#### United States District Court, D. Colorado.

WILDEARTH GUARDIANS, a not-for-profit corporation, Plaintiff,

#### v.

UNITED STATES FOREST SERVICE, a federal agency within the U.S. Department of Agriculture; Charles S. Richmond, in his official capacity as Supervisor of the Grand Mesa, Uncompahgre, Gunnison National Forest; United States Department of the Interior, a federal agency; Wilma Lewis, in her official capacity as Assistant Secretary, Land and Minerals Management, U.S. Department of the Interior, Defendants, and

Mountain Coal Company, Intervenor-Defendant.

#### Civil Action No. 08–cv–02167–MSK. Oct. 31, 2011.

Edward Breckenridge Zukoski, Melanie R. Kay, EarthJustice Legal Defense Fund, Denver, CO, for Plaintiff.

Gregory Daniel Page, U.S. Department of Justice, Washington, DC, for Defendants.

Stephen D. Bell, Dorsey & Whitney, LLP, Denver, CO, for Intervenor–Defendant.

#### OPINION AND ORDER AFFIRMING AGENCY ACTION

#### MARCIA S. KRIEGER, District Judge.

THIS MATTER comes before the Court for resolution of the merits of this administrative agency appeal. The Court has reviewed the record including the parties' briefs (# 84, 92, 97, 94) and Mountain Coal Company's ("MCC") submission of supplemental authority (# 99).

Exercising jurisdiction pursuant to 5 U.S.C. § 702 and 28 U.S.C. § 1331, the Court **AFFIRMS** the decisions of the Defendants.

#### FACTS

A. The Mine, Expansion Plans, and Administrative Process

This case concerns MCC's operation of a coal mine pursuant to a federal lease of United States Forest Service ("Forest Service") lands. The mine, known as the West Elk Mine, is located within the Paonia Ranger District of the Grand Mesa, Uncompahgre and Gunnison National Forests. It has operated continuously since approximately 1981 under the regulatory and environment oversight of the State of Colorado, the Forest Service, the Department of the Interior, the Mine Safety and Health Administration ("MSHA") and other federal agencies.<sup>1</sup> Coal is mined using excavated underground workings. From 2002 to 2007, MCC extracted coal from a portion of the mine known as the "B Seam." As the B Seam approached exhaustion, MCC expanded its operations to recover coal from another area of the mine known as "E Seam" pursuant to additional leased reserves incorporated into its mining permit. It presented a mine plan modification to the Forest Service in 2006 to permit the expansion.

Underground coal mining at the West Elk Mine, like most coal mines, releases methane gas, which can be a serious safety hazard to miners. The MSHA, which regulates working conditions in coal mines, requires mines to maintain levels of methane of one percent or less. To comply with the MSHA's safety requirements, MCC proposed to construct approximately 168 methane drainage wells drilled from the land surface to the mine workings. This would require approximately 22 miles of associated road construction in order to drill and maintain the wells. In addition, MCC proposed construction of a ventilation shaft and escapeway (the "Deer Creek shaft") to support the mine ventilation system and to provide for worker safety. Methane, which is a recognized greenhouse gas, would then be vented directly into the atmosphere. Methane drainage wells are approved by MSHA as a reliable method for venting methane from coal mines; they are already in use in parts of the West Elk Mine.

Pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*, the Forest Service, in cooperation with BLM and other agencies, prepared an Environmental Impact Statement ("EIS") to assess the effect of the drainage wells and ventilation shaft on the area. In September 2006, the agency issued a "scoping" notice, soliciting comments on issues that should be addressed in a potential draft. In response, the local office of the United States Environment Protection Agency ("EPA") provided comments regarding alternative designs and a suggestion that methane be captured rather than vented. The letter noted the EPA's voluntary Coalbed Methane Outreach Program ("CMOP"), which assists coal mine operators in finding alternatives to releasing methane directly into the atmosphere, and the agency's previous work with MCC on the West Elk Mine over the previous decade.

In March 2007, the Forest Service issued a draft EIS, which contained little discussion of methane capture. The EPA submitted comments in a letter dated June 1, 2007. The EPA acknowledged the safety concerns relating to venting of methane but recommended that the final EIS "identify the magnitude of the emissions and discuss alternatives," specifically capture of the gas. The letter emphasized the significance of methane as a potent greenhouse gas and the success of the CMOP effort in adding capture technology to a number of active coal mines. In the letter, the EPA recognized that a gas lease would need to be in place to permit the methane to be put to beneficial use but suggested that the Forest Service analyze capture as an alternative to venting even in the absence of such a lease. Thereafter, the EPA, Forest Service, MCC, and the BLM exchanged information and explore the issues, including how to estimate the projected volume of methane emissions, safety questions, and means of putting the methane to beneficial use.

Following these exchanges and upon review of a preliminary draft of the Final EIS ("FEIS"), the EPA submitted additional comments, reflected in another letter dated August 7, 2007. Administrative Record, USFS00656–662.<sup>2</sup> The EPA again recommended that the Final EIS include a discussion of the viability of methane capture, including a discussion of the "many economic and environmental benefits that might be realized by offering these lands for a new gas lease." The letter notes that MCC does not own a gas lease on the lands and that there are hurdles to leasing. EPA offered several suggestions to overcome the barriers to leasing. The letter also notes that the preliminary Final EIS includes a discussion of "flaring," or burning of the methane after removal from the mine (a technique that reduces greenhouse gas emissions). The letter states that "there appears to be no specific MSHA policy barring properly designed flaring or combustion processes" and that the West Elk Mine already employs a combustion process using a portion of captured mine drainage methane to warm incoming ventilation air. The EPA also provided specific comments regarding language used in the preliminary draft EIS.

#### **B.** Final EIS, Appeal, and Record of Decision

The Final EIS was issued in August 2007. USFS01826-2053. The purpose of the proposed action (the methane venting wells and ventilation shaft) was identified: "to protect public health and safety, to prevent loss of leased federal coal resources, and to facilitate safe and efficient production of compliant and supercompliant coal reserves" as well as to allow MCC to exercise its lease rights. USFS001830. Three alternatives were provided: (1) no action; (2) the proposed action; and (3) a modification of the proposed action that would lessen the impact of the methane drainage wells and road construction on roadless area lands. Flaring and capture were noted as alternatives considered but eliminated from detailed study. Because these are the issues challenged by the Plaintiff, the agency's reasons for eliminating these as alternatives are examined in detail.

#### 1. Forest Service's Analysis of Flaring

In the FEIS, flaring was excluded as an alternative on the grounds that flaring could cause mine explosions and "is not approved by MSHA." USFS0139. Moreover, "MSHA indicates that additional research and development on this technology would have to occur before MSHA would consider flaring as a reasonable option." <sup>3</sup> *Id.* 

The EPA, in its August 7, 2007 letter, disagreed that flaring was precluded on safety grounds and noted that the practice was used in many industries. USFS00649. The EPA acknowledged that the "coal mining industry in the United States has not adopted flaring as a standard safety practice" but attributed this to a lack of interest by the industry in pursuing this option. Id. The EPA recommended that the Forest Service confirm with the MSHA that flaring would not be approved. The EPA noted that its CMOP had a conceptual design of a flare system for burning coal mine methane incorporating applicable petroleum industry codes and guidelines that should be safe; it observed also that flaring is used outside of the United States in underground coal mines and is approved as a safe practice in the United Kingdom and Australia.

The Forest Service stated in its response to the EPA that it would consult with the MSHA on this issue. An email dated October 26, 2007 shows that a mining engineer with the MSHA informed the Forest Service that "MSHA would approve flaring of methane drainage if appropriate protections are incorporated into the flaring system." USFS04944.

#### 2. Forest Service's Analysis of Capture

Similarly, capture of the methane was not analyzed in detail in the FEIS "because of complexities and legal limitations stemming from the leasing processes and regulations of two separate mineral resources, uncertainty with relation to quality and quantity of gas resource, and economic concerns related to additional facilities." USFS01839. Specifically, capture was ruled out because (1) it "would not satisfy the specific purpose and need for the project which is to ensure health and safety of the underground mine and facilitate efficient recovery of leased federal coal reserves;" (2) capture without a gas lease would not be legal; and (3) capture was not forwarded as part of the proposal made to meet mine ventilation needs to satisfy MSHA requirements. Id. It was also noted that some components of a capture/use of methane concept would be outside of the Forest Service's control.

The FEIS explains that coal is managed under a separate program by the BLM than oil and gas; a coal lease does not grant the right to the lessee to capture gas released incident to mining. The right to lease other mineral deposits on lands leased for coal is reserved to the BLM. The FEIS explains that the Forest Service and BLM "have discussed placing the gas under lease, and have explored the gas leasing process, including opportunity for noncompetitive leasing." USFS01892. However, the BLM's legal division had concluded that the agency does not have authority to offer gas leases non-competitively, which means that any leasing of the methane would have to be conducted through the BLM's competitive leasing process under the Minerals Leasing Act.

The FEIS identifies several obstacles to leasing. First is the listing of the Canada lynx as a threatened species, although it is noted that this issue was apparently resolved in 2005. A second obstacle identified was ongoing litigation regarding the 2001 Roadless Area Conservation Rule, which affected at least some of the lands at issue; agencies were deferring processing gas lease nominations in certain areas pending resolution of the litigation. *Id*.

Finally, the FEIS identifies issues relating to the gas itself. It notes that BLM evaluated data regarding gas quantity and quality from the B Seam reserves and determined that gas from the mine could not be directly piped to a gas pipeline because of quality issues. This would mean that a gas treatment facility would need to be constructed before any gas could be sold. In addition, a gas compression facility would be needed to adequately pressurize the gas. Other economic uncertainties were identified, including whether there was sufficient volume to justify economically the investments in gas treatment and transport. According to the FEIS, the BLM also researched using coal mine vent gas for electrical generation on site but did not find sufficient data to analyze the issue. It was further noted that mine operators generally do not generate their own electricity because electricity is available at low wholesale rates. USFS01892.

The Forest Service's written response to the EPA's August 7, 2007 letter, shows the basis upon which the Forest Service considered the possibility of capture to be remote and speculative. It noted that even if gas leases for the area were offered for sale, "there is no guarantee that they will be purchased, and if they are who the purchaser will be." USFS00642. The Forest Service noted that a purchaser of the gas lease would be under no obligation to act upon the lease rights and propose operations and that resolving issues in the leasing process could take more time than available for the decision process. The Forest Service stated it had reviewed an EPA report regarding methane recovery in coal mines, which included an evaluation of the West Elk Mine's potential for participation in the CMOP. The EPA report identified the logistical and quality obstacles to use of the mine's methane for transfer to a pipeline, for power generation, or for local use. USFS00643. The EPA report, like the BLM's findings, demonstrated that because of the quality of the West Elk Mine's methane, it could not be transferred to a natural gas pipeline without treatment. The report also noted that the nearest existing natural gas pipeline was fully subscribed and could not accept additional gas. With respect to power generation, the EPA report identified issues regarding the methane concentrations and flow rates that could cause operating difficulties for power generation. Another use might be to dry coal, but the Forest Service noted that the BLM had conveyed that it would not approve such a practice.

The Forest Service also reviewed information relating to a previous attempt by MCC to participate in the CMOP. A consultant retained by the EPA had evaluated issues such as cleaning the gas for various uses as well as the possibility of using the gas for electricity generation.<sup>4</sup> The investigation showed that for the West Elk Mine, "the economic viability of capturing the gas was limited due to the investment that would need to be made to secure rights to the gas (i.e., leasing), the cost of cleaning the gob gas to pipeline quality specifications, pipeline infrastructure cost, and distance to gas supply line (the closer local lines are distribution lines) outweighed the economic benefits that may have been realized." USFS00644. Further, the option of generating electricity had been explored, but it was determined that the regional power provider had no need for additional power sources; onsite use was similarly ruled out because MCC could obtain electricity more cheaply through its existing contract.

## 3. Forest Service's Analysis of Volume of Greenhouse Gases

With respect to greenhouse gases, the FEIS noted that the project would release methane into the atmosphere and would contribute to the volume of worldwide greenhouse gases. The FEIS explains that the calculations are based on emissions studies of the B Seam workings and discloses other assumptions underlying the estimates. The FEIS notes that the emissions from E Seam are expected to be less than those from B Seam and so that overall the mine's emissions would decrease from previous levels.<sup>5</sup> The FEIS contains an estimate that the proposed action would increase potential greenhouse gas emissions from fossil fuel combustion in Colorado by approximately 1.3 percent (calculated as a carbon dioxide equivalent), which was deemed to not have a significant effect on the human environment.

The FEIS states that it was "not possible to estimate or calculate the effect that methane emissions would have on global warming" because of the lack of models or research available to make such calculations. It notes that flaring or capture of methane would be effective in mitigating the effect of greenhouse gas emissions into the atmosphere but rules out these methods for the same reasons discussed above.

The Forest Service's response to the August 7, 2007 EPA letter, indicates that in the process of drafting the FEIS, the Forest Service based its analysis of anticipated methane emissions from E Seam drilling on data collected from individual methane drainage wells from B Seam mining. The Forest Service also analyzed information from a study prepared for MCC. The Forest Service stated that it relied on EPA's CMOP website to determine that the project's estimated emissions would represent about 2% of the total U.S. annual coal mine methane emissions based on 2003 numbers. USFS00641.

In response to a specific request by the EPA to address the global impacts of the methane emitted from the mine, the Forest Service acknowledges "that models that assess atmospheric loading on a global scale do exist, however, these models are not known to discretize data to the extent that they would provide valuable information for the effects of a project this size on the global scale. Therefore, the [Forest Service] believes the more suitable scale to disclose these effects is on the State scale." USFS 00649.

### 4. Appeal and Final Decision

The proposed action was adopted in a November 8, 2007 Record of Decision ("ROD") by the Forest Supervisor. Plaintiff WildEarth Guardians's ("WildEarth") predecessor and other organizations administratively appealed the decision. The reviewing officer found that the record contained conflicting information from the MSHA regarding the viability of methane flaring. The agency's deciding officer concurred and instructed the Forest Supervisor to further evaluate the feasibility of methane flaring as an alternative.

The Forest Service thereafter sought clarification on the flaring issue from the MSHA office with responsibility for approving the relevant mining plans. The MSHA office responded with a letter dated February 25, 2008, signed by the District Manager. The MSHA's letter states as follows:

In review of the documents regarding the [EPA's] conceptual design of [a flaring] system we have de-

termined that too many unknowns about this system exist at the present time to approve such a system and have advised [MCC] of such.... [A]ny flaring system envisioned that is more or less directly connected to the active gob where miners work must have been fully evaluated by MSHA and determined to be a safe design. Any such system design should be tested in a coal mining methane flaring situation in which no miners are exposed, such as a sealed and abandoned mine, for sufficient time to test the viability and durability of the system and ensure that it has zero potential to cause the ignition of gas underground before this office would consider incorporating it into an active mine ventilation system. There are too many questions remaining unanswered, no evaluations and no actual testing in a no-risk mine type situation that demonstrates that the system's safety for this office to approve the incorporation of such a system into the ventilation plan at the West Elk Mine at the present time.

#### USFS00613.

Based on this information from the MSHA, the Forest Supervisor issued a second Record of Decision dated March 7, 2008, in which the proposed action was approved. An appendix was provided giving supplemental information on flaring and noting that any conflicts regarding the MSHA's position as to this option had been resolved. Given that the MSHA would not approve flaring without significant preliminary testing to assure safety, the Forest Service determined that flaring was not a feasible alternative.<sup>6</sup>

#### C. The Vessels Decision

Several months after the final Record of Decision, many of the assumptions regarding the legal obstacles to capturing methane were altered as a result of a decision issued by the DOI's Office of Hearings and Appeals, Interior Board of Land Appeals. *Vessels Coal Gas, Inc.*, 175 IBLA 8 (June 26, 2008). The case was an appeal of a protest by Vessels Coal Gas, Inc., regarding the three parcels of land included in a competitive oil and gas lease sale of lands subject to coal leases and on which an underground coal mine was located. At issue were the legal implications of permitting the mine operator to contract with a third party to capture the released methane. The BLM determined that the only option was for a gas lease to be obtained through a competitive lease auction. The BLM thereafter offered for competitive bidding the three leases at issue (along with others not relevant to the objection or appeal); these leases, however, contained a number of limitations and stipulations preventing general exploration and development of oil and gas deposits and permitting leasing only for the purpose of capturing the mine vent gas only. Vessels challenged these restrictions.

The opinion on appeal upheld the company's protest. However, the analysis also contained a discussion of whether "Federal gas being emitted as a byproduct of mining Federally-leased coal" was actually a mineral "deposit" under the Minerals Leasing Act. The administrative law judge held that it was not and, therefore, the gas was not required to be leased under the Minerals Leasing Act's competitive leasing process.<sup>7</sup> The *Vessels* decision, therefore, opened up the possibility that methane gas emitted as a byproduct of coal mining could be captured by the mine operator or a third party without the additional complexity or uncertainty of a competitive sale of the oil and gas leasing rights for the subject lands.

## D. Modification of MCC's Leases at West Elk Mine

After the *Vessels* decision issued, MCC and the relevant federal agencies began exploring its implications for the West Elk Mine. Ultimately, the parties negotiated amendments to MCC's coal leases and mining plans to permit, but not obligate, MCC to capture the methane gas. The mining plans <sup>8</sup> were amended to include the following:

If, under a bilateral agreement with the Federal lesse, the Bureau of Land Management amends Federal leases C–1362 and COC56477 to authorize the capture of coalbed gas that would otherwise be vented as required by the Mine Safety Health Administration, the operator *shall capture the vented coalbed gas if such capture is economically feasible and does not jeopardize the safety or health of the miners.* 

*See, e.g.,* USFS01121 (emphasis added). The amendment, however, stipulates that any capture operation must comply with all applicable laws and regulations, including those of the Forest Service. *Id.* The leases were modified as well, to include the following language: "[L]essee is authorized to drill for, extract, remove, develop, produce and capture for use or sale any or all of the coal mine methane

from the above described lands that it would otherwise be required to vent or discharge for safety purposes by applicable laws and regulations." *See*, *e.g.*, DOI00376. The lease amendments provide that the lessee has no obligation to capture the methane if it is not economically feasible or if the methane must be vented in order to abate potential hazards to the health or safety of the coal minors or coal mining activities. In the event methane was captured and sold, a royalty would be paid to the United States.

#### **ISSUES PRESENTED**

WildEarth initiated this administrative appeal. It challenges the actions taken by the Defendant agencies <sup>9</sup> on several grounds: (1) the FEIS failed to analyze a range of reasonable alternatives, specifically flaring and capture of the methane; (2) the FEIS failed to include a reasonably complete discussion of flaring and capture as mitigation measures; (3) the FEIS failed to analyze and disclose the impacts of global warming; and (4) the lease amendments were an action that required further NEPA analysis. WildEarth seeks an injunction halting the ongoing mining operations of the West Elk Mine and other relief. The Defendant agencies have responded to WildEarth's brief on the merits. MCC's response brief also addresses the merits of WildEarth's arguments; MCC additionally challenges WildEarth's standing to assert its claims.

#### ANALYSIS

#### I. Standing of WildEarth to Challenge Actions

WildEarth's standing to bring this appeal is a threshold issue. To show standing, WildEarth presents a declaration from Jeremy Nichols, one of its members and an employee. Ex. 1 to Plaintiff's Opening Brief, # 84-1. The declaration contains general information about global climate change, as well as statements concerning how such changes affect Mr. Nichols personally as a resident of Colorado and a person who enjoys outdoor activities. He discusses the impact of global climate change on insect infestation in the forests of the Rocky Mountains, the effect on sage grouse habitat, and on skiing. He also provides information about WildEarth's watershed protection projects in New Mexico and the effect that global warming will have on these efforts. He also states his concerns regarding the surface impacts of constructing, drilling, and maintaining the new meth-

ane drainage wells for the expansion project. He states that he currently uses the lands at issue for hiking, viewing wildlife, birding, and enjoying the aesthetics of the area. He recounts his experiences observing the impacts of the existing methane drainage wells, including the disturbances caused by the construction of roads across hillsides and of large well drilling pads, as well as the effects of heavy equipment. The noise and visual disruptions from such impacts decreased his enjoyment of the area. He expresses concerns about the impact the project will have on lands that are currently undisturbed. He asserts that a fully informed decision regarding alternatives to the methane drainage wells would redress his injuries by leading to changes that will reduce methane pollution and could limit the construction and operation of the wells, thus reducing the surface impacts of the wells and associated road construction.

#### To establish standing, a plaintiff must show that:

(1) she has suffered an "injury in fact" that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by the relief requested.

Tandy v. City of Wichita, 380 F.3d 1277, 1283 (10th Cir.2004) (citing Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 180–81 (2000)). Where a plaintiff is asserting procedural rights under NEPA the redressability prong of the test is somewhat relaxed; in other words, a plaintiff need not establish that the ultimate agency decision would change upon NEPA compliance. Comm. to Save the Rio Hondo v. Lucero, 102 F.3d 445, 452 (10th Cir.1996).

Under Tenth Circuit law, an association has such standing only if: "(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization's purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." *Chamber of Commerce of U.S. v. Edmondson*, 594 F.3d 742, 756 (10th Cir.2010) (quoting *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 342 (1977)).

WildEarth, as the plaintiff, bears the burden of demonstrating standing. Lujan v. Defenders of Wildlife, 504 U.S. 555, 561 (1992); Utah Shared Access Alliance v. Carpenter, 463 F.3d 1125, 1137 (10th Cir.2006). MCC does not dispute that Mr. Nichol's declaration shows that WildEarth has standing to challenge the decisions to the extent they involve surface impacts. The evidence provided shows that the proposed action, construction of methane venting wells, a ventilation shaft, and roads, undeniably will cause surface impacts. WildEarth has demonstrated this will cause injury to its members' enjoyment of the lands at issue. The injury is not conjectural or hypothetical and is traceable to the action of the Defendants. If WildEarth is successful, i.e., the proposed action is enjoined pending further review of alternative options and possible adoption of an alternative to the wells, the injury could be redressed. The other elements required to show organizational standing are also established, including that the interests asserted are germane to WildEarth's purpose and the participation of the individual members is not needed. This is sufficient to establish WildEarth's standing to challenge the decisions.

MCC appears to contend that because these decisions also implicate climate change, and part of WildEarth's argument concerns the adequacy of the analysis of climate change issues (or of the use of alternatives that themselves might reduce greenhouse emissions), WildEarth must specifically allege a personalized injury resulting from climate change, rather than from the project itself. <sup>10</sup> MCC has provided no case law or other legal authority to support the contention that standing is so narrowly construed for NEPA purposes, particularly given the relaxed redressability element applicable in these circumstances. See Larson v. Valente, 456 U.S. 228, 244, n. 15 (1982) ("[A] plaintiff satisfies the redressability requirement when he shows that a favorable decision will relieve a discrete injury to himself. He need not show that a favorable decision will relieve his every injury."). The procedural failure asserted here was the allegedly inadequate consideration of alternatives, which influenced the decision whether to approve the project, thereby creating the harm alleged. The Court is satisfied that WildEarth has standing to assert its claims.

#### **II. Merits of NEPA Challenge**

#### A. Standard of Review

The APA provides for judicial review of "final agency action for which there is no other adequate remedy in a court." 5 U.S.C. § 704. The Court is required to review the entire record of proceedings before the agency and to set aside the agency's action if it finds that action to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1580 (10th Cir.1994).

Under NEPA, an agency's decision is arbitrary and capricious if the agency (1) entirely failed to consider an important aspect of the problem, (2) offered an explanation for its decision that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise, (3) failed to base its decision on consideration of the relevant factors, or (4) made a clear error of judgment. Forest Guardians v. U.S. Fish and Wildlife Service, 611 F.3d 692, 711 (10th Cir.2010). In reviewing factual determinations, the Court's task is only to determine whether the agency took a "hard look" at the information relevant to that decision. Id. A "hard look" requires examination of the relevant data and articulation of a rational connection between the facts found and the decision made. New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 713 (10th Cir.2009). When the issues require the agency to interpret a statute it applies, the question for the court is whether the agency's construction of the statute is unreasonable or impermissible. Chevron, U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 842-43, 845 (1984); Forest Guardians, 611 F.3d at 704.

An agency's decision is presumed valid, therefore the party challenging the agency's action bears the burden of proof. *Citizen's Committee to Save our Canyons v. Krueger*, 513 F.3d 1169, 1176 (10th Cir.2008).

#### **B. NEPA Challenge**

WildEarth claims that the Defendants violated NEPA procedures in the following manner: (1) the Forest Service's issuance of an EIS that did not adequately consider methane capture and flaring as reasonable alternatives or as potential mitigation measures; (2) the Forest Service's failure to analyze and disclose the impacts of the decision on global warming; and (3) the decisions by the BLM and DOI to amend MCC's coal leases and mining plans to permit capture, if feasible, of methane gas without first undertaking another NEPA analysis.

#### 1. Overview of NEPA

The twin purposes of NEPA is to require agencies to consider environmentally significant aspects of a proposed action, and, in doing so, to inform the public that the agency's decision making process includes environmental concerns. Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, 462 U.S. 87, 97 (1983); Forest Guardians, 611 F.3d at 711. "NEPA prescribes the necessary process, but does not mandate particular results. Accordingly, agencies are not required to elevate environmental concerns over other valid concerns." Utahns for Better Transp. v.. U.S. Dep't of Transp., 305 F.3d 1152, 1163-64 (10th Cir.2002), modified on other grounds, 319 F.3d 1207 (10th Cir.2003) (citing Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350-51 (1989) and Baltimore Gas, 462 U.S. at 97). As long as the record demonstrates that the agency followed the NEPA procedures, the court will not question the wisdom of that decision. Id. at 1163.

NEPA requires federal agencies to prepare an Environmental Impact Statement (EIS) prior to taking major federal action. 42 U.S.C. §§ 4332(C). The EIS must "rigorously explore and objectively evaluate all reasonable alternatives" to a proposed action in comparative form, so as to provide a "clear basis for choice among the options." 40 C.F.R. § 1502.14. Reasonable alternatives are those which are "bounded by some notion of feasibility," Utahns for Better Transp., 305 F.3d at 1172, and, thus, need not include alternatives which are remote, speculative, impractical, or ineffective. Custer County Action Assoc. v. Garvey, 256 F.3d 1024, 1039-40 (10th Cir.2001) (citation omitted). The EIS also must briefly discuss the reasons for eliminating any alternative from detailed study. 40 C.F.R. § 1502.14(a). The Court applies "a rule of reason standard (essentially an abuse of discretion standard)" in deciding whether claimed deficiencies in an EIS are significant enough to defeat the goals of NEPA. Utahns for Better Transp, 305 F.3d at 1163.

#### 2. Was Flaring of Methane Gas Emissions a Rea-

## sonable Alternative for Reducing Methane Levels Within the Mine?

As required by NEPA, the Forest Service prepared an EIS. In it, the Forest Service explained its decision not to consider flaring as an alternative on the grounds of infeasibility, specifically, that the MSHA would not approve flaring without significant preliminary testing to assure safety. WildEarth contends that the reasoning of the Forest Service on this point runs counter to the evidence before the agency. Thus, the task of the Court is to determine whether the Forest Service examined the relevant data and articulated a rational connection between that data and its determination that flaring was not a feasible alternative. *See Forest Guardians*, 611 F.3d at 711.

The record reflects that the Forest Service consulted with MSHA, the agency with final authority over mine safety issues, regarding whether the EPA's proposed flaring system was a method that could or would be approved as an alternative to venting. The MSHA's final answer, as reflected in the February 25, 2008 correspondence from the local office with authority over the mine, was that there were "too many questions remaining unanswered, no evaluations and no actual testing in a no-risk mine type situation that demonstrates that the system's safety for this office to approve" flaring as a safe and effective method of removing coal bed methane from the mine. The description of the testing required before MSHA would be satisfied with this system provides a reasonable evidentiary basis for the Forest Service to conclude that flaring was impractical for the purposes of the proposed project.

WildEarth points to evidence in the record that shows that flaring *could* be safe and effective and that mine safety officials in other countries have concluded that this is an appropriate method.<sup>11</sup> However, the issue is whether the Forest Service considered the evidence, not whether it should have been persuaded by it. NEPA simply requires the Forest Service to evaluate the relevant data (which may be conflicting) and to rationally connect its decision to the data. Put another way, simply because there is some evidence supporting another perspective does not make the alternative more feasible for this particular mine or the Forest Service's reliance on the MSHA's expertise in such issues arbitrary and capricious. Utahns for Better Transp., 305 F.3d at 1164. The Forest Service evaluated the data and rationally related its decision

to the evidence before it.

WildEarth also challenges whether the MSHA had an adequate basis for its position that extensive testing of a flaring system would be required before such a system would be approved, arguing that the Forest Service acted unreasonably in relying on the MSHA's determination in this regard. However, the case cited by WildEarth for the proposition that an agency "cannot simply accept the conclusory word of other agency officials" is inapposite. That case, Natural Resources Defense Council v. U.S. Army Corps of Engineers, 399 F.Supp.2d 386 (S.D.N.Y.2005) involved the defendant agency relying on another agency's conclusory statement that a proposed action would have no environmental impact, and thereby abdicating its obligations to make its own assessment under the NEPA. In contrast, the Forest Service conducted its own analysis but relied on the expertise of the MSHA regarding whether such a system would be approved for use in the mine. Again, although WildEarth clearly disagrees with the MSHA's assessment, it does not demonstrate that Forest Service's reliance on MSHA's statements of its position as to whether such a system would be approved for use was arbitrary, capricious, or unsupported by the record.12

Accordingly, the Court finds that the Forest Service's decision not to include flaring as an alternative in the EIS was not arbitrary, capricious or otherwise not in conflict with the law.

# **3.** Was Capture of Methane Gas Emissions a Reasonable Alternative for Reducing Methane Levels Within the Mine?

As discussed above, the Forest Service concluded that capture of the methane was not feasible because of the legal complexities involved in leasing the gas, as the legal requirements were understood at the time, and the logistical and economic challenges involved in putting the West Elk Mine's methane to beneficial use. As required by NEPA, the FEIS contains a discussion of the Forest Service's reasoning in this regard. In addition, the record shows the agency's investigation and the factual basis upon which it relied. The Forest Service met with and engaged in information exchanges with the EPA and investigated the EPA's suggestions. The Forest Service's investigation revealed that it was impossible to predict whether the gas leases would be purchased, and, if purchased, that the lessee would be interested in capture of the methane. There was significant evidence on the record, including from the EPA and MCC's own investigation of the feasibility of capture at the mine, that capture of the methane for pipeline transmission, power generation, or onsite use was a remote and impractical option given the significant investments required and questionable economic benefit to the potential gas lessee.

WildEarth challenges the Forest Service's view of the legal complexities involved in leasing the gas as contradicted by the record, noting that the EPA suggested ways of addressing the leasing challenges and that the Forest Service itself was investigating ways of leasing the gas to facilitate capture. Again, however, the record shows that the Forest Service considered the EPA's suggestions but made its own determinations in consultation with the BLM, which had final authority over leasing decisions. These agency disagreements are insufficient to demonstrate that the Forest Service's decision was arbitrary and capricious.

WildEarth also points to the fact that the relevant agencies later amended MCC's coal leases and mining plans to permit MCC to capture the methane. This later development, however, was the result of events occurring after the decision was made-i.e., the issuance of the Vessels decision, which shifted parties' understanding of the relevant legal constraints on capture. In determining whether an agency's decision is arbitrary and capricious, the Court reviews the decision in light of the information the agency had before it at the time of the decision. Copar Pumice Co., Inc. v. Tidwell, 603 F.3d 780, 791 n. 3 (10th Cir.2010); Am. Mining Cong. v. Thomas, 772 F.2d 617, 626 (10th Cir.1985) ("[T]he agency's action must be reviewed on the basis articulated by the agency and on the evidence and proceedings before the agency at the time it acted.").

WildEarth contends that the Forest Service did not have sufficient information to rule out methane capture as infeasible based on the technological and economic challenges presented. WildEarth argues that the Forest Service should have determined the actual costs and practicality of methane capture, again pointing to evidence that methane capture can be practical and economical in appropriate circumstances. However, the record indicates that the Forest Service relied on MCC's and the EPA's previous investigation into the economic feasibility of capture, which found that the costs of obtaining leases, cleaning the gas, and infrastructure outweighed the potential economic benefits. In addition, the Forest Service's information was that the nearest pipeline was fully subscribed, which again shows the limited economic viability of capture. Similarly, the record showed that there was little economic incentive for a lease holder to use the methane for electricity generation because there would be no market for it either at the site or from regional power generators. Unlike the cases cited by WildEarth<sup>13</sup>, where there was a complete absence of evidence regarding costs or economic feasibility of the disputed alternative, the Forest Service had a reasonable evidentiary basis to conclude that capture by MCC or another potential lessee was highly uncertain and speculative because of the economic and logistical challenges presented. Again, merely because there is evidence that in other circumstances this approach might be successful does not mean that the agency's decision was arbitrary or capricious.

Because the Forest Service did not act arbitrarily and capriciously in ruling out flaring and capture as feasible alternatives to be analyzed in detail, it was reasonable for it not to provide an extended discussion of these methods as possible mitigation measures. An EIS should discuss "all practicable means" to avoid or minimize environmental harms and why such means are not adopted. 40 C.F.R. § 1505.2(c). As discussed above, the Forest Service had an adequate factual basis for determining that these methods were not practicable.

## 4. Did the EIS Adequately Analyze and Disclose the Impacts of the Decision on Global Warming?

NEPA requires that agencies consider the direct, indirect, and "cumulative impact" of proposed actions in the EIS. 40 C.F.R. § 1508.25. WildEarth argues that the EIS fails to adequately analyze the cumulative impacts of methane venting on climate change. As noted above, the Forest Service analyzed emissions data from the existing mine operations and made calculations regarding the expected annual release of methane into the atmosphere during the life of the project. The FEIS disclosed how much this would increase Colorado's total greenhouse gases from fossil fuel sources and discussed the data in the context of methane emissions from all coal mines in the United States. Based on this data, the agency concluded that the cumulative impact of the project on global warming would not be significant. WildEarth contends that the EIS mischaracterizes the significance of the mine's expansion's methane emissions and fails to consider the cumulative impacts of the mine's emissions with other past, present, and reasonably foreseeable future projects also contributing to climate change.

The Forest Service stated that it could not provide an estimate of the effect of this project on global climate change because of the lack of appropriate models and research. The NEPA contemplates that an agency may not have sufficient information to disclose all foreseeable impacts of a proposed action. 40 CFR § 1502.22 ("When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking."). The regulations provide that where information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the means to obtain it are not known, the EIS must contain the following: (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. 40 CFR § 1502.22(b). The FEIS appears to comply with the regulations in this regard, as it provides a statement that the information regarding the precise impact on global warming is unavailable and its relevance, provides the information it determined could be credibly calculated <sup>14</sup>, and states that the methane release will have some impact on global warming but that the pro rata effect of the mine expansion cannot be determined with precision.

WildEarth has not identified any method in the record (or elsewhere) that would enable the Forest Service to describe with particularity how the project would contribute to overall climate change. The EPA suggested that the EIS contain a more expansive discussion of the contribution of methane to greenhouse effects but the materials in the record do not provide any data or model establishing a threshold from which incremental changes can be determined as a result of particular greenhouse gas contributions.<sup>15</sup> Therefore, WildEarth has not carried its burden to show that the Forest Service's actions were arbitrary and capricious.

## 5. Was Amendment of the Coal Leases an Action Requiring Additional NEPA Review?

WildEarth's final challenge concerns the decision to amend MCC's coal leases and mining plans to permit it to capture the methane gas if it determined that it was economically feasible. WildEarth argues that a new or supplemental NEPA analysis was required before the amendments could be made. The Defendants counter that the claim is not yet ripe since further action would be required before any capture operation would be implemented.

A NEPA review must address an agency's proposed actions involving "any irreversible and irretrievable commitments of resources." 42 U.S.C. § 4332(2)(C)(v). Similarly, as noted by WildEarth, the issuance of a federal oil and gas lease may require an EIS because of the effects on surface lands. See Sierra Club v. United States Dep't of Energy, 255 F.Supp.2d 1177, 1186 (D.Colo.2002) (the government's actions in granting access to a federally-owned surface estate for the purpose of exploiting the mineral estate is a federal action under NEPA). The Tenth Circuit has applied a highly deferential standard of review of an agency's determination whether the time is ripe for application of NEPA to a particular project. Colorado River Water Conservation Dist. v. United States, 593 F .2d 907, 909 (10th Cir.1977) (applying "rational basis" review of agency's determination of when to undertake NEPA review of a project).

In determining whether a challenge to an agency action is ripe, courts may consider the following factors: "(1) whether delayed review would cause hardship to the plaintiffs; (2) whether judicial intervention would inappropriately interfere with further administrative action; and (3) whether the courts would benefit from further factual development of the issues presented." *San Juan Citizens Alliance v. Stiles*, 654 F.3d 1038, 1046 (10th Cir.2011) (*quoting Ohio For*-

estry Ass'n v. Sierra Club, 523 U.S. 726, 733 (1998)).

As noted by the Defendants, the lease and mining plan amendments here do not irreversibly or irretrievably commit the released methane gas to any particular use or activity. The leases were amended to authorize capture, if economically feasible and if the project poses no safety risk to the miners; in the event that these conditions are satisfied, then the mining plans require capture. Given these contingencies, there is no commitment of resources and nothing definite to review. *Colorado River*, 593 F.2d at 910 (noting that a project must be of sufficient definiteness before its impacts can be evaluated; where several prerequisites to a proposal had not yet occurred, there was no irreversible commitment of federal resources).

Moreover, it is unclear what impacts could have been evaluated before the amendments occurred in the absence of any actual proposed facilities or infrastructure <sup>16</sup>; any analysis would be purely speculative and hypothetical, which is of questionable value or utility. See Kleppe v. Sierra Club, 427 U.S. 390, 401-402 (noting that in the absence of an actual proposed plan for regional coal development, it would be "impossible to predict the level of coal-related activity that will occur in the region identified by respondents, and thus impossible to analyze the environmental consequences and the resource commitments involved in, and the alternatives to, such activity."). In addition, as noted by the Defendants, in the event that MCC determines that capture of the mine methane is safe and economically feasible, it could not implement any capture project without further NEPA review. To proceed, MCC will need to obtain consents from all the relevant agencies, including the Forest Service as owner of the surface lands and the MSHA as the agency charged with mine safety, before any action can occur. It would be at this point, when the decisions are made to permit or not permit MCC to go forward with its capture operations, that the resource will be irretrievably and irrevocably committed and NEPA review would be meaningful. Therefore, applying the factors identified in San Juan Citizens Alliance, there appears to be no harm to WildEarth in delaying environmental review until such time as there is an actual proposal for capture, nothing to be gained by judicial intervention at this juncture, and there is clearly a need for further factual development of the issues at both the administrative

level and for the purposes of any judicial review.

Given that the amendments to the mining plans and leases did not result in any definite new or different proposal regarding the disposal of the methane, the Defendants did not act arbitrarily and capriciously in their determination that the time was not ripe for NEPA review.

### CONCLUSION

Having reviewed the administrative record and the arguments of the parties, the Court finds that the agency Defendants complied with NEPA. Accordingly, the decisions of the agency Defendants are **AFFIRMED.** The Clerk of the Court shall enter judgment in favor of the Defendants and close this case.

#### Endnotes

1. In general, the Bureau of Land Management ("BLM") sets the terms for and manages coal leases on Forest Services lands under the Mineral Leasing Act, 30 U.S.C. § 181 *et seq.* The Forest Service must consent to any mining activities on its lands and may impose conditions to protect forest resources. 30 U.S.C. § 1272. The Department of Interior ("DOI") must approve mining of federal leased coal where mining may have surface impacts; recommendations on such issues are provided by the DOI's Office of Surface Mining ("OSM"). 30 C.F.R. §§ 746.11(a), 746.13. Pursuant to a cooperative agreement with the DOI, the Colorado Division of Reclamation, Mining, and Safety ("DRMS") issues the mine permit for mines on federal lands. 30 C.F.R. § 906.30.

2. Citations to the administrative record are to the Bates-stamped numbered pages.

3. The source for this information was identified as a personal communication from a representative of the MSHA District Office in Lakewood, Colorado. USFS001891.

4. The record indicates that the Forest Service received some of this information in July 2007 before the issuance of the FEIS, and additional information in September 2007, after the issuance of the FEIS but before the final decisions were made.

5. The FEIS notes that coal mine methane in the

United States accounts for approximately 5.5. percent of methane released.

6. This decision was also administratively appealed but the second appeal was unsuccessful.

7. The decision, however, left it to the BLM to determine the appropriate legal arrangements to authorize capture in such circumstances.

8. After the FEIS was issued, MCC divided its expansion program into two phases. The first phase was approved on July 31, 2008. The second phase was approved on January 15, 2009.

9. Specifically, WildEarth challenges the Forest Service's consent to the Mine expansion, the DOI's approval of the first phase of expansion, and the DOI's approval of the second phase of the expansion. All of these decisions are challenged on the grounds that they relied on a flawed FEIS that violated NEPA.

10. If the only injury alleged were the effects of climate change, the issue might be closer, but that is not the case here. *Cf., Amigos Bravos v. U.S. Bureau of Land Management,* — F.Supp.2d —, 2011 WL 3924489 (D.N.M., August 03, 2011) (no injury alleged other than effects of climate change allegedly resulting from oil and gas lease sale; plaintiff's asserted injuries were purely conjectural).

11. WildEarth also points to evidence that the West Elk Mine already burns some of its methane from closed portions of the mine to heat it in winter; however, the issue here is burning of methane from active open portions of the mine, which presents entirely different safety challenges.

12. In addition, WildEarth's argument is based on a post-decision Freedom of Information Act request, to which the MSHA stated it had no documents in support of the February 25, 2008 letter. Even if this lack of documentation were significant, the record does not reveal that the Forest Service had any reason to know this at the time the March 7, 2008 Record of Decision was issued.

13. See, e.g., Davis v. Mineta, 302 F.3d 1104 (10th Cir.2002).

14. This includes information on the estimated increase in the amount of greenhouse gas emitted in Colorado, overall methane emissions from coal mines in the United States, and the agency's conclusion that in the context of the overall decline in coal mine emissions that the cumulative emissions from the West Elk Mine expansion would not be significant.

15. In addition, WildEarth does not contend that the data provided in the FEIS is inaccurate.

16. Indeed, as shown in the discussion above, there are several different uses to which the captured methane could be put, including power generation or transfer to a pipeline. Each option would involve different technologies and infrastructure and would, presumably have different impacts depending on the scope of the proposal.