

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

NATURAL RESOURCES DEFENSE COUNCIL)
1200 New York Avenue, NW, Suite 400)
Washington, DC 20005, *et al.*)
)
Plaintiffs,) Civ. No. 07-1709 (RJL)
)
v.)
)
DIRK KEMPTHORNE, in his official capacity)
As the Secretary of the United States)
Department of the Interior)
1849 C Street, NW)
Washington, DC 20240, *et al.*)
)
Defendants.)
)

ANADARKO PETROLEUM CORPORATION,)
WARREN RESOURCES, INC., and DOUBLE)
EAGLE PETROLEUM CO.,)
)
Defendant-Intervenors,)
)
STATE OF WYOMING,)
)
Defendant-Intervenor.)

**PLAINTIFFS' MEMORANDUM IN SUPPORT OF MOTION FOR SUMMARY
JUDGMENT**

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LIST OF ACRONYMS

APD	Application for Permit to Drill
AQTSD	Air Quality Technical Support Document
BCA	Biodiversity Conservation Alliance
BLM	Bureau of Land Management
CAMx	Comprehensive Air Quality Model
CBNG	Coal Bed Natural Gas
CEQ	Council on Environmental Quality
CMAQ	Community Multiscale Air Quality
DEIS	Draft Environmental Impact Statement
DEQ	Department of Environmental Quality
DOE	Department of Energy
DR	Decision Record
EA	Environmental Assessment
EPA/USEPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FONSI	Finding of No Significant Impact
GAO	Government Accountability Office
IBLA	Interior Board of Land Appeals
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standard

NEPA	National Environmental Policy Act
NO _x	Nitrogen Oxide
NRDC	Natural Resources Defense Council
PAPA	Pinedale Anticline Project Area
POD	Plan of Development
RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-way
SEIS	Supplemental Environmental Impact Statement
TCLP	Toxicity Characteristic Leaching Procedure
TSD	Technical Support Document
USFWS	United States Fish and Wildlife Service
VOC	Volatile Organic Compound
WAFWA	Western Association of Fish and Wildlife Agencies
WEDQ-AQD	Wyoming Department of Environmental Quality- Air Quality Division
WOC	Wyoming Outdoor Council

Exhibit List

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|------------|--|
| Exhibit 1 | Second Declaration of Erik Molvar
(with Attachments A, B, C, & D) |
| Exhibit 2 | Declaration of Jim States
(with Attachment A) |
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| Exhibit 12 | EA for Catalina A & B PODs |
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| Exhibit 15 | Jon N. Dull memorandum re: methane gas seeps
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Exhibit 16	Wyoming Outdoor Council letter to BLM dated April, 2007
Exhibit 17	Declaration of Walter R. Mersch
Exhibit 18	BLM's Decision Memorandum for the State Director
Exhibit 19	Bob Lange cover email re: methane seeps
Exhibit 20	Jan. 26, 2006 Fish and Wildlife Service Comment Letter
Exhibit 21	Jan. 5, 2007 Fish and Wildlife Service Comment Letter
Exhibit 22	Map of Seasonal Elk Ranges and Migration Routes
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Exhibit 24	Map of Seasonal Mule Deer Ranges and Migration Routes
Exhibit 25	APD Posting Notice (September 25, 2005)

INTRODUCTION

Plaintiffs challenge the decision of the Bureau of Land Management (“BLM”) to approve hundreds of new gas wells in the Atlantic Rim area of Wyoming’s Red Desert. In its rush to open the public lands to gas drilling, the agency failed to complete the analysis and seek out the public involvement that the National Environmental Policy Act (“NEPA”) requires. BLM ignored the advice of its own experts to update agency analysis of impacts on ozone pollution and leakage of harmful methane gas. Moreover, the agency failed to adequately assess impacts on sage grouse or to account for the impacts on big game of hundreds of additional wells that BLM was considering at the same time as it was evaluating the Atlantic Rim project. Plaintiffs do not seek to stop all drilling on the public’s lands, but instead to ensure that the health and environmental consequences are fully analyzed as required by federal law. For the reasons explained below, this Court should vacate BLM’s decisions approving the Atlantic Rim drilling permits and enjoin approval of further surface disturbing activities until the agency completes the analysis that NEPA requires.

FACTUAL BACKGROUND

The Atlantic Rim area of Wyoming’s Red Desert is a place of stunning beauty with rolling hills, canyons, dune fields and diverse sagebrush communities. Local residents and others across the country value the area for hiking, hunting, wildlife habitat, and clean air and water.¹ While other parts of Wyoming have seen extensive oil and gas

¹ Plaintiffs have standing in this matter because of the interests of the members of plaintiff organizations and the interests of the organizations themselves. See *Friends of the Earth v. Laidlaw Env’tl. Servs.*, 528 U.S. 167, 180-85 (2000); *NRDC v. E.P.A.*, 489 F.3d 1364, 1370-71 (D.C. Cir. 2007). Plaintiffs have attached the following declarations to this brief to support their standing: Second Declaration of Erik Molvar; Declaration of Jim States; Declaration of Andrew Carson; Declaration of Jonathan Ratner;

development, the Atlantic Rim area has remained relatively undeveloped. Second Molvar Decl., at ¶ 10 (attached as Exh. 1). The large area, unfragmented by development has provided critical habitat and migration routes for numerous wildlife species, including sage grouse, elk, mule deer, and pronghorn antelope. See, e.g., AR 2391-2394; 10322-10327.

In May 2001, a consortium of oil and gas companies which ultimately included Anadarko Petroleum (“Andarko”), Warren Resources (“Warren”) and Double Eagle Petroleum (“Double Eagle”) submitted a proposal to drill hundreds of new natural gas wells in the Atlantic Rim area. In December 2005, BLM released a Draft Environmental Impact Statement (“Draft EIS”) for the Atlantic Rim Natural Gas Field Development Project (“Atlantic Rim project”). AR 4816. The project provided for 2,000 new wells. AR 2088. The project area sits within the Red Desert, southwest of the town of Rawlins, Wyoming. In addition to the new wells, the project includes new access roads and pipelines, totaling approximately 1,000 miles. AR 2150. On February 17, 2006, Biodiversity Conservation Alliance (“BCA”) and other plaintiffs submitted comments on the Draft EIS. On May 21, 2007, BLM issued the Record of Decision (“ROD”) and accompanying Final Environmental Impact Statement (“Final EIS” or “FEIS”) approving the Atlantic Rim project with its 2,000 new wells. 72 Fed. Reg. 28518 (May 21, 2007).

Declaration of Bonnie Hofbauer; and Declaration of Linda Lopez. The actions challenged in this case have caused and will continue to cause air quality degradation, increased methane seepage, significant harm to wildlife (including sage grouse and elk), and the transformation of a natural setting into an industrial one in areas where plaintiffs’ members hike, hunt, camp, watch wildlife, go to seek peace and quiet, and enjoy other recreational activities. Plaintiffs’ members intend to return to this area to engage in these activities. Defendants’ challenged actions will limit their ability to do so and their enjoyment of those activities. These are cognizable injuries. Laidlaw, 528 U.S. at 181-85; American Bird Conservancy v. F.C.C., 516 F.3d 1027, 1031 (D.C. Cir. 2008); NRDC v. E.P.A., 489 F.3d at 1370-71. Plaintiffs’ injuries will be redressed by a decision rescinding the drilling permits approved by Defendants and prohibiting defendants from approving any further surface disturbing activity until defendants correct their violations of NEPA.

While significant work went into preparation of the project FEIS, BLM itself acknowledged that it had not finished the environmental analysis required under NEPA. AR 4798. BLM did not know the exact locations of the proposed 2,000 wells or accompanying infrastructure. Consequently, the agency did not include site-specific analysis of the wells in the project EIS. AR 4483, 4561, 4570, 4578, 4580, 4588. Energy companies could not proceed with ground disturbing activity until they obtained approvals of applications for permits to drill. Accordingly, BLM deferred analysis of site-specific impacts until these drilling permit applications were received. Id.

BLM began to approve drilling permits in the summer of 2007. On June 28, 2007, BLM approved the first plans of development submitted by Double Eagle in the Catalina unit for 39 new wells and the roads, pipelines and other infrastructure to go with them. AR 73502. Fourteen of the wells were in Catalina plan of development (“POD”) A and 25 were in POD B. AR 73492. On August 16, 2007, BLM approved plans of development submitted by Anadarko in the Sun Dog unit for 51 new wells and the roads, pipelines and other infrastructure to go with them. AR 74073. Twenty-eight of the wells were in Sun Dog POD A and 23 were in POD B. AR 74063. In each case, BLM conducted little new environmental analysis, but instead relied on the analysis previously done when the agency approved the general project concept. Although BLM knew of the intense interest of the BCA and other plaintiffs in the Atlantic Rim Development Project, the agency did not involve BCA or the public in the environmental review process for either of the PODs that BLM approved in June 2007. Second Molvar Decl., at ¶¶ 20, 21.

On October 23, 2007, BLM approved three additional plans of development (C, D, and E) in the Sun Dog unit. AR 75029, 75185. These PODs contained 48 new wells.

AR 75019, 75173. Thus, seven different plans of development and 138 total wells are part of this litigation.²

PRIOR PROCEEDINGS

Plaintiffs filed their original complaint and a motion for preliminary injunction on September 25, 2007. As the administrative record was not yet available, plaintiffs supported their preliminary injunction motion with the documents available at that point. On November 30, 2007, the Court issued an order denying plaintiffs' motion. Plaintiffs now fully present their argument – supported by the record – that BLM has failed to comply with the National Environmental Policy Act. Plaintiffs have not pursued and hereby waive claims under the Clean Water Act and the Federal Land Policy Management Act (“FLPMA”).

STANDARD OF REVIEW

When reviewing agency action for compliance with NEPA, courts must confirm “that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious.” Nevada v. Department of Energy, 457 F.3d 78, 87-88 (D.C. Cir. 2006), citing Baltimore Gas & Electric Company v. NRDC, 462 U.S. 87, 97-98 (1993). Agency action is arbitrary and capricious if the agency has “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, 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. . . .” Motor Vehicles Mfrs. Ass’n v. State Farm Mutual Auto. Ins. Co., 463 U.S. 29, 43 (1983).

² Plaintiffs amended their complaint on October 26, 2007, to include the Sun Dog C, D & E PODs. On April 3, 2008, BLM approved three more PODs. While plaintiffs did not amend their complaint to include these most recent POD approvals, similar issues are involved as with the earlier BLM actions.

“NEPA review is . . . not toothless.” Environmental Defense v. U.S. Army Corps of Engineers, 515 F.Supp.2d 69, 76 (D.D.C. 2007). “Reviewing courts must independently evaluate the record to confirm that the agency made a reasoned decision based on its analysis of the evidence before it.” Id. citing Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1990). If it did not, a court “may properly conclude that the agency has acted arbitrarily and capriciously.” Id. quoting Earth Island Inst. v. United States Forest Service, 442 F.3d 1147, 1160 (9th Cir. 2006).

ARGUMENT

I. BLM Failed to Take a Hard Look at Environmental Impacts Prior to Approving Applications for Permits to Drill in the Atlantic Rim Project Area.

NEPA requires agencies to take a “hard look” at environmental consequences of proposed actions and to broadly disseminate relevant environmental information. Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989); Grand Canyon Trust v. F.A.A., 290 F.3d 339, 341 (D.C. Cir. 2002). Here, BLM failed to take the hard look required under NEPA at several environmental impacts from the Catalina and Sun Dog development plans the agency approved. The analysis that BLM provided in the Atlantic Rim project FEIS was insufficient to satisfy NEPA’s requirements. The agency ignored the advice of its own experts regarding air quality impacts and methane leaks. In addition, the agency ignored the advice of experts from its sister agency the U.S. Fish and Wildlife Service and relied on sage grouse mitigation measures that evidence in the record demonstrated did not achieve the results BLM concluded that they would. BLM did not cure these inadequacies in the environmental assessments (“EAs”) issued to

accompany BLM's approval of the 138 new wells in the Catalina and Sun Dog development plans.

A. BLM Failed to Take a Hard Look at Air Quality Impacts.

The fundamental objective of NEPA is to ensure that an “agency will not act on incomplete information only to regret its decision after it is too late to correct.” Marsh v. Oregon Natural Resources Council, 490 U.S. at 371 (citation omitted). NEPA's implementing regulations impose an affirmative duty on federal agencies to “insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.” 40 C.F.R. § 1502.24. An agency cannot rely on a model that “bears no rational relationship to the reality it purports to represent.” Columbia Falls Aluminum Co. v. E.P.A., 139 F.3d 914, 923 (D.C. Cir. 1998). Here, BLM approved the Catalina and Sun Dog plans of developments based on air quality analysis that the agency itself acknowledged was out-dated and insufficient.

While normally associated with urban areas, ozone pollution is becoming a growing problem in Wyoming as the number of oil and gas drilling rigs and compressors and the amount of diesel truck traffic dramatically increases. AR 8667 (monitoring has shown exceedances of the ozone standard in and near the Jonah field). BLM estimated that existing background ozone levels in the Atlantic Rim project area were already at 94 percent of federal air quality standards for an 8-hour averaging period. AR 2181 (excerpts of FEIS attached as Exh. 7). Ozone forms through the chemical reaction of nitrogen oxides (“NOx”) and volatile organic compound (“VOC”) emissions in the presence of sunlight. AR 2328. Breathing ground level ozone can cause a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can

worsen bronchitis, emphysema, and asthma.³ Epidemiologic studies in the United States and Europe have linked total mortality, cardiovascular mortality and respiratory mortality to short term increases in ozone levels.⁴

Ground level ozone also damages plants and ecosystems. Increased levels of ozone can damage the leaves of trees and other plants, degrading the appearance of vegetation in recreation areas.⁵ As required by the Clean Air Act, USEPA has set National Ambient Air Quality Standards (“NAAQS”) for ozone to protect public health and welfare. 42 U.S.C. § 7409(b). The 8-hour NAAQS for ozone is 157 ug/m³. AR 2181.⁶ The State of Wyoming’s air quality standard for ozone is the same. Id.

A variety of activities approved by BLM as part of the Atlantic Rim project produce NO_x and VOC emissions. AR 2327. During well construction, drilling rigs and vehicle engine exhaust would produce NO_x and VOC emissions. Id. BLM documents estimate that construction of a single well would produce 1.086 tons of NO_x and 4.899 tons of VOCs. AR 2660. During production, compressor stations, dehydrator heaters, dehydrator gas processing operations, and diesel combustion in haul trucks would produce NO_x and VOC emissions. AR 2661. Combining production and construction

³ USEPA, Fact Sheet: Ground-Level Ozone Health and Environment (hereafter “USEPA Ozone Fact Sheet”), available at <http://www.epa.gov/air/ozonepollution/health.html>. This court may take judicial notice of scientific facts that are “ascertainable with certainty without resort to cumbersome methods of proof.” See e.g., Melong v. Micronesian Claims Commission, 643 F.2d 10, 12 (D.C. Cir. 1980), citing Fed. Rules Evid. 201(b). Plaintiffs request that the Court take judicial notice of the health impacts of ground level ozone pollution as articulated in the USEPA fact sheets and peer-reviewed scientific articles cited herein.

⁴ Bell, M.L.; McDermott, A; Zeger, S.L.; Samet, J.M.; Dominici, F. (2004) Ozone and Short-term Mortality in 95 US Urban Communities, 1987-2000. *J.American Medical Association*, 292:2372-2378; Gryparis, A. et al. (2004) Acute Effects of Ozone on Mortality from the “Air Pollution and Health a European Approach” Project. *Am.J.Respir.Crit.CareMed.* 170: 1080-1087.

⁵ USEPA Ozone Fact Sheet, supra, note 3.

⁶ USEPA recently finalized revisions to the ozone standard lowering the standard from 157 ug/m³ to 147 ug/m³. 73 Fed. Reg. 16436 (March 27, 2008). Plaintiffs’ analysis is based on the standard that existed at the time BLM made its decisions to approve the Atlantic Rim ROD/ FEIS and the Catalina and Sun Dog PODs challenged herein.

emissions, BLM estimates that the Atlantic Rim project would produce 674.88 tons per year of NO_x and 5,869.44 tons per year of VOCs. AR 2663.

In assessing the ozone impacts of the Catalina and Sun Dog plans of development, BLM made two fundamental errors. First, the agency relied on a 1988 method that BLM itself acknowledged was insufficient – the “Scheffe method” – to determine the levels of ozone resulting from the project development. Second, BLM used an invalid background ozone level to justify the agency’s conclusion that the project development would not violate the ozone NAAQS.

1. The Discredited Scheffe Method

As the Rawlins Field Office began to develop the Environmental Impact Statement for the Atlantic Rim project, Wyoming BLM was facing increasing questions about the adequacy of its air quality analysis. Plaintiff BCA raised concerns related to impacts on ozone concentrations in its comments on the Atlantic Rim Draft EIS on February 17, 2006. AR 70538, 70599 (excerpts of BCA comments attached as Exh. 8). BCA’s comments referred to and explicitly incorporated by reference comments identifying problems with the air quality analysis for several other projects under consideration by Wyoming BLM. AR 70598. These projects and decisions pending at the time the Atlantic Rim Draft Environmental Impact Statement was being prepared included: (1) the Jack Morrow Hills Supplemental Draft Environmental Impact Statement; (2) the Jonah Infill Drilling project Draft Environmental Impact Statement; (3) the Seminole Road Natural Gas Development Project Draft Environmental Impact Statement; and (4) the Rawlins Resource Management Plan Draft Environmental Impact Statement. AR 70598.

In commenting on the Jonah Infill Project Draft Environmental Impact Statement air quality supplement on September 26, 2005, plaintiff Wyoming Outdoor Council (“WOC”) criticized BLM’s reliance on the 1988 Scheffe model developed as “very out-of-date, compared to the state of the science.” AR 86223. WOC’s comments criticized the Scheffe model for failing to incorporate “[a]dvances in understanding ozone photochemistry that have occurred since the late 1980’s.” AR 86224. As WOC told BLM, Reactive Plume Models such as the Scheffe model “do not adequately treat the influence of emissions, transport and chemistry going on outside the ‘plume.’” AR 86224. WOC urged BLM to change how it was analyzing ozone impacts so the agency could get a more accurate picture of the problems increased drilling was causing. WOC’s comments state:

The preferred method for estimating ozone production from a particular source is to use a “plume-in-grid” treatment. In this approach, chemistry and transport in the plume from a point source is modeled as it disperses and mixes with the surrounding air, while the emissions, chemistry and transport going on in the background air are simultaneously modeled using an Eulerian grid framework. Models that are currently widely used and recommended for predicting ozone impacts for regulatory purposes, including the Comprehensive Air Quality Model (CAMx) and the Community Multiscale Air Quality model (CMAQ) have this capability. And, unlike the Scheffe (1988) approach, these models can account for the interacting suite of variables that actually determine how much ozone would be produced from a new source of emissions.

AR 86224 (citations omitted).

Dr. Scheffe himself – still a Senior Science Advisor at USEPA – has acknowledged that his method developed in 1988 lacks scientific validity. In a July 28, 2006 letter, Dr. Scheffe noted that his method “was deemed ‘not adequate’ in 1989 [and is] even less adequate today.” AR 9881 (attached as Exh. 9). Dr. Scheffe attests that the

tables he developed in 1988 “never achieved a level of EPA certification associated with EPA guideline models and consequently were not endorsed by the Agency.” Id.

The Scheffe model does not meet the standards for scientific integrity that NEPA requires. “[A]gencies are under an affirmative mandate to ‘insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.’” Environmental Defense, 515 F.Supp.2d at 78, quoting 40 C.F.R. § 1502.24. Courts will reject scientific judgments made by an agency that are unsupported by the record. See, e.g., NRDC v. Daley, 209 F.3d 747, 755 (D.C. Cir. 2000) (court struck down judgment by National Marine Fisheries Service that fishing quota was sufficient to meet statutory conservation goals). The record must demonstrate that an agency’s model accurately represents reality and is based on accurate assumptions. Columbia Falls Aluminum Co., 139 F.3d at 923. In Columbia Falls, the D.C. Circuit rejected EPA’s use of a model applicable to the disposal of hazardous waste where the agency persisted in using the model despite its acknowledgement that “it is now apparent that the TCLP is not a good model for disposal conditions.” Id. at 922-23. BLM has acted in exactly the same arbitrary way here. The agency has persisted in using a method to assess impacts on air quality that BLM itself acknowledged was inadequate.

BLM knew at the time that it was preparing the Atlantic Rim EIS that the Scheffe model lacked the scientific integrity that NEPA requires. AR 8666 (BLM information memorandum for State Director, dated August 31, 2006, states that “BLM’s use of the Scheffe method now deemed obsolete”) (attached as Exh 10). Another document in the record containing BLM’s notes to EPA regarding “Ozone: What’s Next?” states that the Scheffe method was not appropriate for the purpose of “estimate[ing] potential ozone

impacts from proposed projects.” AR 8667 attached as Exh 11. This document is dated September 8, 2006 – over eight months before BLM issued the Final Environmental Impact Statement and Record of Decision approving the Atlantic Rim project. No compelling reason exists in the record to justify BLM’s failure to update its ozone modeling before approving extensive development in the Atlantic Rim area.

BLM arbitrarily relied on the Scheffe method despite the fact that it does not meet the regulatory standards established by EPA for air quality modeling.⁷ EPA has issued regulations establishing a “Guideline on Air Quality Models” that specifies the models to be used for various applications. 40 C.F.R. Part 51, App. W, as revised (70 Fed. Reg. 68,218 (Nov. 9, 2005)) [hereafter “EPA Guideline”]. EPA explains that the models authorized in the Guideline are intended to be applied by federal land management agencies, such as BLM, as well as state and federal air management agencies:

- a. The Guideline recommends air quality modeling techniques that should be applied . . . to new source reviews (NSR), including prevention of significant deterioration (PSD). . . . The guidance is appropriate for use by other Federal agencies and by State agencies with air quality and land management responsibilities. The Guideline serves to identify, for all interested parties, those techniques and data bases EPA considers acceptable.

EPA Guideline ¶ 1.0.a. “In all cases, the model applied to a given situation should be one that provides the most accurate representation of atmospheric transport, dispersion, and chemical transformations in the area of interest.” *Id.*, ¶ 1.0.e.

⁷ This court owes no deference to BLM regarding interpretation of EPA’s air quality modeling criteria. See Grand Canyon Trust, 290 F.3d at 342 (“the court owes no deference to the FAA’s interpretation of NEPA or the CEQ regulations because NEPA is addressed to all federal agencies and Congress did not entrust administration of NEPA to the FAA alone”). Just as the FAA had no special NEPA expertise, BLM has no particular expertise related to air quality modeling. See also Biodiversity Conservation Alliance v. BLM, 404 F.Supp.2d 212, 217 (D.D.C. 2005). Congress specifically directed EPA – not BLM – to promulgate regulations that “shall specify with reasonable particularity each air quality model or models to be used under specified sets of conditions.” 42 U.S.C. § 7475(e)(3)(D); see also 42 U.S.C. § 7620.

For ozone, the EPA Guideline authorizes models for two different types of applications – multi-source and single source applications. Id., ¶ 5.2.1.a. and c. In the Atlantic Rim project area where the primary ozone precursors – VOC and NO_x – will be emitted from operation of many drill rigs, well pads, compressor stations, and diesel truck engines, the single source models are not appropriate. Instead, for applications, such as the Atlantic Rim project, involving multiple sources of ozone precursor chemicals, EPA recommends a photochemical grid model, the Community Multiscale Air Quality model (“CMAQ”). Id., ¶ 5.2.1.a.

BLM, however, did not apply this EPA-authorized multi-source model to determine expected ozone concentrations in areas affected by emissions from the Atlantic Rim project. Nor, apparently, did BLM obtain formal EPA approval to use an alternative model for this purpose. EPA’s Guideline provides for the selection of an alternative model that is not identified by EPA in the Guideline only upon a showing that: (1) “the model produces concentration estimates equivalent to the estimates obtained using a preferred model”; (2) “a statistical performance evaluation has been conducted using measured air quality data and the results of that evaluation indicate the alternative model performs better for the given application than a comparable model in Appendix A”; or (3) there is no preferred model for the application. Id., ¶ 3.2.2.b. In the latter case, when no model has been approved, a proposed model cannot be used unless it has been peer-reviewed and satisfies numerous performance criteria prescribed by the Guideline ¶ 3.2.2.e. In short, the use of an alternative model is only permissible if it can be demonstrated that the model is both reliable and particularly well-suited to its proposed application.

Here, BLM used the Scheffe method rather than EPA’s preferred CMAQ model without making any attempt to demonstrate that the Scheffe method complies with the Guideline. AR 2328, AR 2687, AR 2703. BLM undertook no investigation to demonstrate that the Scheffe method would perform as well as one of the EPA-preferred models, producing “concentration estimates equivalent to the estimates obtained using [EPA’s] preferred” CMAQ model. EPA Guideline ¶ 3.2.2.b. BLM undertook no “performance evaluation” using measured air quality data to show that the Scheffe method performs better than the CMAQ model for multi-source applications such as the Atlantic Rim project. Thus, BLM cannot establish that use of the Scheffe method was proper under the EPA Guideline.

Moreover, even if BLM had requested EPA approval to use an alternative model – which nothing in the record indicates that BLM did – the Scheffe method could never pass muster under the Guideline’s provisions governing selection of an alternative model. EPA Guideline ¶ 3.2.2.e. The Scheffe method has not been scientifically peer-reviewed. AR 9881.

In approving the Catalina and Sun Dog plans of development beginning in June 2007, BLM cannot rely on or “tier to” NEPA analysis that is inadequate.⁸ Plaintiffs do not take issue with BLM’s use of a tiered approach per se. The problem is that BLM did not complete adequate air quality analysis either when it prepared the FEIS or in the environmental assessments completed for the challenged drilling permit approvals.⁹ See,

⁸ “‘Tiering’ refers to the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.” 40 C.F.R. § 1508.28.

⁹ The EAs prepared by BLM for the Catalina and Sun Dog plans of development do not include any air quality analysis. Instead, these EAs simply refer back to the project FEIS. See, e.g., AR 73498 (EA for

e.g., Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1078 (9th Cir. 2002). In Kern, the court found BLM’s NEPA analysis inadequate to support a timber sale where the EA completed for the sale did not include a discussion of cumulative impacts concerning the spread of a damaging fungus and the EIS for the Resource Management Plan covering the area did not include such cumulative impacts discussion either. Id. BLM’s analysis suffers the same fatal flaw here.

BLM ignored the fundamental purpose of NEPA to ensure that federal agencies collect and consider information about environmental impacts before they act. See Robertson, 490 U.S. at 349. BLM knew that the Scheffe model did not provide an accurate representation of ozone impacts, yet blindly plowed ahead and approved the drilling permits nonetheless. Such knowing ignorance is exactly what NEPA is designed to prevent. This is not a case where the concerns were raised at the eleventh hour. Public comments on the Draft EIS for the Atlantic Rim project criticized BLM’s use of the Scheffe model as early as February 21, 2006 – well over a year before BLM issued the Atlantic Rim project Record of Decision and FEIS on May 21, 2007. AR 70538, 70598.

Moreover, BLM’s own documents dated August 2006 acknowledged that the Scheffe method was no longer scientifically valid. AR 8666 (“BLM’s use of the Scheffe method now deemed obsolete”); see also, BLM, Draft Supplemental Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project (“Pinedale DSEIS”) (Sublette County, Wyoming) (December 2006), available at <http://www.blm.gov/wy/st/en/info/NEPA/pfodocs/anticline/seis.html> (excerpts attached

Catalina A & B PODs) (“Air quality impacts are disclosed and analyzed in AREIS.”) attached as Exh. 12; see also AR 74063 (EA for Sun Dog A & B PODs); AR 75019 (EA for Sun Dog C & D PODs); AR 75173 (EA for Sun Dog E POD).

as Exh. 13).¹⁰ In the Pinedale DSEIS – issued six months before the Atlantic Rim Record of Decision/ FEIS – BLM states:

The EPA screening methodology (Scheffe, 1998)¹¹ for ozone analysis was planned for inclusion in this Draft SEIS. However, BLM, with the agreement of the Air Quality Stakeholder Group, has determined that the CALGRID model for ozone impact analysis is the most appropriate method for estimating ozone impact from the PAPA [Pinedale Anticline Project Area]. Results from the CALGRID modeling analysis will be released as a supplement to the Air Quality TSD for this Draft SEIS.

Id. A similar supplement could have – and should have – been done for Atlantic Rim project.

Even if the Court finds that the project EIS was too far along to require BLM to supplement it with new modeling, BLM has no excuse for failing to complete accurate modeling before approving the Catalina and Sun Dog drilling permits. NEPA’s obligations apply anew to BLM’s decisions approving the development of the Catalina and Sun Dog PODs – each of these approvals is a major federal action under NEPA. See 42 U.S.C. § 4332(2)(C); see also AR 4798 (“This decision is not the final review or approval for actions associated with ARNG development. The AO will review and consider each component of the project that involves federal lands or minerals on a site-specific basis. Other reviews or decision points include, but are not limited to, the review of annual or multi-year development plans (including transportation plans), Applications for Permit to Drill (APD), right-of-way (ROW) grants, Sundry Notices, or applications for Special Use Permits.”). BLM knew as it undertook the environmental review process for the Catalina and Sun Dog PODs that the existing air quality modeling did not provide

¹⁰ Plaintiffs request that the court take judicial notice of this BLM document available on the internet and whose accuracy is not disputed. See supra note 3.

¹¹ BLM identifies the Scheffe method as dated 1998. In fact, the methodology was developed by Dr. Richard Scheffe over two decades ago in 1988. AR 9881.

an accurate picture of reality. Nevertheless, the agency persisted in relying on a model that it knew was no good, just as EPA did in Columbia Falls. As the D.C. Circuit did in Columbia Falls, this Court should reject BLM's attempt to remain in the dark, ignoring the true consequences of its actions.

2. Invalid Background Ozone Level

Even assuming for the sake of argument that the Scheffe method was an appropriate method for the required ozone air quality analysis, BLM's analysis suffers a second fatal flaw. An agency's decision under NEPA must involve a reasoned analysis of the evidence before the agency. Environmental Defense, 515 F.Supp.2d at 76, citing Marsh, 490 U.S. at 371. Here, BLM failed to incorporate the background ozone level the agency itself identified in determining the impact on ozone concentrations when the predicted project emissions were added.

BLM's determination of "total predicted impacts" related to ozone concentrations cannot survive even minimal scrutiny. Once the modeling is complete, the calculation to determine impacts on ozone levels is one of simple addition. As BLM stated in its FEIS, "[b]ackground air quality concentrations are combined with modeled project-related air quality impacts of the same averaging time periods, and the total predicted impacts are compared to applicable air quality standards." AR 2183 (emphasis added). Table 3-6 of the FEIS identifies the measured background concentration. The background level measured for ozone according to the 8-hour standard is listed as 147 ug/m³. AR 2181. Although a background level is also listed for ozone based on a 1-hour standard, the NAAQS has been based only on an 8-hour standard, not a 1-hour standard, since 1997. See 62 Fed. Reg. 38856 (July 18, 1997) (EPA revision to ozone standard replaced the

then existing primary 1-hour average standard with only an 8-hour average ozone standard). See also, 40 C.F.R. § 50.10 (2007).¹² The NAAQS is now specifically based on an 8-hour standard because exposure to high ozone concentrations for short periods (8 hours or less) is associated with serious health effects. Id. EPA's regulations specify that 8-hour concentration levels are determined by the annual fourth-highest daily maximum eight-hour average. 40 C.F.R. § 50.10(b) (2007). As the FEIS indicates, 147 ug/m³ was the fourth-highest daily 8-hour value measured. AR 2181.

According to the methodology that BLM itself set out, the agency should have added the background value of 147 ug/m³ to the predicted project emissions to estimate ozone concentrations from the development. BLM's modeled "Maximum Predicted" ozone level is 16.1 ug/m³. AR 2332. These predicted emissions are based on the current 8-hour averaging period. Id. Simple math, adding 147 to 16.1, produces an ozone concentration of 163.1 ug/m³. This level exceeds the NAAQS of 157 ug/m³.

But BLM did not do this. Instead, the agency hunted up a more convenient background concentration level of ozone that would not lead to a predicted violation of the NAAQS. The new, substituted background concentration is 75.2 ug/m³. AR 2331. This number is based on an hourly average rather than an 8-hour average. Id. ("O₃ [ozone] maximum predicted concentrations were added to the average hourly background O₃ conditions monitored as part of the Green River Basin Visibility Study"). BLM failed to follow the methodology that the agency itself identified – to use "the same averaging time periods." AR 2183 (emphasis added). BLM added 75.2 ug/m³ (an hourly average)

¹² BLM acknowledges the inapplicability of the 1-hour standard in its FEIS for Atlantic Rim. The FEIS provides: "EPA published a final rule on August 3, 2005 revoking the 1-hour ozone standard for all areas of Wyoming effective June 15, 2005. The WDEQ-AQD then completed the process of removing the 1-hour standard from Wyoming Air Quality Standards & Regulations effective January 30, 2006. As a result, there is no federal or state 1-hour ozone standard that applies to Wyoming." AR 2183.

to 16.1 ug/m³ (an 8-hr average) to get a “total predicted impact” of 91.3 ug/m³. AR 2332. Conveniently, this total is well below the NAAQS.¹³ BLM has failed elementary school math. The agency is adding apples to oranges. Plaintiff BCA criticized BLM’s fuzzy math in its comments on Atlantic Rim’s Draft Environmental Impact Statement. AR 70599. Yet, BLM persisted in its error.

3. Implications of BLM’s Flawed Ozone Analysis

The relief that plaintiffs seek – a complete air quality analysis – is not simply a paper exercise. Ground-level ozone pollution is becoming a pressing concern in Wyoming, including the Atlantic Rim area. While usually a summertime air pollutant in urban areas, Wyoming officials have issued several health alerts in rural gas-drilling areas due to a substantial buildup of ozone. Lipsher, Steve, “Wyoming Ozone Alert Stirs Debate,” Denver Post (February 28, 2008), attached as Exh. 14; see also Wyoming Department of Environmental Quality health advisories, available at <http://deq.state.wy.us/out/outreachpressrelease.htm>. BLM must have complete and accurate information to make the informed decisions that NEPA requires regarding the appropriate amount of drilling and appropriate pollution controls. See City of Williams v. Dombeck, 151 F.Supp.2d 9, 17 (D.D.C. 2001) (NEPA was enacted “to help public officials make decisions that are based on an understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.”), citing 40 C.F.R. § 1500.1(c); Environmental Defense, 515 F.Supp.2d at 78.

¹³ BLM concluded in the FEIS that “[t]he predicted potential cumulative impacts are below applicable ambient air quality standards and PSD [prevention of significant deterioration] increments.” AR 2489. Neither the FEIS or any the the Environmental Assessments accompanying the Catalina and Sun Dog approvals discuss the damage to health and environment caused by ground-level ozone.

By relying on an out-dated methodology and an incorrect background number, BLM failed to require readily available emission controls for drilling rigs and other gas exploration and production equipment. The FEIS does not contain any controls to limit the project's impact on ozone concentrations. AR 2335; see also, AR 4839. BLM did not conduct any additional air quality analysis when preparing the Environmental Assessments to accompany the agency's approvals of the Catalina and Sun Dog plans of development. See, e.g., AR 73498 (Catalina EA) ("Air quality impacts are disclosed and analyzed in the AREIS."). The Conditions of Approval for the Catalina and Sun Dog plans of development also do not contain mitigation measures to limit the impacts of the approved exploration and production on ozone concentrations. See e.g., AR 73506-19 (Conditions of Approval for Catalina PODs A & B).

Yet, means to limit emissions of NOx and VOCs that form harmful ground level ozone are readily available. In fact, BLM has required such measures elsewhere in Wyoming. In the Pinedale area, for example, BLM proposed to require 80 percent emission reductions. BLM, Pinedale Anticline Draft SEIS (December 2006), at 4-74, attached as Exh. 13. The Pinedale Draft SEIS prepared by BLM identifies several measures that can be taken to reduce emissions that cause air quality impacts including the use of natural gas-fired drilling rig engines, Tier 2 diesel drilling rigs and centralization of gathering facilities to reduce truck traffic. Id. at 4-75.¹⁴

B. BLM Failed to Take a Hard Look at Methane Leak Impacts.

The Atlantic Rim FEIS fails to adequately disclose the potential environmental harms that the project will trigger by causing methane gas to be released through dry

¹⁴ Although the analysis in the Pinedale Draft SEIS is focused on visibility impacts, NOx emissions contributing to reductions in visibility also contribute to increased ozone concentrations.

seeps and as part of springs. This failure is especially egregious because the administrative record shows that BLM's own scientists identified the risk of harm from methane releases but BLM still failed to disclose this information in the FEIS. As a BLM scientist stated in an internal BLM document, "there exist some fairly severe safety and environmental concerns" due to the increases in methane emissions that the project will cause. AR 8805. However, the few sentences in the FEIS on the topic of methane discharges utterly fail to disclose the environmental effects that BLM's own scientist predicted. Accordingly, the FEIS fails to adequately disclose this important effect of the project. See Robertson, 490 U.S. at 350 (agency must assure that "the adverse environmental effects of the proposed action are adequately identified and evaluated").

In the administrative record, internal BLM scientific analysis and comments by the United States Environmental Protection Agency (EPA) and plaintiffs documented that the development of the Atlantic Rim coal bed methane project would result in releases of methane and that those releases would have serious environmental effects. These effects include both the risk of local harm from the high concentrations of methane and contributions to global warming due to the potent heat-trapping capacity of methane. AR 8803. In contrast, the FEIS contains only a few sentences on the general topic of methane springs, no discussion of the evidence that the interim drilling had already caused an increase in methane seeps, and no discussion of global warming. AR 2351, AR 4547.

In a BLM document dated February 6, 2007, a BLM Petroleum Engineer, Jon N. Dull, evaluated known methane gas seeps in the Atlantic Rim area. AR 8799-8808, attached as Exh. 15. Dull noted that there appeared to have been a significant increase in

the amount of methane escaping from seeps “since the commencement of [the interim] CBNG [coal bed natural gas] development,” and that this increase was probably the result of that development. AR 8803. Dull concluded that “it is likely that future CBNG development may cause increased quantities of gas to be emitted from the known seeps. It is also possible that there exist other seeps within the ARPA that are yet to be discovered.” AR 8805.

As Dull explained, this increase in methane seeps is a predictable result of coal bed methane production because the same process that releases methane for capture in production wells also allows it to escape to the atmosphere through innumerable fractures, springs and old, improperly closed wells. AR 8802. Specifically, gas companies produce methane from coal seams “through a dewatering process where the hydrostatic head (pressure) is reduced, within the coal beds. . . .” Id. The reduction in pressure within the coal seams allows methane gas that is otherwise trapped in the coal seam to be released. Id. The gas companies capture a portion of the released methane through their wells but, once it has been released from the coal bed, the methane also migrates to the atmosphere through other routes. AR 8802-03

BLM’s engineer Dull identified the following “fairly severe safety and environmental concerns” (AR 8805) from the increase in methane gas seeps:

- (1) Potential damage to the atmosphere by elevated emission of coal bed gases. All the constituents of the coal bed gases are considered to be greenhouse gases and incompatible with the well being of the earth’s atmosphere.
- (2) Potential damage to human and animal safety:
 - Accidental ignition by an unaware tourist/hunter could result in someone being seriously burned. Natural ignition via lightening or spontaneous combustion of exposed coal bed [gases] could cause wild fires that would be a danger to human life, wildlife and vegetation.

- Some of the potential constituents of coal gases like hydrogen sulfide and carbon dioxide are poisonous to humans and wildlife. They are also heavier than air and can settle in low lying basin areas and can create potential traps for the unknowing and unwary.

(3) Potential damage to vegetation: Some of the coal gas constituents like methane and hydrogen sulfide are incompatible with plant life and can result in vegetation die off in the adjacent vicinity of the seeps. In the San Juan Basin of Colorado there have been extensive vegetation kills adjacent to gas seeps associated with the coal bed outcrops that are being developed for CBNG.

AR 8803.

Although neither EPA nor plaintiffs had the benefit of Dull's analysis, comments from each echoed his concerns. EPA explained that the project will "generate greenhouse gases, including methane and CO₂" and urged that "[t]he EIS should include an evaluation of project greenhouse gas emissions and their potential control technologies to provide public disclosure of this environmental impact." AR 3481; see also AR 9941. Likewise, plaintiffs urged that methane impacts on global warming be evaluated, pointing out that methane "is a global warming gas 20 times more potent than carbon dioxide."¹⁵ AR 9954.

Like Dull, plaintiffs and other public commenters also linked the recent increase in methane spring activity to the interim coal bed methane production BLM had approved. In March of 2007, local rancher Sharon O'Toole met with Bob Bennett of BLM and provided photos of active methane springs. Ms. O'Toole's email stated that she had spoken "with Venable Barclay, a geologist who has done a lot of work in this area [and who] confirmed that this is new activity." AR 9432. In April, 2007, Wyoming Outdoor Council ("WOC") submitted a letter to BLM describing "new and unexplained" methane springs that "have been occurring in the Atlantic Rim area," "coincid[ent] with

¹⁵ This means that each molecule of methane released to the atmosphere will contribute twenty times the amount of warming as a molecule of carbon dioxide.

the drilling and development of coal bed methane wells in the area, due to the pilot project that the BLM approved.”¹⁶ AR 8840, attached as Exh. 16. WOC’s letter explained that the Wyoming Department of Environmental Quality (DEQ) had recently held a meeting about the new methane seeps and had explained that these new methane emissions were “not due to the reinjection of produced water.” Id. However, WOC pointed out that Wyoming DEQ did not address the withdrawal of water and WOC explained – consistent with Dull’s explanation – that the evidence “suggests that coal seam dewatering is causing” the “rapid and substantial increase in methane springs.” AR 8840-8841.

The record also shows that Barbara Parsons, a member of a BLM advisory group, forwarded to BLM an April 27, 2007 Biodiversity Conservation Alliance press release concerning the methane springs. AR 9447. The release contained the results of testing conducted by Walt Merschhat, a geochemist who Parsons described as “a very credible professional geologist with experience in” coal bed methane. AR 9447; see also AR 79100 (Declaration of Walter R. Merschhat), attached as Exh. 17. Merschhat had tested the concentration of gases in new and previously existing methane springs and found “exceptionally high methane concentrations.” AR 9450. Merschhat also pointed out that in addition to the bubbling methane seeps associated with springs, methane was invisibly “seeping out of dry cracks in the ground.” Id. The BCA news release urged BLM to supplement the FEIS with an evaluation of the methane impacts. Id.

BLM recognized that it must respond to plaintiffs’ letter and release because “until the ROD is released to the public,” the administrative record “is still open for this

¹⁶ The WOC letter alternatively refers to methane springs and “mud pots,” which such springs are called because methane appears to boil up out of the mud.

kind of information.” AR 9452. However, the record shows that BLM never seriously considered the information submitted but instead simply tried to find a way to approve the project as quickly as possible. AR 9453. As articulated in its own memorandum, BLM chose a “do nothing” approach. AR 9467, attached as Exh. 18. The agency recognized that such an approach “keeps project on track without any additional work” but that doing nothing “does not acknowledge public comment received during NEPA process, does not match the administrative record, increases risk of appeal by WOC and diminishes the defensibility of NEPA process and the ‘hard look.’” *Id.* Rather than revising its Record of Decision, BLM issued it without any errata discussing the methane concerns that the public had brought to the agency’s attention. AR 4817-4819.

Neither the ROD nor the FEIS nor the Environmental Assessments prepared for the Catalina and Sundog development plans contain any reference to the report Dull drafted. Dull himself does not appear to have been included in any meetings or email correspondence regarding how the agency should respond to plaintiffs’ concerns about methane. Thus, it appears that BLM never consulted its own expert’s analysis of the issue. The correspondence also shows that BLM’s discussion focused on whether the reinjection of water was causing the problem, when in fact plaintiffs’ comments explicitly stated that the withdrawal of water, rather than reinjection, had caused the increase in methane seeps. AR 9453 (BLM discussion of reinjection); 8840-8841 (WOC letter).

Rather than analyzing the issue presented, BLM simply assembled the few instances in which the FEIS mentioned methane seeps. BLM’s hydrologist, Bob Lange compiled the FEIS’s references to methane and implicitly admitted in his cover email that

the analysis was not sufficient: “If I were to write this analysis today, I would have gone into more detail about gas migration and made the point that project activities and drought can cause this phenomenon.” AR 9460 attached as Exh. 19. Notwithstanding this admission, BLM’s assistant field manager concluded – mistakenly – that BLM had adequately “addressed methane springs in the FEIS.” AR 9460.

In fact, the discussion of methane seeps in the FEIS is woefully inadequate. The discussion is limited to two general paragraphs. The groundwater section included the following:

Methane seeps could possibly develop in the outcrop region of the Mesaverde Group as a result of this project. These seeps could contaminate shallow groundwater resources and may also cause the death of vegetation in limited areas. The number or location of these seeps is impossible to predict, therefore monitoring would be established to evaluate this impact. These seeps have been documented within CBNG development in the San Juan Basin along with other areas of CBNG development. In the San Juan Basin many of these seeps, even before production, occurred in the outcrop regions of the producing formations.

AR 2351. The vegetation impact section stated:

Although most natural gas would be collected as water is removed from the coal aquifers, some gases may move upslope through the formation and escape through the soil surface. Where this occurs the vegetation may die back, resulting in dominance of herbaceous species and increased bare ground. These locations would generally be small and scattered along the outcrops of the coal formations, probably affecting less than 10 acres altogether.

AR 2371.¹⁷ Finally, BLM proposes to include monitoring wells to “quantify potential impacts from methane seeps where the Mesaverde Group outcrops.” AR 2368. The only mention of the effects of methane on global warming is BLM’s statement, made in

¹⁷ In the response to comments included in the ROD, BLM also acknowledged “reports of mud pots and geysers” that “may be related to current operations.” AR 4868-4881. However, BLM only disclosed that these features are “not likely related to injection of produced water,” and failed to acknowledge that its expert believed they were connected to the dewatering process. Id.

response to EPA's comments, that "[e]ffects from greenhouse gases are outside the scope of" the EIS. AR 4547.

This discussion fails to disclose or analyze the "fairly severe safety and environmental concerns" identified by BLM's Dull, EPA and plaintiffs' scientists. Accordingly, it violates NEPA's requirement that the EIS must analyze and disclose "the adverse environmental effects of the proposed action." Robertson, 490 U.S. at 350. First, the FEIS fails to acknowledge that the interim drilling had likely already resulted in increased methane seeps. Second, the FEIS fails to provide any discussion of the amount of methane that might escape from seeps. BLM should have tested the methane seeps to determine the quantity of methane escaping or, at the very least, it should have reported the results of Walt Mersch's tests, which revealed very high levels of methane. Third, despite the concerns of its own scientist and the fact that plaintiffs pointed out that methane is a far more potent greenhouse gas than CO₂, BLM fails to even mention the global warming impact of increased methane emissions. AR 4547. Fourth, the FEIS also makes no mention of the "potential danger to human and animal safety" that Dull and plaintiffs identified.

Importantly, this case is not simply one in which there is a disagreement between BLM's experts and plaintiffs' experts. Here, BLM failed to disclose in the FEIS the analysis conducted by the agency's own engineer. BLM's failure to disclose its own engineer's analysis plainly demonstrates that the FEIS is deficient and does not adequately "disclose the environmental impact of [BLM's] actions." Balt. Gas & Elec. Co. v. NRDC, 462 U.S. at 97-98. The "few sentences" which purport to address methane fail to provide the required analysis of the issue. See NRDC v. Hodel, 865 F.2d 288, 299

(D.C. Cir. 1988) (rejecting as inadequate discussion consisting of a few “snippets [that] do not constitute real analysis”); see also Defenders of Wildlife v. Babbitt, 130 F. Supp. 2d 121, 138 (D.D.C. 2001) (rejecting analysis consisting of only a few “conclusory remarks”) (internal citations omitted).

BLM’s failure to evaluate the effect of the project on global warming is particularly surprising because EPA, in its comments, even cited a recent Eight Circuit decision requiring the analysis of impacts on global warming for a railroad project. AR 3481; Mid States Coalition For Progress v. Surface Transp. Bd., 345 F.3d 520, 550 (8th Cir. 2003) (rejecting EIS which failed to evaluate effects on global warming from construction of new rail route that would reduce the cost of coal); see also Center for Biological Diversity v. Nat’l Highway Traffic Safety Admin., 508 F.3d 508, 550 (9th Cir. 2007) (rejecting EIS for failure to evaluate cumulative impact of greenhouse gas emissions from new fuel economy standards). As the Eighth Circuit held, contributions to global warming are not too speculative; an EIS must discuss effects whose “nature . . . is reasonable foreseeable” even if “its extent is not.” Mid States Coalition, 345 F.3d at 550. BLM’s claim that global warming impacts are “beyond the scope of this EIS” is inconsistent with the Mid States Coalition decision as well as the Ninth Circuit’s Center for Biological Diversity case.

In sum, the FEIS fails to provide a sufficient analysis of the potential impacts from methane seeps. Accordingly, the Court should enjoin further activity and remand the matter to BLM for completion of an adequate EIS.

C. BLM Failed to Take a Hard Look at Sage Grouse Impacts.

NEPA “does not mandate particular results, but simply prescribes the necessary process.” (Nov. 30, 2007 “Memorandum Opinion,” at 12). As noted above, however, “NEPA review is . . . not toothless.” Environmental Defense, 515 F.Supp.2d at 76. NEPA requires that the agency take a “hard look” at the environmental consequences of the proposed action. Robertson, 490 U.S. at 350. To satisfy the “arbitrary and capricious” standard of review, that “hard look” must involve a reasoned analysis of the evidence before the agency. Environmental Defense, 515 F.Supp.2d at 76 (citing Marsh, 490 U.S. at 371). As the Supreme Court has stated, “the agency must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choice made.” Motor Vehicles, 463 U.S. at 43. That explanation must consider all important aspects of the problem and not “run[] counter to the evidence before the agency.” Id.

Here, BLM’s conclusion that “no actions that might jeopardize the future existence or viability of this species [sage grouse] may occur,” AR 4405, conflicts with the evidence in the record. BLM has failed to provide the “detailed” and “reasonably complete” discussion of measures to mitigate the environmental consequences of a proposed action that NEPA requires. See Robertson, 409 U.S. at 351, 352. Finally, BLM has failed to meet its obligation under NEPA regulations to “insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.” 40 C.F.R. § 1502.24.

1. BLM's Discussion of Impacts to Sage Grouse in the EIS

The greater sage grouse is the largest species of grouse in North America. 69 Fed. Reg. 21484, 21485 (Apr. 21, 2004). While once prevalent throughout western North America, population estimates now range between 100,000 and 500,000, representing a 69-99% decline from original populations. *Id.* at 21486. Recognizing the decline of the species, BLM has listed the sage grouse as a “Sensitive Species.” AR 4405; Western Watersheds Project v. Fish and Wildlife Service, 535 F. Supp. 2d 1173, 1175-76 (D. Idaho 2007). Because nearly half of all sage grouse habitat exists on BLM-administered federal land, BLM has affirmed that it has a special responsibility for the welfare of the species. AR 5497, 79130.

BLM acknowledges in the Atlantic Rim FEIS that sage grouse will be significantly harmed by this project. AR 2092. Sage grouse are prevalent throughout the Atlantic Rim project area. AR 2394. Prior to the initiation of drilling, suitable sage grouse habitat covered 92% of the project area. AR 2395. Much of that habitat will be either permanently or temporarily lost due to the Atlantic Rim project. AR 2395, AR 2402. The FEIS notes that potential project impacts include long-term loss and fragmentation of habitat, decreased population productivity (lower birth rates), and increased predation, all of which lead to a predicted “long-term decline in the population of this species.” AR 2395, AR 2500.

BLM proposed in its Draft EIS and later adopted in the ROD/ FEIS a set of measures to mitigate harm to sage grouse.¹⁸ These measures included a 0.25-mile no surface disturbance zone around sage grouse leks along with seasonal restrictions on surface disturbing activities within two miles of a lek (to protect nesting habitat). AR

¹⁸ The mitigation measures are summarized in this Court’s Nov. 30, 2007 opinion, at 11 and AR 2626.

2626. Even with the application of these measures, however, BLM predicted that impacts to sage grouse would exceed the “significance” criteria. AR 2404.

2. BLM Failed to Adequately Respond to the Fish and Wildlife Service’s Concerns that the Project May Lead to the Need to List Sage Grouse as Threatened or Endangered.

In its January 26, 2006 comments on the Draft EIS, the United States Fish and Wildlife Service (“the Service”) raised a serious concern regarding the discussion of impacts to sage grouse – namely, that the anticipated impacts might lead to the need to list sage grouse as endangered or threatened under the Endangered Species Act (“ESA”). Noting BLM’s prediction in the Draft EIS of significant effects on sage grouse and other sagebrush-dependent species (sagebrush obligates), the Service stated:

The Service is concerned that the effects to habitats important to the above species [including sage grouse] may be irreversible and no amount of mitigation can restore or replace what is lost. As several of these species are in decline from loss of habitat, the Service recommends that the Bureau not authorize an action that may exacerbate their decline and possibly result in listing of one or more of these species under the [Endangered Species] Act.

AR 3255 (Jan. 26, 2006 Fish and Wildlife Service Comment Letter, at 2, attached as Exh. 20) (emphasis added).

The Service’s legitimate and serious concern about the extent of the impact of the project on sage grouse warranted a direct response and reasoned analysis based on evidence. Instead, BLM provided only “conclusory remarks, statements that do not equip a decisionmaker to make an informed decision about alternative courses of action or a court to review the [decisionmaker’s] reasoning.” NRDC v. Hodel, 865 F.2d at 298. BLM’s failure to provide the requisite response and analysis violates NEPA’s hard look requirement. See Id. at 298-300 (finding cumulative impact analysis in EIS inadequate where it did not include the “requisite analysis” and did not “address the issue raised by

the EPA”); and suggesting that agency reference scientific studies and other materials in its analysis on remand); Friends of the Earth v. U.S. Army Corps of Engineers, 109 F. Supp. 2d. 30, 38-42 (D.D.C. 2000) (finding corps’ failure to address certain issues raised in comments of sister agencies and “lack of analysis” of others did not satisfy NEPA’s “hard look” requirement).

In its response to the Service’s comments, BLM stated: “The sage-grouse is a BLM sensitive species, listed as such on 04/09/2001. Because of this status no actions that might jeopardize the future existence or viability of this species may occur.” AR 4405. The record, however, lacks any evidence or analysis of the crucial question raised in the Fish and Wildlife Service’s comments: Will the proposed action lead to a need to list sage grouse as endangered or threatened under the ESA? Indeed, in comments on the Final EIS, the Service reiterated:

We remain concerned that Project impacts to greater sage-grouse and other sagebrush obligate species may be significant and possibly irreversible, especially in a landscape where these species currently thrive. Proposed development may alter the future size, distribution and existence of local populations. The Service reiterates its recommendation that the Bureau not authorize an action that may exacerbate the decline of fish and wildlife species and possibly result in listing under the Act.

AR 10134-10135 (Jan. 5, 2007 Fish and Wildlife Service Comment Letter, attached as Exh. 21).

Despite acknowledging its obligation to prevent actions that “might jeopardize the future existence or viability” of the greater sage grouse, AR 4405, BLM never addresses – much less analyzes – whether or not the proposed (now approved and ongoing) action will possibly lead to a need to list sage grouse under the Endangered Species Act. This omission is particularly striking given BLM’s written policy that BLM-authorized actions may not “contribute to the need for [a sensitive] species to become listed as a threatened

or endangered species.” AR 5237-38 (BLM’s Manual 6840 - Special Status Species Management). In addition, the 1990 Great Divide Resource Management Plan (“RMP”), which covers the Atlantic Rim project area, states that “[s]age grouse and sharp-tailed grouse strutting/dancing grounds [leks] and nesting habitat will be protected.” Finally, a 2000 Memorandum of Understanding (“MOU”) between BLM and the Western Association of Fish and Wildlife Agencies, U.S. Forest Service, and U.S. Fish and Wildlife Service commits BLM to “provide for habitat protection, conservation and restoration, as appropriate, consistent with all other applicable laws, regulations, directives and policies.” AR 86104. BLM’s contravention of its own Special Status Species policy, as well as the RMP and MOU, without any analysis or explanation is another reason that the BLM’s decision-making process was arbitrary and capricious. Motor Vehicles, 463 U.S. at 41-42; Greater Boston Tel. Corp. v. FCC, 444 F.3d 841, 852 (D.C. Cir. 1970) (“[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored....”).

The Service’s concern that the project may have irreversible effects that could lead to the need to list sage grouse as an endangered species is neither idle nor inconsequential. Listing under the ESA triggers a host of potentially costly legal protections, including prohibitions on actions that will harm a listed species and the need for consultations and biological opinions for actions that “may affect” listed species. 16 U.S.C. §§ 1536, 1538. And the potential that the proposed action could lead to the need to list sage grouse is real and significant. Indeed, in 2004, after groups petitioned the Service to list the sage grouse under the Endangered Species Act, the Service issued a

“90-day” finding that sage grouse may warrant listing as threatened or endangered under the ESA. See Western Watersheds, 535 F. Supp. 2d 1177; 69 Fed. Reg. 21484.

The decision as to whether a listing is warranted is still pending. See Western Watersheds, 535 F. Supp. 2d at 1189. Yet, it is clear that energy development on BLM-managed land, and especially in the Atlantic Rim, has a particularly strong potential to impact the need for listing. Nearly half all sage grouse habitat is on BLM-managed land. Id. at 1187; AR 5497. Sage grouse are prevalent in the Atlantic Rim project area and 92% of the area is suitable sage grouse habitat. AR 2394-95. However, a recent study by Matthew Holloran involving another Wyoming BLM-authorized natural gas development project with very similar sage grouse mitigation measures to those approved in this project, predicted the complete extinction of the studied sage grouse population within 19 years. AR 7131.

3. *BLM’s Discussion of its Sage Grouse Mitigation Measures is Not Supported By the Record.*

In its January 26, 2006 letter, the Service also questioned the scientific validity of BLM’s proposed mitigation measures for sage grouse. The Service stated: “The Service does not support a 0.25 mile protective buffer around sage-grouse leks as a mitigation measure, nor do we support a 2-mile [seasonal] buffer to protect nesting habitat.” AR 3256 (Exhibit 20, at 3). The letter cited the recent study by Matthew Holloran, mentioned above, which concluded that these mitigation measures applied by BLM in a nearby energy development project were inadequate to maintain breeding populations and estimated the “mean extinction time for the population of birds that was present before gas field development” to be 19 years. AR 7131.

Instead of mitigation measures that have been demonstrated to be ineffective, the Service stated that it “strongly recommends minimum protection measures as described by Connelly et al. (2000).” AR 3256 (Exh. 20, at 3). The Connelly paper cited by the Service, also known as the “Western Association of Fish and Wildlife Agencies (WAFWA) Guidelines for Management of Sage-grouse Populations and Habitats”¹⁹ (the “Connelly guidelines”) recommends that no energy-related facilities be located within 3.2 kilometers (two miles) of an active lek.²⁰ AR 86094. Despite referencing “literature reviews,” BLM’s response to the Service’s critique failed to point to any studies, or to provide any evidence or analyses, that support its contention that the quarter-mile “no surface disturbance” zone around leks is a scientifically-accepted mitigation measure. AR 4405.

Not only did BLM fail to support its proposed mitigation measures with evidence or analysis, but it failed to even discuss the studies presented by the Service that undermined the validity of those measures. BLM was clearly aware of the Holloran study, citing it for other propositions in the FEIS. AR 2260, AR 2499. However, BLM failed to discuss the implications of this study on the scientific viability of its mitigation measures. Similarly, BLM was aware of the Connelly guidelines. Indeed, in the 2000 MOU between BLM, the Forest Service, the Fish and Wildlife Service and WAFWA, the BLM committed specifically to consider the Connelly guidelines in its planning process.

¹⁹ See e.g. AR 5520, AR 5527 (referring to Connelly guidelines as “WAFWA Guidelines for Management of Sage-grouse Populations and Habitats”)

²⁰ BCA also cited this study in its comments. See AR 70559, 70561.

AR 86104.²¹ Nevertheless, the FEIS, ROD, and site-specific EAs all fail to discuss the Connelly guidelines or indicate why they are not being followed.

BLM's failure to provide a reasoned and evidence-based analysis of its proposed mitigation measures, in the face of substantial criticism and contrary evidence, violates NEPA's "hard look" requirement. NEPA requires that an EIS "contain[] sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a 'hard look' at environmental factors, and to make a reasoned decision." NRDC v. Hodel, 865 F.2d at 294. Here, the opposing viewpoint of the Service and others, which was supported by evidence, was dismissed with a pat, conclusory response asserting that the proposed measures represented the "minimum" of an acceptable range. AR 4405. The response, along with the rest of the EIS and other NEPA documents, failed to cite any evidence or analyze the issue. Such treatment is patently inadequate under NEPA. See Id. at 298-300 (finding "conclusory remarks" regarding impacts of project, without any analysis, to be inadequate, and recommending, on remand, that agency present an analysis supported "with references to scientific studies and other materials so that a decisionmaker would have ready access to the information underlying the Secretary's findings and conclusions."); Environmental Defense, 515 F. Supp. 2d at 81 (D.D.C. 2007) (finding agency's discussion of mitigation inadequate where it "failed to identify evidence supporting its determination"); Columbia Falls, 139 F.3d at 923 (holding that an agency must provide a "full analytical defense" when its analytic model is challenged and that it "retains a duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a non-arbitrary, non-capricious rule.").

²¹ Further, BLM's "National Sage Grouse Habitat Conservation Strategy" identifies the Connelly paper cited by the Service as a "a good starting point in developing local management . . . guidelines." AR 5497, at 5543.

Furthermore, BLM's assertion that its mitigation measures represent an acceptable minimum runs counter to the evidence in the record, which overwhelmingly indicates that these measures don't work. See Motor Vehicles, 463 U.S. at 43 (stating that agency action would be arbitrary and capricious if it "offered an explanation for its decision that runs counter to the evidence before the agency").

Relatedly, BLM's unsupported discussion of mitigation measures – and indeed, its aforementioned unsupported discussion of the extent and severity of the project's impacts on sage grouse – violates NEPA's scientific integrity requirement. NEPA requires that agencies "insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements." 40 C.F.R. § 1502.24. Here, by failing to provide any evidence or analysis in support of its conclusion (or lack thereof) regarding the extent of the projects' impacts on sage grouse or in support of its proposed mitigation measures, the efficacy of which was controverted by record evidence, BLM violated NEPA's scientific integrity requirement. See Environmental Defense, 515 F. Supp. 2d at 81 (finding violation of scientific integrity requirement where agency failed to incorporate into its mitigation analysis known problems with its plan and failed to identify evidence supporting its conclusions).

4. BLM Does Not Provide a Detailed or Reasonably Complete Discussion of Mitigation Measures for Sage Grouse.

NEPA's requirement that an agency disclose the potential environmental consequences of proposed actions incorporates a "requirement that an EIS contain a detailed discussion of possible mitigation measures." Robertson, 490 U.S. at 351. The Court in Robertson underscored the importance of a "reasonably complete" discussion of mitigation:

[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the “action-forcing” function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.

Id. at 352; see Citizens Against Burlington v. Busey, 938 F.2d 190 (D.C. Cir. 1991) (EIS must contain “a reasonably complete discussion of possible mitigation measures”) (quoting Robertson, 490 U.S. at 352).

Here, BLM’s discussion of possible mitigation measures lacks any detail, analysis or evidentiary support, failing to satisfy the “reasonably complete discussion” requirement. See Environmental Defense, 515 F. Supp. 2d at 81 (finding agency’s discussion of mitigation inadequate where it “failed to identify evidence supporting its determination”); League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Forsgren, 309 F.3d 1181, 1192 (9th Cir. 2002) (finding “hard look” failure where discussion of mitigation measures failed to provide analysis or rationale to support chosen measures that were contradicted by the recommendation of a sister agency, and noting that a “‘mere listing’ of mitigation measures, without supporting analytical data” does not constitute a reasonably complete discussion of mitigation (citation omitted)); Mid States Coalition, 345 F.3d 558 (Heaney, J., concurring) (“It is not enough to put forth . . . [measures] as appropriate mitigation without revealing the reasoning behind such a finding, or detailing the impact the proposed mitigation will have Instead, the [agency] is required to explain fully its course of inquiry, analysis and reasoning.” (quotation marks and citation omitted)).

II. BLM Failed to Adequately Assess Cumulative Impacts to Big Game.

BLM’s own statements in the record expose the inadequacy of the agency’s cumulative impact analysis. The cumulative impact analysis must include impacts from

all reasonably foreseeable future actions that will have a synergistic or cumulative environmental impact on a region, including proposals concurrently pending before an agency. 40 C.F.R. § 1508.7; Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976). Here, BLM sole reliance on a calculation of surface acres disturbed to determine cumulative impacts conflicts with the agency's own acknowledgment that displacement of big game, such as elk, far exceeds the actual area of surface disturbance. Even assuming that relying on surface acres disturbed is sufficient, BLM's numbers for the acres disturbed are wrong. BLM failed to include impacts from thousands of additional wells in two proposals pending before the BLM at the time the agency was working on the environmental analysis to support the Atlantic Rim project.

BLM unreasonably limited its cumulative impact analysis to a calculation of surface acres disturbed. The agency estimates that the cumulative impact from the proposed action is disturbance of 7,124 total acres of the Sierra Madre elk herd's seasonal range. AR 2498 (see Exh. 7). Looking at the surface disturbance alone fails to provide a complete picture of the cumulative impacts on the Sierra Madre elk herd. BLM itself acknowledges, "Construction and drilling noise have the potential of affecting wildlife species at the project site as well as areas surrounding disturbance sites." AR 2389. Specifically, a zone from 0.6 to 1.2 miles surrounding an area of surface disturbance such as a well pad tends not to be used by elk due to human activity. Id. BLM needed to look at the actual acres of seasonal range from which the elk were displaced, rather than simply the surface disturbance that the projects caused.²²

²² BLM's cumulative impact analysis completely leaves out the Petition elk herd which the agency itself acknowledged would be affected by the project. AR 2400, 2498.

Even more significantly, BLM did not accurately count the number of acres of disturbed surface. BLM failed to include two projects with thousands of new wells that the agency was planning for at the same time it was preparing the Atlantic Rim EIS. BLM issued a Notice of Intent to Prepare an Environmental Impact Statement for the Continental Divide-Creston Natural Gas Project on March 3, 2006 – months before BLM even issued its Draft Atlantic Rim EIS. 71 Fed. Reg. 10989-01.²³ Almost 9,000 new wells were proposed as part of this project. *Id.* BLM did not consider the impacts of these proposed wells despite the requests of BCA and the Wyoming Game and Fish Department to do so. AR 4590, (BLM Resp. to Comments); AR 70570 (BCA Comments); AR 9762-63 (WGFD Comments). BLM concluded that the project was “not reasonably foreseeable” (AR 9772) even though the agency itself included the project on its map of “Rawlins Field Office – Minerals and Lands Projects,” dated June 9, 2006. AR 86298 (Exh. 22). The agency clearly had time to include the impact of these wells before it issued the Atlantic Rim Final EIS in May 2007.

Likewise, BLM failed to include the impacts of the 4,208 proposed new wells in the Hiawatha energy project even though the agency was preparing the environmental analysis for this project at the same time that it was preparing the Atlantic Rim EIS. See Notice of Intent to Prepare an Environmental Impact Statement – Hiawatha Regional Energy Development Project, 71 Fed. Reg. 52571-01 (Sept. 6, 2006).²⁴ NEPA explicitly requires agencies to evaluate the impacts of “reasonably foreseeable future actions.” 40 C.F.R. § 1508.7; Grand Canyon Trust, 290 F.3d at 345. Both these projects when

²³ The Continental Divide-Creston project is located directly east and extending north of the Atlantic Rim project area. AR 86298, attached as Exh. 22. *See* Rawlins Field Office, Continental Divide – Creston Natural Gas Project, http://www.blm.gov/wy/st/en/info/NEPA/rfodocs/cd_creston.html.

²⁴ The Hiawatha project is located southwest of the Atlantic Rim project. Rock Springs Field Office, Hiawatha Regional Energy Project, <http://www.blm.gov/wy/st/en/info/NEPA/rsfodocs/hiawatha.html>.

combined with Atlantic Rim project would have dramatic consequences on elk, pronghorn and mule deer. See Maps of Seasonal Ranges. AR 3189, attached as Exh. 22 (elk)(M-24); AR 3186, attached as Exh. 23 (pronghorn) (M-21); AR 3188, attached as Exh. 24)(mule deer)(M-23). Yet, BLM chose to ignore them.

The record here simply does not support BLM's conclusion that the Continental Divide-Creston and Hiawatha projects were not reasonably foreseeable. Even if these projects were not reasonably foreseeable at the time BLM completed the project EIS, the projects certainly were foreseeable at the time BLM was conducting the environmental analysis to support approving the Catalina and Sun Dog PODs.

III. BLM Failed to Meet its Public Participation Obligations.

The fundamental objective of NEPA is to ensure that that an “agency will not act on incomplete information only to regret its decision after it is too late to correct.” Marsh, 490 U.S. at 371 (citation omitted). An essential part of this information comes from the public. NEPA's implementing regulations explicitly provide that “public scrutiny [is] essential to implementing NEPA.” 40 C.F.R. § 1500.1(b). Moreover, NEPA's implementing regulations require federal agencies to “[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures.” 40 C.F.R. § 1506.6(a). Yet, in this case, BLM approved numerous applications for permits to drill without taking reasonable steps to involve the public.

Plaintiffs do not argue that federal NEPA regulations require agencies to circulate an environmental assessment under all circumstances. The regulations, however, do require that BLM circulate the challenged EAs under the circumstances involved here. This Court has recognized that “[a]ll three statutory and regulatory schemes implicated”

here – the Federal Land Policy and Management Act, NEPA and the CEQ regulations – “require the BLM to involve the public in its decision-making process.” Biodiversity Conservation Alliance v. BLM, 404 F.Supp.2d 212, 219 (D.D.C. 2005) (citations omitted). Plaintiffs concede that “whether the public was adequately involved is a fact-intensive inquiry made on a case-by-case basis.” Id. at 220. In Biodiversity Conservation Alliance, the Court found that the facts showed that BLM provided the required public participation. Here, the facts show that BLM has not.

A. Notice of Drilling Permit Applications Did Not Provide Information about Environmental Impacts.

The notice that BLM provided that drilling permit applications had been filed did not provide information about the project’s environmental impacts. BLM did not post the actual applications that it had received. See Exh. 25 (APD Posting Notice dated September 26, 2005), attached as Exh. V to Plaintiffs’ Reply to Opposition to Motion for Preliminary Injunction.²⁵ BLM regulations require operators to submit the following information as part of a drilling permit application:

- (1) A drilling plan, which may already be on file, containing information required by paragraph (e) of this section and appropriate orders and notices.
- (2) A surface use plan of operations containing information required by paragraph (f) of this section and appropriate orders and notices.
- (3) Evidence of bond coverage as required by the Department of the Interior regulations, and
- (4) Such other information as may be required by applicable orders and notices.

²⁵ Upon receipt of an application for permit to drill, BLM shall post information related to the APD for public inspection at least 30 days before action to approve the APD. 43 C.F.R. § 3162.3-1(g).

43 C.F.R. § 3162.3-1(d). None of this information was provided to the public by BLM. See Exh. 25.

Moreover, BLM’s regulations require that “[e]ach drilling plan shall contain the information specified in applicable notices or orders, including a description of the drilling program, the surface and projected completion zone location, pertinent geologic data, expected hazards, and proposed mitigation measures to address such hazards.” 43 C.F.R. § 3162.3-1(e). While the operators seeking the Catalina and Sun Dog drilling permits presumably provided this information to BLM, it was not provided to the public. See Exh. 25.

Information related to the site-specific environmental impacts of the APDs and the conditions of approval to address the impacts were made available to the public for the first time in BLM’s Environmental Assessments that accompanied each plan of development approval.²⁶ See, e.g., AR 73492-73501; Exh. 12, at 22. None of this information was provided at any time to the public before BLM approved the Catalina A & B PODs. See, e.g., Declaration of Erik Molvar (September 21, 2007), at ¶ 15, attached as Exh. A to Plaintiffs’ Motion for Preliminary Injunction. The same is true for the Sun Dog A & B PODs. Id.

Thus, the facts in this case are very different from the facts in Biodiversity Conservation Alliance, 404 F.Supp.2d 212. Biodiversity Conservation Alliance involved a challenge to a seismic testing project by Veritas DGC Land Incorporated (“Veritas”). In that case, “BLM advised the public of Veritas’s proposal, allowed a thirty-day public

²⁶ Each plan of development (or POD) approval included a group of wells. In other words, BLM approved several APDs in each POD approval. For example, the FONSI/Decision Record for Catalina PODs A & B approved 39 wells. AR 73502.

comment period, and did not issue the DR/FONSI until after considering the issues raised during that period.” *Id.* (emphasis added).

The facts in TOMAC v. Norton, 433 F.3d 852, 861 (D.C. Cir. 2006) are also quite different from the facts here. Unlike BLM in this case, the Bureau of Indian Affairs in TOMAC did seek comment on the original draft environmental assessment. *Id.* Plaintiffs in TOMAC argued that an additional round of comment was necessary when the agency supplemented the EA. *Id.* Here, there is no supplemental EA at issue. What plaintiffs challenge is BLM’s failure to circulate an original draft EA for public comment before the agency approved the challenged Catalina and Sun Dog drilling permits. See also, Ocean Mammal Institute v. Gates, Slip Copy, 2008 WL 564664 (D.Hawai‘i, Feb. 29, 2008) (“While there is no minimum level of public comment and participation required, a complete failure to involve or even inform the public about an agency’s preparation of an EA and a FONSI violates NEPA. In short, agencies should provide adequate “pre-decisional opportunities for informed public involvement in the environmental review process.”) (citations omitted). Here, BLM did not provide the public the information necessary to allow for informed public participation in the agency’s decisions to approve the Catalina and Sun Dog A & B plans of development.

B. Opportunity to Comment on Project EIS Does Not Satisfy BLM’s Obligation to Involve Public in Assessment of Site-Specific Environmental Impacts Prior to Approving Drilling Permits.

Plaintiffs do not dispute that BLM provided significant opportunity for public comment on the project-wide Atlantic Rim EIS. However, BLM explicitly put off part of the necessary analysis under NEPA until later when the agency knew where the operators proposed to locate the wells. BLM indicated, both in the FEIS and in response to several

of plaintiffs' comments, that some issues would not be analyzed until specific drilling proposals were on hand and site-specific analyses were performed. See e.g., AR 2345, AR 2426; AR 4561, AR 4570, AR 4578, AR 4580, AR 4588. The agency cannot have it both ways. If BLM finished the environmental analysis required under NEPA in the FEIS, then public comment on that document would be sufficient. When the agency puts off part of the required analysis, however, as BLM did here, it cannot shut the public out of this later stage.

CONCLUSION

For the reasons stated herein, plaintiffs respectfully request that this Court declare that BLM has violated the National Environmental Policy Act, vacate BLM's approval of the drilling permits issued for the Atlantic Rim project area, and enjoin further approvals.

Respectfully submitted,

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