STATE OF NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD

IN THE MATTER OF THE APPEALS OF THE AIR QUALITY PERMIT NO. 7482-M1 ISSUED TO 3 BEAR DELAWARE OPERATING – NM, LLC.

EIB No. 20-21 (A)

AND

REGISTRATION NOS. 8720, 8730, AND 8733 UNDER GENERAL CONSTRUCTION PERMIT FOR OIL AND GAS FACILITIES EIB No. 20-33(A)

WildEarth Guardians, *Petitioner*.

3 BEAR DELAWARE OPEARTING - NM, LLC'S POST-HEARING SUBMITTALS

Pursuant to 20.1.2.401 NMAC, the July 20, 2020 Procedural Order, and the November 3, 2020 Order Granting Extension of Time to File Post-Hearing Submittals, 3 Bear Delaware Operating – NM, LLC (3 Bear) timely files its post-hearing submittals in this matter. 3 Bear's closing arguments are attached as Exhibit 1. Its proposed findings of fact and conclusions of law are attached as Exhibit 2.

Respectfully submitted this 30th day of November, 2020.

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CERTIFICATE OF SERVICE

This is to certify that I have duly served the above 3 BEAR DELAWARE OPEARTING – NM, LLC'S POST-HEARING SUBMITTALS upon all parties herein by email this 30th day of November, 2020, addressed as follows:

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3 BEAR EXHIBIT 1

STATE OF NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD

IN THE MATTER OF THE APPEALS OF THE AIR QUALITY PERMIT NO. 7482-M1 ISSUED TO 3 BEAR DELAWARE OPERATING – NM, LLC.

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AND

REGISTRATION NOS. 8720, 8730, AND 8733 UNDER GENERAL CONSTRUCTION PERMIT FOR OIL AND GAS FACILITIES EIB No. 20-33(A)

WildEarth Guardians, *Petitioner*.

3 BEAR DELAWARE OPEARTING - NM, LLC'S CLOSING ARGUMENT

EIB No. 20-21(A) is an appeal of New Source Review (NSR) Permit Number 7482-M1 (the Libby permit amendment), issued to 3 Bear Delaware Operating – NM, LLC (3 Bear) for the Libby natural gas processing plant in Lea County, New Mexico. Petitioner WildEarth Guardians (WEG) asserts that the New Mexico Environment Department (NMED or Department) violated 20.2.72.208.D NMAC by issuing the Libby permit amendment without modeling or otherwise evaluating whether the permitted emissions increase will cause or contribute to a violation of the 2015 national ambient air quality standard (NAAQS) for ozone, and without requiring offsetting emission reductions.

Standard of Review

The petitioner appealed pursuant to NMSA 1978, § 74-2-7.H and 20.1.2.202 NMAC. In a permit appeal to the Environmental Improvement Board, "[t]he burden of proof shall be on the petitioner." NMSA 1978, § 74-2-7(K). In addition, NMAC 20.1.2.302 provides that:

In a petition hearing, the petitioner has the burden of going forward with the evidence and of proving by a preponderance of the evidence the facts relied upon to justify the relief sought in the petition. Following the establishment of a prima facie case by the petitioner, any person opposed to the relief sought in the petition has the burden of going forward with any adverse evidence and showing why the relief should not be granted.

The Board's decision may be appealed to the Court of Appeals. Upon appeal, the Board's action shall be set aside only if found to be: (1) arbitrary, capricious or an abuse of discretion; (2) not supported by substantial evidence in the record; or (3) otherwise not in accordance with law. NMSA § 74-2-9(C).

Summary of Argument

The Libby permit amendment, NSR Permit Number 7482-M1, was properly issued in compliance with Chapter 74, Article 2 of the NMSA, 20.2.72 NMAC, and applicable NMED guidance. The permit application appropriately did not contain source-specific ozone modeling, which is not required for new or modified minor source permit applications like the application to amend the Libby gas plant's permit.

Even if modeling were required, technical analyses performed by 3 Bear and WEG in response to the appeal demonstrate that Libby's ozone impacts are below applicable significance levels and do not cause or contribute to a violation of the national ambient air quality standard for ozone. Performing this modeling earlier would not have changed the outcome. Any alleged failure to perform ozone modeling was therefore harmless.

Unable to demonstrate that the Libby permit amendment results in a significant ozone impact or causes or contributes to a NAAQS violation under the established meaning of those terms, WEG advances its own novel interpretation of these terms of art. The Board should apply the established legal meaning of these terms and should not adopt WEG's reinterpretation.

The phrase cause or contribute is a legal term of art. Its meaning has been developed in numerous EPA guidance documents, and the Department follows the federal definition. Under that definition, an emissions increase causes or contributes to a NAAQS violation only if the impact on ambient air quality is "significant," meaning that ambient concentrations will increase by an amount equal to or greater than a defined "significance level."

The Department has established a significance level for ozone of 1.0 parts per billion (ppb). Air Quality Bureau Chief Elizabeth Bizbey-Kuehn testified that minor sources of emissions, such as the Libby plant, will never cause ozone impacts above 1.0 ppb and by definition do not cause or contribute to ozone NAAQS violations. This confirms that single-source ozone modeling is unnecessary.

WEG asks the Board to ignore the significance threshold and conclude that any increase in ozone precursor emissions causes or contributes to a NAAQS violation in what WEG calls an "actual nonattainment" area. WEG's position would effectively rewrite 20.2.72.208.D NMAC. It runs counter to decades of EPA guidance, NMED's Air Dispersion Modeling Guidelines, and the Department's historic practice. It is not followed by the EPA or any other state nor can it be successfully implemented.

The scope of the appeal in docket number 20-21(A) is limited to whether the Department violated 20.2.72.208.D NMAC by issuing the individual permit amendment to the Libby plant without performing ambient air quality modeling or otherwise evaluating ambient ozone impacts, and without requiring emission offsets. Evidence regarding the oil and gas industry's

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¹ In EIB Number 20-33(A), the Board is reviewing three General Construction Permit (GCP) registrations filed by XTO Energy, Inc. and Spur Energy Partners, LLC.

cumulative contribution to regional ozone concentrations, the sufficiency of the Department's ozone reduction strategies, and overall ozone policy are not relevant to whether the Department's review of NSR Permit 7482-M1 complied with 20.2.72.208.D NMAC. The Board will soon consider broad policy issues in its rulemaking hearing for the Department's draft ozone and methane regulations, and must limit its decision in EIB No. 20-21(A) to the issues that are properly before it.

Overview of the Libby Natural Gas Processing Plant Permit Amendment

The Libby Gas Plant (Libby) in Lea County, New Mexico, is a minor source for purposes of the prevention of significant deterioration (PSD) permitting program.² The facility is a natural gas processing plant constructed in 2018-2019 with a permitted throughput capacity of 60 million standard cubic feet per day (MMScfd). It uses a cryogenic gas separation train to process field gas received from three surrounding compressor stations. The plant extracts natural gas liquids from the field gas, resulting in pipeline quality natural gas. The plant uses modern emissions control technologies, including a thermal oxidizer, storage tank flares, oxidation catalysts and air fuel ratio controllers on the lean burn engines, and non-selective catalytic reduction and air fuel ratio controller on the rich burn engine. 3 Bear implements a leak detection and repair program. The Department has never initiated an administrative or judicial enforcement action against the Libby plant. 3 Bear Prefiled Direct 1:6 – 2:22.

The permit challenged in this appeal is NSR Permit 7482-M1 (the Libby permit amendment). It was issued on April 8, 2020 to amend Libby's original NSR permit. *Id.* at 1:18-20. The Libby permit amendment allowed the potential emissions of nitrogen oxides (NOx) to increase by 21.8 tons per year (tpy) and the potential emissions of volatile organic compounds (VOCs) to increase by 71.5 tpy. *Id.* at 3:19-20. Accordingly, the Libby permit amendment was a minor modification of a minor source permit.

After receiving the Libby permit amendment, 3 Bear made physical changes to the Libby facility in reliance upon and in accordance with the permit. 3 Bear's witness Lori Marquez testified that 3 Bear has installed a compressor engine and is operating storage tanks and tank load-out equipment as presented in the most recent permit. Marquez Direct, Tr. 333:22 – 334:4.

The Libby permit amendment complies with all applicable requirements of the Department's minor source permitting program and was properly issued. The Director of the Air Quality Bureau, Elizabeth Bisbey-Kuehn, and its Modeling and Emissions Inventory Unit Manager, Dr. Sufi Mustafa, each agreed that the Libby permit was "evaluated and approved in accordance with the federal Clean Air Act, the New Mexico Air Quality Control Act, the Board's regulations and the relevant EPA modeling guidance and protocols." Mustafa Direct, Tr. 167:15-20; Kuehn Direct, Tr. 213:11-16. In addition, Ms. Marquez testified that the amended Libby permit complies with the applicable requirements of 20.2.72.203 and 20.2.72.207 NMAC, and Section 74-2-7 of the Air Quality Control Act. Marquez Direct, Tr. 344:1-4.

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² The plant is a major source for purposes of the Title V operating permit program. 3 Bear Prefiled Direct 1:15. This fact has no impact on the Department's compliance with 20.2.72.208.D NMAC because the regulation does not apply to operating permits.

Argument

I. The Libby Permit Amendment was Properly Issued Because Ozone Modeling is not Required for Minor Sources

WEG asserts that the issuance of the Libby permit amendment was procedurally flawed because the Department issued it without modeling or otherwise evaluating its single-source ozone impacts. WEG Opening Stmt., Tr. 25:6-12. WEG claims this violated 20.2.72.208.D NMAC, which reads as follows:

20.2.72.208 BASIS FOR DENIAL OF PERMIT: The department shall deny any application for a permit or permit revision if considering emissions after controls:

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D. The construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard unless the ambient air impact is offset by meeting the requirements of either 20.2.79 NMAC or 20.2.72.216 NMAC, whichever is applicable.

WEG contends this rule requires modeling or other technical analysis to determine whether the Libby permit amendment causes or contributes to a violation of the ozone NAAQS. This claim fails because no ozone modeling or other technical analysis of ambient ozone impacts is required for minor source permitting actions. "Ozone is normally only modeled for regional compliance demonstrations and does not need to be modeled for air quality permits." New Mexico Air Quality Bureau, Air Dispersion Modeling Guidelines³ § 2.6.5 (revised June 6, 2019). Source-specific ozone impacts are not evaluated for minor source permitting actions and permit applicants are not required to quantify their contributions to regional ozone concentrations. *Id.* The Air Dispersion Modeling Guidelines explain that "[o]zone and Volatile Organic Compound (VOC) emissions do not currently require a modeling analysis for a PSD minor source" like the Libby plant. *Id.* § 2.2.

New Mexico's minor source permitting regulations were approved by EPA as part of the infrastructure State Implementation Plan (SIP) for the 2015 ozone NAAQS. 84 Fed. Reg. 49057, 49060, Table 1 (Sept. 18, 2019). The Board's minor source permitting rules and the provision that minor source permits do not require ozone modeling are consistent with 40 CFR Part 51 Appendix W and EPA's Draft Guidance for Ozone and Fine Particulate Matter Permit Modeling, February 10, 2020, page 7. These EPA authorities require an ozone impact analysis only for projects with VOC and NOx emission increases above the defined Significant Emission Rates at PSD major sources.

NMED's decision not to require source-specific ozone impact evaluations for minor source permitting actions is consistent with the practices of other states with designated ozone nonattainment areas and areas where elevated ozone concentrations have been monitored,

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³ 3 Bear Hearing Exhibit 7.

including at least Colorado, Texas, and Oklahoma. 3 Bear Prefiled Direct 5:7 – 7:10; Marquez Direct, Tr. 337:15 – 342:9.

The Department's witnesses confirmed that ozone modeling is not required for minor source permit applications. Ms. Kuehn explained that the federal Clean Air Act does not require minor sources to evaluate individual source contributions to ozone concentrations. The Department's practice is consistent with the requirements of the United States EPA, and she is not aware of any other states that require individual minor sources to estimate their ozone impacts. Kuehn Direct, Tr. 207:6-19; *see also* Mustafa Direct, Tr. 160:16-20.

II. Screening-Level Modeling Performed After the Appeal was Filed Confirms That Issuing the Permit Complied With 20.2.72.208.D NMAC Because Ambient Ozone Impacts are Below the Significance Level

Although ozone modeling was not required for the Libby permit amendment, 3 Bear evaluated the facility's ozone impact in response to the appeal.⁴ This analysis was performed using a tool published by EPA called the Modeled Emission Rates for Precursors (MERPs).⁵ The results show that the Libby permit amendment complies with 20.2.72.208.D NMAC. The permit amendment does not cause or contribute to a NAAQS violation because ambient ozone concentrations will increase by less than the applicable "significance level" of 1.0 ppb. This means that if the Department had previously performed the modeling demanded by WEG (but not required by rule), no further action would have been required and the Department would have issued the permit as currently written.

Not every emissions increase causes or contributes to a violation of a NAAQS. Only those emissions increases that are projected to increase ambient concentrations of a particular pollutant by more than the significance level cause or contribute to a NAAQS violation. New Mexico's Modeling Guidelines define modeling significance levels as "thresholds below which the source is not considered to contribute to any predicted exceedance of air quality standards or PSD increments." Air Dispersion Modeling Guidelines § 2.4.1 (3 Bear Hearing Ex. 2). EPA guidance similarly explains that "A modeled result predicting that a proposed source's maximum impact will be below the corresponding [significant impact level (SIL)] value recommended above generally may be considered to be a sufficient demonstration that the proposed source will not cause or contribute to a violation of the applicable NAAQS or PSD increment." EPA, Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program (EPA's Ozone SIL Guidance) at 17 (April 17, 2018). In other words, a significance level or SIL provides a benchmark for interpreting the results of ambient air quality modeling. The Department and EPA have established an ozone SIL

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⁴ The results have been submitted as evidence in the appeal and may be considered by the Board when deciding whether to uphold the permit. NMSA § 74-2-7(K) ("Based upon the evidence presented at the hearing, the environmental improvement board or the local board shall sustain, modify or reverse the action of the department or the local agency respectively").

⁵ The MERPs tool is a highly conservative screening-level model. The Department endorses the use of the MERPs tool and incorporated this tool into its Air Dispersion Modeling Guidelines.

⁶ The Department's term "significance level" has the same meaning as EPA's term "significant impact level" or SIL.

of 1.0 ppb. NM Air Dispersion Modeling Guidelines § 2.6.5, Table 5E n.2; EPA's Ozone SIL Guidance at 15, Table 1.

The use of significance levels in cause or contribute demonstrations is "at the heart of the definition" and is "baked into the term 'cause or contribute." Bennett Direct, Tr. 376:6-13. EPA has consistently applied SILs to cause or contribute demonstrations since at least 1977. See 3 Bear Prefiled Rebuttal 3:2-10, citing EPA, "Guidelines for Air Quality Maintenance Planning and Analysis, Volume 10 (Revised) and Procedures for Evaluating Air Quality Impact of New Stationary Sources." It is not possible to make cause or contribute demonstrations without a significance level. As 3 Bear's witness Jeffry Bennett explained, "you have to have that as part of any kind of determination. Otherwise you're just in a vacuum. You don't know the level you have to compare to." Bennett Direct, Tr. 376:13-16. Bennett is not aware of any situations where EPA applies the cause or contribute standard without using a significance level. *Id.* 387:23 – 388:1.

Bennett performed a MERPs analysis to estimate the ambient ozone impacts of the Libby permit amendment, as described in his written and verbal testimony. 3 Bear Prefiled Rebuttal 6:8 – 8:13; Bennett Direct, Tr. 392:12 – 397:24. Bennett used the MERPs tool to estimate the Libby permit's ozone impacts by comparing it to a hypothetical facility in Terry County, Texas, where EPA previously modeled the ozone impacts of increasing NOx and VOCs by 500 tpy each. Pursuant to the MERPs, Bennett calculated the ratio of the permitted NOx and VOC emissions increases at Libby to the 500 tpy NOx and VOC increases at the Texas facility, and multiplied the Texas facility's modeled ozone impact by that ratio to estimate the Libby permit's ozone impact. The MERPs analysis indicates that the emissions allowed by the Libby permit amendment could increase ambient ozone concentrations by approximately 0.05 parts per billion (ppb). 3 Bear Rebuttal 8:1; Tr. 395:22-25.

The Libby permit amendment does not cause or contribute to an exceedance of the ozone NAAQS because its estimated ozone impact of approximately 0.05 ppb is far below the 1.0 ppb ozone significance level. WEG's own technical analysis also demonstrates that the ozone impacts of the Libby permit amendment are below the 1.0 ppb ozone significance level. WEG's witness Dr. Sahu testified that the ozone impacts could be 0.18 ppb. WEG Prefiled Rebuttal at 6; Sahu Direct, Tr. 66:14-18. WEG's inability to show that the Libby permit amendment will cause or contribute to an ozone violation is fatal to its appeal.

The Department's testimony confirms that the Libby permit will not cause or contribute to a NAAQS violation. Dr. Mustafa testified that "an individual facility would have to emit more than 250 tons per year of both NOx and VOCs to cause ozone concentrations to increase more than the SIL for ozone. This means that under EPA's guidance minor sources such as the 3 Bear

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⁷ EPA modeled the ozone impacts of dozens of hypothetical facilities across the country to facilitate such comparisons. The Terry County, Texas facility is the closest hypothetical source. Bennet considered it to be representative. The second-closest hypothetical facility is in Otero County, New Mexico. The MERPs tool yielded a smaller ozone impacts from the Libby plant when compared to the Otero County facility, so 3 Bear used the Terry County source to be more conservative.

⁸ Dr. Sahu argues that the significance levels should not be applied in southeastern New Mexico, as described below, but he notably does not argue that the single-source ozone impacts of the Libby permit amendment exceed the legal significance threshold. *Id.* 68:6-13.

facility are not considered to cause or contribute to ozone concentrations above the NAAQS." Mustafa Direct, Tr. 162:8-14. Ms. Kuehn explained that "[b]y definition those sources emit less than the Significant Impact Level and therefore do not cause or contribute to ozone exceedances." Kuehn Direct, Tr. 208:14-16.

The Department complied with 20.2.72.208.D NMAC, when it issued the Libby permit amendment without conducting single-source ozone modeling because such modeling is not required for minor sources. In addition, modeling performed in the course of this hearing demonstrates that any purported legal error was harmless because the ambient ozone impacts resulting from the Libby permit amendment do not exceed significance thresholds. The permit will not "cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico ambient air quality standard," so 20.2.72.208.D NMAC, is not applicable to this case. In short, the Department would still have issued the Libby permit amendment had the Department modeled its ozone impacts in advance.

III. WEG's Claim of Noncompliance with 20.2.72.208.D NMAC Rests on its Reinterpretation of Critical Regulatory Terms and the Process for Making Cause or Contribute Demonstrations

The petitioner does not dispute that the single-source air quality impacts of the Libby permit amendment are less than the 1.0 ppb ozone significance threshold established by the Department. This fact ends the analysis under 20.2.72.208.D NMAC and conclusively demonstrates there was no violation of this regulation.

Unable to show a violation of the rule as written, WEG attempts to revive its claim by reinterpreting key regulatory terms. WEG argues that any emissions increase in what it calls an "actual nonattainment" area "causes or contributes" to a NAAQS violation. As part of this argument, WEG contends that the Department should disregard its established "significance level" for ozone impacts and thereby change its process for determining whether a proposed emissions increase causes or contributes to a NAAQS violation.

WEG's attempt to reinterpret these regulatory terms and alter the process for making cause or contribute demonstrations is inconsistent with Board regulations, New Mexico statutes, EPA guidance, and long-standing Department practices. This is inappropriate. Dr. Sahu conceded on cross-examination that Clean Air Act terms have specific regulatory meanings, and that it's important to use those terms correctly. Sahu Cross, Tr. 84:11-17. The Board should apply the accepted meaning of these terms and uphold the Libby permit amendment.

a. The Air Quality Control Act and Implementing Regulations do not Support a Presumption That "Any" Emissions Increase Causes or Contributes to a NAAQS Violation

WEG repeatedly asserts that any increase of ozone precursor emissions in what WEG calls an "actual nonattainment area" causes or contributes to an ozone exceedance. *See, e.g.,* Sahu Prefiled Direct at 2, 15 and 22; Sahu Direct, Tr. 64:25 – 65:3 and 93:22 – 25. Dr. Sahu testified that "any increases cause or contribute if you're already exceeding the National Ambient Air Quality Standard." Sahu Direct, Tr. 86:1-5. His position is technically flawed and legally

incorrect. This interpretation of "cause or contribute" makes the term synonymous with an emissions increase. This interpretation is incorrect because the terms are not interchangeable and the regulations use the terms differently. As is most relevant here, Dr. Sahu's interpretation of "cause or contribute" effectively rewrites 20.2.72.208.D NMAC by replacing the cause or contribute standard with a rule against issuing permits for emission increases that are not offset, as shown in the *hypothetical* redline of 20.2.72.208.D NMAC, below:

The department shall deny any application for a permit or permit revision if considering emissions after controls . . . The construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of allow air contaminant emissions to increase in an area with monitored exceedances of any National Ambient Air Quality Standard or New Mexico ambient air quality standard unless the ambient air impact is offset by meeting the requirements of either 20.2.79 NMAC or 20.2.72.216 NMAC, whichever is applicable;

However, 20.2.72.208.D NMAC does not say that, and the regulation cannot be revised outside of a rulemaking hearing. The words "cause or contribute" have a legal meaning that must be honored.

A second example is found at 20.2.72.219.B(1)(e)(iv) NMAC. This rule allows the Department to adjust a facility's permitted emissions limitations provided that "such adjustment does not . . . result in allowable emissions which could contribute to a violation of any national or New Mexico ambient air quality standard." This regulatory language makes it clear that some emission increases do not cause or contribute to a NAAQS violation and that Dr. Sahu's interpretation is inconsistent with the Board's rules.

The Board and the Department must preserve the regulatory distinction between these two terms by rejecting the claim that any emissions increase in a nonattainment area causes or contributes to a NAAQS violation.

b. Significance Levels are a Core Part of Cause or Contribute Demonstrations and Cannot be Disregarded

It is not feasible for agencies to make cause or contribute demonstrations without using significance levels. As described above, significance levels are "at the heart" of cause or contribute demonstrations. Bennett Direct, Tr. 376:6-13. WEG's witness Dr. Sahu admitted on cross-examination that SILs apply to all prevention of significant deterioration (PSD) permits. Sahu Cross, Tr. 92:6-8. Dr. Sahu offered no examples of an agency performing a cause or contribute demonstration without using a significance level, and Mr. Bennett testified that he is not aware of any. Bennett Direct, Tr. 387:23 – 388:1.

Significance levels are not "magic threshold[s]" as WEG derisively characterizes them. WEG Opening Stmt., Tr. 25:18. They are legal thresholds that provide necessary benchmarks for interpreting the results of air quality modeling. The Board should reject WEG's attempt to remove significance thresholds from the process of determining whether a permit application

would cause or contribute to a NAAQS violation. WEG offers three rationales for ignoring the Department's ozone significance level, none of which are persuasive.

First, WEG asserts that 20.2.72.208.D NMAC says nothing of a significance level. Sahu Direct, Tr. 66:24 – 65:1 ("I didn't see the word 'significant."); WEG Opening Stmt. Tr. 27:24-25 ("There is no significance threshold in those regulations."). WEG is incorrect because 20.2.72.208.D NMAC, cites to 20.2.72.216 NMAC, which expressly relies on "significant ambient concentration" thresholds. More importantly, the use of significance levels is inherent in cause or contribute demonstrations. At most, the absence of the word "significant" creates ambiguity regarding the rule's meaning. The Department has discretion over how to interpret the Board's regulations, *Phelps Dodge Tyrone v. Water Quality Control Commission*, 140 N.M. 464, 471 (N.M. Ct. App. 2006). The Department reasonably exercised its discretion and resolved any ambiguity by establishing an ozone significance level in the Air Dispersion Modeling Guideline.

Second, WEG argues that the significance threshold should not apply to cause or contribute determinations in nonattainment areas. Sahu Cross, Tr. 91:18 – 92:10. The premise of this argument is inaccurate. Southeastern New Mexico is a designated ozone attainment area. WEG's attempt to treat it differently conflicts with NMSA § 74-2-2, which defines a nonattainment area as one that has been formally designated nonattainment by the EPA. *See also* Kuehn Direct, Tr. 205:2-9.

Dr. Sahu attempts to justify his claim that significance thresholds do not apply in nonattainment areas by pointing to a lack of EPA guidance concerning their use in nonattainment areas. Sahu Cross, Tr. 91:18 – 92:2. But this lack of guidance is to be expected and does not give rise to an inference that SILs should be ignored in nonattainment areas. Cause or contribute demonstrations are performed in conjunction with PSD permit applications, which by definition apply only to sources located in attainment areas. 42 U.S.C. 7475(c)(3); Bennett Direct, Tr. 371:10-25. There is no reason for EPA to publish guidance on the use of SILs in nonattainment areas. Moreover, significance levels apply in the limited circumstances where a PSD permit application could affect a nonattainment area. Where the source is located in an attainment area and its emissions travel to a nonattainment area, significance levels are used to evaluate potential contributions to nonattainment. 20.2.79.109.A(2) and D(1) NMAC. This undercuts Dr. Sahu's claim.

Third, WEG incorrectly contends the Department cannot rely on its ozone significance level without making a case-by-case assessment that the significance threshold is appropriate. WEG Prefiled Rebuttal at 6; Sahu Cross, Tr. 95:6-15. WEG's contention is misplaced because it relies on EPA guidance that PSD major source permits should include a case-by-case explanation of the SIL. WEG Prefiled Rebuttal at 6, *citing* EPA's Ozone SIL Guidance. This requirement does not apply to minor source permits because they are not subject to the same federal standards as PSD major source permits. *See* 42 USC § 7475(a) (federal requirement for PSD permits). Accordingly, EPA's guidance regarding case-by-case review of a SIL is not applicable to the Libby gas plant's minor source permit amendment.⁹

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⁹ While the legal standards of the major source PSD guidance do not apply to minor source permits, it is technically sound to apply EPA's modeling guidance, including the MERPs screening tool and significance levels, to minor source permit applications. *See* Mustafa Direct, Tr. 161:8-25.

In addition to these three rationales, WEG suggests that the ambient impact of the total emissions from the 3 Bear facility should be compared to the significance threshold. WEG Prefiled Rebuttal at 6. Such an approach would be invalid. Only the Libby permit amendment has been challenged in this appeal, and only the incremental emissions increase can be considered when evaluating the ambient impacts of the proposed action. *See, e.g.,* EPA "Guidance on the Development of Modeled Emission Rates for Precursors (MERPs)" at 45 (April 30, 2019) (evaluating the "proposed increase in emissions" from a facility, not total facility emissions). WEG also advocated for "summing the maximum allowable emissions" of multiple new facilities and calculating the ambient impact from the sum total emissions. WEG Prefiled Rebuttal at 6. This approach is also invalid and conflicts with established procedures for modeling the cumulative impact of multiple facilities. *See, e.g., id.* at 54.

None of WEG's reasons for disregarding the ozone significance level are valid. Significance levels are applicable to all cause or contribute demonstrations, regardless of whether the word "significant" appears in 20.2.72.208.D NMAC. WEG provided no legal authority or examples supporting its claim that significance levels apply only in attainment areas, and in any event the Libby plant located is located in an attainment area. WEG's argument that EPA's Ozone SIL Guidance requires a case-by-case evaluation of the significance level has no merit because the guidance applies only to major source permits.

IV. WEG's Redefinition of "Nonattainment Area" Would Create an Unworkable Permitting Program

The challenge to the Libby permit amendment is founded on an argument that southeastern New Mexico is an "actual nonattainment" area¹¹ because certain monitors recorded three-year average concentrations above 70 ppb, even though the region is currently designated as an attainment area for the 2015 ozone NAAQS. WEG Prefiled Direct at 2, 22; Sahu Cross, Tr. 77:6-11. Treating a designated attainment area as a nonattainment area is inconsistent with federal and state statutes and would render the permitting regulations impossible to implement.

As the Department explained, the New Mexico Air Quality Control Act and the 1990 amendments to the federal Clean Air Act limit the definition of a nonattainment area to an area that is formally designated as nonattainment. NMED Opening Stmt., Tr. 146:25 – 147:9; *Id.* 147:10-18; Kuehn Cross, Tr. 219:25 – 220:4; § 74-2-2, NMSA. An area must be formally designated by EPA as a nonattainment area before the Department can treat it as a nonattainment area in its permitting decisions. Kuehn Cross, Tr. 224:17-22. The Board's rules provide no authority and contain no process for the Department to establish a nonattainment area based solely on monitored values. NMED Opening Stmt., Tr. 148:1-7. Boundaries cannot be established outside of the formal area designation process. Kuehn Cross, Tr. 219:16 – 221:22.

In order to implement the permitting regulations, Department staff and regulated entities must know the status of each area. This includes basic information about the boundaries, applicability date, and ozone classification status of the area (e.g., marginal, moderate, or higher). The formal designation process provides such information; WEG's proposal does not.

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¹⁰ 3 Bear Rebuttal Exhibit 4.

¹¹ The term "actual nonattainment" has no meaning under the New Mexico Air Quality Control Act or the federal Clean Air Act.

WEG could not explain how the Department would define the boundaries of "actual nonattainment" areas without using the formal designation process. Sahu Cross, Tr. 79:16-25; *id.* Tr. 77:16-19 and 78:10-19 (admitting that nonattainment area boundaries do not always follow county lines).

If the Department attempted to apply WEG's novel "actual nonattainment" standard, fluctuations in the monitored ozone values would create confusion over an area's attainment status. Dr. Sahu testified that the three-year average concentrations at the Hobbs, Carlsbad and Carlsbad Caverns monitoring stations exceed 70 ppb for 2017-2019. Sahu Direct, Tr. 56:13 – 57:7. But these numbers are not static. Unverified data recorded by the Hobbs monitor for 2020, up to the date of the hearing, indicates a three-year design value for 2018-2020 of 68 ppb, which would attain the NAAQS. Bennett Direct, Tr. 405:5-11. This fluctuation raises important questions about the feasibility of implementing WEG's concept of an "actual nonattainment" area, including whether and when the region ceases to be an "actual nonattainment" area, how to revise the boundaries in response to new data, and which rules apply to permit applications that are pending at the time an area's status changes. These questions will be more complicated in counties with multiple ozone monitors where the concentrations may differ.

The Department and regulated entities need certainty over the status of each geographic area. The permitting program cannot function under WEG's novel definition of an actual nonattainment area. This definition must be rejected because it conflicts with NMSA § 74-2-2 and is impractical to implement.

V. WEG's Reinterpretation of the Terms "Cause or Contribute" and "Nonattainment Area" is Impermissible NMSA 1978, § 74-2-5

The Air Quality Control Act authorizes the Board to promulgate regulations to prevent significant deterioration of air quality and to achieve national ambient air quality standards in nonattainment areas, among other things. Such regulations "shall be no more stringent than but at least as stringent as required by the federal act and federal regulations pertaining to . . . prevention of significant deterioration and pertaining to nonattainment areas." NMSA § 74-2-5(C)(1)(a).

Interpreting the terms cause or contribute and nonattainment area in the manner proposed by WEG would result in PSD and nonattainment area regulations that are more stringent than the federal act in at least two ways. First, geographic areas that EPA has designated as attainment would be subject to nonattainment area permitting requirements. Minor source permit applications in these areas would require emission offsets, even though the federal Clean Air Act requires offsets in nonattainment areas only for major sources. See 42 U.S.C. § 7503(a) and (c); 42 U.S.C. § 7511a(a)(4). Second, PSD permit applications would be evaluated without the benefit of a significance level, potentially leading to a determination that every PSD permit causes or contributes to a NAAQS violation and requires emission offsets.

The arguments advanced by WEG must be rejected because they would lead to an impermissible result under § 74-2-5(C)(1)(a).

VI. The Board Must Decide the Issues Presented in the Appeal Without Relying on Irrelevant Evidence

The sole issue pending before the Board with respect to the Libby gas plant is whether the Department violated 20.2.72.208.D NMAC by issuing the permit amendment without modeling or otherwise evaluating whether the permitted emissions increase will cause or contribute to a violation of the 2015 ozone NAAQS, and without requiring offsetting emission reductions. Petn. for Hrg. at 4; WEG Opening Statement, Tr. 24:1 – 24:5. Although its claim is narrow, WEG submitted extensive evidence regarding broader topics including the oil and gas industry's overall contribution to regional ozone concentrations, the number of existing oil and gas facilities, and policy positions regarding the Department's ozone mitigation efforts. Such evidence provides no basis to grant the appeal.

The pending appeal challenges a single air permit, not statewide or regional oil and gas activity. Evidence of the industry's total air quality impact is not relevant to whether the Department complied with the individual source permitting provisions of 20.2.72.208.D NMAC when it issued NSR Permit No. 7482-M1. The language of the regulation is limited to single-source air quality impacts, not the cumulative impacts of multiple sources. Evidence of emissions from other facilities is therefore irrelevant. N.M. R. Evid. 11-401 ("Evidence is relevant if it has any tendency to make a fact more or less probable than it would be without the evidence, and the fact is of consequence in determining the action").

The sources of regional ozone concentrations are likewise irrelevant to the Department's compliance with 20.2.72.208.D NMAC. Southeastern New Mexico's status as an attainment or nonattainment area affects the Board's analysis, but the underlying reasons for the area's attainment status do not. For purposes of the pending permit appeal, the share of regional ozone caused by motor vehicles, agriculture, interstate transport, the oil and gas industry, or other emission sources is of no consequence. Only the area's ultimate status as an attainment or nonattainment area factors into this aspect of the appeal.

Relying on evidence of regional or statewide oil and gas emissions and impacts could result in a Board decision that is arbitrary, capricious, an abuse of discretion, or not supported by substantial evidence in the record. NMSA § 74-2-9(C). A decision based on evidence that does not relate to the Department's compliance or noncompliance with 20.2.72.208.D NMAC would lack a rational basis, would not be supported by substantial evidence, and the evidence would not support the findings. *See, e.g., Southwest Org. Project v. Albuquerque-Bernalillo Cty. Air Quality Control Bd.*, No. A-1-CA-36398, 2020 N.M. App. LEXIS 44 at 9 (N.M. App. Oct. 15, 2020); *Oil Transp. Co. v. N.M. State Corp. Comm'n*, 110 N.M. 568, 571 (1990).

VII. Policy Questions Regarding New Mexico's Ozone Control Measures are Separate From the Pending Appeal and Should be Considered in the Upcoming Rulemaking Hearing

WEG has also raised certain policy issues that are not before the Board for decision. Among other things, the petitioner argues that the Department should stop approving permits for oil and gas sources. WEG Prefiled Direct at 2; Sahu Direct, Tr. 54:7-21. Petitioner asserts that the Department does not intend "a robust regulatory response designed to bring regional ambient

air quality back into compliance with the ozone NAAQS," and instead "appears to be preparing to blame sources outside of the State's control." WEG Prefiled Rebuttal at 10.

These policy concerns have no bearing on the Department's compliance with 20.2.72.208.D NMAC and should not be considered in this appeal. The Board will have an opportunity to review the Department's Ozone Attainment Initiative and implementing regulations in early 2021, when the Department formally proposes its ozone and methane rules. Unlike the current hearing, the 2021 rulemaking hearing will allow robust public participation concerning ozone policy issues.

The Ozone Attainment Initiative includes aggressive measures. The draft regulations address ozone precursors and methane from oil and gas operations and apply retroactively to existing sources such as Libby. Kuehn Cross, Tr. 227:11-16. "The plan and the regulations that are adopted by the Board under the plan are an attempt to lower those emissions to keep the entire state in attainment for the ozone standard. We have proposed sector-wide oil and gas regulations that target ozone precursors from oil and gas emissions." Kuehn Board Questions, Tr. 293:16-21. The Department will also propose regulations for transportation sector emissions and likely for emissions from power plants or other industrial sectors. *Id.* 293:22 – 294:10. In addition, the Department has joined EPA's Ozone Advance program. Kuehn Board Questions, Tr. 305:3-4.

The current hearing is much narrower in scope. It is limited to the appeal of an individual permit and is not an appropriate forum to evaluate statewide ozone policy.

Conclusion

The evidence demonstrates that the Department complied with 20.2.72.208.D NMAC, when it issued the Libby permit amendment. The single-source ozone modeling demanded by the petitioner is not required by the Department's Air Dispersion Modeling Guidelines. Modeling is also not required by 20.2.27.208.D NMAC because the emissions authorized by minor source permit revisions are categorically below the levels that could cause or contribute to a violation of the ozone NAAQS.

Although not required, 3 Bear used an EPA screening tool to model the ozone impacts of the Libby permit amendment in response to the appeal. The results confirmed that the permit amendment does not cause or contribute to a NAAQS violation because the ambient ozone impacts are far below the applicable significance level.

WEG's arguments are based on misinterpretations of critical legal terms. WEG contends that the Department should ignore the established ozone significance level and should presume that any increase of ozone precursor emissions in an "actual nonattainment" area causes or contributes to an ozone NAAQS violation. WEG's argument fails because the Department must apply these terms of art in a manner that is consistent with the Board's regulations and the Air Quality Control Act. Adopting the positions advanced by WEG would run afoul of the Act because the Board's regulations would be more stringent than federal rules for PSD permits and for nonattainment areas, in violation of NMSA § 74-2-5.

The appeal of the Libby permit amendment presents a narrow question regarding the Department's compliance with a regulation applicable to individual source air permits. WEG's testimony and exhibits address many broader topics, including the oil and gas industry's overall air quality impacts and the Department's ozone strategy. Such evidence is not relevant to the appeal and should not be considered. The Board will have an opportunity to consider the Department's ozone strategy in early 2021, when the Department formally proposes its draft ozone regulations.

Respectfully submitted this 30th day of November, 2020.

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3 BEAR EXHIBIT 2

STATE OF NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD

IN THE MATTER OF THE APPEALS OF THE AIR QUALITY PERMIT NO. 7482-M1 ISSUED TO 3 BEAR DELAWARE OPERATING – NM, LLC.

EIB No. 20-21 (A)

AND

REGISTRATION NOS. 8720, 8730, AND 8733 UNDER GENERAL CONSTRUCTION PERMIT FOR OIL AND GAS FACILITIES EIB No. 20-33(A)

WildEarth Guardians, *Petitioner*.

3 BEAR DELAWARE OPEARTING – NM, LLC'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW IN EIB NUMBER 20-21(A)

- 1. The Libby gas plant is a minor source for purposes of the Prevention of Significant Deterioration (PSD) permitting program and 20.2.72, NMAC.
- 2. On April 8, 2020, the Department issued New Source Review (NSR) Permit 7482-M1 (the Libby permit amendment), increasing the Libby gas plant's potential emissions rate by 21.8 tons per year (tpy) of nitrogen oxides (NOx) and 71.5 tpy of volatile organic compounds (VOCs). The Libby permit amendment was a minor modification to an existing minor source.
- 3. The Libby permit amendment, New Source Review (NSR) Permit Number 7482-M1, was issued in compliance with NMSA Chapter 74, Article 2, 20.2.72 NMAC, and applicable New Mexico Environment Department (NMED) guidance. The permit application appropriately did not contain source-specific ozone modeling, which is not required for new or modified minor source permit applications. 20.2.72.203.A(4); NMED Air Dispersion Modeling Guidelines § 2.6.5.
- 4. Section 20.2.72.208.D NMAC does not require the permit applicant or the Department to perform modeling or other technical evaluations of the single-source ozone impacts resulting from a permit application for an individual facility. The Department is authorized to rely on the 1.0 ppb significance level for ozone established in the NMED Air Dispersion Modeling Guidelines § 2.6.5, Table 5E, note 2. The Department's testimony regarding the results of the EPA's "Modeled Emission Rates for Precursors" screening model establishes that no individual minor source of nitrogen oxides (NOx) and/or volatile organic compounds (VOCs) will result in ambient ozone impacts in excess of the 1.0 ppb significance level. Permits and permit revisions that do not result in

- ambient air quality impacts greater than the applicable significance level do not cause or contribute to a NAAOS violation.
- 5. Even if 20.2.72.208.D NMAC required the Department to model or otherwise evaluate the impact of NSR Permit 7482-M1 on ambient ozone concentrations, technical analyses performed in response to the appeal indicate that the ozone impacts resulting from the permit revision will not exceed approximately 0.05 ppb or 0.18 ppb. The Board does not need to determine which result is correct because both are below the 1.0 ppb significance level for ozone. Therefore, the Libby permit amendment does not cause or contribute to a violation of the ozone NAAQS. Any alleged failure to perform ozone modeling was harmless and provides no basis to grant the petitioner's request to rescind the permit.
- 6. The Board disagrees with the petitioner's contention that any increase in ozone precursor emissions in a nonattainment area causes or contributes to a violation of the ozone NAAQS. An emissions increase causes or contributes to a NAAQS violation only if the ambient air quality impact exceeds the applicable significance level. *See, e.g.,* Air Dispersion Modeling Guidelines § 2.4.1 ("Modeling significance levels are thresholds below which the source is not considered to contribute to any predicted exceedance of air quality standards or PSD increments"); *see also* EPA "Guidance on Significant Impact Levels for Ozone and Fin Particles in the Prevention of Significant Deterioration Permitting Program" at 17 (April 17, 2018).
- 7. Use of a significance level is necessary because it provides an objective benchmark to determine whether a proposed action will cause or contribute to a NAAQS violation. Absent a defined significance level, Department staff would be left to make subjective decisions to issue or deny permits using personal judgment regarding whether a source causes or contributes to a NAAQS violation. Air quality modeling would serve no purpose without a numeric threshold to compare the results against.
- 8. Southeastern New Mexico, including all of Lea and Eddy Counties, is designated as an "attainment/unclassifiable" area for purposes of the 2015 ozone National Ambient Air Quality Standard (NAAQS). 82 Fed. Reg. 54232, 54263-64 (Nov. 16, 2017).
- 9. Southeastern New Mexico is not a nonattainment area as defined at Section 74-2-2(N), NMSA or Section 20.2.72.7.T, NMAC. The definition in the Board's regulation must be interpreted in a manner that is consistent with the statute. The Air Quality Control Act defines a "nonattainment area" to include only an area that is designated nonattainment within the meaning of Section 107(d) of the federal Clean Air Act. NMSA § 74-2-2(N). Federal designation of southeastern New Mexico as an attainment/unclassifiable area precludes the Department from treating the region as a nonattainment area.
- 10. The scope of the appeal in docket number 20-21(A) is limited to whether the Department violated 20.2.72.208.D NMAC by issuing an individual permit amendment to the Libby plant without performing ambient air quality modeling or otherwise evaluating ambient ozone impacts, and without requiring emission offsets. Evidence regarding the oil and gas industry's cumulative contribution to regional ozone concentrations, the sufficiency of the Department's ozone reduction strategies, and overall ozone policy are not relevant to

whether the Department's review of NSR Permit 7482-M1 complied with 20.2.72.208.D NMAC.