

CORRECTED EXHIBIT 1A**DIRECT TECHNICAL TESTIMONY OF JEREMY NICHOLS****I. Introduction**

My name is Jeremy Nichols, and I am the Climate and Energy Program Director for WildEarth Guardians (Guardians). Guardians is a nonprofit environmental advocacy organization founded 32 years ago in Santa Fe, New Mexico. The organization's mission is to protect and restore the wildlife, wild places, wild rivers, and health of the American West. The organization currently has more than 120,000 members and supporters.

I present this written testimony on behalf of Guardians for the public hearing in the matter EIB 21-05, regarding the New Mexico Environment Department's (NMED) petition filed with New Mexico's Environmental Improvement Board for the adoption of the State Implementation Plan (SIP) Certification for the 2015 Ozone Transport, or "Good Neighbor" provision.

In its petition, NMED contends that based on the U.S. Environmental Protection Agency's (EPA's) modeling data and NMED's analyses, New Mexico will not significantly contribute to nonattainment or interfere with maintenance in downwind states for purposes of compliance with the Good Neighbor obligations under the 2015 Ozone National Ambient Air Quality Standards (NAAQS). Accordingly, NMED concludes that New Mexico's current SIP sufficiently addresses the necessary Good Neighbor provisions of the Clean Air Act and a substantive SIP revision is not needed.

My testimony will show that NMED unreasonably relied on outdated, unrepresentative data and modeling from EPA, despite there being more representative data readily available on which NMED could have based its Good Neighbor SIP. As such, NMED's SIP Certification for the 2015 Ozone Good Neighbor provision does not demonstrate compliance with the Clean Air Act.

My testimony will address the following topics: the public health impacts of ozone pollution and how it is formed; how states are required to address ozone pollution and the interstate transport of ozone under the Clean Air Act; and four categories of recent data that cast doubt on the reliability of the emissions and air quality projections NMED relied on for its Good Neighbor determination.

II. Qualifications

My full background and qualifications are set forth in my resume, which is marked as Exhibit 2.

I am currently the Climate and Energy Program Director for WildEarth Guardians. In this capacity, I have led the organization's engagement in air quality regulatory matters for over

13 years. Previous to this position, I was the founder and director of a nonprofit clean air advocacy organization called Rocky Mountain Clean Air Action. I have over 20 years of direct, hands-on experience in weighing in on and scrutinizing air quality regulatory actions, including stationary source permitting, SIP revisions, state-only rulemakings, and enforcement. I work closely with and provide consulting support for scientists, attorneys, elected officials, and the general public on air quality and air quality regulatory matters.

In my years of working on air quality regulatory issues, I have provided testimony, comments, and information to numerous air quality agencies, boards, and commissions. I have provided technical testimony to the New Mexico Environmental Improvement Board. I have provided expert testimony to the Colorado Air Quality Control Commission. I have developed and submitted comments on numerous permits, both New Source Review and Title V Operating Permits, and state regulatory proposals. I have provided comments and testimony in response to numerous EPA regulatory actions, including SIP reviews, proposed New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, regional haze regulations, and nonattainment planning. I have practiced before the EPA's Environmental Appeals Board.

III. Background

A. Ozone

Ozone harms human and environmental health when it occurs at ground-level and is often referred to as smog.¹ It is well known that ozone exposure is linked to serious human health impacts, including respiratory and cardiovascular disease.² Long-term ozone exposure can lead to hospitalizations, lower birth weight, decreased lung function in newborns, and premature death.³ Even short-term ozone exposure has been shown to decrease lung function, cause respiratory inflammation, exacerbate asthma and allergies, increase emergency room visits and hospitalizations, and cause or contribute to death in some cases.⁴ Studies have shown that low income and minority communities tend to experience disproportionately higher levels of air pollution, including ozone.⁵

To protect public health, the EPA has established NAAQS for ozone. The current NAAQS, which was adopted in 2015, limits eight-hour concentrations of ozone to no more than

¹ U.S. EPA, "Ground-level ozone basics," website available at <https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics>.

² U.S. EPA, "Health effects of ozone pollution," website available at <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>.

³ U.S. EPA, "Ozone and Health," fact sheet available at <https://www.epa.gov/sites/production/files/2016-04/documents/20151001healthfs.pdf>.

⁴ *Id.*

⁵ See e.g., Exhibit 3, Miranda, M.L., S.E. Edwards, M.H. Keating, and C.J. Paul, "Making the environmental justice grade: the relative burden of air pollution exposure in the United States," *Int. J. Environ. Res. Public Health*, 2011 June; 8(6): 1755-1771; Exhibit 4, Bravo, M.A., R. Anthopolos, M.L. Bell, M.L. Miranda, "Racial isolation and exposure to airborne particulate matter and ozone in understudied US populations: environmental justice applications of downscaled numerical model output," *Env. Int.*, 2016, 92-93: 247-255.

0.070 parts per million (ppm).⁶ An exceedance of the NAAQS occurs whenever air quality rises above 0.070 ppm. A violation of the NAAQS occurs when the three-year average of the fourth highest annual eight-hour ozone values exceed 0.070 ppm.⁷ There is cause for health concern whenever ozone levels rise above 0.070 ppm.

Ozone molecules form when two key pollutants – nitrogen oxides (NO_x) and volatile organic compounds (VOCs) – react with sunlight.⁸ Because of this relation NO_x and VOCs are often referred to as “precursor emissions” to the formation of ozone. NO_x and VOC emissions can travel great distances, contributing to regional ozone pollution.⁹ Ozone formed in a particular area can also travel great distances, influencing ozone concentrations in downwind locations. Regional transport of ozone and ozone precursor emissions that emanate in one state can make it difficult for downwind states to comply with the NAAQS.¹⁰

NO_x and VOCs are released from smokestacks, tailpipes, and oil and gas production activities. NMED has identified oil and gas production activities as the primary contributor to elevated ozone levels in northwest and southeast New Mexico and has even proposed new regulations that would establish control requirements for NO_x and VOC emissions from the oil and gas sector.¹¹

B. State Implementation Plans and Clean Air Act “Good Neighbor” Requirements

Individual states respond to and prevent ozone pollution by developing and implementing SIPs as required by the Clean Air Act. While SIPs contain state-adopted rules, they are federally reviewed and approved. SIPs contain the enforcement programs, emission limitations, and control measures for pollutants such as ozone and ozone precursors and must ensure attainment and maintenance of the NAAQS.

A required component of each SIP is an analysis and determination that a state’s air pollution rules will prohibit any air pollution produced in the state that could travel and negatively affect neighboring states.¹² Specifically, SIPs must prohibit “any source or emissions activity within the [s]tate from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other [s]tate with respect to any such national primary or secondary ambient air quality standard[.]”¹³ This component of a SIP is often referred to as the “Good Neighbor” provision.¹⁴

⁶ 40 C.F.R. § 50.15.

⁷ *Id.*

⁸ *Supra.* Note 19.

⁹ U.S. EPA, “Interstate air pollution transport,” website available at <https://www.epa.gov/interstate-air-pollution-transport/interstate-air-pollution-transport>.

¹⁰ *Id.*

¹¹ *In the Matter of Proposed New Regulation, 20.2.50 NMAC, “Petition for Regulatory Change,”* No. EIB 21-27, available online at <https://www.env.nm.gov/air-quality/wp-content/uploads/sites/2/2018/08/2021-05-06-EIB-21-27-Petition-for-Regulatory-Change-Part-20.2.50-pj.pdf>.

¹² 42 USC § 7401(a)(2)(D)(i)(I).

¹³ *Id.*

¹⁴ *Supra.* Note 26.

The EPA established new NAAQS for ozone in October 2015.¹⁵ This revision triggered a legal requirement that all states submit a revised SIP to ensure, among other things, that control measures for ozone and ozone precursors will prevent pollution that contributes to nonattainment or interferes with maintenance in other states.¹⁶ Under the Clean Air Act, states had three years from the time of EPA’s 2015 revision of the ozone NAAQS to submit a revised SIP.¹⁷

NMED submitted a SIP revision addressing the 2015 ozone NAAQS in November 2018, a month after the three-year deadline. However, NMED did not include a Good Neighbor provision with this submission. On December 5, 2019, EPA issued a finding that New Mexico failed to submit a complete SIP by not addressing the Good Neighbor provision of the Clean Air Act.¹⁸ This action set a subsequent two-year deadline for the EPA to either promulgate a federal implementation plan (FIP) to address New Mexico’s Good Neighbor obligations or to fully approve a SIP revision.¹⁹

C. EPA 2018 Memo Regarding Clean Air Act Good Neighbor Provision

On March 27, 2018, more than three years ago, the EPA published a memorandum providing guidance for how states could analyze and determine their Good Neighbor obligations in relation to the 2015 ozone NAAQS.²⁰ While this 2018 Memo provided guidance to states, the EPA made clear it was not definitive or final for purposes of demonstrating compliance with the Clean Air Act’s Good Neighbor provision. The EPA explained:

EPA’s goal in providing this information is to assist states’ efforts to develop good neighbor SIPs for the 2015 ozone NAAQS to address their interstate transport obligations. While the information in this memorandum and the associated air quality analysis data could be used to inform the development of these SIPs, the information is not a final determination regarding states’ obligations under the good neighbor provision. Any such determination would be made through notice-and-comment rulemaking.²¹

EPA’s 2018 Memo highlights the four-step framework used to address the requirements of the Clean Air Act’s Good Neighbor provision. These steps include:

1. Identify downwind air quality problems;
2. Identify upwind states that contribute enough to those downwind air quality problems to warrant further review and analysis;

¹⁵ 80 Fed. Reg. 65,291 (Oct. 26, 2015).

¹⁶ *Supra*. Note 30.

¹⁷ 42 U.S.C. § 7410(a)(1).

¹⁸ 84 Fed. Reg. 66,612 (Dec. 5, 2019).

¹⁹ *Id.* at 66,613.

²⁰ U.S. EPA, “Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I),” Memorandum Published March 27, 2018, available online at https://www.epa.gov/sites/production/files/2018-03/documents/transport_memo_03_27_18_1.pdf.

²¹ *Id.* at 2.

3. Identify the emissions reductions necessary (if any), considering cost and air quality factors, to prevent an identified upwind state from contributing significantly to those downwind air quality problems; and
4. Adopt permanent and enforceable measures needed to achieve those emissions reductions.²²

To assist states in meeting the Good Neighbor provision of the Clean Air Act, the EPA prepared modeling in 2017. This modeling is referenced in the agency's 2018 Memo. The 2017 modeling relied upon by the EPA utilized emissions data from 2011, 10 years ago, assessed measured ozone monitoring data for the years 2014-2016, and projected monitored ozone values to 2023.

IV. NMED's Proposed SIP Certification Does Not Demonstrate Compliance with the Clean Air Act

NMED's Good Neighbor SIP does not utilize the best representative data available to the agency. The agency relied upon the EPA's 2018 Memo to justify its proposed Certification.²³ However, EPA's 2018 Memo relies on now outdated, unreliable, and inaccurate data and information. Notably, the modeling relied on emissions data from 2011. The modeling was also based on ozone monitoring data from the years 2014-2016. Further, the modeling assumed the implementation and effectiveness of regulations that have since been withdrawn. Most importantly, the EPA's 2018 Memo does not account for dramatic changes to emissions and air quality in New Mexico and neighbor states, which have largely resulted from the recent boom in oil and gas development.

A. Emissions Trends since EPA's Modeling

EPA's 2017 modeling relies upon the agency's 2011 National Emissions Inventory, which is now 10 years old. Since 2011, emissions of ozone precursors, primarily from the oil and gas sector, have increased and new inventories, which are readily available to NMED, suggest reliance on the 2011 data is unreasonable in 2021.

Since EPA completed its 2017 modeling, the agency has released both the 2014 National Emissions Inventory and 2017 National Emissions Inventory.²⁴ Both the 2014 and 2017 updated

²² *Id.* at 2-3.

²³ Although NMED also relied upon guidance issued by EPA on August 31, 2018 and October 19, 2018, these guidance documents also relied on the modeling prepared by EPA in 2017 in support of the March 27, 2018 Memo.

²⁴ The EPA's 2014 National Emissions Inventory can be queried at <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>. The 2017 National Emissions Inventory can be queried at <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>. EPA generally releases National Emissions Inventory data every three years. The agency is currently in the process of developing its 2020 emissions inventory. See <https://www.epa.gov/air-emissions-inventories/2020-national-emissions-inventory-nei-documentation>.

National Emissions Inventory data indicate that reliance on the 2011 data is no longer appropriate.

Although the updated National Emissions Inventory data confirms that anthropogenic emissions of NOx have declined in New Mexico, dropping from 204,031 tons in 2011 to 164,928 tons in 2017, emissions of VOCs have increased. According to the National Emissions Inventory data, VOCs increased from 217,433 tons in 2011 to 233,760 tons in 2017, a nearly 10% increase in emissions.

Further, there is every reason to conclude the National Emissions Inventory data is far from accurate with regards to its assessment of oil and gas industry emissions. The U.S. Bureau of Land Management, Western Regional Air Partnership, and others, working with the international consulting firm, Ramboll, have developed ozone precursor inventories for the oil and gas industry in the Permian Basin of southeast New Mexico, as well as the San Juan Basin in northwest New Mexico.²⁵ In recent reports assessing both 2014 emissions and projected 2028 emissions, the inventory shows that emissions from the oil and gas industry are much, much higher than reported by the National Emissions Inventory. While the 2011 National Emissions Inventory reported annual oil and gas industry emissions in New Mexico of 127,029 tons of VOCs and 42,196 tons of NOx, the Ramboll inventory projects that by 2028, emissions of VOCs will be 40% higher than reported in 2011 and emissions of NOx will be nearly 65% higher than reported in 2011.

**Oil and gas NOx and VOC emissions in Permian and San Juan Basin
reported in Ramboll inventories (in tons/year)**

Basin²⁶	2014 NOx	2028 NOx	2014 VOCs	2028 VOCs
Permian	30,351	26,473	121,644	112,893
San Juan	44,730	43,136	86,188	64,429
TOTALS	75,081	69,609	207,832	177,322

The discrepancy between the National Emissions Inventory and more rigorous and focused inventories prepared by consultants of the Bureau of Land Management and Western Regional Air Partnership is not a surprise. In 2018, the Western Regional Air Partnership detailed and explained discrepancies between their inventory data and the National Emissions Inventory.²⁷ Among other things, the Western Regional Air Partnership found that the National

²⁵ See, Exhibit 9, Parikh, R., J. Grant, A. Bar-Ilan, *Development of Baseline 2014 Emissions from Oil and Gas Activity in Greater San Juan Basin and Permian Basin*, Final Report Prepared for Bureau of Land Management, Western States Air Resources Council, and Western Regional Air Partnership. (November 2018), available at https://www.wrapair2.org/pdf/2014_SanJuan_Permian_Baseyear_EI_Final_Report_10Nov2017.pdf; and Exhibit 10, Grant, J., R. Parikh, A. Bar-Ilan, *Future Year 2028 Emissions from Oil and Gas Activity in the Greater San Juan Basin and Permian Basin*, Final Report Prepared for Bureau of Land Management, Western States Air Resources Council, and Western Regional Air Partnership. (August 2018), available at https://www.wrapair2.org/pdf/SanJuan_Permian_Futureyear_EI_Report_21Aug2018.pdf.

²⁶ In the inventory, the Permian Basin was considered to include the Counties of Chaves, Eddy, Lea, and Roosevelt and the San Juan Basin was considered to include Cibola, McKinley, Rio Arriba, San Juan, Sandoval, and Valencia Counties.

²⁷ Exhibit 11, “Comparison of Oil and Gas Emission Estimates from the Greater San Juan Basin Inventory Project Emission Inventory to the 2014 National Emission Inventory (Version 2),” Memo Prepared June 25, 2018, available at https://www.wrapair2.org/pdf/GSJB_NEI2014v2_Compare_Memo_25Jun2018.pdf.

Emissions Inventory failed to include emissions from minor sources.²⁸ With thousands of minor sources emitting ozone precursors in New Mexico’s oil and gas industry alone, this omission significantly impacts the reliability of the National Emissions Inventory.

This updated emissions inventory data indicates that EPA’s reliance on 2011 inventory data is no longer reasonable. Given this, it is not reasonable for NMED to rely on the agency’s modeling in support of its Certification.

B. Trends in Ozone Violations since EPA’s Modeling

NMED’s identification of downwind air quality problems in its Good Neighbor Certification is also deficient because the EPA’s analysis did not rely on updated air quality data.

As discussed above, NMED’s SIP Certification relied on EPA’s 2018 Memo for its analysis of its Good Neighbor obligations, and this EPA memorandum identified areas with current air quality violations based on 2014-2016 monitoring data. This is problematic because monitoring data between 2014-2016 is not representative of air quality in many oil and gas producing states that have experienced and are currently experiencing a boom in the industry. For example, as recently as 2016, New Mexico’s Lea and Eddy Counties had not reported a single exceedance of the 2015 ozone air quality standard. That changed in 2017, when both counties began reporting exceedances. By 2019, both counties had accumulated so many ozone exceedances that they had fallen into violation of the 2015 ozone standard. More recent ozone monitoring data from New Mexico’s neighbors shows similar trends.

The table below show how ozone levels in New Mexico have increased since the timeframe 2014-2016, indicating that EPA’s prior assumptions regarding the state of air quality are no longer up-to-date.²⁹ The table presents design value data for New Mexico ozone monitors for the years 2014-2016, and for every three years since to 2017-2019.³⁰ A design value is EPA’s method for determining whether or not an air quality standard has been violated at a particular monitor and is calculated for ozone by taking the three-year average of the fourth highest 8-hour ozone reading.³¹ The data shows that since the three year period of 2014-2016, ozone levels have increased across the board in New Mexico. The data also shows that while only one monitoring site was violating the 2015 ozone NAAQS in 2014-2016, six sites are now violating based on 2017-2019 data. These ozone violations underscore that New Mexico’s air quality impacts to other states is likely more severe and warranting of closer, updated scrutiny.

New Mexico Ozone Monitor Design Value Data, 2014-2021 (in parts per billion)

County	Monitor ID	2014-2016	2015-2017	2016-2018	2017-2019
Bernalillo	350010032	65	65	66	67
Bernalillo	350011012	64	67	69	71

²⁸ *Id.* at 3.

²⁹ This table was prepared using monitoring data queried via EPA’s AirData Monitor Values Report website, <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.

³⁰ 2018-2020 design value data is also now available, however, we acknowledge this data likely would not have been available in time to inform NMED’s current proposed Certification.

³¹ 40 C.F.R. § 50.19.

Doña Ana	350130008	66	68	68	70
Doña Ana	350130020	66	68	71	73
Doña Ana	350130021	72	72	74	77
Doña Ana	350130022	68	72	74	76
Doña Ana	350130023	65	66	67	70
Eddy	350151005	67	68	74	79
Lea	350250008	66	67	70	71
Rio Arriba	350390026	64	65	67	67
Sandoval	350431001	64	65	68	68
San Juan	350450009	62	64	69	68
San Juan	350450018	66	68	70	69
San Juan	350451005	62	64	69	69
Santa Fe	350490021	63	63	66	66
Valencia	350610008	64	65	67	68

Similarly, air quality in neighboring states has also diminished since the 2014-2016 timeframe. In particular, neighboring El Paso, Texas has regularly exceeded the ozone NAAQS and two monitors in the area are now in nonattainment with the 2015 ozone NAAQS. This contrasts starkly with the state of air quality in 2014-2016, where zero monitors were in nonattainment of the 2015 ozone NAAQS.

8-Hour Ozone Design Values (in parts per billion) at Key El Paso, Texas Monitors, Based on 2017-2019 Monitoring Data³²

Monitor Location	State	Monitor ID	2019 4th Max.	2018 4th Max.	2017 4th Max.	3 Year Average Design Value
El Paso, Ivanhoe Fire Station	TX	481410029	70	74	63	69
El Paso, Rim Road	TX	481410037	75	76	74	75
El Paso, Yvette Drive	TX	481410058	72	77	75	75

While El Paso is not designated a nonattainment area, the reference to nonattainment under Section 110(a)(2)(D)(i)(I) is not limited to “areas” designated as nonattainment, but refers to air quality. The EPA has explained, “it is clear that the reference in section 110(a)(2)(D)(i)(I) to ‘nonattainment’ refers to air quality, not designation status.”³³

The ozone air quality data above shows that air quality in many parts of New Mexico and its surrounding neighbors has been degrading since the 2014-2016 period. In fact, the air quality at each of the monitors identified above has either further degraded or remained near the same since the 2014-2016 time period, rather than improved as EPA’s modeling predicted. These trends cast doubt on the current accuracy and reliability of EPA’s emissions and air quality projections provided in the 2018 Memo. Without the best representative data, NMED cannot

³² Data queried from EPA’s AirData website, <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.

³³ 63 Fed. Reg. 57,356, 57,372 (October 27, 1998).

ensure it properly identified downwind air quality problems and demonstrated compliance with the Clean Air Act's Good Neighbor provision.

Adding to the concern over the accuracy and reliability of EPA's 2018 Memo is that the underlying modeling assessed contributions of ozone only at monitoring sites and did not analyze contributions to unmonitored areas. This is problematic in relation to New Mexico. For example, there are zero ozone monitors in the Permian Basin of West Texas.³⁴ However, with high ozone levels reported in Hobbs and Carlsbad in the New Mexico portion of the Permian Basin, literally on the doorstep of the Permian Basin of west Texas, it seems inconceivable that there would not also be high ozone in the region.³⁵ Unfortunately, due to a lack of monitors, EPA did not assess whether emissions from New Mexico may be contributing significantly to air quality that may be in nonattainment in West Texas and did not assess whether emissions from New Mexico may be interfering with maintenance of air quality in West Texas. This raises further questions over whether it was reasonable for NMED to rely solely on the EPA's 2018 Memo to justify its Good Neighbor SIP Certification.

C. Emissions Control Revisions since EPA's Modeling

Not only did NMED's reliance on outdated data lead it to underestimate future emissions growth and air quality degradation, the reliance on outdated modeling led it to overestimate future emissions reductions based on emissions controls that were later revoked or revised.

As discussed earlier, EPA's 2018 Memo presented projected 2023 future year emissions and air quality based on emissions and air quality available at that time it conducted the modeling, including a 2011-based modeling platform, 2011 emissions inventory, and 2014-2016 air quality data. Similarly, EPA projected 2023 future year emissions and air quality based on the emissions controls that were final and in effect at the time of modeling, which included a series of new emissions controls that had been promulgated under the Obama Administration. Notable and most significant among the controls for ozone precursor emissions were the 2012 and 2016 New Source Performance Standards (NSPS) for the Oil and Gas Sector and the 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards (CAFE Standards).³⁶

Unfortunately, these rules were ultimately rescinded and drastically rolled back by the Trump administration. The EPA's 2012 and 2016 NSPS were revised in September 2020.³⁷ The CAFE Standards were rolled back in April 2020.³⁸

As a result, NMED's reliance on EPA's 2018 Memo assumes emissions reductions from controls that do not currently exist. Because these emissions controls are no longer effective, EPA's modeling likely underestimates 2023 future year emissions and air quality violations for

³⁴ Aside from the New Mexico-based monitors in Hobbs and Carlsbad, the nearest ozone monitors to the Permian Basin of West Texas are located in El Paso and in Palo Duro State Park near Amarillo in the Texas Panhandle.

³⁵ The monitor in Hobbs is located less than five miles from the Texas border.

³⁶ The EPA indicates it relied on these rules in its 2017 Technical Support Document for its 2017 modeling. *See* Exhibit 5 at 93 and 97.

³⁷ *See* 85 Fed. Reg. 57,018 (Sept. 14, 2020) and 85 Fed. Reg. 57,398 (Sept. 15, 2020).

³⁸ *See* 85 Fed. Reg. 24,174 (April 30, 2020).

purposes of determining Good Neighbor obligations. NMED itself has confirmed the significant impact these emissions controls were expected to have within New Mexico and nationally. For example, in 2018 NMED used the 2012 and 2016 NSPS for the Oil and Gas Sector as evidence New Mexico emissions of ozone precursors would not harm downwind states and that New Mexico air pollution control measures complied with its Good Neighbor obligations.³⁹

More recently, the State of New Mexico joined a legal petition with a group of other states and cities, challenging the Trump Administration's decision to revise the 2012 and 2016 NSPS for the Oil and Gas Sector.⁴⁰ The petition was submitted in September 2020, and as part of that litigation, NMED explained that the revisions to these oil and gas regulations would undermine New Mexico's public health and environmental investment to reduce VOC emissions that contribute to unhealthy ozone levels. NMED emphasized that New Mexico relied on the NSPS regulations to control VOC emissions from small oil and gas sources to mitigate ozone impacts in New Mexico and in neighboring states.

V. Conclusion

Emissions controls that were expected to significantly reduce ozone precursors nationally were eliminated or curtailed since EPA conducted the modeling it presented in its 2018 Memo. Likewise, violations of the ozone air quality standard are being measured with greater frequency in many parts of New Mexico and in its neighboring states than just a few years ago. These violations are, at least in part, due to increasing emissions of ozone precursors coming from a boom in oil and gas development, which has accelerated in just the past few years as well. Modeling and projecting future emissions and air quality is by its nature an imperfect science, but the data and modeling NMED relied on to determine its Good Neighbor obligations for the 2015 ozone air quality standard does not demonstrate that the Clean Air Act's Good Neighbor provision has been met.

More importantly, NMED's reliance on outdated data does a disservice to the public and environmental health of our downwind neighbors and sets a precedent that may ultimately harm New Mexico in the long-run. NMED has indicated that modeling studies and preliminary back-trajectory analyses suggest that interstate transport of ozone from the Permian Basin in Texas contributes to high ozone concentrations in southern and southeastern New Mexico. It is likely that New Mexico, Texas, and other surrounding states will need to work together in good faith to address ozone pollution. But NMED's use of unrepresentative data for this Good Neighbor SIP would be one step down a slippery slope that may lead other states to implement similar strategies for avoiding responsibility for downwind air pollution, jeopardizing the air quality and public health of New Mexicans and their neighbors.

³⁹ See *In the Matter of Proposed Approval of New Mexico's Infrastructure State Implementation Plan for Ozone National Ambient Air Quality Standard*, "Petition for Approval of New Mexico's Infrastructure State Implementation Plan Certification," No. EIB 18-06, available at <https://www.env.nm.gov/wp-content/uploads/sites/8/2018/05/Petition-for-Approval-of-New-Mexicos-Infrastructure-State-Implementation-Plan-Certification.pdf>.

⁴⁰ Exhibit 8, Pet'r's Emergency Mot. for Stay Pending Review; Mot. for Expedited Review at 79-84, *California v. Wheeler*, No. 20-1357 (Sept. 18, 2020).