

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge William J. Martínez**

Civil Action No. 16-cv-3141-WJM-STV

WILDEARTH GUARDIANS,

Plaintiff,

v.

U.S. BUREAU OF LAND MANAGEMENT,

Defendant.

ORDER AFFIRMING AGENCY DECISION

Plaintiff WildEarth Guardians (“WildEarth”) sues the Bureau of Land Management (“BLM”), under the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701 *et seq.* WildEarth claims that BLM unlawfully determined that it had no duty to perform a “conformity” analysis under the Clean Air Act (“CAA”), 42 U.S.C. §§ 7401 *et seq.*, when it auctioned certain oil and gas leases in May and November 2015.¹

On the arguments presented, WildEarth has not carried its burden to show that BLM acted unlawfully. Accordingly, BLM’s decisions as to the two lease sales will be affirmed.

I. STANDARD OF REVIEW

The APA empowers a reviewing court to set aside agency action if it is, *inter alia*, “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). Generally, an agency decision will be considered arbitrary and

¹ The content of a “conformity” analysis is described below in Part II.B.

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 or the product of agency expertise.

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

A reviewing court should engage in a “thorough, probing, in-depth review,” *Wyoming v. United States*, 279 F.3d 1214, 1238 (10th Cir. 2002) (citation omitted), with its review of the merits “generally limited to . . . the administrative record,” *Custer Cnty. Action Assoc. v. Garvey*, 256 F.3d 1024, 1027 n.1 (10th Cir. 2001).

However, “[t]he scope of review under the ‘arbitrary and capricious’ standard is narrow and a court is not to substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; see also *Davis v. Mineta*, 302 F.3d 1104, 1111 (10th Cir. 2002) (stating that the court’s review is “highly deferential”). The Court confines its review “to ascertaining whether the agency examined the relevant data and articulated a satisfactory explanation for its decision, including a rational connection between the facts found and the decision made.” *Colo. Wild v. U.S. Forest Serv.*, 435 F.3d 1204, 1213 (10th Cir. 2006). “An agency’s action is entitled to a presumption of validity, and the burden is upon the petitioner to establish the action is arbitrary or capricious.” *Sorenson Commc’ns, Inc. v. FCC*, 567 F.3d 1215, 1221 (10th Cir. 2009).

II. STATUTORY & REGULATORY BACKGROUND

A. NAAQS, SIPs, and Ozone

As part of the CAA, Congress charged the Environmental Protection Agency (“EPA”) with setting National Ambient Air Quality Standards (“NAAQS”) for certain

pollutants. 42 U.S.C. § 7409. NAAQS are specifically described as “ambient air quality standards the attainment and maintenance of which in the judgment of the [EPA], based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.” *Id.* § 7409(b)(1).²

Once a NAAQS is promulgated or revised, each state must adopt and submit to the EPA for approval a State Implementation Plan (“SIP”) that “provides for implementation, maintenance, and enforcement of [the NAAQS] in each air quality control region (or portion thereof) within such State.” *Id.* § 7410(a)(1). Each SIP must “include enforceable emission limitations and other control measures, means, or techniques . . . , as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the [CAA’s] applicable requirements.” *Id.* § 7410(a)(2)(A).

The EPA has promulgated NAAQS for ozone, among other pollutants. The current ozone NAAQS is “0.075 parts per million (ppm), daily maximum 8-hour average.” 40 C.F.R. § 50.15(a).³ Whether a region meets the standard is judged by asking whether “the 3-year average of the annual fourth-highest daily maximum 8-hour average [ozone] concentration is less than or equal to 0.075 ppm.” *Id.* § 50.15(b). If the answer is yes, the region is deemed in “attainment” with the ozone NAAQS. See 42

² To be precise, the foregoing quotation refers to “primary” NAAQS. The CAA also requires the EPA to establish “secondary” NAAQS, which are designed to eliminate “any known or anticipated adverse effects associated with the presence of [a particular] air pollutant in the ambient air.” *Id.* § 7409(b)(2). No party has argued that the secondary NAAQS are relevant to the questions currently before the Court, likely because the primary and secondary NAAQS for ozone are identical. See 40 C.F.R. § 50.15(a).

³ In 2015, the EPA announced a new ozone NAAQS of 0.07 ppm. See 80 Fed. Reg. 65,292 (Oct. 26, 2015). The implementation of this new standard has been postponed until October 1, 2018. See 82 Fed. Reg. 29,246 (June 28, 2017).

U.S.C. § 7407(d)(1)(A)(ii). If the answer is no, the region is in “nonattainment” status.
Id. § 7407(d)(1)(A)(i).

A substantial portion of Colorado’s Front Range, along with portions of the eastern plains in Adams, Arapahoe, and Weld counties, is in nonattainment status for ozone (“Nonattainment Area”). See 40 C.F.R. § 81.306.

B. The General Conformity Rule

The federal government may not approve or support any activity that does not “conform” to an approved SIP. *Id.* § 7506(c)(1).

Conformity to [a SIP] means—

(A) conformity to [a SIP’s] purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not—

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

Id.

The EPA has promulgated regulations, collectively known as the “General Conformity Rule,” that guide federal agencies’ application of this requirement. See 40 C.F.R. §§ 51.851, 93.150–93.165. If a federal action is (a) unrelated to a transportation project and (b) may affect an ozone nonattainment area, the General Conformity Rule requires an agency to perform an ozone conformity analysis if “the total

of direct and indirect emissions of [ozone] or [an ozone] precursor . . . caused by a Federal action would equal or exceed,” as applicable here, 100 tons per year (tpy). 40 C.F.R. § 93.153(b)(1).⁴ EPA considers 100 tpy a *de minimis* level of ozone or precursor emissions. See 58 Fed. Reg. 63214, 63228 (Nov. 30, 1993) (explaining why the General Conformity Rule excuses NAAQS conformity analysis in some circumstances).

The General Conformity Rule defines “direct emissions” as “those emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and originate in a nonattainment or maintenance area and occur at the same time and place as the action and are reasonably foreseeable.” 40 C.F.R. § 93.152. “Indirect emissions,” by contrast, are

those emissions of a criteria pollutant or its precursors:

- (1) That are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place as the action;
- (2) That are reasonably foreseeable;
- (3) That the agency can practically control; and
- (4) For which the agency has continuing program responsibility.

Id. Finally, indirect emissions are “reasonably foreseeable” when “the location of such emissions is known and the emissions are quantifiable as described and documented by the Federal agency based on its own information and after reviewing any information

⁴ The threshold is lower for nonattainment areas classified as “serious,” “severe,” or “extreme.” See *id.* The Nonattainment Area at issue here was classified as “marginal” in 2015. See 77 Fed. Reg. 30,088, 30,110 (May 21, 2012). In 2016, EPA changed that classification to “moderate,” see 81 Fed. Reg. 26,697, 26,714 (May 4, 2016), which is still below the serious, severe, and extreme categories, and therefore still governed by the 100 tpy threshold.

presented to the Federal agency.” *Id.*

Thus, as applicable here, the General Conformity Rule establishes that an agency which can reasonably foresee more than *de minimis* ozone precursor emissions (defined as 100 tpy) must then take the next step of actually performing a NAAQS conformity analysis.

C. Oil & Gas Leasing on Federal Lands

BLM is the Secretary of the Interior’s delegate for offering and managing onshore leases of federal property for purposes of mineral extraction, including oil and gas operations. See 43 C.F.R. § 3160.0-3. BLM carries out this responsibility through “a three-phase decision-making process.” *Pennaco Energy, Inc. v. U.S. Dep’t of Interior*, 377 F.3d 1147, 1151 (10th Cir. 2004). First, BLM develops a resource management plan (“RMP”) for the region in question, which includes decisions regarding which resources may be extracted from the land. 43 C.F.R. § 1601.0-5(n). Second, BLM decides which parcels to offer for leasing, and then auctions the lease rights to those parcels to the highest bidder. See *generally id.* §§ 3120–3120.7. Third, BLM must decide whether to approve a lessee’s “Application for Permit to Drill” (“APD”). *Id.* § 3162.3-1(c). “[A]t [this] point the agency has a second opportunity to review the potential environmental impacts of the proposed action and impose any necessary conditions of approval” *Amigos Bravos v. BLM*, 2011 WL 7701433, at *5 (D.N.M. Aug. 3, 2011).⁵

⁵ *Amigos Bravos* describes another phase between the second and third steps, *i.e.*, an exploration phase. See *id.*; *cf. Pennaco Energy*, 377 F.3d at 1151–52. That distinction is immaterial in the present context.

III. FACTUAL BACKGROUND & PROCEDURAL HISTORY

Oil and gas drilling and extraction operations may release nitrogen oxides (NOx) and volatile organic compounds (VOCs), which are ozone precursors. More specifically, given sunlight and the right meteorological conditions, NOx and VOCs can react with each other to produce ozone. This case turns on BLM's consideration of NOx and VOCs at the second stage of the three-stage process described above.

A. The May 2015 Lease Sales

Acting under an RMP encompassing northeastern Colorado, BLM issued an August 2014 environmental assessment ("EA")⁶ analyzing the environmental consequences of a proposed May 2015 auction of numerous oil and gas leases in that region. (Administrative Record (ECF No. 11) ("R.") at 3895.) BLM understood that some of the lease parcels fall within the Nonattainment Area. (R. at 3700.) The EA therefore included a discussion of the NAAQS conformity requirement. (R. at 3700–01.)

Applying the General Conformity Rule, BLM concluded that it did not need to perform a full conformity analysis for a number of reasons. As to "direct" emissions, BLM noted that leasing does not authorize any sort of emissions-generating activity, and so no "direct" emissions would result. (*Id.*) Concerning "indirect" emissions (*i.e.*, future emissions likely to result upon approval of a lessee's APD), BLM found them

⁶ Under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4231 *et seq.*, a federal agency undertaking a major federal action that may significantly affect the environment must prepare either (1) an environmental impact statement ("EIS"), if the agency can foresee from the outset that the action will significantly affect the environment, or (2) an environmental assessment ("EA") to determine whether the action will significantly affect the environment. See 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1502.14(d), 1508.9; *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 780 (10th Cir. 2006); *Utah Env'tl. Cong. v. Bosworth*, 443 F.3d 732, 736 (10th Cir. 2006). Lawsuits such as this one, seeking to void agency action, often claim that the agency did not adequately fulfill its NEPA duty to prepare a meaningful EIS or EA. This lawsuit, however, presents no NEPA claim. WildEarth proceeds solely under the CAA and accompanying regulations.

analogous to land transfers, which EPA exempts from conformity analysis. (*Id.*) BLM also found that indirect emissions were not reasonably foreseeable:

- It is unclear who[] may bid on, let alone win individual lease parcels. Where such sales are made on a broad scale, it is unclear how many individuals may gain an interest in any number of the nominated parcels.

- Further, it is unclear if/how the parcels would be developed during the initial 10 year lease period, such that an emissions inventory could be reasonably estimated and compared to the de minimis thresholds, on an annual basis.

(R. at 3701.)

BLM additionally reasoned that its proposed lease sales were analogous to sales of offshore leases for the Outer Continental Shelf, an action which EPA regulations specifically exempt from conformity analysis because EPA has determined that indirect emissions are not reasonably foreseeable in that context. (*Id.*) Finally, BLM relied on EPA regulations that excuse conformity analysis as to certain aspects of drilling operations that must pass muster under separate CAA approval process known as new source review (“NSR”). (*Id.*) With this exemption in mind, BLM reasoned, “It is unclear but highly likely that several project design features, for example equipment sets, such as tanks, separates, compression[] engines, pump jacks, dehydration units, etc..., will require at least a minor new source review (i.e. permit) prior to constructing such facilities to implement any subsequent development proposals.” (*Id.* (ellipses in original).)

In March 2015, WildEarth formally protested BLM’s plans for the May 2015 lease sales. (R. at 765.) WildEarth challenged BLM’s conclusion that it need not perform a NAAQS conformity analysis for ozone. (R. at 775–79.) Among its many arguments,

WildEarth claimed that BLM already had data through which it estimated reasonably foreseeable emissions on a broad, region-wide scale, and so there appeared to be no reason why it could not use that same data to estimate emissions from the various parcels included in the upcoming auction. (R. at 778.)

In May 2015, BLM issued a revised EA incorporating and responding to comments and objections, such as WildEarth's. (R. at 3895.) As for choosing not to perform a NAAQS conformity analysis, BLM re-adopted all of its original reasoning save for the analogy to the exempted activity of land transfers. (R. at 3916–17.) Apparently responding to WildEarth's comment about BLM already possessing data from which it could predict emissions, BLM elaborated that it could "make broad predictions about possible future emissions in a region for purposes of NEPA cumulative impacts analysis,"⁷ but "it does not have specific information about whether or how the specific parcels under consideration may be developed during the initial 10 year lease period, such that a more precise emissions inventory could be reasonably estimated and compared to the [100-tpy] threshold[]." (R. at 3916.)

Soon after releasing this revised EA, BLM put 86 parcels up for auction, and sold 73 of them, including some within the Nonattainment Area. (R. at 1843, 3906, 4065, 4068.) Relying on extra-record evidence, WildEarth claims that 31 of the 73 are in the Nonattainment Area. (ECF No. 13 at 20 & n.5.)⁸ BLM objects to consideration of these

⁷ NEPA-interpreting regulations call upon agencies to consider the cumulative impacts of the proposed agency action alongside other existing and reasonably foreseeable actions. 40 C.F.R. §§ 1508.25(c)(3).

⁸ All ECF page citations are to the page number in the ECF header, which does not always match the document's internal pagination, particularly in documents with prefatory material such as a table of contents.

documents (ECF No. 14 at 22 & n.5), and indeed, WildEarth has not moved to supplement the record. But the Court finds that whether it accepts WildEarth's numbers or not, the outcome of this lawsuit would be the same, so the Court need not resolve BLM's objection.

B. The November 2015 Lease Sales

In November 2015, BLM conducted another auction of leases for parcels in northeast Colorado (some within the Nonattainment Area) following essentially the same pattern as it did with the May 2015 lease sales. BLM released an EA for the proposed November 2015 sales in May 2015. (R. at 7591.) For the same reasons described in its May 2015 EA approving the May 2015 lease sales, BLM decided that EPA regulations exempted it from performing a NAAQS conformity analysis for ozone as to the proposed November 2015 sales. (R. at 7613.) In September 2015, WildEarth formally objected for the same reasons advanced in its objection to the May 2015 lease sales. (R. at 5547–52.) And, in November 2015, BLM issued a revised EA addressing and rejecting WildEarth's objections and re-adopting the reasoning in the original EA. (R. at 7723, 7755–56.)

Shortly after issuing the November 2015 revised EA, BLM put 121 parcels up for auction and sold 106 of them, including some within the Nonattainment Area. (R. at 7751, 7965, 7969.) Again relying on extra-record evidence, WildEarth says that 36 of the 106 sold parcels are within the Nonattainment Area (ECF No. 13 at 20 & n.6), and the Court again finds that it need not resolve BLM's objection to this extra-record assertion because the resolution would not change the outcome.

IV. ANALYSIS

A. Framing the Dispute

For clarity, the Court emphasizes that BLM did not perform a NAAQS conformity analysis, or in other words, BLM never forecasted whether either the May 2015 or November 2015 lease sales would prolong the ozone problems in the Nonattainment Area. Relying on the General Conformity Rule, BLM instead concluded that it had no duty to make such a forecast because it was not reasonably foreseeable that either the May 2015 lease sale or the November 2015 lease sale would indirectly lead to 100 tpy in emissions of an ozone precursor. All parties agree that reasonable foreseeability of indirect emissions at the 100-tpy threshold is the crux of the current dispute.⁹

To repeat, emissions are reasonably foreseeable under the General Conformity Rule if “the location of such emissions is known and the emissions are quantifiable as described and documented by the Federal agency based on its own information and after reviewing any information presented to the Federal agency.” 40 C.F.R. § 93.152. Because BLM knew precisely where each lease parcel was located, there is no dispute in this lawsuit over the “location of such emissions is known” clause, leaving only a question of whether emissions were “quantifiable as described and documented by [BLM] based on its own information and after reviewing any information presented to [it].”

B. Previous Emissions Predictions

What information, then, was in BLM’s possession, or was otherwise presented to it, that would allow it to quantify the ozone precursor emissions likely to result indirectly

⁹ WildEarth admits that direct emissions are not at issue here. (ECF No. 13 at 25.)

(*i.e.*, in the future) from the lease sales? WildEarth points to three studies in BLM's possession. (ECF No. 13 at 27–32.) The Court will summarize each in turn. Additional details from these studies are presented below in Part IV.C.2.

1. The 2012 Development Scenario

In March 2012, BLM's Royal Gorge Field Office (which encompasses the Nonattainment Area) received a study it had commissioned titled "Reasonable^[10] Foreseeable Development Scenario for Oil and Gas, Royal Gorge Field Office, Colorado" ("2012 Development Scenario"). (R. at 9557.)¹¹ The Royal Gorge Field Office intended to use this study when revising its RMP. (R. at 9563.) It contains historical drilling statistics in the relevant region (R. at 9566–80), estimates of future oil and gas prices (R. at 9580–82), an assessment of "occurrence potential" (*i.e.*, discovery of new oil and gas resources in the region) (R. at 9582–84), and predictions about numbers of new wells through the year 2030 (R. at 9584–91).

2. The 2013 Emissions Report

In July 2013, the Royal Gorge Field Office received from a contractor a "Draft Oil and Gas Air Emissions Inventory Report for Seven Lease Parcels in the BLM Royal Gorge Field Office" ("2013 Emissions Report"). (R. at 3332.) According to WildEarth, BLM commissioned this document "to meet the requirements of a settlement agreement between [WildEarth] and BLM in a previous lawsuit" (ECF No. 13 at 27), about which the parties otherwise say nothing (*see also* R. at 3336 (mentioning a "Stipulation and

¹⁰ So in original. "Reasonable foreseeable," rather than "reasonably foreseeable," is a common phrase in the BLM documents cited by the parties.

¹¹ In their briefs and in the administrative record, the parties refer to this by the unpronounceable acronym "RFDS."

Order entered into by WildEarth Guardians and the BLM” in 2012)).

The 2013 Emissions Report studied seven specific lease parcels in northeast Colorado (four in Weld County, three in Morgan County). (R. at 3336–37.) Drawing on the 2012 Development Scenario’s estimates and assumptions regarding the potential density of well sites, the 2013 Emissions Report projected the number of wells likely to be drilled on the seven lease parcels under examination. (R. at 3338.) The authors assumed that each lease parcel would have at least one well, because, they said, “[p]arcels must have at least one well in order to retain the lease.” (*Id.*)

Having set forth the assumptions, the 2013 Emissions Report then provided per-well estimates of emissions, including emissions of NOx and VOCs, calculated in tons per year. (R. at 3340.) The calculations for those specific ozone precursors are as follows:

	NOx (tpy)	VOCs (tpy)
Oil Extraction		
Construction	11.16	0.75
Operation	10.58	20.96
Maintenance	0.00	0.00
Reclamation	0.02	0.00
TOTAL	21.75	21.72
Natural Gas Extraction		
Construction	11.18	0.76
Operation	4.53	33.30
Maintenance	0.00	0.00
Reclamation	0.02	0.00
TOTAL	15.73	34.06

(*Id.*)

3. The 2015 Modeling Study

In January 2015 BLM’s Colorado State Office received a study it had

commissioned as part of RMP revisions, titled “Colorado Air Resource Managing Modeling Study” (“2015 Modeling Study”). (R. at 9055.)¹² This study drew on the 2012 Development Scenario¹³ to create assumptions about air emissions under “High, Low, and Medium Development Scenarios” for oil and gas operations in northeastern Colorado by the year 2021. (R. at 9078–80.) The projections include estimates of NOx and VOC emissions in tons per year. (R. at 9111–12.) WildEarth does not point to any particular estimated value as significant, but instead emphasizes the 2015 Modeling Study’s existence as evidence that emissions may be forecasted with reasonable certainty. (See ECF No. 13 at 32; ECF No. 15 at 10.)

C. Reasonable Foreseeability

Having reviewed the foregoing three documents, the Court frankly expected WildEarth to present an argument essentially as follows: The 2013 Emissions Report (authored as part of a settlement with WildEarth) estimates that a typical oil well in operation emits 10.58 tpy of NOx and 20.96 tpy of VOCs; and a typical natural gas well in operation emits 4.53 tpy of NOx and 33.3 tpy of VOCs. (See Part IV.B.2, above.) Thus, it would take only 10 oil wells or 23 natural gas wells operating in a single year to exceed 100 tpy for NOx, and only 5 oil wells or 4 natural gas wells operating in a single year to exceed 100 tpy for VOCs. Surely (the argument would continue) BLM could feel reasonably certain that, of the dozens of leases it planned to auction, at least, say, 5 will result in oil extraction operations occurring in the same year. BLM accordingly could

¹² The parties and the Administrative Record refer to this study by the pronounceable but awkward acronym “CARMMS.”

¹³ The Court could not find a specific citation to the 2012 Development Scenario in the 2015 Modeling Study, but the parties nonetheless agree that the latter drew upon the former. (See ECF No. 13 at 32; ECF No. 14 at 39.)

reasonably foresee ozone precursor emissions above the 100-tpy threshold.

But WildEarth, quite surprisingly, does not make this argument. Moreover, the typical rate (if there is a typical rate) at which leases offered at auction result in operating oil or natural gas wells is far beyond a judicially noticeable fact—much less the number of leases that result in operating wells simultaneously with other new wells arising from the same auction. Accordingly, the Court presumes that WildEarth intentionally chose not make any argument akin to the foregoing, and the Court will explore it no further.

1. The Parties' Arguments

a. *WildEarth's Opening Brief*

WildEarth instead offers a different argument. WildEarth begins by borrowing the 2013 Emissions Report's assumption that lessees must place at least one well on every leased parcel to avoid forfeiting the lease. (ECF No. 13 at 27.) WildEarth then draws on its claim that the May 2015 sale yielded 31 leases in the Nonattainment Area, meaning, "at a minimum, . . . 31 new wells." (*Id.* at 28.)

Multiplying the per well emissions estimates for NO_x and VOCs from the [2013] Emissions Report by 31 new wells results in: (1) 674.25 tpy of NO_x and 673.32 tpy of VOCs for oil wells, and (2) 487.63 tpy of NO_x and 1,055.86 tpy of VOCs for gas wells. Accordingly, estimated NO_x and VOC emissions from the May 2015 lease sale exceed the Clean Air Act's 100 tpy emission threshold for a conformity determination.

(*Id.*) WildEarth performs the same calculation for the November 2015 sales, which allegedly yielded 36 leases in the Nonattainment Area and thus could be expected to result in 36 new wells with "(1) 783 tpy of NO_x and 781.92 tpy of VOCs for oil wells, and

(2) 566.28 tpy of NOx and 1,226.16 tpy of VOCs for gas wells.” (*Id.*)¹⁴ All of these calculations rely on the “TOTAL” rows of the table reproduced in Part IV.B.2, above, meaning WildEarth assumes that all of the listed activities in that table (construction, operation, maintenance, and reclamation) occur in the same year.

WildEarth also generally argues that the 2012 Development Scenario, the 2013 Emissions Report, and the 2015 Modeling Study all show that BLM is capable of forecasting emissions. “Yet BLM offers no reasonable explanation as to why indirect emissions for *all* oil and gas development in the [region] are reasonably foreseeable, but indirect emissions for the 2015 May and November leasing authorizations are not.” (ECF No. 13 at 32 (emphasis in original).)

b. *BLM’s Response Brief*

BLM has several responses. As to WildEarth’s numerical calculations, BLM claims that they are fraught with problems, not the least of which is the assumption that 31 or 36 wells would all go through the construction, operation, maintenance, and reclamation phases in the same year. (ECF No. 14 at 29, 38.). BLM also argues that WildEarth’s calculations fail to account for numerous uncertainties.

The first set of uncertainties turn on whether a parcel will ever be developed:

BLM does not know when it notices the sale how many of the leases it offers for competitive bid will be sold. . . . For those parcels successfully leased, BLM does not know if the successful bidder will develop the resource during the ten-year primary lease term. In many instances the lessee does

¹⁴ There is a mistaken premise in this argument. WildEarth relies on its calculation of the number of leases *actually sold* within the Nonattainment Area (see ECF No. 1 at 22–23)—a number BLM could not have known when it was preparing the EAs for the May and November 2015 sales. But presumably the correct multiplier (number of leases *offered* in the Nonattainment Area) is greater than or equal to the number actually sold, so WildEarth’s mistaken premise, at worst, underestimates the emissions potential.

not do so and the lease expires. Alternatively, a lease may terminate early due to nonpayment of annual rent. In other cases, a single well may be drilled to generate production and extend the term of the lease beyond ten years, but other development of the lease may not occur until later.

(*Id.* at 26 (citations omitted).) Thus, says BLM, WildEarth’s one-well-per-lease assumption is inappropriate. (*Id.*)¹⁵

Another set of uncertainties flows from lack of knowledge regarding “how many wells will be developed on an individual parcel The density of wells (both Federal and non-Federal) can range from over 150 wells per township to less than one per Township, depending on oil and gas resource potential.” (*Id.* at 28.)

Yet another set of uncertainties revolve around *when* a parcel will be developed, assuming it will be developed at all:

BLM’s leases have a ten-year initial development window. The conformity impacts of emissions associated with well construction (*e.g.*, earthmoving equipment, drilling rigs) are materially different if all wells on all leased parcels are drilled during the first year of the leases, as opposed to well construction spaced evenly over the ten-year period. An assumption that construction on all of the leased parcels will occur in a single year exponentially increases the estimated emissions in that year compared to construction that is evenly spaced over a ten-year period, and may result in a determination of nonconformity for that year whereas emissions attributable to evenly spaced construction could conform to the SIP. BLM has no ability to know the timing of a potential lessee’s construction plans at the leasing stage. Nor has it any knowledge about when production will commence on any of the leased parcels after construction of the wells.

(*Id.* at 27 (citations and footnote omitted).)

BLM also claims it lacks needed knowledge about the equipment that lessees

¹⁵ BLM additionally notes particular circumstances in which a lessee may retain the lease without drilling. (See *id.* at 26–27 (citing 43 C.F.R. §§ 3107.3-1, 3180.0-1–0-3).)

may use to develop their parcels: “At the leasing stage, BLM does not know the type of drill rig the lessee will propose to use. BLM does not know whether a flare or vapor recovery unit will be employed. These and other variables directly impact the ability to estimate foreseeable emissions.” (*Id.* at 28 (citations omitted).)

And finally, BLM

does not know how the wells will be developed, including whether hydraulic fracturing will be used and whether they will be vertical or horizontal bores. BLM does not even know whether the lessee will target oil or gas resources and what the production rates might be for the various resources that might be recovered from different geologic formations. Each of these unknowns affects a reasonably foreseeable emissions inventory.

(*Id.* at 29 (citations omitted).)

BLM further notes that, for purposes of NEPA analysis in the May and November 2015 EAs, it made separate per-well emissions estimates based on data derived from the 2015 Modeling Study. (ECF No. 14 at 29–30, 40–41.) These estimates differ widely from the 2013 Emissions Report. For example, the 2013 Emissions Report forecasts 11.16 tpy of NO_x during construction of an oil rig, whereas the two EAs forecast only 0.72 tpy for the same activity. (See R. at 3916, 7755.) And it forecasts only 6.67 tpy of VOCs during operation of an oil well (*id.*), as compared to the 2013 Emissions Report’s forecast of 20.96.¹⁶ According to BLM, these substantial differences “reflect the assumptions and speculation that is associated with emissions estimates at this early stage of development, which are necessarily of a different scale and level of detail than data used in a conformity analysis.” (ECF No. 14 at 41.)

Additionally, BLM points out an alleged absurdity:

¹⁶ WildEarth has not challenged the per-well estimates in the two EAs.

[I]t is inappropriate to scale reasonably foreseeable development projections from a field office-wide scenario that includes both federal and non-federal mineral development reported on a township basis to individual parcels, some of which are no more than 40 acres. A township with maximum projected development (150 wells per township) would yield a projection of 0.26 wells for a 40-acre[] parcel, a nonsensical number for purposes of modeling emissions.

(*Id.* at 42 (citations omitted); see *also* R. at 4055 (stating in the May 2015 EA, “Obviously, a quarter well is not something that exists.”).)

As for WildEarth’s argument that the 2012 Development Scenario, the 2013 Emissions Report, and the 2015 Modeling Study demonstrate BLM’s ability to forecast emissions, BLM counters that those documents rely on the “kinds of conservative assumptions [that] may be appropriate for evaluating maximum environmental impacts [such as under a NEPA analysis], but bear little relation to actual emissions from the actual number of wells to be drilled on a parcel.” (ECF No. 14 at 39.) In a similar vein, BLM elsewhere states its acknowledgment

that its projections of reasonably foreseeable development and associated [2015 Modeling Study] emission inventories are appropriate for estimating potential emissions on a field office scale or for assessing cumulative environmental impacts in accordance with NEPA requirements. In contrast, BLM determined that because a conformity analysis requires more precise information to allow an accurate comparison of project-level emissions with specific thresholds in the General Conformity Rules, it cannot reasonably estimate air quality impacts for conformity purposes because of all the unknowns previously discussed.

(*Id.* at 41 (citations omitted).) Thus, BLM’s argument reduces to the notion that “indirect emissions from lease sales are not reasonably foreseeable for purposes of conformity determinations because they are not quantifiable with sufficient precision at the lease

sale stage of oil and gas management.” (*Id.* at 30.)

c. *WildEarth’s Reply Brief*

In reply, WildEarth asserts that “sufficient precision” is not part of the General Conformity Rule. (ECF No. 15 at 6–9.) WildEarth also notes the apparent incongruity between relying on previous emissions forecasts for purposes of NEPA but rejecting them for purposes of NAAQS conformity. (*Id.* at 11 n.3.)

As to BLM’s argument that the per-well projections in the EA differ significantly from previous projections (ECF No. 14 at 40–41), WildEarth says nothing. As to BLM’s argument that scaling down region-wide studies could lead to “nonsensical” calculations such as 0.26 of a well on a particular parcel (*id.* at 42), WildEarth claims that this is simply another instance of seeking more precision than the General Conformity Rule requires (ECF No. 15 at 12).

In general, WildEarth re-urges its view that existing documents provide more than enough data to permit BLM to predict that the May and November 2015 lease sales will each lead to ozone precursor emissions of over 100 tpy. (*Id.* at 9–13.)¹⁷

2. Precision & the General Conformity Rule

To resolve the parties’ disputes, the Court begins with the broad dispute over the

¹⁷ For the first time in its reply brief, WildEarth further argues that deferring a conformity analysis to the APD stage is futile because “per-well ozone precursor emissions are likely to fall below the threshold for a conformity analysis. This segmenting of oil and gas development into individual wells, and analyzing each well’s emissions in isolation, will result in BLM avoiding a conformity analysis altogether” (ECF No. 15 at 5; *see also id.* at 11–12.) Relatedly, WildEarth cites for the first time an EPA “Questions and Answers” document about NAAQS conformity analysis. (*Id.* at 8, 12.) Arguments raised for the first time in a reply brief are generally forfeited. *See United States v. Harrell*, 642 F.3d 907, 918 (10th Cir. 2011). Moreover, even if the Court were to excuse the forfeiture, it would necessarily permit BLM to file a surreply, yet WildEarth’s new argument is so thinly presented that the Court cannot envision a surreply from BLM that would assist the Court in fairly considering the matter. Accordingly, WildEarth has forfeited its segmentation argument.

precision or lack thereof required by the General Conformity Rule. When EPA first proposed that rule (see 58 Fed. Reg. 13,836 (Mar. 15, 1993)), it generated several comments about whether “reasonably foreseeable” was adequately defined (see 58 Fed. Reg. 63,214, 63,226 (Nov. 30, 1993)). EPA’s commentary accompanying the final rule addressed this concern by, among other things, “add[ing] the discussion below”:

. . . the final definition does not require a Federal agency to use all emissions scenarios contained in financial documents or environmental analyses. That approach could not in many cases be implemented since the various documents contain quite different scenarios and a single document sometimes contains multiple emissions scenarios. In addition, some scenarios could be based on speculation. The definition does not require the use of worst-case assumptions, unlikely growth scenarios, or analyses where it is impossible to assess local air quality impacts. . . .

The final rule requires the Federal agency to review all of its own information and all information presented to the Federal agency. Selection and documentation of the relevant emissions scenarios for conformity review is the responsibility of the Federal agency and should be based on reasonable expectations of future activity resulting from the Federal action.

Id.

WildEarth naturally prefers to emphasize language such as that in the last sentence of this guidance—“reasonable expectations of future activity.” (See ECF No. 15 at 8.) BLM, not surprisingly, emphasizes the recognition in the prior paragraph that differing scenarios, unlikely scenarios, speculation, worst-case assumptions, and so forth, need not always be considered, even if in the agency’s possession. (See ECF No. 14 at 37–38.) In other words, both parties can claim apparently helpful language.

Because BLM does not administer the CAA, the Court owes no deference to BLM’s interpretations of the General Conformity Rule, much less BLM’s interpretations

of EPA's Federal Register guidance concerning the General Conformity Rule. See, e.g., *Hoffman Plastic Compounds, Inc. v. NLRB*, 535 U.S. 137, 143–44 (2002) (no deference due to agency where it interprets a statute “far removed from its expertise”). Even so, nothing prevents the Court from finding BLM's interpretation of EPA's guidance more persuasive than WildEarth's. That is essentially the case here, as illustrated by the only case cited by either party that is even remotely on-point: *South Coast Air Quality Management District v. Federal Energy Regulatory Commission*, 621 F.3d 1085 (9th Cir. 2010).

In *South Coast*, the plaintiff presented the same theory that WildEarth presents here, namely, that the federal agency impermissibly decided it did not need to perform a NAAQS conformity analysis regarding indirect emissions. *Id.* at 1099–1101. The project in question was a proposed natural gas pipeline. *Id.* at 1089–90. As to that pipeline, the plaintiff claimed that the federal agency knew enough to trigger a conformity analysis because the agency knew:

- 1) the amount of gas the pipeline will transfer; 2) the purchasers and shippers who will buy the gas; 3) the WI of the gas [*i.e.*, the “Wobbe Index,” a metric tied to the amount of NOx the gas would produce when burned]; 4) the expected NOx emissions that will result from the gas's consumption; and 5) the environmental harm that will result from that consumption.

Id. at 1101.

The Ninth Circuit characterized these five items as “significantly less than meets the eye.” *Id.* The plaintiff's claim about the amount of gas the pipeline would transfer was actually the pipeline's “maximum capacity, not the actual amount of gas that it will carry.” *Id.* In addition, the plaintiff had overstated the agency's knowledge about NOx

emissions by failing to account for several then-unknowable variables that affect the “WI” at the time the gas reaches the consumer and is burned. *Id.*

Although not quite as thin as the information discussed by the plaintiff in *South Coast*, the Court agrees with BLM that the information available to it—the 2012 Development Scenario, the 2013 Emissions Report, and the 2015 Modeling Study—is somewhat “less than meets the eye.” *Id.*

The 2012 Modeling Study does not project emissions, but only projects the number of wells likely to be drilled between 2011 and 2030. While specifically noting that “[i]t is difficult to predict what will occur a few years into the future [much less] 20 years ahead” (R. at 9584), the document projects 196 wells on BLM land within the Nonattainment Area by 2030. (R. at 9587, 9640.) It further states that it makes no projection about how much oil or gas will be produced from those 196 wells, but simply “assume[s] that [BLM] production would be equal to about the [BLM] percentage of all wells projected (about 4% for conventional wells and 6% for coalbed natural gas wells).” (R. at 9588.) Thus, the 2012 Development Scenario does not—on its own, at least—provide anything close to a usable amount of information to reasonably predict future emissions from either the May or November 2015 lease sales.

WildEarth, understanding this, combines the 2012 Development Scenario with the 2013 Emissions Report and thereby extrapolates its own emissions predictions. (See Part IV.C.1.a, above.) But WildEarth does not deny BLM’s charge that its predictions assume construction, operation, maintenance, and reclamation on all 31 parcels (from May 2015) or 36 parcels (from November 2015) in the same year. WildEarth’s calculations are therefore akin to a worst-case scenario, which EPA

counseled against relying upon. See 58 Fed. Reg. 63,214, 63,226.

As for the 2015 Modeling Study, it presents multiple scenarios—another sort of analysis that EPA deemed potentially unreliable. See *id.* To be sure, simply because an analysis contains multiple scenarios does not mean that an agency can ignore *all* of them. But, as already noted (Part IV.B.3), WildEarth does not draw on the 2015 Modeling Study for any particular dataset or projection that could be helpful to BLM. WildEarth instead holds it up as an example of BLM predicting future emissions in a different context, and argues that BLM should therefore be able to predict emissions in this context. Such an argument is not enough to overcome the “presumption of validity” in favor of agency action. *Sorenson Commc’ns*, 567 F.3d at 1221.

To reiterate, the question before the Court is whether BLM’s “own information and . . . information presented to [it]” was sufficient in May 2015 and/or November 2015 to permit BLM to quantify emissions such that it could predict ozone precursor emissions of more than 100 tpy indirectly resulting from either lease sale. The Court concludes only that WildEarth has not carried its burden to show that BLM acted arbitrarily or capriciously in determining that the information in its possession was insufficient to permit it to make a reasonable forecast of indirect emissions. BLM’s actions will therefore be affirmed, and the Court does not reach BLM’s alternative arguments about analogies to offshore leasing and about new source review.

V. CONCLUSION

For the reasons set forth above, BLM’s actions with respect to the May 2015 and November 2015 lease sales are AFFIRMED. The Clerk shall enter judgment in favor of BLM and against WildEarth, and shall terminate this case. Each party shall bear its own

attorney's fees and costs.

Dated this 23rd day of April, 2018.

BY THE COURT:

A handwritten signature in blue ink, appearing to read "William J. Martinez", is written over a horizontal line.

William J. Martinez
United States District Judge