

IV. THE PERMIT MUST BE REMANDED FOR AN APPROPRIATE ANALYSIS OF DESERT ROCK'S OZONE IMPACTS.

EPA issued the Desert Rock permit with almost total disregard for years of monitoring data showing that ambient ozone levels in San Juan County were at or approaching the NAAQS. EPA instead adhered to demonstrably flawed modeling from 2004 that projected ozone impacts for 2012 using a single four-day set of data from 2002. EPA simply ignored current elevated ozone monitoring data because the area has not been formally designated for nonattainment and, in EPA's view, the implication of the data was "uncertain."

In mid-October 2008, just as this permit appeal was getting under way, ozone data collected from a monitor downwind of the Desert Rock site in San Juan County demonstrated that the area had exceeded the 75 ppb ozone NAAQS.¹⁷ In other words, nonattainment of the ozone NAAQS in San Juan County was no longer "uncertain." On November 18, 2008, New Mexico moved the Board either to consider the new ozone information in this appeal or to remand the permit so that EPA could revisit this issue. *See* New Mexico's Motion to Supplement the Record on Appeal, or, in the Alternative, for Remand and Reopening of the Public Comment Period (hereinafter, "New Mexico's Motion"). During the pendency of this appeal, San Juan County has continued to violate the ozone NAAQS by a wide margin. The Navajo Lake Monitor recorded 8-hour ozone averages of 77 ppb (February 4, 2009), 78 ppb (February 6, 2009), 78 ppb (February 7, 2009), and 83 ppb (February 16, 2009).

EPA and DREC opposed New Mexico's Motion, but fail to offer a sound reason for disregarding the current ozone information or the more accurate oil and gas impact assessments throughout this permitting process. Instead, they bury their heads in the sand and insist that the

¹⁷ Attainment status is measured using a 3-year average of the annual fourth highest daily maximum 8-hour average. 73 Fed. Reg. 16,436 at 16,483 (Mar. 27, 2008).

2004 modeling reflects the best available data. Their disregard of the current data undermines the Act and reflects poor public policy.

A. San Juan County's Exceedance of the Ozone NAAQS Must Be Taken into Account.

EPA and DREC fail to provide a sound basis for disregarding the fact that the area in which Desert Rock would be built has ozone levels that currently exceed the NAAQS.¹⁸ Instead, they urge strict adherence to rules of administrative procedure, notwithstanding the fact that in the face of significant new information, the Board has discretion as to the application of those rules. Because neither DREC nor EPA can contest the Board's discretion, they are forced to argue that the exceedances of the ozone NAAQS are not "substantial" and do not raise "substantial new questions." EPA Resp. to NM Motion at 2; DREC Resp. to NM Motion at 4-5. These arguments lack merit.¹⁹

1. The ozone NAAQS is the relevant benchmark for determining nonattainment.

DREC suggests that the new information is insubstantial because the 75 ppb standard is "not automatically imposed" on its PSD permit.²⁰ DREC Resp. at 127. EPA, however, does not dispute the relevance to this permit of the 8-hour ozone standard of 75 ppb, which was

¹⁸ The area that New Mexico will recommend for nonattainment designation in less than a month includes all of San Juan County, which contains the proposed Desert Rock site, as well as the monitors referenced by the parties in this appeal (Substation, Bloomfield, and Navajo Lake).

¹⁹ EPA suggests that "existing ozone concentrations in the Four Corners area are appropriately addressed in the context of New Mexico's State Implementation Plan for the area, and not in the context of a PSD permit." EPA Resp. at 60. New Mexico's SIP obligations, however, do not relieve EPA, the permitting authority, from its obligation to ensure that a new source does not cause or contribute to a NAAQS violation under 42 U.S.C. § 7475(a)(3).

²⁰ New Mexico presented this ozone data in its Supplemental Brief, as well as data from the Administrative Record and data from EPA's public databases collected and published prior to issuance of the permit. *See* NM Supp. Br. at 49-52 and Ex. D attached thereto. New Mexico presented the October 2008 data in its Motion to demonstrate that San Juan County had exceeded the ozone NAAQS as measured by the three-year average of the fourth highest 8-hour average. Arguments pertaining to the Board's consideration of either set of data overlap to some degree in the briefing.

promulgated on March 27, 2008 and became effective on May 27, 2008. AR 121 at 7; Region Resp. at 67. In fact, EPA specifically considered, in its final permitting decision on July 31, 2008, whether Desert Rock would cause or contribute to ozone NAAQS. AR 120 at 125 (the “result [of Desert Rock’s maximum impacts] would still be well below the 75 ppb level of the 8-hour ozone NAAQS.”) Because the ozone NAAQS is the benchmark against which Desert Rock’s impacts must be (and were) measured, the fact that actual background ozone levels exceed that benchmark is of the utmost relevance to this permitting decision.

According to DREC, the ozone NAAQS would only be relevant to a PSD permitting process after the imposition of new “emission limits” pursuant to a state SIP, which would occur after submission (and, presumably, EPA approval) of a SIP by the May 12, 2014 deadline. DREC Resp. at 129-30. This argument ignores the fact that the Act now requires—and has required since before this permit was issued—that New Mexico use the 75 ppb ozone NAAQS as the benchmark for evaluating the attainment status for all areas of the State. Section 107(d)(1)(A) of the Act specifically requires states to submit attainment designations no later than one (1) year after promulgation of a revised NAAQS. Pursuant to the EPA’s March 12, 2008 rule promulgating the new ozone NAAQS, New Mexico must submit its designations by March 12, 2009. 73 Fed. Reg. 16,436 at 16,503 (Mar. 27, 2008). For purposes of determining attainment, this process immediately implements the ozone 2008 NAAQS, and no further rulemaking or administrative process is necessary.

Moreover, the PSD program is intended to prevent air quality problems before a new facility is permitted. Despite this fact, EPA and DREC would have the facility permitted now only to be swept up in a SIP process for the region that will likely reduce permitted emissions limits. This approach places the burden on the state of New Mexico to develop a plan to reduce

Desert Rock's ozone levels, when the issue must be considered now and could more effectively be addressed before the Desert Rock facility is permitted and constructed.

2. In the face of background levels in excess of the NAAQS, Desert Rock would presumptively contribute to a NAAQS violation.

In dismissing the relevance of the fact that San Juan County is now above the ozone NAAQS, DREC also errantly suggests that it falls on Petitioners "to substantiate" that "emissions from the Desert Rock Project would cause or contribute to ozone exceedances in the area generally or specifically at the Navajo Lake Monitor." DREC Resp. at 140. But, in view of San Juan County's exceedance of the ozone NAAQS, not only does the burden fall upon DREC as to this issue, but DREC must also overcome the strong presumption that Desert Rock would contribute to an ozone NAAQS violation in San Juan County. As EPA guidance directs:

[A] PSD source with significant new emissions of the applicable pollutant which constructs in an area adjacent to a nonattainment area should be presumed to contribute to the violation if it would have a significant impact at any point in the nonattainment area. However, if the proposed PSD source can demonstrate that its new emissions would not have a significant impact at the point of the violation when that violation is actually occurring, then the proposed source would meet the requirements of 40 CFR 52.21 (k)(1) provided that it would not cause any new violations of the NAAQS. This answer would apply whether the nonattainment area was newly discovered or was formally designated nonattainment under Section 107. I should like to add that, while such a demonstration is allowed, it will be extremely difficult to prove an insignificant contribution, especially in the short term.

EPA Memorandum from Richard G. Rhodes, Director of Control Programs Development

Division to Alexandra Smith, Director Air & Hazardous Materials Division, Region X,

Regarding Interpretation of "Significant Contribution" (December 16, 1980): ("Rhodes Memo")

at 1-2.²¹ The Rhodes Memo indicates that the presumption is applicable to new sources

²¹ The Rhodes Memo forms the basis of and is expressly reaffirmed by the Emison Memo cited by DREC regarding spatial/temporal considerations as to a source's impacts. See DREC Resp. at 123.

proposed to be built adjacent to “newly discovered,” but not yet formally designated nonattainment areas.

B. EPA Erred in Relying on the 2004 Modeling.

Even leaving aside San Juan County’s exceedance of the ozone NAAQS, EPA’s reliance on the 2004 modeling for its ozone determination was clearly erroneous. Regardless of the model’s suitability for assessing Desert Rock’s ozone impacts in 2004, which Petitioners have contested, it became abundantly clear during the course of this permitting process—and long before EPA’s permitting decision—that the modeling was deficient.

EPA and DREC make a concerted effort to shield the Region’s flawed ozone determination behind the deference that the Board generally accords to the Region’s technical analysis. DREC Resp. at 116, 119, 124, 127, 131; Region Resp. at 59. That deference, however, is far from absolute, and cannot foreclose review of the Region’s rationale for its conclusions in the ozone analysis. *In re Indeck-Elwood, LLC*. 13 E.A.D.____, slip op. 47-48, n. 67 (EAB; Sept. 27, 2006)(remanding PSD permit due to technical shortcomings in analysis, noting that even as to technical determinations, the “permit issuer’s rationale for its conclusions must be adequately explained and supported in the record”); *In re Gov’t of D.C. Mun. Separate Sewer Sys.*, 10 E.A.D. 323, 348 (EAB 2002)(the Board “look[s] to determine whether the record demonstrates that the [permit issuer] duly considered the issues raised in the comments and whether the approach ultimately adopted by the [permit issuer] is rational.”) Here, EPA should not be accorded deference. EPA acknowledges that the ozone modeling suffered from “problems,” did not provide “a precise estimate of DREF’s impacts,” and did not reflect “high ambient ozone concentrations in the Four Corners Area.” AR 120 at 125; EPA Resp. at 64.

1. EPA has failed to address data that conflicted with the 2004 modeling.

As New Mexico asserted in its Supplemental Brief, a fundamental failing in EPA's analysis is its continued reliance on modeled background ozone levels in the face of actual data that demonstrated substantially higher levels. NM Supp. Br. 49-52. New Mexico's Supplemental Brief referenced monitoring data--compiled and published by EPA—that reflected eight-hour average ozone levels in San Juan County ranging up to 87 ppb, and that indicated, months before the permit was issued, that the three-year average of the fourth highest eight-hour average in San Juan County was 75 ppb, or exactly at the NAAQS. *Id. and see* Ex. D to NM Supp. Br. EPA admits that it “oversees the monitoring network, and is aware of the high ambient ozone concentrations in the Four Corners Area,” but declines to address the implications of those data, instead stating obliquely that the issue of “model adequacy” was addressed and that the “modeling should be considered as illustrative of the magnitude of impacts from a large power plant.” EPA Resp. at 64. Thus, EPA neither refutes the conclusion that, given ozone levels at or above 75 ppb, Desert Rock would contribute to an exceedance of the ozone NAAQS, nor provides any real explanation for disregarding those data.

The 2004 model performed poorly in part because it relied on an emissions inventory that grossly underestimated emissions from the oil and gas industry. NM Supp. Br. at 48. The fact that oil and gas development contributes significantly to ozone levels in the Four Corners Region was corroborated by a study submitted by the NPS to EPA—with the admonition to take a “harder look” at ozone in the Four Corners—in reference to the Desert Rock permit. *See* New Mexico Motion, at 6, and Ex. AA thereto. EPA has failed to address this issue.

EPA and DREC attempt to dispel the 2004 modeling's failings by citing data to suggest that the 2004 modeling made accurate projections of 2007 ozone levels at two monitoring

stations. In particular, EPA and DREC observe that the 2007 monitored design values for the Substation and Bloomfield monitors were slightly *less* than what was projected. EPA Resp. at 64 n. 22; DREC Resp. at 139-40.²² But this does not explain the model's severely inaccurate prediction for the Navajo Lake Monitor. The 2004 model projected a 2007 maximum ozone level of 62 ppb at Navajo Lake, but the fourth-highest eight-hour average at that monitor in 2007 was 79 ppb. *See* NM Supp. Br. at 50 and Exs. C (at 4-5), and D.

EPA cannot ignore higher ozone levels at one monitor in favor of lower readings at another location. The Navajo Lake monitor was installed in 2006 for the specific purpose of better measuring the full extent of the ozone levels in San Juan County. Its location downwind of the proposed Desert Rock site was selected specifically so that pollutants emitted upwind would have time to photochemically react to form ozone before reaching the monitor.

Additionally, the 2007 levels should be viewed in the context of the design values (rolling, three-year averages of the fourth highest 8-hour average in ppb) for the Substation and Bloomfield monitors at the time of permit issuance:

	2003	2004	2005	2006	2007
Bloomfield	74	72	72	69	69
Substation	75	73	72	71	72

See NM Supp. Br. at Ex B; data compiled from <http://www.epa.gov/air/data/>. These data suggest that Desert Rock's estimated contribution of up to 4 ppb would cause or contribute to ozone violations of the 75 ppb standard in the area in the average year.

²² It bears noting, as EPA is well aware, that excess NO_x levels in the vicinity of the Bloomfield monitor "scavenge" the ozone in that immediate vicinity by chemically reacting with it and, thereby, reducing ozone levels at the monitor. As a result, ozone levels recorded at Bloomfield under-reflect actual levels in the area.

2. EPA's spatial-temporal argument lacks support in the record.

Because Desert Rock's ozone contribution pushes the area up to the ozone NAAQS even using EPA's background levels, DREC and EPA suggest that the ozone analysis should be accorded a margin for error because of EPA's determination that "the projected 4 ppb impact of DREF...does not coincide in time or space with the maximum predicted ozone concentration." EPA Resp. at 66; DREC Resp. at 122-23. The record does not support this assertion.

The *only* support in the record for EPA's determination that Desert Rock's impacts would not occur at the same time as background peak levels can be found in the 2004 modeling report at Table 5-2, p. 5-4. *NM Growth and Control Strategy Modeling*, attached to NM Supp. Br. at Exh. A. That table uses only four days of data from June of 2002 to show that the projected maximum baseline ozone level for 2012 would occur on June 7 whereas the projected maximum impact from a power plant would occur on June 6. Based on that one-day difference in a single four-day ozone episode alone, EPA concludes that Desert Rock's maximum impact would *never* correspond with peak ozone levels.

The unreasonableness of resting such an important conclusion on a single four-day ozone episode is readily apparent in light of the actual ozone data for the area. The monitoring network overseen by EPA at the time this permit was issued had recorded 8-hour average ozone levels that exceeded the NAAQS at times throughout the calendar year with conditions that differ significantly from those in June. For example, monitors registered 8-hour averages of 80 ppb on April 20, 2006, and 79 ppb on August 25, 2007. *See* NM Supp. Br., Ex D. Moreover, New Mexico cited a recent example of an ozone episode with 8-hour averages of 76 and 77 ppb on October 15 and 18, 2008. NM Motion at 4. Finally, as indicated above, the Navajo Lake Monitor recorded a peak 8-hour average of 83 ppb and three other 8-hour average levels

exceeding the ozone NAAQS on four days in February of 2009. For these or any of the other numerous ozone episodes at various times throughout the years since the 2004 modeling, EPA simply has not and cannot demonstrate that Desert Rock's contribution at such times would not be significant.

The severe inadequacy of EPA's temporal analysis also undermines its conclusion about the correlation between Desert Rock's spatial impacts with ozone violations in the area. In an area with numerous ozone violations occurring throughout the year, it is not appropriate to base a conclusion about the spatial interrelation between Desert Rock's emissions and high background levels upon a single four-day episode from June of 2002. Moreover, to the limited extent that the 2004 modeling even considered the spatial ozone impacts of a new power plant, it did so principally in a manner that registered only those impacts greater than 2 ppb. *See* "Air Quality Modeling Analysis for the San Juan Early Action Ozone Compact: Maintenance for Growth and Control Strategy Modeling," at Section 4.2.1, attached to NM Supp. Br. at Ex. A, cited by EPA at AR 120, p 125. Because, however, EPA must double the impacts considered in that modeling to make it applicable to Desert Rock, the analysis is inadequate. For example, if the ozone impact of power plant emissions in the 2004 modeling were projected to be 1.5 ppb at a given location, it would not have appeared in the model's spatial projection for power plant impacts because of the 2 ppb cutoff. However, if that value were doubled to correct for the actual size of Desert Rock, those impacts (of roughly 3 ppb) would have registered over a much broader area than the 2004 modeling projected.

V. EPA FAILED TO ANALYZE THE NAAQS AND BACT FOR PM_{2.5}, OR ALTERNATIVELY, TO DEMONSTRATE THAT PM₁₀ IS AN ADEQUATE SURROGATE FOR PM_{2.5}.

EPA makes three primary arguments in response to the petitions: (1) EPA is not precluded from using a PM10 analysis as a surrogate for PM2.5 analysis; (2) the petitions fail to present permit-specific arguments that the use of PM10 as a surrogate for PM2.5 analysis is erroneous for the DREF permit; and (3) EPA's technical judgment should be given deference before review is granted. DREC makes similar arguments, all of which are addressed below.²³

A. EPA Failed to Conduct a Technical Analysis of PM2.5.

EPA argues that it is not required to conduct a PM2.5 analysis because it is "not precluded as a matter of law from using a PM10 analysis as a surrogate to demonstrate compliance with PM2.5 requirements." EPA Resp. at 69. In its Response to Comments, however, EPA did not demonstrate compliance with PM2.5 requirements in its PM10 analysis. Instead, EPA simply referred to the Seitz Memorandum, which it claimed "identified significant technical difficulties with implementing PSD for PM2.5 because of limitations in ambient monitoring and modeling capabilities." AR 120 at 77, (*Memorandum from John S. Seitz, Director Office of Air Quality Planning and Standards, to Regional Air Directors, re: Interim Implementation of New Source Review Requirements for PM2.5, October 23, 1997*).

As New Mexico noted in its Supplemental Brief, the Seitz memorandum refers to concerns that existed eleven years ago, such as lack of monitoring, modeling, and control technologies for PM2.5. NM Supp. Br. at 60. Those concerns no longer exist. Methods for monitoring PM2.5 exist and are currently in place near the Desert Rock site; methods for modeling have been approved by EPA; and control technologies exist and are in place at other power plants. NM Supp. Br. at 61-62; NGO Supp. Br. at 201-203.

²³ DREC makes the following arguments: (1) EPA approved its use of PM10 as a surrogate for PM2.5 based on the Seitz and Page memoranda and the May 2008 PM2.5 rule grandfathering provision; (2) the permit appeal is not the appropriate forum to challenge the May 2008 rule; and (3) the Board should grant deference to EPA's technical judgment.

EPA also relies on the PM2.5 regulations issued in May 2008, 40 CFR 52.21(i)(1)(x), to conclude:

EPA will now allow sources or modifications who submitted applications in accordance with the PM10 surrogate policy to remain subject to that policy for purposes of permitting if EPA or its delegate reviewing authority determined that the application was complete prior to May 8, 2008. AR 120 at 77.

EPA does not explain how the PM10 surrogate policy obviates the need to conduct an analysis for PM2.5 or to determine whether the PM10 analysis that was conducted is an adequate surrogate for this facility.

In its Response to Comments, EPA indicates that it included condensables in the PM10 emission limit, but never explains how this action addresses PM2.5 emissions. There is no indication in the administrative record or the Response to Comments that EPA or the permit applicant ever conducted an analysis to ensure the PM10 limit—with or without condensables—was an adequate surrogate for PM2.5 for this facility.

B. EPA Must Conduct a Technical Analysis of PM2.5, Not Just Rely on a Blanket Statement that PM10 is an Adequate Surrogate.

In defense of its failure to conduct a technical analysis of PM2.5, EPA relies on the Board's decisions in *Prairie State* and *Cherry Point* for the proposition that “[w]here PM10 is an adequate surrogate, the requirement in section 163(a)(3) of the Act can be satisfied for PM2.5 through fulfillment of the PM10 requirements.” EPA Resp. at 70. The key phrase is “where PM10 is an adequate surrogate”; EPA has made no such showing. And as the petitioners observed in their supplemental briefs, the EAB in both *Prairie State* and *Cherry Point* found that the permitting authorities not only provided a good reason for using PM10 as a surrogate for PM2.5, but also had analyzed PM2.5 for compliance with the NAAQS.

In *Prairie State*, the Board upheld the use of PM₁₀ as a surrogate because, as the permitting authority explained, no implementation guidance for the PM_{2.5} standard existed at that time, and the permitting authority provided additional analysis for the new PM_{2.5} standard. *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, slip op. at 75-76 (EAB August 24, 2006). The Board found that the permitting authority's analysis of a particular pollutant in the absence of an applicable model approved by the Agency must be "solidly grounded on the record of the case", and may not be applicable if the EPA developed additional methods or techniques for analyzing the pollutant. *Id.* at 77-78.

Unlike *Prairie State*, EPA did not demonstrate that PM₁₀ is an adequate surrogate for PM_{2.5} for DREF, and EPA has developed additional methods and techniques for analyzing PM_{2.5}. Also unlike *Prairie State*, EPA did not conduct any additional analysis for the PM_{2.5} at DREF.

In *Cherry Point*, the Board found that "the record includes an evaluation of the proposed Facility's emissions impacts with respect to both PM₁₀ emissions and PM_{2.5} emissions." *In re BP Cherry Point*, PSD Appeal 05-01, slip op. at 222 (EAB June 21, 2005). The Board also found that:

...for purposes of both the PM BACT analysis and the ambient impact analysis, the permit applicant treated all particulate, whether less than ten microns or not, as if it were PM₁₀, thus potentially over-counting PM₁₀ emissions. With respect to PM_{2.5}, in addition to the PM₁₀ analysis, the record includes an ambient impact analysis that counts all the PM₁₀ emissions from the proposed Facility as PM_{2.5}. In particular, the ambient air quality analysis evaluates the impact of the proposed Facility's PM_{2.5} emissions, both at the point of maximum impact and in the nearby Canadian portions of the airshed, assuming that all the PM₁₀ emissions from the Facility (i.e., all PM emissions) will be PM_{2.5}... That is, the analysis estimates the total PM₁₀ emissions from the Facility, and rather than treating PM_{2.5} as a smaller subset of PM₁₀, and examining the ambient impact of just that subset, it assumes that the entire quantity of PM₁₀ coming from the Facility will also be PM_{2.5}.

Id. at 222-223 (internal citations removed). In contrast, at DREF, neither EPA nor DREC evaluated PM2.5 in the NAAQS or BACT analysis for PM10.²⁴ The permitting authority must do more than make a blanket statement that PM10 can be used as a surrogate for PM2.5; it must actually conduct an analysis to show that the PM10 analysis for a particular source is an adequate surrogate.

C. EPA Cannot Shift the Burden from the Permitting Authority to the Public to Demonstrate the PM10 is an Inadequate Surrogate.

In its response brief, EPA argues that the petitioners must present “permit-specific information and arguments to show that the use of PM10 as a surrogate is clear error.” EPA Resp. at 71. As demonstrated above, EPA did not conduct a technical analysis of PM10 as a surrogate or model for PM2.5, therefore there is no permit-specific information for petitioners to assess. It is the absence of such information in the permit and response to comments that constitutes EPA’s error.²⁵

Additionally, in response to New Mexico’s argument that two recent state cases have concluded that PM10 is not an adequate surrogate for PM2.5, EPA contends that “[p]etitioners have not presented modeling data or any other specific information showing that the PM2.5 NAAQS will be violated or otherwise showing that the PM10 surrogacy is clear error.” EPA Resp. at 74. The applicant and agency—not the petitioners—bear the burden to show that the

²⁴ DREC admits that its use of PM10 as a surrogate does not waive its obligation to analyze PM2.5, yet argues that using PM10 as a surrogate actually “expand[s] the scope of particulate matter that must be monitored for PM2.5.[so that] sources that rely upon the surrogate policy may in fact be adopting a stricter standard.” DREC Resp. at 148. DREC provides no analysis of PM2.5 emissions at Desert Rock to demonstrate this assertion, and fails to acknowledge that the permit contains no requirement for monitoring PM2.5.

²⁵ EPA also states that “there is no general rule that PM10 cannot serve as a surrogate for PM2.5 simply because of the general differences between PM10 and PM2.5 that Petitioners rely on” and that the petitions are based on speculation regarding the inadequacy of PM10 as a surrogate for PM2.5. EPA Resp. at 71. In their supplemental briefs, the petitioners did not engage in “speculation”, instead they show the inadequacy of PM10 as a surrogate is supported by EPA’s own regulations.

PM2.5 NAAQS will not be violated. The Board has never held that petitioners are required to prepare and submit modeling to support their arguments.

Instead, the petitioners must “identify the basis for [their] objections to the permit, and explain why, in light of the permit issuer’s rationale, the permit is clearly erroneous or otherwise deserving of review.” *In re Zion Energy, LLC*, 9 E.A.D. 701, 705 (EAB 2001). In this case, neither EPA nor the applicant presented any modeling data for PM2.5 or specific information regarding the adequacy of PM10 as a surrogate, so the petitioners object to the lack of analysis. Petitioners are not required to do the agency's work for it.

D. DREC Must Conduct a BACT Analysis for PM2.5 Emissions and Demonstrate Compliance with the NAAQS.

The permittee acknowledges that PM2.5 will constitute approximately 78% of total annual PM emissions—or more than 800 tons per year—from the facility. NM Supp. Br. at 57. As a result, Desert Rock is a major emitting facility for PM2.5 and must conduct a BACT analysis pursuant to Section 165(a) of the Act to determine whether it will cause or contribute to a NAAQS violation. There are numerous existing sources of PM2.5 in the region where Desert Rock will be built, including two coal-fired power plants, two refineries, more than 20,000 oil and gas wells, and numerous other industrial and transportation sources.

Pursuant to Section 165(a), EPA Region 9 should have required DREC to demonstrate that: (1) the PM2.5 emissions will not cause or contribute to exceedances of the maximum allowable increase or concentration for any pollutant more than one time per year and the NAAQS in the air quality control region; (2) the facility complies with BACT for PM2.5; (3) Section 165(d) (with respect to protection of Class I areas) have been complied with for such facility; and (4) that the owner and operator will monitor PM2.5 emissions. The Board should therefore remand the permit to EPA Region 9 to comply with the terms of Section 165(a) for

PM2.5 or to demonstrate how the PM10 analysis that was conducted for Desert Rock is an adequate surrogate for the PM2.5 analysis and protects the PM2.5 NAAQS.

VI. EPA VIOLATED THE ACT BY ISSUING A PERMIT WITHOUT ENFORCEABLE CONDITIONS ADDRESSING THE FINDINGS OF ADVERSE AQVR IMPACTS.

The purpose of Section 165(d) is to protect the air quality related values ("AQRVs"), including visibility, of Class I areas. Section 165(d)(2)(B) places an affirmative duty on the Federal Land Managers (FLMs) "to consider, in consultation with the Administrator, whether a proposed major emitting facility will have an adverse impact on" the AQRVs. EPA acknowledges that the FLMs made findings of adverse impacts pursuant to Section 165(d). EPA Resp. at 82-83. EPA also acknowledges that the FLMs made these findings in consultation with Region 9. *Id.* at 82. Nonetheless, EPA rejects the FLMs' findings of adverse AQVR impacts without articulating a clear basis, and fails to include enforceable conditions in the permit to mitigate those impacts.

A. Federal Agency Requirements under the Act

1. EPA's obligations under the Act

EPA has an affirmative duty under Section 165(d) to deny a permit if the proposed facility will adversely affect the AQRVs in a Class I area. EPA, pursuant to Section 165(d)(C)(iii), may issue a permit only if the FLMs certify that the facility's emissions will have no adverse impact on the AQRVs of a Class I area. The FLMs made no such certification for Desert Rock.

Two of the primary purposes of the PSD permitting program are to protect health and welfare from actual or potential adverse effects regardless of the attainment or maintenance of NAAQS, and to preserve, protect, and enhance the air quality in national parks, wilderness areas, and other areas of special national or regional natural, recreational, scenic, or historic value. 42

U.S.C. § 160(1) and (2); *Environmental Defense v. EPA*, 489 F.3d 1320, 1322 (2007); 42 U.S.C. §169A (Congress established a national goal of preventing any future impairment of visibility in Class I areas by man-made air pollution). To achieve these goals, EPA must "assure that any decision to permit increased air pollution in any area...is made only after careful evaluation of all the consequences of such a decision." 42 U.S.C. § 160(5). *Environmental Defense*, 489 F3d at 1325 (EPA's failure to assess a pollutant in terms of the PSD goals breaches the agency's duty to consider all the relevant statutory factors).

2. FLMs' obligations under the Act

Section 165 contains a seven-step process for issuing a PSD permit that may adversely affect a Class I area. In step one, the owner or operator of a facility must demonstrate that the facility will not exceed increment levels for each criteria pollutant. 42 U.S.C. § 165(a)(3). In step two, if the facility's emissions affect a Class I area, the appropriate FLM must be notified. 42 U.S.C. § 165(d). In step three, if an FLM files a notice that the facility may affect air quality in a Class I area and identifies potential adverse effects, the owner or operator of the facility must demonstrate that the emissions will not exceed increment levels in the Class I area. 42 U.S.C. § 165(d)(C)(i). If the owner or operator of the facility does not make this demonstration, the permit cannot be issued.

In step four, if the permitting authority accepts the FLM's demonstration of adverse impacts, it cannot issue the permit even if there is no increment exceedance. 42 U.S.C. § 165(d)(C)(ii) . In step 5, if the owner or operator of the facility demonstrates to the FLM that its emissions will not adversely affect AQRVs in each affected Class I area, notwithstanding the increment exceedances, the permitting authority may issue the permit, provided the FLM certifies that it agrees with the owner or operator of the facility. 42 U.S.C. § 165(d)(C)(iii). In

step 6, any permit issued pursuant to the FLM's certification must contain emission limits to prevent PM and SO₂ from exceeding the increment levels specified in the Act. 42 U.S.C. § 165(d)(C)(iv). In step 7, if the FLM denies certification, the owner or operator of the facility may obtain a variance for the increment exceedance if the owner or operator demonstrates there will be no adverse impact on AQRVs. 42 U.S.C. § 165 (d)(D)(i) and (ii). Variances are subject to public hearings and must be approved by the President if the FLM does not concur.

Reading these provisions together, it is clear that the Act's primary goal is to protect the AQRVs in Class I areas. Accordingly, the Act requires the agency to deny a permit if there will be adverse impacts on AQRVs. Unlike increment exceedances, the Act and EPA's PSD regulations provide no exceptions, significance levels, or *de minimus* amounts for AQRV impacts. *In the Matter of Hadson Power 14 – Buena Vista*, PSD Appeals Nos. 92-3, 92-4, 92-5, *slip. op.* at 277-278 (EAB October 5, 1992). The agency may issue a permit for a facility that exceeds increment levels *only if* the owner or operator can demonstrate no adverse impacts to AQRVs in Class I areas.

B. EPA Abused its Discretion by Ignoring the FLMs' Finding that Desert Rock will Adversely Affect AQRVs in Class 1 Areas.

EPA has discretion under step 4 of the process to accept or reject the FLMs' demonstration of adverse impacts so long as it provides a reasonable basis for its decision. *Motor Vehicle Manufacturers Association v State Farm*, 463 U.S. 29, 48, 103 S.Ct. 2856, 2869 (1983)(“MVMA”)(the agency must cogently explain why it exercised its discretion in a given manner).²⁶ EPA failed to provide a satisfactory explanation or reasonable basis for rejecting the FLMs' adverse impact demonstration in this case. EPA does not allege any problem with the

²⁶ *MVMA* held that an agency's action is arbitrary and capricious if the agency relied on factors Congress did not intend it to consider, 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. *MVMA*, 463 U.S. at 43.

National park Service's ("NPS") modeling; in fact, EPA acknowledged that it has no basis to challenge the NPS modeling. NM Supp. Br. at 69. Instead, EPA simply recites, without any support in the record, that there has been no showing that Desert Rock will have an adverse impact on visibility. NM Supp. Br. at 75; EPA Resp. at 87. An agency's bare conclusion does not constitute reasoned decisionmaking. *MVMA*, 463 U.S. at 52; *Prairie State* at 154 (the agency's rejection of adverse impact determinations without a reasoned explanation was arbitrary and capricious); *Hadson Power* at 276 (the permitting authority does not have unfettered discretion to reject an FLM's adverse impact finding).

Pursuant to Section 165(d)(C)(i), the FLMs filed notice and identified adverse impacts the facility will have in eight Class I areas and DREC was unable to demonstrate that increment levels for SO₂ in twelve Class I areas would not be exceeded. NM Supp. Br. at 67-69 and 73. Additionally, the FLMs determined that DREC's modeling was inadequate and flawed. NM Supp. Br. at 65-68. Despite these findings, EPA issued the permit without a demonstration that the facility will have no adverse impacts on AQRVs as required by Section 165(d)(C)(iii), and without the required FLM certification. *Hadson Power* at 275 (FLM must establish the existence of adverse impacts or certify their absence). In fact, the FLMs continue to dispute EPA's assertions. National Park Service Technical Comments on EPA's Response to Comments on the Desert Rock Prevention of Significant Deterioration (PSD) Permit Application, October 2008 at 3-6, Exhibit AA, State of New Mexico's Motion to Supplement the Record on Appeal or, In the Alternative, for Remand and Reopening of the Public Comment Period.

EPA attempts to sidestep these problems by incorporating a reference to a voluntary memorandum of understanding ("MOU") between the Navajo Nation and DREC. EPA Resp. at 84; Permit Section IX.D.3. The MOU purports to offset Desert Rock's SO₂ emissions through

funding unspecified capital projects at other electrical generating units or purchasing emission credits. It is true that the FLMs told EPA that incorporation of the MOU as an enforceable condition of the permit would address their adverse impact findings for Desert Rock. AR 42 (MOU would address USFS' concern "provided it is Federally enforceable and included as a PSD permit condition."); NM Supp. Br. at 72. The FLMs' position is consistent with the Federal Land Managers Air Quality Related Values Workgroup ("FLAG") guidance. FLAG Report, December 2000 at 16 ("The FLM does not determine what permit conditions will be required or administer permit conditions; that is the responsibility of the permitting authority. However, the FLMs may request permit conditions or agree to withdraw objections to permit issuance if requested conditions are included. ...To be effective, permit conditions must be federally enforceable and guaranteed.")(emphasis added); Prairie State at 161 (the Board will accept creditable mitigation offsets that are incorporated into the permit as enforceable conditions).

EPA's reference to the MOU into the Desert Rock permit does not satisfy this condition. In contrast to Prairie State, EPA has not identified any creditable offsets in its Response to Comments or included conditions in the Desert Rock permit that require credit purchases or specific projects to be funded, nor has EPA required SO₂ emission limit reductions over time. Because the MOU condition is not enforceable, the FLMs' findings of adverse impact have not been resolved.

C. EPA's Response

EPA raises three arguments in response to the petitions. First, it argues that the USFS letter finding an adverse visibility impact was unsupported by evidence. Second, it argues that the NPS finding of adverse impacts on AQRVs in eight Class I areas was submitted after the draft permit was issued, and therefore could be ignored. Third, EPA asserts that it satisfied the

FLMs concerns by including the SO₂ portion of the MOU in the final permit. None of these arguments have merit.

1. The USFS letter was based on an analysis previously submitted to EPA.

EPA argues that the USFS' April 2006 letter did not contain the analysis required by 40 C.F.R §52.21(p)(3). EPA Resp. at 83. Section 52.21(p)(3) requires the EPA to consider any analysis performed by the FLM within thirty days of the notification provided by EPA pursuant to section 52.21(p)(1). EPA contends that it provided such notice on March 24, 2006, but the USFS' response failed to provide the required analysis, and so could be ignored. *Id.*

EPA is playing a shell game. EPA originally provided the (p)(1) notice in early 2004. *See* NM Supp. Br. at 74-75. The FLMs not only responded to the notice within thirty days, but also provided substantial additional data and analysis over the next two years, demonstrating that Desert Rock will have an adverse impact on visibility in eight Class I areas. *Id.* For reasons not disclosed in the record, EPA reissued a (p)(1) notification in March 2006. Because the FLMs had already provided their data and analysis over the preceding two years, there was no need for them to resubmit the data in response to the EPA's most recent notification. The FLMs fully complied with the provisions of 52.21(p), whereas EPA failed to explain why it chose not to “consider any analysis performed by the FLMs...that shows that a proposed new major stationary source may have an adverse impact on visibility.” *Hadson Power* at 276 (arbitrary and capricious rejections of adverse impact determinations are not sustainable).

2. The NPS analysis of adverse impacts triggered the statutory requirements of section 165(d)(C)(ii).

EPA claims that “[b]ecause the NPS did not submit [its] analysis until after Region 9 had proposed the permit, the Region did not comply with the applicable statutory and regulatory

requirements concerning how to consider and address adverse impact findings before issuing the draft permit and was not required by the regulations to re-propose the permit on that basis.” EPA Resp. at 83.²⁸ In fact, the NPS submitted substantial data and analysis *before* EPA issued the draft permit, providing ample time for EPA to comply with its statutory and regulatory obligations. NM Supp. Br. at 65-69. Nor did NPS’ submittal of its adverse impacts findings during the public comment period on the draft permit prevent EPA from complying with its statutory obligations as the NPS submitted its analysis nearly two years before EPA issued the final permit. The NPS submitted its analysis in direct response to EPA’s claims in the AAQIR that Desert Rock would not cause any increment exceedances or significant impacts on acid deposition in any Class I area, and that the FLMs did not find the facility would result in adverse visibility impacts. *Id.* at 71. There is absolutely no excuse for EPA’s failure to address the NPS finding before issuing the final permit.

The courts and this Board have rejected decisions by permitting authorities to ignore inconvenient FLM adverse impact findings. *National Parks Conservation Assoc. v. Manson*, 414 F.3d 1 (2005); *Hadson Power* at 286 (to fulfill its statutory objective of protecting class I areas, the agency must consider the merits of the FLMs’ demonstration and not summarily dismiss it). The court in *National Parks* noted that the Montana Supreme Court remanded a PSD permit for a coal-fired power plant to the Montana DEQ after the agency ignored the FLMs’ findings of adverse impacts at two Class I areas. *Id.* at 4. The FLMs had notified the permitting authority that the proposed Roundup plant would cause visibility impairment at a national park and a wilderness area. *Id.* at 3. The permit applicant objected to this finding to Department of Interior officials and the state agency conducted further analysis that “only reaffirmed the original

²⁸ EPA asserts that the petitioners claimed it erred by failing to begin another round of public comment after receiving the NPS adverse impact findings. EPA Resp. at 84. New Mexico never made such a claim. New Mexico simply wants EPA to comply with its statutory obligation to address the FLMs’ findings.

adverse impact conclusion.” *Id.* After an Assistant Secretary of Interior, over the objections of the FLMs, issued a letter withdrawing the adverse impact finding, the state agency issued the permit. The Montana Supreme Court reversed and remanded the permit to “determine anew whether the permit applicant established that the proposed project will not cause or contribute to adverse impacts on visibility in the Class I areas at issue.” *Id.* at 7.

In Desert Rock, EPA does not respond specifically to any of the FLMs findings. Nor does EPA explain why it rejected the FLMs' findings, or why it accepted DREC's modeling despite its acknowledged flaws. NM Supp. Br. at 70.²⁹ In *Hadson Power*, the EAB held that the permitting authority's failure to articulate an alternative, legally supportable basis for rejecting an adverse impact determination is not harmless error. *Hadson Power* at 258. The NPS provided both quantitative and qualitative analysis of the DREF's impacts on the Class I and II areas in its jurisdiction. According to *Hadson Power*, the permitting authority must provide a “rational basis” for determining that an FLM has not satisfactorily demonstrated adverse impacts to AQRVs given the FLMs' “affirmative responsibility and expertise regarding the Class I areas in their jurisdiction.” *Id.* at 276.

3. Permit Condition IX.D.3 does not mitigate the adverse impacts identified by the FLMs.

EPA claims that it addressed the FLMs' adverse impact findings by “incorporat[ing] the portion of the mitigation agreement relating to SO₂ emissions into the final PSD permit,” and that such incorporation constituted a “reasonable response” to these findings. EPA Resp. at 88. In fact, EPA did not incorporate any provisions from the MOU into the permit; it merely included a reference to the MOU. As discussed earlier, this incorporation is not effective. The MOU is voluntary and unenforceable. Because the FLMs conditioned their willingness to

²⁹ EPA never responded to the FLMs' adverse impact findings regarding acid deposition in soils and water. *Hadson Power* at 281 n. 33 (non-visibility AQRVs must be assessed).

withdraw adverse impact findings on the incorporation of enforceable conditions in the permit, EPA's failure to comply with the condition means that these findings have not been mitigated.


CONCLUSION

For the reasons set forth herein, New Mexico respectfully requests that the Board remand the Desert Rock PSD Permit to EPA Region 9.

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Respectfully submitted,

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