale by undervaluing the benefits and overvaluing the costs of more stringent standards.”<sup>15</sup>

USFS asserts that its analysis need not confirm to the principles set out in *High Country* and *Center for Biological Diversity* because it did not conduct a full costs-benefits analysis for the lease modifications. While it is true that USFS did not monetize all costs and benefits, it did estimate the monetary value of the coal that would be produced and the income generated for laborers (which included direct, indirect, and induced impacts on production and labor income).<sup>16</sup> USFS thus assigned a monetary value to the two most significant benefits of the lease modifications, while ignoring the costs of GHG emissions. This is precisely the sort of unbalanced analysis that the courts rejected in those two cases.

**Suggested Remedy:** USFS should revise the SFEIS with estimates of the social costs of direct and GHG emissions that will be generated as a result of the lease modifications and should provide the public with an opportunity to comment on the significance of these costs. For an example of what such an analysis entails, USFS can refer to the work it performed in the Colorado Roadless Rule EIS. USFS should also reevaluate the merits of the proposal on the basis of these costs and revisit its decision to issue the lease modifications.

---

<sup>13</sup> SFEIS at 122.

<sup>14</sup> *High Country Conservation Advocates v. United States Forest Serv.*, 52 F. Supp. 3d 1174, 1191 (D. Colo. 2014).

<sup>15</sup> *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198 (9th Cir. 2008).

<sup>16</sup> SFEIS § 3.21.2 (“Economic Impact Analysis”).

### **III. Conclusion**

We appreciate your consideration of the information and concerns noted in this objection. Should you have any questions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Jessica Wentz', with a long horizontal flourish extending to the right.

Jessica Wentz  
Sabin Center for Climate Change Law  
Columbia Law School  
435 West 116<sup>th</sup> St.  
New York NY 10027