

Nos. 26-277, 26-298

IN THE
Supreme Court of the United States

COMMONWEALTH OF KENTUCKY,
STATE OF WEST VIRGINIA, *et al.*,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY, *et al.*,
Respondents.

CHAMBER OF COMMERCE OF THE UNITED STATES OF
AMERICA, *et al.*,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY, *et al.*,
Respondents.

**On Petitions for Writ of Certiorari to the
United States Courts of Appeals
for the District of Columbia Circuit**

**BRIEF OF THE MIDWEST OZONE GROUP
AS *AMICUS CURIAE*
IN SUPPORT OF PETITIONERS**

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**INTRODUCTION AND
INTEREST OF *AMICUS CURIAE*¹**

The Midwest Ozone Group is a continuing association of organizations and individual entities operated to promote its members' interests concerning air emissions and air quality. The Midwest Ozone Group has been engaged with the federal regional circuit courts and the United States Supreme Court concerning the federal Clean Air Act (42 U.S. Code §7401 et seq.) national ambient air quality standards (NAAQS) development and implementation for over 30 years. The Midwest Ozone Group has committed its resources to identifying and communicating about the unique legal, scientific and technical issues and facts that inform implementation of the Clean Air Act, all of which will be the focus of this amicus brief.

The perspective of the Midwest Ozone Group will illustrate the practical consequences of the D.C. Circuit's failure to effectively apply the Clean Air Act's thorough review requirement to the promulgation of the fine particulate (PM_{2.5}) NAAQS (89 Fed. Reg. 16,202 March 6, 2024) (Final Rule or PM_{2.5} NAAQS) that is before the Court in this case. The Clean Air Act does not authorize U.S. Environmental Protection Agency (EPA) to shift the NAAQS standard by glancing at a subset of preferred science. It instead requires a

¹ All parties, including counsel for Respondents, received timely notice of the intent of the Midwest Ozone Group to file this brief under Rule 37(2)(a). Pursuant to Supreme Court Rule 37.6, *amicus curiae* states that no counsel for any party, aside from *amicus curiae*, its members, or its counsel, made any monetary contribution intended to fund the preparation or submission of this brief.

thorough review of all of the factors that must be considered in the development of the NAAQS. EPA's cavalier dismissal of the significant impacts to include costs of a suddenly changed NAAQS on non-attainment counties, the nation's economy, and affected sources is based on agency hubris rather than lawful policy. The comprehensive follow-on actions derived from the Clean Air Act require research, design, installation, air quality modeling, permit development, operational changes and economic modification. In this case, the Final Rule lost sight of the Clean Air Act.

The petitions for writ of certiorari filed by the Commonwealth of Kentucky and the State of West Virginia, et al., and by the Chamber of Commerce of the United States, et al., correctly identify the cost and thorough review factors required in EPA's promulgation of the Final Rule. The petitions raise for review the failure of the D.C. Circuit to recognize Clean Air Act statutory requirements for agency action resulting in the urgent need for vacatur of the Final Rule. The Court should grant the petitions.

Midwest Ozone Group incorporates in this brief the petitioners' briefs and offers the following additional support for granting the petitions and vacatur of the Final Rule.

SUMMARY OF ARGUMENT

"Thorough review" is the standard set for EPA by section 109(d) of the Clean Air Act and an off-cycle revision must be well-reasoned. *Loper Bright, Enterprises v Raimondo*, 603 U. S. 369 (2024). This brief focuses on some of the technical problems with the non-thorough process that EPA used in the rule under review in this very case,

further illustrating how important it is that EPA perform a “thorough review”.

EPA’s PM_{2.5} NAAQS rulemaking relied upon a 2016 emissions modeling platform in the proposed rule, yet in the adoption of the Final Rule, a 2018 modeling platform was utilized. The result is that the revised PM_{2.5} NAAQS in the Final Rule is based on defective data and flaws that were identified by Midwest Ozone Group in the record of the rulemaking. Midwest Ozone Group takes the position that this Court should grant the petitions seeking to vacate the revised PM_{2.5} NAAQS rulemaking because it will broadly sow significant rulemaking follow-on actions that require investment of public and private monies to implement a Clean Air Act program that is based on improper, erroneous, and inconsistent data.

One result of EPA’s failure is the revised PM_{2.5} NAAQS diminishes “headroom” or air quality increments allowing for management of emissions within a geographic area that meet the standard. Those areas, which were already attaining the PM_{2.5} NAAQS, now have limited increments between ambient concentration levels and the improperly revised PM_{2.5} NAAQS to manage costly Clean Air Act actions such as state implementation plan development, permitting, and prevention of economic development.

The revised PM_{2.5} NAAQS will harm many. More counties across the country will be in nonattainment status that were incorrectly predicted by the modeling used to support the Final Rule and thus those counties are subject to additional costly emission control requirements and investments. Consequently, more facilities will be required to decrease emissions to meet the ill-derived standard,

which will be an expense of time and money for all stakeholders. The revised PM_{2.5} NAAQS will increase the business cost of manufacturing and industrial operations, stunting economic stability. For example, new facilities and those undergoing major modifications will have to clear additional agency implementation hurdles and invest in new engineering, equipment, and permitting. The Final Rule is silent about the reality of implementing the hastily changed PM_{2.5} NAAQS.

Inconsistent data and flawed projections derived from a modeling platform will drive unjustified actions. For example, the platforms rely on data reporting inconsistencies that further undermine the integrity of the science and technology supporting the PM_{2.5} NAAQS.

In addition, the Final Rule failed to include the biased data adjustment consistent with EPA policy. Monitoring data impacted by bias will improperly characterize the air quality, but the Final Rule did not account for that bias. Rather, the Final Rule confirmed the bias of historical data taking no action, therefore setting up a false conclusion about air quality and statutorily required nonattainment designations.

Stunningly, the revised PM_{2.5} NAAQS is not the product of the Clean Air Act that requires a reasoned process that effectively manages problematic data. The petitioners' questions presented focus on the urgent NAAQS issues of "thorough review", costs, feasibility and attainability and the Court must grant review.

The following facts and technical data are provided to illustrate the scale of the real-world

consequences of the revised and improperly promulgated rule and the impact of the failure of the D.C. Circuit to recognize those statutory errors.

REASONS FOR GRANTING THE PETITIONS

The revised PM_{2.5} NAAQS before the Court should have been vacated for a variety of reasons including failure to consider the waterfall of events the Clean Air Act requires with each new NAAQS. Each event expands the adverse impact of an improperly derived NAAQS. To be a standard that is achievable, a NAAQS must necessarily be based on sound technical data and science. The Clean Air Act does not tolerate the failure of the Final Rule to consider the numerous requirements and obligations imposed by the revised PM_{2.5} NAAQS on regulated entities and others.

I. The D.C. Circuit decision grants deference to action that is not well-reasoned resulting in significant costs, attainability and feasibility impacts not authorized by the Clean Air Act.

The Clean Air Act sections 108 and 109 provide a whether and how assessment process to be followed for the promulgation of a NAAQS and for review to an existing NAAQS. In the Final Rule, the agency unlawfully concluded its action did not require assessment of costs, attainability, or technical feasibility. 89 Fed Reg. 16,202 at 16,205-6. The agency must, however, be held to a reasoned decision-making standard consistent with *Michigan v. EPA*, 576 U.S. 743, at 752 (2015). By failing to properly implement the

Clean Air Act, the revised PM_{2.5} NAAQS imposes on Midwest Ozone Group and all other stakeholders a litany of obligations including research, design, and installation of control measures, air quality modeling, permitting, operational changes and economic modification to business operations. <https://www.regulations.gov/document/EPA-HQ-OAR-2015-0072-2093> at 11-13. EPA's abbreviated and dismissive process for reconsideration of the PM_{2.5} NAAQS is not reflective of Section 109 congressional directives and is not an appropriate consideration of all of the relevant factors. *Id.*

EPA's varied statements about this revised PM_{2.5} NAAQS demonstrate its hollow attempt at a show of reasoned decision making. EPA confirms its Final Rule as an "economically significant regulatory action" as submitted to The Office of Management and Budget for review. EPA also asserts that this action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy." 89 Fed. Reg. 16,202 at 16,374. The exercise of noting "significance" as defined by definitions not relevant to Section 109, does not substitute for the need to assess all real-world consequences found within technically measurable metrics of factors, cost, attainability, and feasibility.

EPA's Regulatory Impact Analysis indicates the annualized controls costs are estimated at 593.8 million dollars. EPA, *Final Regulatory Impact Analysis Reconsideration of the National Ambient Air Quality Standards*, at 14 (Jan. 2024), https://www.epa.gov/system/files/documents/2024-02/naaqs_pm_reconsideration_ria_final.pdf ("Final RIA"). To illustrate the areas where emissions reductions will be required to meet the revised standard, EPA lists

52 counties located across the country that will need PM_{2.5} emissions reductions: twelve in Eastern States, seven in Southeast States, ten Western States, and twenty-three in California. *Id.* at 10. However, the agency is quick to note that its Regulatory Impact Analysis was done for information purposes only, and that the Final Rule was not based on consideration of such information or analyses – illustrating a fundamental defect in the Final Rule. 89 Fed. Reg. 16,202 at 16,206. EPA, *Responses to Significant Comments on the 2023 Proposed Rule for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter*, (Mar. 6, 2024), <https://www.regulations.gov/document/EPA-HQ-OAR-2015-0072-6010> at 118-119. EPA tosses to the states and others the burden of implementation and therefore resource expenditures:

The action does not prescribe specific pollution control strategies by which these ambient standards and monitoring revisions will be met. Such strategies will be developed by states on a case-by-case basis, and the EPA cannot predict whether the control options selected by states will include regulations on energy suppliers, distributors, or users. Thus, the EPA concludes that this proposal does not constitute a significant energy action as defined in Executive Order 13211.

89 Fed. Reg. 16,202 at 16,374.

This narrative turns a blind eye to the expansive list of counties and sources this Rule will engage as found in the Policy Assessment. EPA, *Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter*. (Jan. 2020). <https://www.regulations.gov/document/EPA-HQ-OAR->

2015-0072-1583 (“Policy Assessment”) at 2–3. The types of impacted anthropogenic sources of PM_{2.5} include both stationary (e.g., fuel combustion for electricity production and other purposes, industrial processes, agricultural activities) and mobile (e.g., diesel- and gasoline-powered highway vehicles and other engine-driven sources) sources. *Id.* Begging the question about how states and sources will control natural sources of PM_{2.5} to meet the new NAAQS, the Final Rule lists dust from the wind erosion of natural surfaces, sea salt, wildfires, and biological particles such as bacteria and pollen. *Id.* Wildland fire, which encompasses both wildfire and prescribed fire, accounts for over 44% of emissions of primary PM_{2.5} emissions. *See* 89 Fed. Reg. 16,202 at 16,214.

The quandary created with this revised PM_{2.5} NAAQS leads the nation to that which is unachievable. EPA has taken the Clean Air Act to a place where failure is the inevitable result. The Clean Air Act, however, has the stated primary goal “to encourage or otherwise promote reasonable Federal, State, and local government actions. . .” CAA § 101(c).

II. Lowering The Annual Particulate Matter Standard Will Result In Significant Costly Ramifications For Permitting Sources And Source Sectors In The United States Economy That Are Already Stressed.

The following technical aspects of the Final Rule illustrate how revision of a NAAQS without a thorough review results in unjustified public and private investments.

EPA's 2032 air quality modeling projected that there are 119 monitored counties in nonattainment with the new revised PM_{2.5} NAAQS of 9.0 µg/m³ using annual PM_{2.5} 2022 design values ("DVs"). EPA also predicted the number of monitored nonattainment counties would decrease to 52 (47% rate of success of attainment) according to EPA's 2032 air quality modeling. Final RIA at 10. The following Figure 1 compares the EPA map of the 52 predicted nonattainment counties, with a map that illustrates the significant in number of affected counties when all counties in Core Based Statistical Areas associated with the violating monitors are included.

The result is that in 2032, the number of counties projected to be in violation of a 9.0 µg/m³ standard increases from 52 to 187 counties. *Id.* All these counties, if designated, would be subject to additional emission control requirements to be included in the implementation plans prepared by the states for EPA review.

Such plans would require lower emissions at multiple facilities within the nonattainment area and a review, including possible retrofit of new controls for existing sources. At these locations, multiple decisions by agencies and sources will need to be considered regarding cost of control, both existing and retrofit, as well as the remaining useful life of each facility.

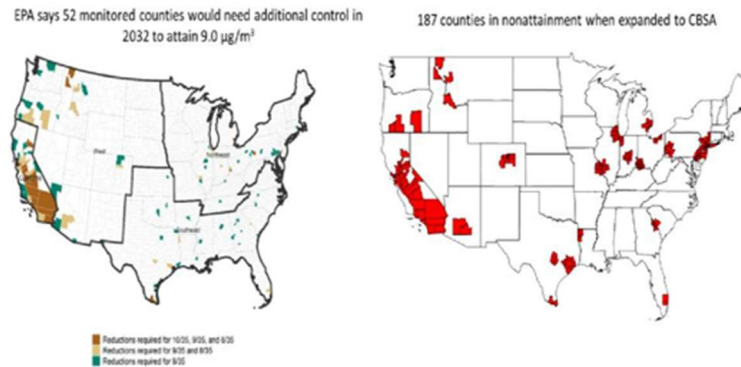


Figure 1. Monitored counties and expanded Core Based Statistical Areas modeled by EPA in nonattainment of the $9.0 \mu\text{g}/\text{m}^3$ NAAQS in 2032.

Major new projects, including new or planned facilities and modifications to existing facilities, will require controls to meet the more stringent “Lowest Achievable Emission Rate” instead of “Best Available Control Technology” controls. Emissions offsets will also be required, not only for directly emitted particulate matter, but also for pollutants that can create particulate matter in the atmosphere (e.g., nitrogen dioxide and sulfur dioxide). An immediate impact of a lower $\text{PM}_{2.5}$ NAAQS is that new or expanded manufacturing and other industrial projects may become too costly in areas defined as nonattainment and either not be pursued, or projects may be relocated to attainment areas. Based on the current projections, large swaths of the country will be impacted.²

² Air & Waste Management Association, EM Magazine (May 2023), <https://www.awma.org/emmay23>

In areas that are in attainment, but close (1–3 $\mu\text{g}/\text{m}^3$) to the 9.0 $\mu\text{g}/\text{m}^3$ standard, industry will also need to consider how close their area is to the new $\text{PM}_{2.5}$ NAAQS. There will be areas that meet the standard but have limited “headroom” between ambient concentration levels and revised $\text{PM}_{2.5}$ NAAQS. Headroom here is defined as the amount of remaining $\text{PM}_{2.5}$ concentration (in $\mu\text{g}/\text{m}^3$) from measured or modeled conditions to the 9.0 $\mu\text{g}/\text{m}^3$ NAAQS nonattainment threshold. For example, with the annual $\text{PM}_{2.5}$ NAAQS set at 9.0 $\mu\text{g}/\text{m}^3$, a county with a design value of 8.0 $\mu\text{g}/\text{m}^3$, would have headroom of 1.1 $\mu\text{g}/\text{m}^3$ ($9.1 - 8.0 \mu\text{g}/\text{m}^3$).

The following Figure 2 presents a continental U.S. scale map of county-based headroom calculations for the NAAQS at 9.0 $\mu\text{g}/\text{m}^3$. To generate these metrics, the maximum $\text{PM}_{2.5}$ DVs from preliminary 2021–2023 were used to represent each monitored county or associated county within Core Based Statistical Areas. Values were calculated for non-monitored counties using a geospatial statistical interpolation that is used to estimate non-monitored county values using an inverse-distance weighted averaging method. Headroom was calculated as $\text{PM}_{2.5}$ concentration ($\mu\text{g}/\text{m}^3$) remaining compared to the standard.

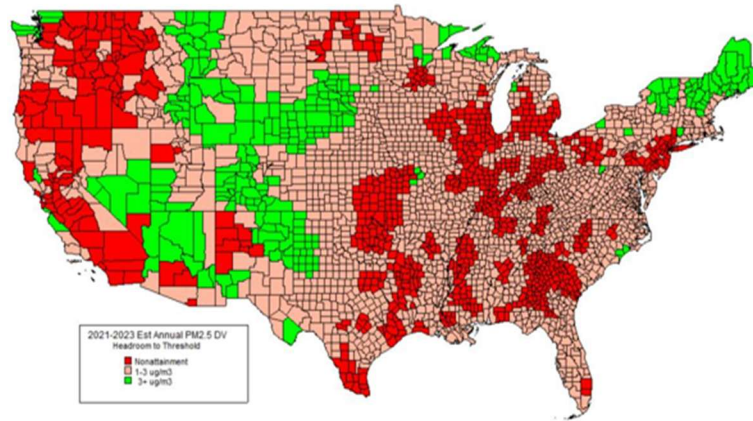


Figure 2. Headroom map of US counties using preliminary 2021-2023 annual PM_{2.5} design values ($\mu\text{g}/\text{m}^3$).

Red counties in Figure 2 represent counties that currently exceed or are interpolated to exceed the new $9.0 \mu\text{g}/\text{m}^3$ standard. Orange counties represent areas where the headroom falls within $1\text{--}3 \mu\text{g}/\text{m}^3$ of the $9.0 \mu\text{g}/\text{m}^3$ standard and identify areas where facility modifications or plans for new facilities may need to be given significant consideration. Counties in green have headroom calculations greater than $3 \mu\text{g}/\text{m}^3$ and are likely in less jeopardy than orange-highlighted counties for sources considering new builds or plant modifications.

The Clean Air Act Prevention of Significant Deterioration program applies to new major sources or major modifications at existing sources for pollutants where the area the source is located is in attainment or unclassifiable with the NAAQS. It requires installation of Best Available Control Technology, air

quality analysis, additional impacts analysis, and public involvement. EPA, *Prevention of Significant Deterioration Basic Information* (Dec. 15, 2025). <https://www.epa.gov/nsr/prevention-significant-deterioration-basic-information>.

These technical examples of costly ramifications of the Final Rule that was hastily promulgated show the unjustified costs it imposes.

III. The PM_{2.5} NAAQS At 9.0 µg/m³ Is Not Attainable Nor Feasible For Much Of The Nation.

The reduction in the PM_{2.5} NAAQS will lower the compliance threshold in situations where air quality dispersion modeling is used to document compliance with the standard, such as new air permit applications. However, even with all known, cost-effective control technologies expended in EPA's regulatory impact analysis, emission reductions from existing sources will not be enough to reach levels of attainment at the lower end of the proposed range for the PM_{2.5} NAAQS. *See* Final RIA at 12, 168. The Final Rule's reliance on this flawed data and modeling clearly demonstrate that it was not attainable nor feasible for much of the nation as required by the Clean Air Act.

A. There Are Significant Issues With The Updated Modeling Platform Used To Project Attainment For 9.0 $\mu\text{g}/\text{m}^3$ Annual Primary $\text{PM}_{2.5}$ Standard.

As a further illustration of deficiencies in the Final Rule, relating to feasibility and attainment the administrative record informs the proposed rule was based on a 2016 emissions modeling platform with projections to 2032 to support air quality modeling EPA, *Regulatory Impact Analysis for the Proposed Reconsideration of the National Ambient Air Quality Standards for Particulate Matter* (Dec. 2022) https://www.epa.gov/system/files/documents/2023-01/naaqs-pm_riaproposed_2022-12.pdf (“Proposed NAAQS RIA”). In the Final Rule, however, a 2018 platform was used to support the Rule. *See* Final RIA at 101. The 2018 platform includes multiple changes in both the base year and future year data which has impacted projected nonattainment and implementation of the $\text{PM}_{2.5}$ NAAQS and EPA’s related assessment of the impact of the change in the NAAQS.

The table below presents projected 2032 state anthropogenic $\text{PM}_{2.5}$ emission differences calculated from EPA’s modeling from the proposed rule 2016 platform and the final rule 2018 platform. *See* United States Environmental Protection Agency, *Proposed Rule 2016 Modeling Platform* <https://www.epa.gov/air-emissions-modeling/2016v3-platform> (“Proposed Rule Platform”); *See also*, United States Environmental Protection Agency *Final Rule 2018 Modeling Platform* <https://www.epa.gov/air-emissions-modeling/2018v2-emissions-modeling-platform> (“Final Rule Platform”).

State	Annual 2032 Anthropogenic PM _{2.5} Emissions (Tons)			
	Proposed	Final	Change (Tons)	Change (%)
Kentucky	75,839	41,462	-34,378	-45%
Tennessee	74,087	52,868	-21,219	-29%
Kansas	158,268	117,492	-40,776	-26%
Wyoming	93,203	71,353	-21,850	-23%
Idaho	129,561	103,910	-25,651	-20%
Colorado	73,077	125,097	52,020	71%
Oregon	115,933	231,787	115,855	100%
California	204,254	414,174	209,920	103%
Nevada	28,505	62,409	33,904	119%
Utah	30,193	76,963	46,770	155%

Figure 3. Top 5 state anthropogenic total annual 2032 PM_{2.5} emission increases and decreases (%) between proposed and final modeling platforms.

Any one of these state level emission changes would almost certainly impact on air quality modeling that would change designations between attainment and nonattainment without justification. The changes to the proposed modeled concentrations, nonattainment designations, and required incremental emission reductions are significant factors that are inconsistent with the thorough review requirements of the Clean Air Act. Furthermore, major inconsistencies have been identified in state-to-state reporting of emission categories of PM_{2.5} for application to the modeling platforms. As an example, EPA's 2032 final reconsideration emissions platform illustrates the inconsistency in the reporting of unpaved road dust emissions by the states. *See Final Rule Platform.* Figure 4 below shows this inconsistency in modeled emissions for this category noting that Missouri has the largest reported unpaved road dust PM_{2.5} emissions in the continental United States (106,858 tpy) (more than 72% greater than Texas), while Indiana has zero reported

unpaved road dust PM_{2.5} emissions in this same platform.

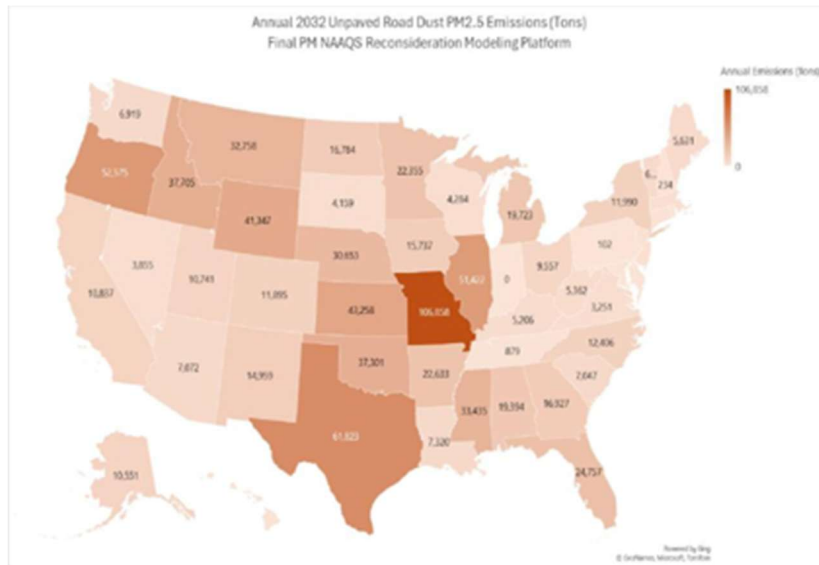


Figure 4. 2032 annual PM_{2.5} emissions for the unpaved road dust category.

EPA's reliance on air quality modeling data based on these defects illustrates the fact the Final Rule compels vacatur.

As was pointed out by this Court in its granting of an emergency stay of EPA's Good Neighbor interstate air transport plan, the failure of EPA to offer a reasoned response to concerns about the use of air quality modeling would likely entitle applicants to reversal of EPA's rule. *Ohio v EPA*, 603 U.S. 279 (2024).

B. EPA's PM_{2.5} NAAQS Revision Fails To Consider The Impact Of Its Data Adjustments To The Monitoring Requirement Revisions Finalized In Its PM_{2.5} NAAQS Reconsideration.

An additional factor evidencing the challenges to feasibility and attainability of the Final Rule is the failure to have applied the agency's approved modification of the Federal Equivalent Method designation for the Teledyne Advanced Pollution Instrumentation Model T640 PM_{2.5} mass monitor including the 640X option to all of the concentration data for PM_{2.5} from the T640 and T640X monitors in the EPA's Air Quality System. 89 Fed. Reg. 42,874 (May 16, 2024). EPA stated that updated data would be available in Air Quality System by May 13, 2024, and recommended that air agencies review the updated data by May 28, 2024. *Id.*

There were more than 400 of the Teledyne T640 and 640X monitors in service as of 2023. That number of monitors clearly has an impact on PM_{2.5} nonattainment designations.

The data adjustments, while laudable, occurred after EPA promulgated the revised PM_{2.5} NAAQS, and EPA did not account for the impact of the biased data in establishing the revised PM_{2.5} NAAQS. Indeed, in its May 13, 2024, response to comments on the proposed data adjustment EPA conceded that "[o]ne commenter asserted that this comprehensive Network Data Alignment is improper because the EPA failed to consider the potential health effects associated with the action" and added that "[t]his comment is beyond the scope of this action, as any health impacts related to PM_{2.5} monitoring and NAAQS attainment are

addressed through the 2024 Final PM_{2.5} NAAQS rule and will likely be addressed by any future NAAQS-setting actions.” EPA, *Summary of and Responses to Public Comments on the EPA’s Plan to Update PM_{2.5} Data from T640/T640X PM Mass Monitors*, May 13, 2024. <https://www.regulations.gov/document/EPA-HQ-OAR-2023-0642-0032>.

Because the bias of historical data for the many Teledyne PM_{2.5} monitors in the monitoring network has been confirmed by EPA, and especially because that bias is likely to be more pronounced for wildfire smoke events, the data may have resulted in both inaccurate calculation of PM_{2.5} design values and erroneous designation of PM_{2.5} nonattainment areas. EPA’s failure to assess the impact of the biased data on PM nonattainment as part of its PM_{2.5} NAAQS reconsideration is a demonstrable fact that the agency failed to consider all relevant facts as prescribed by the Court in *Michigan*; accordingly, this Final Rule is not based on reasoned decision-making.

IV. EPA’s Failure to Consider the Disparate Health Effects Of Speciated PM_{2.5} Particles Demonstrates Lack of Thorough Review.

During the review of the PM_{2.5} NAAQS (EPA-HQ-OAR-2015-0072) that resulted in promulgation of the revised PM_{2.5} NAAQS to 9 µ/m³, numerous commenters advised EPA that all PM_{2.5} is not alike and urged EPA to account for the differences in speciated PM_{2.5} in setting a revised standard. Indeed, as long ago as 2016, the Texas Commission on Environmental Quality (TCEQ) submitted comments to EPA stating that “[t]he EPA should place significant focus on the impact of individual PM components on measured health endpoints,” adding

that “[i]t is generally acknowledged that not all species of PM are equally toxic, with metals being generally more toxic (reviewed in Chen and Lippman 2009) and nitrates generally less so (reviewed in Schlesinger 2007).” EPA-HQ-OAR-2015-0072-0008. In 2017, the Texas Public Policy Foundation submitted a comment stating that “[d]ata on speciated PM_{2.5} are necessary to test hypotheses on whether different PM_{2.5} components have different potencies for causing an increase in different health effects.” EPA-HQ-OAR-2015-0072-1812.

More recently, in 2023, The Nature Conservancy recommended that EPA “take advantage of speciated particulate monitoring technology to provide valuable information about the composition, and ultimately the sources, of PM_{2.5} pollution.” EPA-HQ-OAR-2015-0072-2219.

EPA has thus known for over a decade about scientific concerns regarding the disparate health effects of various species of particulate matter, even if all is sized at 2.5 microns or less in aerodynamic diameter - the PM_{2.5} standard size. This exact observation has been substantiated in various technical assessment documents prepared to justify regulatory actions. EPA has nonetheless failed to collect data or begin to consider these disparate health effects, a fatal flaw in its revised PM_{2.5} NAAQS.

In its 2024 *Responses to Significant Comments on the 2023 Proposed Rule for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter* (EPA-HQ-OAR-2015-0072-6010), EPA evidently did not consider any of these and other comments as sufficiently significant to respond. There is no mention of the issue of disparate health effects of the various speciated PM_{2.5} constituents in the

response to “significant” comments. EPA has consistently failed to begin to consider these disparate health effects, an onerous legal flaw in its revised PM_{2.5} NAAQS.

CONCLUSION

For the reasons set forth above, as well as the reasons set forth in the petitions, the Court should grant the petitions and undertake review of the merit of the Final Rule.

Respectfully submitted,

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