Nos. 23-3581, 23-3583

IN THE UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

SIERRA CLUB,

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL REGAN, Administrator, U.S. Environmental Protection Agency,

Respondents.

Petition for Review of the U.S. Environmental Protection Agency's Final Rulemakings at 88 Fed. Reg. 32,584 (May 19, 2023) and 88 Fed. Reg. 32,594 (May 19, 2023)

PETITIONER'S BRIEF

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and Sixth Circuit Rule 26.1, Sierra Club certifies that it is not a subsidiary or affiliate of a publicly owned corporation. Sierra Club further certifies that it is not aligned with a publicly owned corporation, or affiliate of such corporation, that has a substantial financial interest in the outcome of the litigation.

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GLOSSARY OF TERMS

CDD	Clean Data Determination
EE	Exceptional Event
EGLE	Michigan Department of Environment, Great Lakes, and Energy
EPA	United States Environmental Protection Agency
NAAQS	National Ambient Air Quality Standard
NOx	Nitrogen Oxides
$PM_{2.5}$	Fine Particulate Matter
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan
VOCs	Volatile Organic Compounds

STATEMENT REQUESTING ORAL ARGUMENT

Sierra Club requests oral argument in this case. As this consolidated case involves three separate, but related, agency actions and two administrative records, oral argument will assist the Court in understanding the relationship between the various actions and records, as well as provisions of the Clean Air Act and its implementing regulations that may not be familiar to the reviewing panel.

JURISDICTIONAL STATEMENT

I. Agency's Jurisdiction

The United States Environmental Protection Agency ("EPA") issued two rulemakings challenged in this direct appeal, one making a Clean Data Determination for the Detroit area pursuant to 40 C.F.R. § 51.1318 ("Clean Data Determination"), and excluding certain air monitoring data in doing so pursuant to 40 C.F.R. § 50.14(A)(1)(i)(A) ("Exceptional Event Approval"); and another redesignating the Detroit Ozone Nonattainment Area to "attainment" pursuant to 42 U.S.C. § 7407(d)(3)(E) ("Redesignation").

II. Court of Appeal's Jurisdiction

This Court has jurisdiction over these direct appeals of Clean Air Act final agency actions of EPA pursuant to 42 U.S.C. § 7607(b).

III. Filing Date Establishing the Timeliness of the Petition for Review

Notice of EPA's final actions issuing the Clean Data Determination and Exceptional Event Approval appeared in the Federal Register on May 19, 2023. Clean Data Determination for the Detroit Area for the 2015 Ozone Standard, 88 Fed. Reg. 32,584 (May 19, 2023). Notice of EPA's final action redesignating the Detroit Ozone Nonattainment Area to attainment appeared in the Federal Register on the same day. Redesignation of the Detroit, MI Area to Attainment of the 2015 Ozone Standards, 88 Fed. Reg. 32,594 (May 19, 2023). The petition for review for each action was due 60 days after the Federal Register notice, that is by July 18, 2023. 42 U.S.C. § 7607(b)(1). Sierra Club filed both its petition for review of the Clean Data Determination and Exceptional Event Approval (Case No. 23-3581) and its petition for review of the redesignation (Case No. 23-3583) on July 17, 2023. Thus, both petitions for review were timely filed.

IV. Final Agency Action

EPA characterizes each of the actions as a "final action" of the EPA Administrator. *See* 88 Fed. Reg. at 32,584 (Clean Data Determination and Exceptional Event Approval) and 88 Fed. Reg. at 32,594 (Redesignation).

STATEMENT OF ISSUES

Clean Data Determination & Exceptional Event Approval

1. EPA must determine a "clear causal relationship" exists between the measured exceedances of a national ambient air quality standard and wildfire smoke before excluding such exceedances from the data set used to evaluate compliance with the air quality standard. 42 U.S.C. § 7619(b)(3)(B)(ii). Did EPA's Exceptional Event Approval excluding two days of high ozone readings in Detroit on the basis of wildfire smoke violate this requirement where the administrative record failed to include the requisite supporting evidence, and was the resulting Clean Data Determination finding that Detroit was attaining the standard therefore also unlawful? More specifically:

    a. Was EPA's determination that the exceptional event affected pollution levels at Detroit's East 7 Mile monitor irrational considering that EPA failed to explain why pollutants EPA has identified as associated with wildfires did not have elevated levels during the exceptional event and that the evidence EPA did rely on does not support its conclusion that wildfire affected pollution levels during the exceptional event?

    b. Was EPA's determination that wildfire emissions caused the ozone exceedances at the East 7 Mile monitor irrational because EPA failed to

assess and the record does not contain evidence to show whether Michigan properly omitted several days from its matching day analysis?

c. Was EPA's determination that wildfire emissions caused the ozone exceedance at the East 7 Mile monitor irrational given that EPA acknowledged local conditions may have contributed to high ozone concentrations during the exceptional event, but failed to explain why it determined it was unnecessary to analyze the contribution of local conditions to high ozone levels during the exceptional event.

Redesignation

2. EPA relied on its Exceptional Events Approval to ignore two days of high ozone pollution in 2022 when it redesignated the Detroit Nonattainment Area to attainment, thereby lifting certain pollution protections. Where EPA's Exceptional Events Approval failed to provide a reasoned basis for EPA's finding that the Detroit area attained the ozone standard in 2022, did EPA violate 42 U.S.C. § 7407(d)(3)(E)(i), which requires EPA to find that an area "has attained" the air quality standard before redesignating a nonattainment area to attainment?

3. EPA approved Michigan's request to redesignate the Detroit Nonattainment Area to attainment even though Michigan had not revised its state implementation plan to include the reasonably available control technology ("RACT") requirements mandated by the statute (42 U.S.C. § 7511a(b)(2), (f)) for Moderate

ozone nonattainment areas. Did EPA therefore violate the requirement of 42 U.S.C. § 7407(d)(3)(E)(v) to only redesignate areas to attainment if the state "has met all requirements applicable to the area . . ."?

4. Did EPA violate the requirement of 42 U.S.C. § 7407(d)(3)(E)(iii) by redesignating the Detroit Nonattainment Area to attainment based on air quality data from 2019-2021, when it could not reasonably conclude from the record that the air quality improvement in those years was from "permanent and enforceable emissions reductions," because the temporary pandemic-related recession depressed ozone pollution and would have contributed to attainment during that time?

STATEMENT OF THE CASE

The Clean Air Act charges EPA with deciding which areas of a state have air that is unsafe to breathe. 42 U.S.C. § 7407(d). EPA does so by comparing air monitoring data with the air quality standards the agency has set to protect public health. EPA's designation of an area as being in "nonattainment" with a standard triggers specific actions the state must take to reduce pollution in that area. *Id.* § 7501 *et seq*. When EPA changes the area's designation to "attainment," many of those obligations disappear. A nonattainment designation therefore matters enormously. It matters for the health of people breathing unsafe air and it matters

for industries that will be more tightly regulated because their pollution contributes to the problem.

In this case, Sierra Club challenges EPA's decision to lift the nonattainment designation for ozone—a lung irritant that causes asthma and other harms—for a seven-county area in Southeast Michigan. The decision carries particular import for Detroit and neighboring cities in Wayne County, where homes may be down the street from auto-manufacturing plants and oil refineries, and where cases of asthma have been rising so disproportionately compared to the state as a whole that Michigan's community health agency has dubbed it the "epicenter of the asthma burden." ARC-31 (Great Lakes Environmental Law Center and Sierra Club Comments on Proposed Clean Data Determination), Ex. 4 at 7 n.23 [App. __].[1]

To ensure that EPA hews to the Clean Air Act's priority of protecting public health, even in the face of pressure from industry, Congress has tightly prescribed

[1] Before these cases were consolidated, EPA filed a separate record index in each case. To distinguish between these records, this brief uses different prefixes: "ARC" refers to the Administrative Record index for the Clean Data Determination and Exceptional Event Approval filed in Case No. 23-3581 (Doc. 9). "ARR" refers to the Administrative Record index for the Redesignation filed in Case No. 23-3583 (Doc. 10). The digits following ARC and ARR refer to the last two digits of the Document ID listed in the Certified Record Indices for the respective cases. Certain of the documents appear in both records: ARC-02 (Michigan 2022 Exceptional Event Demonstration), ARC-03 (EPA concurrence on EGLE Exceptional Event Request), ARC-04 (EPA Technical Support Document for Exceptional Event Approval), ARC-31 (Great Lakes Environmental Law Center and Sierra Club Comments on Proposed Clean Data Determination), and ARC-45 (Detroit Design Value Report 2020-22). This brief refers to these

the conditions EPA and states must meet before EPA can lift a designation of nonattainment. 42 U.S.C. § 7407(d)(3)(E). The most fundamental of these conditions is that the concentration of pollution in the ambient air must be at or below the relevant air quality standard. *Id.* § 7407(d)(3)(E)(i). The three agency actions challenged here encompass EPA's flawed determination that Detroit-area ozone is at or below the standard of 70 parts per billion (ppb), in spite of contradictory information before it.

To determine compliance with the standard, EPA must consider three years of air quality data. 40 C.F.R. § 50.19. In its redesignation proposal, EPA relied on data from 2019-21, a highly anomalous period spanning the pandemic years, when many of the largest contributors to ozone pollution (e.g., power plants burning fossil fuels) were operating less. ARR-01 (Proposed Redesignation of the Detroit, MI Area to Attainment of the 2015 Ozone Standards, 87 Fed. Reg. 14,210 (Mar. 14, 2022)) at 14,211 [App.__]. Then, when pollution levels predictably rose as the pandemic waned in 2022, EPA decided to throw out two days where a Detroit-based monitor measured ozone levels that EPA would normally consider to violate the standard. ARC-43 (Final Clean Data Determination for the Detroit Area for the 2015 Ozone Standard, 88 Fed. Reg. 32,584 (May 19, 2023)) [App. __]. EPA

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documents by their ARC number only and only a single copy is reproduced in the joint appendix.

blamed these June 2022 violations on wildfires 1,430 miles away and, in a separate rulemaking, approved Michigan's request to excluded these data points as having been influenced by an "exceptional event." *Id.* Excluding this monitoring data let EPA find that the Detroit area was meeting EPA's ozone standard as of 2022 and finalize its redesignation of the area from nonattainment to attainment. 88 Fed. Reg. at 32,594 [App. __]. EPA simultaneously issued a Clean Data Determination, which is a finding that air quality in a nonattainment area has in fact attained the standard and, under EPA's regulations, suspends a set of the state's air pollution control requirements for the area even without a redesignation to attainment. 88 Fed. Reg. at 32,584 [App. __]. But EPA lacked the evidence to meet the high bar the Act sets for attributing high ozone levels to such a far-off source of pollution, as opposed to the many high-polluting facilities closer to the violating monitor. 42 U.S.C. § 7619(b); 40 C.F.R. § 50.14(b)(4). This core failure undermines each of the three challenged actions.

Even if EPA had evidence to support its factual finding of attainment, it made a key legal error as well. One of EPA's core duties prior to lifting a nonattainment designation, beyond evaluating current air quality, is to ensure that the state has met the Act's "applicable" requirements for the nonattainment area. 42 U.S.C. § 7407(d)(3)(E)(v). This prerequisite ensures that a state is not excused from the Act's other mandates intended to reduce air pollution, and that state rules

resulting from those mandates are built into the state's plan to keep the area in compliance with health standards for the long-term after EPA removes the nonattainment label. But here, EPA moved forward with lifting the nonattainment designation even where the state had not met the Act's requirement to issue rules to limit pollution from specific sources in the nonattainment area. EPA excused the state from this obligation because the requirement to adopt those rules came due after the state had submitted its redesignation request to EPA, but before EPA approved the request. In EPA's view, the omitted pollution-control rules were not "applicable" requirements, even though it agreed that the state's deadline to adopt them had since passed. 88 Fed. Reg. at 32,611-12 [App. __]. As shown below, the plain language of multiple provisions of the Clean Air Act, as well as this Court's precedent, all forbid EPA from excusing the Act's mandatory requirements in this way.

By flubbing these essential steps for redesignation, EPA has failed to protect the health of a particularly vulnerable community amidst a worsening public health crisis. While EPA claims to be "sensitive to" concerns about "elevated asthma rates and other respiratory diseases in the Detroit area," and committed to "fair treatment of vulnerable populations disproportionately affected by pollution," the agency's actions say otherwise. 88 Fed. Reg. at 32,585 [App. __]. In making a weighty decision to eliminate measures that would protect the Detroit area's

vulnerable populations, EPA abandoned its responsibility to ensure that pollution concentrations were actually meeting the standard and to require Michigan's compliance with the Clean Air Act's mandatory pollution control requirements for the area. EPA's response to concerns about how its flawed decision-making will impact Detroit communities is to assure the public that air quality has improved "to levels that now meet health-based air quality standards." *Id.* This circular reasoning that the air is already safe has no basis in evidence and, as a result, is no assurance at all.

LEGAL FRAMEWORK AND FACTUAL BACKGROUND

I. Ozone Pollution and Public Health

Ozone exposure causes serious health problems, including chest pain, coughing, throat irritation, and increased susceptibility to respiratory infections. *See, e.g.*, *Wall v. EPA*, 265 F.3d 426, 428 (6th Cir. 2001). Ozone is particularly dangerous for those who already suffer from respiratory illnesses as it can worsen diseases like asthma, emphysema, and chronic bronchitis. Sensitive populations such as children and the elderly are also especially susceptible to the negative health effects of ozone and are far more likely to be hospitalized for asthma. ARR-

10 (Sierra Club et. al Comments on the Proposed Approval of the Detroit, Michigan 2015 Ozone Redesignation) at 5 [App. __].

While Detroiters have long had disproportionately high rates of asthma when compared to the rest of Michigan's population, the problem has grown worse in the past five years. During this period, the asthma rate among Detroit adults has increased while Michigan's rate has remained the same. ARC-31 at 7 [App. __]. Similarly, the disproportionate rate of asthma hospitalizations in Detroit compared to the Michigan average has also worsened in recent years. *Id.* at Ex. 5, 6 [App. __, __]. There is also significant evidence that the asthma burden in Southeast Michigan is disproportionately high among Black children compared to White children, particularly in Wayne County where Detroit is located. According to a 2019 report, 31.9 per 10,000 Black children were hospitalized between the years 2010 to 2014 due to asthma attacks compared to 5.8 of 10,000 White children. *Id.*

Ozone forms when nitrogen oxide ("NOx") and volatile organic compounds ("VOCs"), known as "ozone precursors," react in the presence of sunlight. In the Detroit area, there are a multitude of sources of those ozone-producing pollutants. Numerous power plants, including the Monroe coal-fired power plant, and mobile sources such as cars and trucks are just a few of the significant sources of NOx pollution in the Detroit Nonattainment Area. ARR-10 at 8-9 [App. __]. Additionally, an oil refinery in Detroit and numerous automotive assembly plants

throughout the Southeast Michigan region – including the Mack Avenue Assembly Plant and Jefferson North Assembly Plant in Detroit – are significant sources of VOC pollution. *Id.*; ARC-31 at 8 [App. __]. These pollutants contribute to peak ozone formation during hot, dry, stagnant summertime conditions. In Michigan, weather is conducive to the formation of ozone from the spring through the fall and thus the ozone season starts on March 1 and ends on October 31. ARR-10 at 4 [App. ___].

II. The Clean Air Act and the Ozone National Ambient Air Quality Standard

The Clean Air Act ("Act") represents a "national policy … to reduce air pollution." *Big Rivers Elec. Corp. v. EPA,* 523 F.2d 16, 22 (6th Cir. 1975). The cornerstone of this policy is the Act's requirement for EPA to establish air quality standards at a level "requisite to protect the public health" with "an adequate margin of safety." 42 U.S.C. § 7409(b)(1). In turn, states are required to establish an air monitoring network to assess conformity with each standard and develop regulatory programs capable of ensuring continual compliance with each standard. 42 U.S.C. § 7410(a)(1), (a)(2)(B); 40 C.F.R. Part 58; *Commonwealth of Pa., Dep't of Env't Res. v. EPA*, 932 F.2d 269, 272 (3d Cir. 1991) (citing *Train v. Nat. Res. Def. Council, Inc.* ("*NRDC*"), 421 U.S. 60, 99 (1975)) ("The need to maintain the Clean Air Act standards once they are reached is well-recognized by the Courts."). If EPA determines that an area fails to meet the standards, the Act requires the

state to develop and implement specific and enforceable air pollution control programs capable of lowering air pollution to meet the standard by statutory deadlines. *See* 42 U.S.C. §§ 7501–7515.

In 2015, EPA revised the ozone standard to 70 parts per billion (ppb). Final National Ambient Air Quality Standards ("NAAQS") for Ozone, 80 Fed. Reg. 65,292 (Oct. 26, 2015). EPA determines compliance with that standard by calculating the "design value." The design value for the ozone standard is the fourth-highest daily maximum 8-hour average ozone concentration averaged over three years. 40 C.F.R. Part 50, Appendix U. In more detail: First, ozone monitors measure ozone concentrations each hour; second, for each day, EPA compiles the hourly ozone concentrations to determine the maximum daily 8-hour average for the day; third, at the end of each year, EPA identifies the fourth highest of those maximum daily 8-hour averages; finally, EPA averages the fourth highest daily 8-hour average for each of the past three years. The resulting three-year average is the design value; if it is higher than 70 ppb, air pollution exceeds the ozone standard. Functionally, this means that whether an area meets the standard can hinge on one or two days with elevated levels of ozone pollution in any given three-year period.

III. Nonattainment Designations and the 1990 Amendments to the Act

Based on the above-described design values, EPA designates each area of a state as either in "attainment" or "nonattainment" with the air quality standard. 42 U.S.C. § 7407(d)(1)(A).[2] If the design value is at or below the standard, EPA considers an area to be in attainment. On the other hand, if the area is above the standard, it is designated "nonattainment."

Congress added new sections governing nonattainment areas to the Act in 1990 in response to EPA's pervasive failure under the prior scheme to bring areas suffering from unhealthy air quality into attainment. 1990 Clean Air Act Amendments, Pub. L. No. 101-549, 104 Stat. 2399 (1990); Senate Rep No. 101-228, 1990 U.S.C.C.A.N. 3385 at *3400 (1989). Under the previous version of the Act, first enacted in 1970, states had wide freedom to select pollution control measures to attain the standards. *See generally Train*, 421 U.S. at 79. In enacting the 1990 Amendments, Congress intended to correct the "discretion-filled approach of two decades prior." *S. Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 886-87 (D.C. Cir. 2006). "No longer willing to rely upon EPA's exercise of discretion, Congress adopted a graduated classification scheme that prescribed mandatory controls that each state must incorporate into its [State Implementation

[2] Additionally, an area may be designated as "unclassifiable" if, on the basis of available information, it cannot be classified as meeting or not meeting the standard. 42 U.S.C. § 7407(d)(1)(A)(iii).

Plan].” *Id.* at 887; *see also NRDC v. EPA*, 777 F.3d 456, 459-61 (D.C. Cir. 2014) (describing “history of Congress’s and EPA’s efforts to establish air quality standards for ozone”).

For ozone, this graduated classification scheme ranks nonattainment areas from Marginal to Extreme based on the severity and duration of ozone pollution, and establishes deadlines for submitting the mandatory controls and bringing the area into attainment. *See generally* 42 U.S.C. § 7511a. An area that fails to attain the standards by the deadline must be reclassified by EPA within six months to a higher rank. *Id.* § 7511(b)(2). Such reclassifications are known informally as “bump-ups.”

IV. The Detroit Area Nonattainment Designation and Bump-Up

Whenever EPA revises an air quality standard, the Act requires it to designate the areas failing to meet the standard as nonattainment areas within two years; for the 2015 ozone standard, that deadline was October 2017. 42 U.S.C. § 7407(d)(1)(B); 80 Fed. Reg. 65,292 (Oct. 26, 2015). Nearly 10 months after that deadline, and facing litigation challenging its delay, EPA designated a seven-county area in Southeast Michigan as a nonattainment area for the ozone standard (“Detroit Nonattainment Area”) in 2018. *See* Additional Air Quality Designations for the 2015 Ozone NAAQS, 83 Fed. Reg. 25,776, 25,779, 25,813 (June 4, 2018). Initially, EPA designated the Detroit Nonattainment Area as a Marginal

nonattainment area. *Id*. Michigan was required to lower ozone pollution in the Detroit Nonattainment Area and attain the standard by August 3, 2021. 42 U.S.C. § 7511(a)(1); Proposed Reclassification of Areas Classified as Marginal for the 2015 Ozone NAAQS, 87 Fed. Reg. 21,842, 21,844 (Apr. 13, 2022). Michigan failed to meet that deadline; that failure required EPA to reclassify (or bump up) the Detroit Nonattainment Area from Marginal to Moderate nonattainment no later than February 3, 2022. *See,* 42 U.S.C. § 7511(b)(2). EPA belatedly undertook that reclassification on February 1, 2023, again in response to litigation. Final Finding of Failure to Attain and Reclassification of the Detroit Area as Moderate for the 2015 Ozone NAAQS, 88 Fed. Reg. 6,633 (Feb. 1, 2023) (making reclassification effective March 1, 2023); *see All. of Nurses v. Regan*, 22-cv-01606-CJN, Mot. to Dismiss Pl. Claim Regarding the Detroit, MI Area as Moot (Doc. 29) (D.D.C. Feb. 14, 2023).

The reclassification of the Detroit Nonattainment Area from Marginal to Moderate nonattainment required Michigan to revise its State Implementation Plan to more effectively limit the emission of ozone precursor pollutants from both stationary and mobile sources. For stationary sources, Michigan was required to submit revisions of its State Implementation Plan to require certain types of sources of VOCs to achieve emissions limits achievable through the use of reasonably available control technology ("RACT") and to similarly limit NOx

from all existing major sources located in the nonattainment area unless the state could demonstrate that NOx emission reductions lacked benefits. 42 U.S.C. § 7511a(b)(2), (f).[3] For mobile sources, Michigan was required to implement a motor vehicle inspection and maintenance program aimed at ensuring cars in the nonattainment area are complying with emission limits. *See generally* 42 U.S.C. § 7511a(b). Michigan issued VOC RACT rules in April 2023 limiting emissions from sources like the automobile industry's vehicle coating operations, but suspended enforcement of those rules for the Detroit Nonattainment Area once EPA redesignated the area in the action challenged here. Habalewsky Decl., Ex. 1 (Variance, Suspension of Enforcement of Part 6 Reasonably Available Control Technology Rules for the Southeast Michigan 2015 Ozone Maintenance Area).

V. Requirements for Converting an Area from "Nonattainment" to "Attainment," and Clean Data Determinations

Once all of the air monitors in a nonattainment area have an ozone design value that is at or below 70 ppb, a state can request that EPA redesignate the area from nonattainment to attainment. To grant that request, EPA must determine that the area satisfies five criteria listed in 42 U.S.C. § 7407(d)(3)(E). The first, third, and fifth of those criteria are at issue in this case. These require that the area has

[3] For Moderate areas, major sources are those that emit more than 100 tons of NOx annually. 42 U.S.C. § 7511a(f)(1), 7602(j) (definition of "major stationary source").

attained the standard, *id.* § 7407(d)(3)(E)(i), that the improvement in air quality is due to permanent and enforceable reductions in pollution resulting from federal and state requirements, *id.* § 7407(d)(3)(E)(iii), and that the State "has met all requirements applicable to the area" under section 7410 and part D of Clean Air Act Subchapter I, *id.* § 7407(d)(3)(E)(v). Part D includes, for instance, requirements for a Moderate ozone nonattainment area.

EPA's regulations add a mechanism called a "Clean Data Determination" to relieve a state from some obligations for nonattainment areas when air quality in an area is meeting the standard, but where EPA would not be able to redesignate the area because it cannot satisfy the other statutory criteria. A Clean Data Determination suspends the state's requirements to "submit attainment demonstrations and associated RACM [reasonably available control measures], RFP [reasonable further progress] plans, contingency measures for failure to attain or make reasonable progress, and other planning SIPs related to attainment" of the standard until the area either is redesignated to attainment or EPA determines the area has again violated the standard. 40 C.F.R. § 51.1318. The Clean Air Act does not explicitly authorize Clean Data Determinations nor does it specify any standard of approval; EPA has made clear that a Clean Data Determination is independent of the statute's redesignation provisions. *See, e.g.*, *NRDC v. EPA.*, 571 F.3d 1245, 1260 (D.C. Cir. 2009) ("The Clean Data Policy does not effect a redesignation; an

area must still comply with the statutory requirements before it can be redesignated to attainment.").

VI. Michigan's Redesignation Request in Spring 2022

By the end of the 2021 ozone season, the ozone design values at numerous monitors were teetering on the edge of the 70 ppb standard, with several monitors in the Detroit Nonattainment Area recording a design value precisely at 70 ppb. ARR-10 at 7 [App. __]. On January 3, 2022, just prior to EPA's February 3, 2022 deadline to bump-up the area to Moderate nonattainment, Michigan submitted a request that EPA redesignate the Detroit Nonattainment Area to attainment. ARR-02 (Michigan Department of Environment, Great Lakes, and Energy ("EGLE") Redesignation Request and Maintenance Plan) [App. __]. Just a little over two months later, EPA proposed to approve Michigan's request to redesignate the Detroit area from nonattainment to attainment. 87 Fed. Reg. at 14,210 [App. __]. Issuing the proposal just as the 2022 ozone season was beginning, EPA based its proposed approval on the area monitors' ozone design values for the years 2019 to 2021. *Id.*

Sierra Club and nineteen other public interest organizations submitted comments noting the possibility that even a relatively mild ozone season that year could push the area back above the ozone standard, and opposing the redesignation. ARR-10 at 6-7 [App. __]. Validating these concerns, several days

of high levels of ozone pollution in May, June, and July pushed the 2022 design value to 71 ppb—so that the area was no longer attaining the standard. ARC-45 (Detroit Design Value Report 2020-22) at 7 [App. __].

VII. Michigan's Exceptional Event Request to Exclude Data from the 2022 Ozone Design Value to Support Its Previously Submitted Redesignation Request

Rather than take steps to address those increased ozone levels, Michigan invoked an exception that would allow it to ignore them. The Act allows for EPA to exclude valid air quality data from the calculation of a design value if the EPA finds that the exceedance of an air quality standard was clearly caused by an "exceptional event," such as wildfires, volcanos, and other events that are, *inter alia,* "not reasonably controllable or preventable" and "unlikely to recur at a particular location." 42 U.S.C. § 7619(b); 40 C.F.R. § 50.14. When caused by such events, EPA may ignore poor air quality for the purpose of determining whether or not an area is meeting an air quality standard. *See Bd. of Cnty. Comm'rs of Weld Cnty. v. EPA,* 72 F.4th 284, 290 (D.C. Cir. 2023) ("EPA may disregard data that arises from an 'exceptional event'.").

Exceptional event determinations carry significant consequences for communities living with levels of ozone pollution above the standard. Disregarding air quality data untethers the ozone design value – which in this case was the value used to determine whether the Detroit Nonattainment Area was to remain subject

to heightened requirements to lower ozone pollution – from the actual level of pollution measured by air monitors. Put another way, by disregarding data pursuant to an exceptional event determination, EPA is authorizing states to pretend air pollution in a community is lower than it actually is for the purposes of assessing compliance with the standard and thus avoid the Act's requirements for nonattainment areas. Given the significant consequences of exceptional event determinations, Congress mandated that EPA make the protection of public health the "highest priority" when establishing its regulations governing the issuance of exceptional event determinations. 42 U.S.C. § 7619(b)(3)(A)(i). Congress has also established a high evidentiary bar for states seeking to disregard air quality data through an exceptional event request. States must demonstrate that an "exceptional event caused a specific air pollution concentration at a particular air quality monitoring location" and that "a clear causal relationship" exists between the measured exceedances of the standard and the exceptional event. 42 U.S.C. § 7619(b)(3)(B)(ii).

In January 2023, Michigan submitted an exceptional event request to EPA seeking to disregard the high concentrations of ozone pollution detected on June 24 and 25, 2022 when calculating the ozone design value. Michigan claimed that smoke from wildfires 1,430 miles away had traveled to the Detroit area and caused those high ozone levels. The stakes riding on this request were high; without

approving the exceptional event request, EPA could not determine that the Detroit Nonattainment Area was currently attaining the ozone standard and could not redesignate the area to attainment. *See* 42 U.S.C. § 7407(d)(3)(E)(i).

Absent the exclusion of ozone data pursuant to an exceptional event demonstration, the ozone design value at the East 7 Mile monitor for 2020-22 was 71 ppb. ARC-45 at 7 [App. __]. Excluding ozone data from June 24 and 25, 2022 would bring the ozone design value down to 69 ppb – barely below the standard of 70 ppb. ARC-01 (Proposed Clean Data Determination for the Detroit Area for the 2015 Ozone Standard, 88 Fed. Reg. 7,382 (Feb. 3, 2023)) at 7,383, Table 1 [App. __] (Monitor 26-163-0019 refers to the East 7 Mile monitor). This in turn would allow EPA to both issue its Clean Data Determination and finalize its proposed redesignation.[4] EPA ultimately relied on the on the Exceptional Event Approval to conclude that the Detroit Nonattainment Area was currently attaining the ozone standard. *See* 88 Fed. Reg. at 32,613 [App. __].[5]

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[4] EPA only provided for public comment on the exceptional events in EPA's proposed Clean Data Determination, without informing the public that the exceptional events were also relevant to the redesignation. EPA instead stated: "In this proposed action, EPA is not taking further action to finalize the proposed redesignation." ARC-01, 88 Fed. Reg. at 7,382 n.1 [App. __]. In spite of EPA's statement, Sierra Club commented on flaws in EPA's Exceptional Event Approval in both the Redesignation and Clean Data Determination/Exceptional Event Approval dockets, and EPA responded to both sets of comments. 88 Fed. Reg. at 32,584-92, 32,610-13 [App. __, __]. *See also infra* n. 12.

[5] The technical basis for EPA's Exceptional Event Approval and Clean Data Determination, and Sierra Club's critique of it, appear in the administrative records

EPA appears to have recognized the necessity for the approval of Michigan's exceptional event request in order to approve its redesignation request and to have worked with the state to establish a schedule to ensure the necessary approvals occurred before the 2023 ozone season. In an email from the EPA's Air and Radiation Division Director for Region 5 (the regional office covering Michigan), to EGLE's Air Division Director, EPA provided a detailed schedule regarding EGLE's exceptional event request that described when the EPA would issue its initial concurrence determination, when the EPA would hold its public comment period, and when the EPA Region 5 Administrator would sign the final rule approving not only the exceptional event request, but also Michigan's redesignation request. ARC-31, Ex. 29 [App. __].

VIII. Regulatory and Public Health Impacts of EPA's Actions

EPA's decision to issue its Exceptional Event Approval, Clean Data Determination, and Redesignation will have significant consequences for residents living in the Detroit Nonattainment Area well into the future. As discussed in more detail above, the Act provides a graduated classification scheme for ozone nonattainment that requires states to reduce ozone pollution to below the standard

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prepared for the Redesignation rulemaking as well as the Clean Data Determination rulemaking. *See* Case No. 23-3583, List of Documents Comprising the Administrative Record [Doc.10] (including Doc. ID Nos. EPA-R05-OAR-2023-0058-0002, -03, -04, and -31, all related to the Clean Data Determination and Exceptional Event Approval).

by specific deadlines, or the Act requires EPA to "bump-up" the nonattainment classification, which in turn requires states to implement more aggressive pollution control measures. *Supra* at 14-17. Conversely, when EPA redesignates an area from nonattainment to attainment, states are required to develop maintenance plans with contingency provisions that describe the actions the state will take to correct any violation of the standard that occurs after the redesignation. 42 U.S.C. § 7505a(d).

If ozone pollution does increase to levels that once again threaten the standard, there are two primary differences in the air quality protection provided by the maintenance plan as opposed to the Act's nonattainment provisions: first, Michigan has more discretion to select which pollution control measures to implement under its maintenance plan compared to the Act's nonattainment requirements, and; second, the timeline for attaining the standard and the consequences for a prolonged violation are less certain under Michigan's maintenance plan compared to the Act's bump ups for ozone nonattainment.

Under its maintenance plan, Michigan is required to take additional action if levels of ozone pollution exceed either the "warning level" or "action level". ARR-02 (Redesignation Request) at 28 [App. __].[6] If levels of ozone pollution are

[6] The warning level is defined as an annual, fourth highest daily maximum 8-hour average of 74 ppb or greater at any monitor in the Detroit Nonattainment Area. The action level is defined as either a violation of the standard or a fourth highest daily

present in the Detroit Nonattainment Area above the warning level, then Michigan must conduct a study to determine if ozone pollution is trending higher. *Id.* If Michigan, at its sole discretion, determines its study shows ozone pollution is trending higher, then it must identify which of the over one dozen contingency measures described in the maintenance plan to implement. *Id.* If levels of pollution are present above the action level then Michigan is free to pick from the over one dozen contingency measures or adopt any "additional measures" as it sees fit. *Id.* at 28-30 [App. __]. Not only do the contingency measures vary widely – ranging from the adoption of pollution control technology at industrial sources of ozone precursors in the area to programs to encourage reduced automotive idling – but Michigan also has complete discretion in deciding which measures to implement. *Id.* at 29-30 [App. __]. Under the Act's nonattainment provisions, the Act specifies exactly what measures Michigan must take and requires EPA to review Michigan's proposals. *See* 42 U.S.C. § 7511a(b).

Further, while the Act's graduated classification scheme for ozone nonattainment designations establishes clear deadlines for states to achieve attainment and requires more aggressive pollution control measures if states fail to meet those deadlines, Michigan's maintenance plan merely requires the

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maximum 8-hour average monitored averaged over two years of 71 ppb or greater at any monitor in the Detroit Nonattainment Area. *Id.*

implementation of some type of contingency measure within 18 months after the end of ozone season. There is no clear direction or requirement regarding when Michigan must attain the standard or what Michigan must do if its contingency measures fail to lower ozone pollution levels to below the standard in a timely fashion. For example, whereas RACT emission limits on certain pollution sources would be mandated in a Moderate nonattainment area, they are only optional contingency measures in Michigan's maintenance plan. 88 Fed. Reg. at 32,600 n.14 [App. __].

Furthermore, unlike the two-year deadline after EPA revises a standard, there is no requirement for EPA to periodically re-assess which areas are failing to meet standards and issue new nonattainment area designations when a state's maintenance plan is failing to ensure attainment with the standard. Instead, this is completely at EPA's discretion. *See* § 7407(d)(3)(A) (EPA "*may* at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised.") (emphasis added).

In short, the Act ensures the protection of the public health by requiring states to take specific actions to reduce ozone pollution by enumerated deadlines, thus minimizing discretion for both EPA and states. Under Michigan's maintenance plan, Michigan has almost unfettered discretion to determine what

measures it will implement to reduce ozone pollution and when it will achieve attainment by. Thus, by taking the series of actions at issue in this case, EPA has eroded many of the Clean Air Act's key requirements that exist to ensure that all residents have safe air to breathe. They have done so, as the EPA notes, in an area that most needs the protections of the Act.

As EPA has acknowledged, communities in Detroit already face "environmental conditions that have adverse human health or environmental effects on people of color, and/or low-income populations," including disproportionately high levels of ozone pollution when compared to national averages. 88 Fed. Reg. at 32,585 [App. __]. EPA also acknowledged that it is "sensitive to" concerns about "elevated asthma rates and other respiratory diseases in the Detroit area." *Id.*

While EPA claims its decision to ignore high levels of ozone pollution in the Detroit area will not worsen these existing, disparate impacts because ozone levels "now meet health-based air quality standards," the ozone data measured at the East 7 Mile monitor demonstrates that pollution remains above the standard and thus poses a serious threat to public health—even while EPA relieves Michigan of its obligation to address that threat. *Id.*; ARC-45 at 7 [App. __].

STANDARD OF REVIEW

The Administrative Procedures Act ("APA") supplies the standard of review for all four issues listed above.[7] Under APA review, courts will overturn an EPA action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," 5 U.S.C. § 706(2)(A); *see also Sw. Pa. Growth All. v. Browner*, 144 F.3d 984, 988 (6th Cir.1998). Courts must also set aside any agency action that is "in excess of statutory jurisdiction, authority, or limitations." 5 U.S.C. § 706(2)(C).

To demonstrate non-arbitrary decision-making, the agency must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts found and the choices made. *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 43 (1983); *Louisville Gas & Elec. Co. v. Fed. Energy Regul. Comm'n*, 988 F.3d 841, 846 (6th Cir. 2021).

The standard for reviewing an agency's interpretation of a statute (relevant to issue 3 above) is different from a review of whether the agency's action is

[7] For certain EPA actions issued under the Clean Air Act, 42 U.S.C. § 7607(d) supersedes the APA. However, by its own terms, this Clean Air Act provision does not apply to EPA's redesignation of a nonattainment area or a Clean Data Determination unless EPA determines that it does so. EPA must make such a determination explicit at the time of the rulemaking. *Envt'l Def., Inc. v. EPA*, 509 F.3d 553, 561 (D.C. Cir. 2007). EPA has not done so here.

arbitrary. With respect to statutory interpretation, deference is only permissible if despite "exhaust[ing] all the 'traditional tools' of construction"—including text, context, and structure—a court cannot determine the statute's meaning. *Chevron v. NRDC*, 467 U.S. 837, 843 n.9 (1984); *Keeley v. Whitaker*, 910 F.3d 878, 885-86 (6th Cir. 2018) (where "the statute, read in context[,]" is unambiguous, *Chevron* deference does not apply). *See Kisor v. Wilkie*, 588 U.S. __, 139 S.Ct. 2400, 2448 (2019) ("If a reviewing court employs all of the traditional tools of construction, the court will almost always reach a conclusion about the best interpretation of the regulation at issue" and "will have no need to adopt or defer to an agency's contrary interpretation") (Kavanaugh, J., concurring). *See State of Ohio v. Ruckelshaus*, 776 F.2d 1333, 1339 (6th Cir. 1985) ("The principle of deference does not permit the court to become a rubber stamp, automatically approving every agency interpretation of a statute.").

SUMMARY OF ARGUMENT

All three of the actions challenged here are unlawful because they depend on EPA's wholly unsupported conclusion that Detroit ozone readings above the health-based air quality standard on two days in the summer of 2022 were clearly caused by the "exceptional event" of smoke from a wildfire 1,430 miles away, leading EPA to exclude those high readings from the data it used to evaluate whether the area was attaining the standard. 42 U.S.C. § 7619(b). The unlawful

Exceptional Events Approval rendered both the Clean Data Determination and the Redesignation unlawful because both those actions were explicitly predicated on EPA's finding that the area met the ozone standard in 2022. *See* 88 Fed. Reg. at 32,601-02 [App. __]; 88 Fed. Reg. at 32,584 [App. __].

Even if the Court accepts EPA's Exceptional Event Approval and resulting Clean Data Determination, it must vacate the Redesignation because EPA failed to satisfy two other requirements for redesignation set forth in the statute. 42 U.S.C. § 7407(d)(3)(E).

I. EPA's Exceptional Event Approval, a Predicate for Each of the Other Challenged Actions, Is Contradicted by the Record

For EPA to exclude air quality data based on the influence of wildfire smoke, "a clear causal relationship must exist between the measured exceedances . . . and the exceptional event [in this case, the wildfire,] to demonstrate that the exceptional event caused a specific air pollution concentration at a particular air quality monitoring location." 42 U.S.C. § 7619(b)(3)(B)(ii). EPA's conclusion that there was a "clear causal relationship" between wildfire smoke and two exceedances of the ozone standard in June 2022 was arbitrary because EPA lacked record support for its conclusion and even ignored information that state regulatory staff acknowledged was contradictory. First, while EPA guidance points to an unusually high presence of fine particulate matter ($PM_{2.5}$) and carbon monoxide in the air as the best evidence of wildfire smoke, EPA ignored Michigan regulators'

own finding that these pollutants were *not* particularly high at the violating monitor on the two days in question. ARC-62 (Exceptional Events Guidance) at 22 [App. __]; ARC-02 (Michigan 2022 Exceptional Event Demonstration) at 51-52 [App. __]. Even when looking to a different pollutant associated with wildfire smoke, brown carbon, the administrative record failed to support EPA's conclusion that elevated levels of brown carbon pollution were present throughout the exceptional event. ARC-02 at 40-41 [App. __]. Second, even if EPA had demonstrated the presence of wildfire smoke in the area that day, it lacked evidence to demonstrate that the wildfire smoke *caused* the ozone exceedance at the violating monitor. Michigan provided a "matching day analysis" where it compared ozone levels on previous days with similar meteorological conditions to those that existed during the claimed exceptional event; if ozone levels on the exceptional event days are significantly higher when compared to ozone concentrations on days with similar meteorological conditions, that can be evidence of a non-typical source influencing ozone pollution. ARC-02 at 53 [App. __]. But Michigan omitted an unspecified number of meteorologically similar days with no evidence that they were properly discarded from the analysis. *See id*. EPA's blind acceptance of Michigan's conclusions on this incomplete record was not reasoned decision-making. The record lacks any further analysis beyond the matching day analysis to differentiate between the impact of local sources and the 1,430-mile away wildfire. Given the

particularly dense concentration of sources of ozone precursors in the Detroit area, EPA's decision not to require more before concluding there was a "clear causal relationship" was arbitrary. 40 C.F.R. § 50.14(b)(4); ARC-62 at 3 [App. __] (noting that the analyses needed to demonstrate a clear causal connection between a wildfire and air quality exceedances will vary based on numerous factors, including "the complexity of the airshed").[8]

Because the Exceptional Event Approval was unlawful, and a necessary basis for EPA's Clean Data Determination, the Clean Data determination is unlawful, too. 88 Fed. Reg. at 32,584 [App. __] (noting the determination was based on a showing of attainment "based on the exclusion of certain exceedances . . . due to exceptional events."). Likewise, without the exceptional event approval, EPA had no basis for finding that the Detroit Nonattainment Area "has attained" the standard, as required by 42 U.S.C. § 7407(d)(3)(E)(i) prior to a redesignation. *See* 88 Fed. Reg. at 32,613 [App. __] (noting in Redesignation that EPA's determination under this section relied on EPA's concurrence with the state's exceptional events demonstration).

[8] *See also, e.g.*, Declaration of Dolores Leonard ("Leonard Decl.") ¶¶5, 9 (Standing Addendum ["SA"] at 1-2) (her home in Detroit is "surrounded by industrial facilities," and there are "dozens of pollution sources" in her zipcode and neighboring areas).

II. EPA Failed to Satisfy the Statutory Requirements for Redesignation.

Section 7407(d)(3)(E) of the Act imposes five requirements (or "prongs") that must be satisfied at the time EPA redesignates an area. EPA failed to meet three of them.

A. EPA Cannot Show the Area "Has Attained" the Standard

As noted above, EPA's redesignation did not satisfy § 7407(d)(3)(E)(i), requiring EPA to determine "the area has attained the national ambient air quality standard" because EPA relied upon its unlawful Exceptional Event Approval in making this determination. 88 Fed. Reg. at 32,613 [App. __]; *Sw. Pa. Growth All. v. Browner*, 121 F.3d 106, 113 (3d Cir. 1997). While the Court's inquiry could end there, there are two additional statutory requirements EPA failed to satisfy, taken below in turn.

B. The State Has Not Met "All Requirements Applicable to the Area."

EPA's finding that the state has met all of the Act's "requirements applicable to the area" per § 7407(d)(3)(E)(v) required an interpretation of this phrase that is contradicted by the text, structure, and context of the statute: that "applicable" requirements means only those requirements that were applicable on the date the state submitted its redesignation request. 88 Fed. Reg at 32,611-12 [App. __] (citing 42 U.S.C. § 7407(d)(3)(E)(v)). Based on this interpretation, EPA

proceeded with redesignation even though Michigan had not met the RACT requirement that was then effective for the Detroit Nonattainment Area. *Id.*

Three provisions of the Act plainly contradict this approach. First, prong (v) requires that the state "has met" all applicable requirements. 42 U.S.C. § 7407(d)(3)(E)(v). The use of the present perfect tense indicates a continuing obligation that persists at the time of redesignation, in parallel with EPA's interpretation of the same use of this tense in the other prongs required for redesignation. Second, the maintenance plan provision in § 7505a(c) specifically addresses the timing of lifting the requirements applicable to a nonattainment area: "Until [the maintenance plan] is approved and an area is redesignated as attainment for any area designated as a nonattainment area, the requirements of this part [i.e., part D, which includes the Moderate nonattainment area requirements] shall continue in force and effect with respect to such area." *Id.* § 7505a(c). Third, the provision requiring RACT for Moderate ozone nonattainment areas is mandatory, not permissive. *Id.* § 7511a(b)(2) (the state's plan "shall provide for the implementation of" RACT measures).

Those expressly mandatory terms reflect Congress's desire, in the 1990 Amendments to the Act (which include each section of the Act cited above), to limit EPA's discretion to avoid or delay improving air quality in nonattainment areas. "The specificity in the 1990 Amendments reflects the concern that, without

detailed directives, industry intervention might frustrate efforts to put pollution control steps in place." Hon. Henry A. Waxman, *An Overview of the Clean Air Act Amendments of 1990*, 21 Envtl. L. 1721, 1743–44 (1991); *see also S. Coast Air Quality Mgmt. Dist.*, 472 F.3d at 886-87. Indeed, this Court has twice rejected a similar attempt by EPA to allow a state to avoid completing the RACT requirement prior to redesignation. *Sierra Club v. EPA*, 793 F.3d 656, 669-70 (6th Cir. 2015); *Wall*, 265 F.3d at 440.

C. EPA Cannot Show that the Air Quality Improvement Was the Result of "Permanent and Enforceable" Emissions Reductions

EPA's Redesignation is also unlawful because it did not adequately respond to evidence in the record showing that area monitors met the standard as a result of the COVID-19 pandemic's impact on economic activity rather than "permanent and enforceable" emission reductions. 42 U.S.C. § 7407(d)(3)(E)(iii). The major economic downturn and lockdowns in 2020 significantly depressed emissions of pollution that contributes to ozone. Even under those conditions, the area's monitors just barely attained the standard during the 2019-2021 period relied upon by EPA. The record provides an insufficient basis to reasonably support EPA's conclusion that "permanent and enforceable" measures, rather than a combination of permanent reductions and temporary conditions, produced attainment.

For each of those independent reasons, the Redesignation should be vacated. 5 U.S.C. § 706(2)(A).

ARGUMENT

I. Sierra Club Has Standing to Challenge EPA's Actions

Sierra Club has associational standing to challenge EPA's actions on behalf of its members. Associational standing requires that at least one member has standing to sue in her own right, that the interests at stake are germane to the organization's purpose, and that neither the claim asserted nor the relief requested requires participation of individual members in the lawsuit. *Sierra Club*, 793 F.3dat 661 (citing *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs.(TOC) Inc.*, 528 U.S. 167, 181 (2000)). An individual has standing to sue when she has suffered an injury that is concrete and particularized, actual or imminent, fairly traceable to the defendant's actions, and likely to be redressed by a favorable decision. *Sierra Club v. EPA*, 60 F.4th 1008, 1017 (6th Cir. 2023).

Sierra Club and its members meet these requirements for all three EPA actions challenged here. Sierra Club's organizational purposes include protecting public health and the environment from air pollution. *See* Declaration of Andrew Sarpolis ("Sarpolis Decl.") ¶¶ 2-5 (SA at 29-30). Sierra Club's members live, breathe, and recreate outdoors in the area that EPA redesignated from nonattainment to attainment and for which it granted a Clean Data Determination based on its Exceptional Events Approval. *See id.* ¶ 7 (SA at 30) (noting more than 7,000 members living in the seven-county area); Decl. of Martin Habalewsky (SA

at 24-26); Leonard Decl. (SA at 1-4); Declaration of Robert Shobe (SA at 20-23). Sierra Club members also live near the East 7 Mile monitor in Detroit, which has measured some of the area's highest ozone concentrations, including those days ignored by EPA in granting Michigan's request to consider them exceptional events. *See, e.g.*, Shobe Decl. ¶4 (SA at 20). Individual members have health problems exacerbated by high levels of ozone, including asthma, and face other harms resulting from high ozone levels, and from ozone precursor pollution. *See* Leonard Decl. ¶¶11-14 (SA at 2-3); Habalewsky Decl. ¶¶6-7, 9-12 (SA at 24-25, 25-26); Shobe Decl. ¶¶13-16 (SA at 22). High ozone levels cause members to curtail outdoor activities and members enjoy those activities less when concerned about health harms from air pollution. These harms caused by a risk of higher ozone levels are concrete and imminent. *Clean Wisconsin v. EPA*, 964 F.3d 1145, 1156-57 (D.C. Cir. 2020). "More ozone is more ozone, and there is no 'threshold concentration below which' ground-level ozone is 'known to be harmless." *Id.* at 1158 (citing *Am. Trucking Ass'ns, Inc. v. EPA,* 283 F.3d 355, 360 (D.C. Cir. 2002); NAAQS for Ozone, 62 Fed. Reg. 38,856, 38,863 (July 18, 1997)).

Sierra Club members' injuries are traceable to the EPA actions because each action here pauses or eliminates steps that the state would otherwise need to take to reduce levels of VOC and NOx pollution, leading in turn to higher concentrations of ozone in the air these members breathe and related harms. *See supra* at 18, 23-

26. For example, Michigan recently issued RACT rules to reduce VOC pollution from petroleum refineries, vehicle coating operations, asphalt mixers, gasoline loading systems, and other existing sources of VOCs in the state's ozone nonattainment areas.[9] Sierra Club members live near these types of sources and would benefit from the pollution reductions resulting from these regulations. *E.g.*, Leonard Decl. ¶¶5-9 (SA at 1-2); Shobe Decl. ¶6 (SA at 20); Habalewsky Decl. ¶9 (SA at 25). Because EPA redesignated the southeast Michigan area to attainment, however, Michigan issued a "variance" to prevent enforcement of these requirements in those seven counties. Habalewsky Decl., Ex. 1 (SA at 27). As another example, whereas new major sources of VOCs or NOx proposed for a nonattainment area must meet particularly rigorous permitting requirements, such as offsetting the new proposed emissions with decreases at other facilities in the area, such requirements do not apply in an attainment area. *See* Michigan Nonattainment New Source Review Certification for the 2015 Ozone NAAQS, 88 Fed. Reg. 37,766, 37,767 (June 9, 2023) (applying to sources "in nonattainment areas"). "Put simply, an attainment designation amounts to a relaxation of regulatory requirements." *Clean Wisconsin*, 964 F.3d at 1157 (holding that EPA's designation of areas as attainment, rather than nonattainment, "increase[s] the

[9] Mich. Admin. Code R. 336.1601-336.1662, Part 6. Emission Limitations and Prohibitions – Existing Sources of Volatile Organic Compound Emissions (effective April 18, 2023).

likelihood that Environmental Petitioners' members will experience ozone-related injuries."). *Sierra Club*, 793 F.3d at 663 ("[M]any courts have apparently found it so obvious that redesignation would lead to higher emissions that they did not even need to discuss the standing of environmental litigants.").

The injuries stemming from the Redesignation are also traceable to the Exceptional Event Approval and resulting Clean Data Determination, because the Act forbade redesignation without a finding of *continuing* attainment as of 2022 – a finding that would not be possible without those two actions. *See* 42 U.S.C. §7407(d)(3)(E)(i); 88 Fed. Reg. at 32,602 [App. __] (relying on finding in Clean Data Determination and Exceptional Event Approval rulemaking that the area "continued to attain the standard for the 2020-22 period," although the state's redesignation request was based on the 2019-21 period); *see also infra* at 58-59. And the Clean Data Determination itself injures Sierra Club members by suspending the state's obligation to adopt various measures required of nonattainment areas and intended to help bring ozone levels down to safer levels. 40 C.F.R. § 51.1318. For example, a Clean Data Determination suspends reasonable further progress plans detailing how specified emission reductions will be achieved. *Id.*; 42 U.S.C. §§ 7501(1), 7502(c)(2). EPA's accompanying Redesignation eliminated those requirements (and others); but, the Clean Data Determination is a distinct source of injury to Sierra Club members because it

suspends those requirements even if Sierra Club is successful in obtaining vacatur of the Redesignation.

For similar reasons, vacatur of any of EPA's three actions is likely to redress Sierra Club members' injuries. *See Sierra Club*, 60 F.4th at 1017. ("These two requirements of standing [(traceability and redressibility)] often run together and we analyze them in tandem.") (internal quotation omitted). Vacating the Redesignation would redress harms because the state would need to bring ozone levels down with more stringent pollution control measures, and would need to do so by a specified deadline. 42 U.S.C. § 7502(a)(2)(A). Sierra Club members would benefit from the state having to adopt (or return to enforcing) emissions limits representing RACT. *See supra* at 38; Habalewsky Decl., Ex. 1 (SA at 27-28). The stricter requirements on new proposed sources in nonattainment areas would again apply to the Detroit area. *See* 88 Fed. Reg. at 37,767; Mich. Admin. Code R. 336.2901-336.2908 (2019) ("New Source Review for Major Sources Impacting Nonattainment Areas").

Vacating the Clean Data Determination or the Exceptional Event Approval would require vacatur of the Redesignation; as discussed above, the Redesignation has no factual or legal basis without them. Vacating the Clean Data Determination or the Exceptional Event Approval it relies on would also bring Sierra Club members relief by reinstating the full suite of regulatory requirements intended to

reduce ozone levels. As Sierra Club's members satisfy the requirements for individual standing, Sierra Club has associational standing on their behalf. *Sierra Club*, 793 F.3d at 661.

II. EPA's Approval of Michigan's Exceptional Event Request Was Arbitrary and Capricious Because It Lacked a Rational Basis to Conclude that High Ozone Pollution on June 24 and 25, 2022 Was Due to Wildfire Smoke

The Clean Air Act required EPA to determine that Michigan's exceptional event demonstration established a clear causal relationship between wildfire emissions and an exceedance of the ozone standard at the East 7 Mile ozone monitor. 42 U.S.C. § 7619(b)(3)(B)(ii). While EPA has noted that evidentiary support required to meet the clear causal relationship criterion will vary on a case-by-case basis, it has also provided guidance that establishes a three-tier system in order to instruct states about the general types of evidence necessary to meet the criterion based on the intensity of the wildfire and its capability of producing pollution, as well as the distance between the wildfire and the impacted monitor. ARC-62 at 3-4 [App. __]. Tier 1 analyses, which require the least amount of evidentiary support, are appropriate for fires located in close proximity to the impacted monitor. *Id.* at 4 [App. __]. Tier 3 analyses are required when the relationship between the wildfire and the impacted monitor is at the most tenuous and thus requires the highest degree of evidentiary support to satisfy the clear causal relationship criterion. *Id.* at 12 [App. __].

Since the wildfire that supposedly caused the exceedances at the East 7 Mile monitor on June 24 and 25, 2022 was approximately 1,430 miles away, EPA guidance instructed Michigan to submit a Tier 3 analysis. A Tier 3 analysis is generally required to include: evidence that wildfire emissions were transported to the monitor(s); evidence that fire emissions affected the monitor, and; evidence that fire emissions caused the ozone exceedance. *Id.* at 26 [App. __]. At the direction of this guidance, Michigan submitted smoke maps and smoke trajectory models as evidence that wildfire emissions were transported to the area of the monitor, a pollutant corroboration analysis based on coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide, and brown carbon air quality data as evidence that fire emissions affected the monitor, and a matching day analysis as evidence that wildfire emissions caused the ozone exceedance. *See generally* ARC-02 [App. __]. At issue in this case are the pollutant corroboration analysis and the matching day analysis. *Id.* at 39-41, 51-52, 53-59 [App. __, __, __].

As discussed below, EPA's Exceptional Event Approval relied on arbitrary and capricious determinations. Since each of the following categories of evidence is considered necessary by EPA guidance to establish a "clear causal relationship" between the wildfire smoke and the ozone exceedances at the East 7 Mile monitor on both June 24 and 25 2022, a finding that EPA's determination based on *any* of

the categories of evidence for the high ozone levels on *either* June 24 or 25 was arbitrary and capricious is sufficient to render the Exceptional Event Approval arbitrary and capricious as a whole, and, consequently, the Clean Data Determination and the Redesignation as well.

A. EPA's Determination that Fire Emissions Affected the East 7 Mile Monitor Based on Michigan's Pollutant Corroboration Analysis Was Arbitrary and Capricious

When wildfire smoke is present in an area, it typically causes elevated concentrations of a number of air pollutants, notably soot (also known as "fine particulate matter" or "$PM_{2.5}$") from the wildfire ash and carbon monoxide ("CO") from combustion. *See* ARC-62 at 22 [App. __]. As such, EPA guidance instructs exceptional event demonstrations to include a pollutant corroboration analysis, which consists of identifying whether air quality monitors in the area measured elevated levels of the pollutants that are typically associated with wildfire smoke. *Id.* at 14-15 [App. __]. Since this analysis relies on actual, on-the-ground monitoring data it helps to alleviate some of the uncertainty inherent in other pieces of evidence, such as satellite imagery and meteorological modelling that are generally used to demonstrate wildfire emissions were transported to the monitor. As explained by EPA, "[b]ecause plume elevation is not directly available from simple satellite imagery, plume imagery alone does not conclusively show that wildfire emissions transported aloft reached a ground-level monitor. If plume

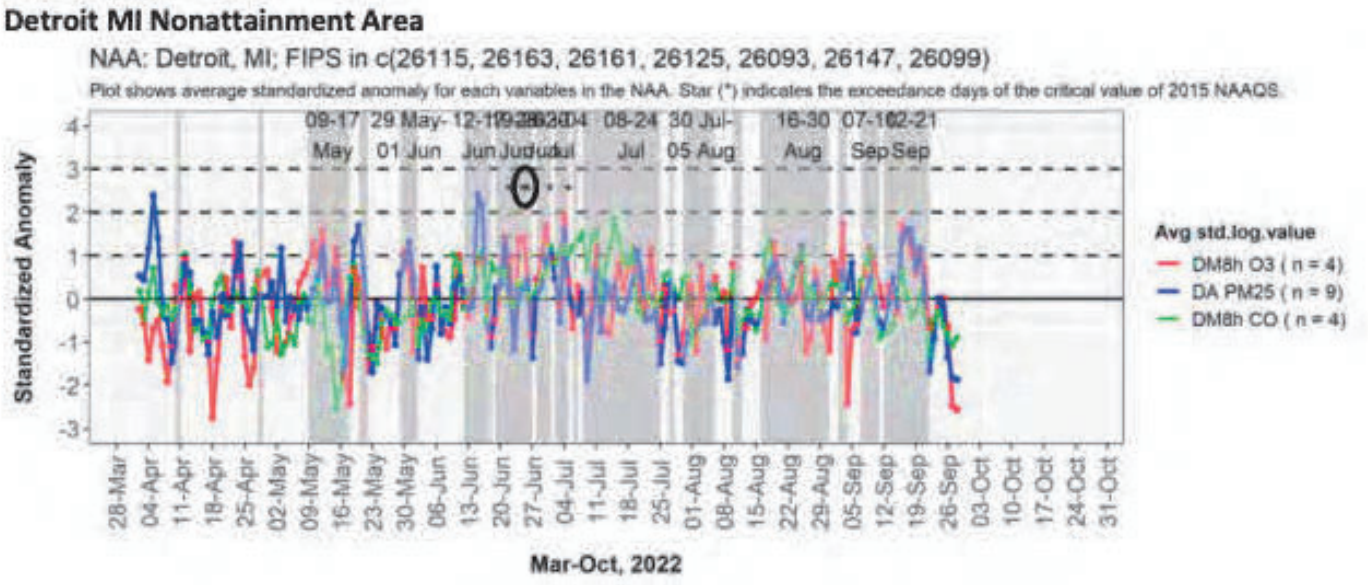
arrival at a given location coincides with elevation of wildfire plume components (such as $PM_{2.5}$, CO or organic and elemental carbon), those two pieces of evidence combined can show that smoke was transported from the event location to the monitor with elevated [ozone] concentrations." *Id.* at 14-15 [App. __]. In this case, EPA not only arbitrarily determined that Michigan's evidence demonstrated that wildfire emissions impacted the East 7 Mile monitor, it ignored evidence to the contrary.

1. EPA Ignored Evidence That Wildfire Smoke Did Not Meaningfully Affect Ozone Concentrations the East 7 Mile Monitor

Michigan utilized a screening analysis developed by the Lake Michigan Air Directors Consortium ("LADCO") to find evidence from local monitoring data that smoke affected the East 7 Mile Monitor. *See* ARC-02 at 51-52 [App. __]. This analysis looks at associations between ozone, $PM_{2.5}$, and carbon monoxide during the exceptional event period to measure the standard deviation of each pollutant above expected levels based on historical data. *Id.* If there are two or more pollutants with a standard deviation above one, it may indicate that concentrations for at least two pollutants commonly associated with wildfire smoke were higher than normal which is evidence that wildfire smoke was present in the area. *Id.* As illustrated by Figure 1 below, the standard deviation for both $PM_{2.5}$ (the blue line) and carbon monoxide (the green line) during the exceptional event period (denoted

by the circle) was below one, indicating that concentrations of these pollutants did not significantly deviate from historical concentrations on the exceptional event days in question. *Id.* at 52 [App. __].

Figure 1



The lack of any significant deviations of $PM_{2.5}$ and CO pollution during the exceptional event days in question is evidence that wildfire smoke *did not* affect the East 7 Mile monitor. In fact, later in its exceptional event demonstration, Michigan relied on another LADCO analysis for other days as evidence that wildfire smoke *did not* affect the East 7 Mile monitor as a part of its matching day analysis. *Id.* at 58-59 [App. __]; *infra* at 54. Put another way, Michigan and EPA ignored the LADCO analysis for the exceptional event days when it did not support their conclusion that wildfire smoke affected the East 7 Mile monitor during the exceptional event days but later relied on LADCO analyses as evidence

that wildfire smoke did not affect the East 7 Mile monitor during the days included in the matching day analysis.

The fact that the LADCO analysis for the exceptional event days did not support a conclusion that wildfire smoke affected the East 7 Mile monitor was not lost on Michigan. In an email, a meteorologist with EGLE who worked on the exceptional event demonstration noted that the LADCO analysis flagged two days at the East 7 Mile monitor for a potential exceptional event demonstration based on high levels of $PM_{2.5}$ and carbon monoxide but that those days "'don't align with the high [ozone] days at East 7 Mile' including June 24 and 25, 2022." ARC-31, Ex. 20 [App. __].

Rather than address this the evidence that $PM_{2.5}$ and carbon monoxide were not unusually high on the days Michigan claimed wildfire smoke was in the area, EPA ignored it, noting that it was "one piece of evidence to identify the potential for smoke influences on surface air quality conditions…" and that it instead relied on brown carbon air quality as evidence that wildfire smoke affected the East 7 Mile monitor. 88 Fed. Reg. at 32,589 [App. __]. As discussed below, EPA's consideration of brown carbon data was also arbitrary and capricious. *Infra* at 48-51. Additionally, the LADCO analysis for the exceptional event days was not just one piece of evidence, it's the exact type of evidence that EPA *directs* states to collect to investigate the presence of wildfire smoke, and it *contradicts* EPA's

conclusion. ARC-62 at 14 [App. __]. Under the arbitrary and capricious standard, the agency cannot ignore evidence contradicting its position. It must examine the relevant data and articulate a satisfactory explanation for its action, including a rational connection between the facts and the choices made. *Motor Vehicle Mfrs. Ass'n,* 463 U.S. at 43 (citing *Burlington Truck Lines, Inc. v. United States,* 371 U.S. 156, 168 (1962)); *Butte Cty. v. Hogen,* 613 F.3d 190, 194 (D.C. Cir. 2010). When an agency "fails to examine relevant evidence or articulate a satisfactory explanation for a decision," then its decision is arbitrary and capricious. *Bangura v. Hansen,* 434 F.3d 487, 502 (6th Cir. 2006). A conclusory explanation for matters involving a central factual dispute where there is considerable evidence in conflict does not suffice to meet the deferential standards of review. *Int'l Union, United Mine Workers v. Mine Safety & Health Admin.,* 626 F.3d 84, 94 (D.C. Cir. 2010). In this instance, since there was factual evidence that contradicted EPA's determination that wildfire smoke affected the East 7 Mile monitor during the exceptional event days, it must at the very least articulate "a rational connection between the facts found and the choice made." *Hosseini v. Nielsen,* 911 F.3d 366, 371 (6th Cir. 2018). Here, EPA never explained why pollutants its guidance identifies as common indicators of wildfire smoke – $PM_{2.5}$ and carbon monoxide – were not elevated above normal concentrations at any point during the exceptional event.

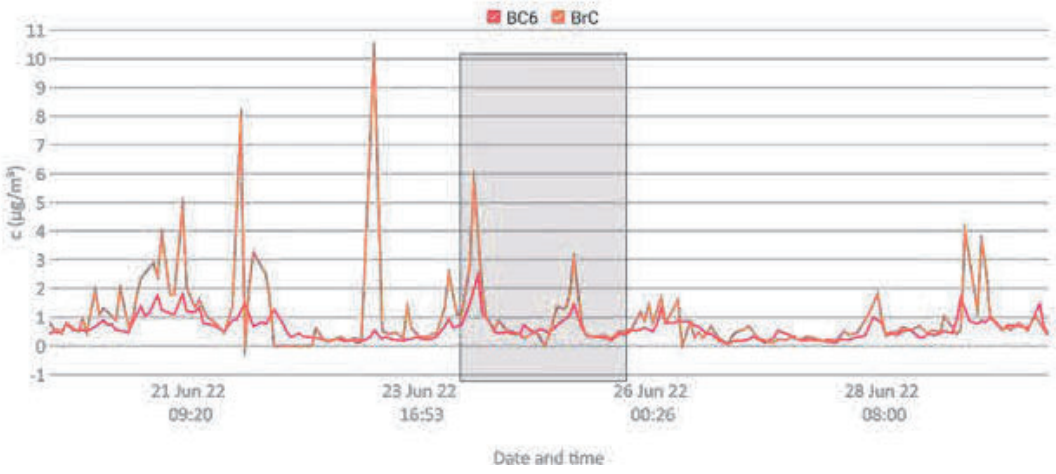
2. Local PM10 and Brown Carbon Data Does Not Support EPA's Conclusion that Wildfire Smoke was Present at the East 7 Mile Monitor Throughout the Exceptional Event

In addition to the LADCO analysis, Michigan referred to the presence of two other pollutants as evidence that wildfire smoke affected the East 7 Mile monitor – PM_{10} and brown carbon. "PM_{10}" refers to coarse particulate matter that is less than 10 microns in diameter, a larger cutoff than for $PM_{2.5}$, and so includes not only soot but also larger particles such as road and construction dust. In its exceptional event demonstration, EGLE claimed elevated concentrations of PM_{10} pollution were evidence of wildfire smoke being present in the area. However, EPA has cautioned against relying on PM_{10} concentrations as an indicator of smoke because "PM_{10} generally tends to 'fall' to ground level relatively quickly in the vicinity of the event and, in our experience, is not usually subject to long range transport." ARC-31, Ex. 16 at 20 [App. __]. In its final rule, EPA acknowledged that wildfire smoke "would not typically have an impact" on local PM_{10} levels when smoke travels long distances and seemingly disregarded this information in issuing its exceptional event determination. 88 Fed. Reg. at 32,589 [App. __].

EPA instead cited brown carbon concentrations measured by an air quality monitor in Dearborn, Michigan. Brown carbon sources include the combustion of biomass, biofuels, and fossil fuels. According to EGLE and EPA, brown carbon pollution peaked on June 23, 2023 – a day *before* the two-day exceptional event.

ARC-02 at 9 [App. __]; 88 Fed. Reg. at 32,586 [App. __]. While the administrative record does not include a detailed accounting of brown carbon data collected by the Dearborn monitor, it does include an imprecise graph – provided below as Figure 2 – that appears to show the hourly average of brown carbon pollution spiking on June 23 and then dropping sharply either on or before June 24 to normal levels with another small, short-term spike and corresponding drop on what appears to be June 25. ARC-02 at 41 [App. __]. Notably, none of these spikes during the supposed exceptional event period appear to be out of the ordinary – higher spikes in brown carbon concentration are apparent in the few days before the exceptional event days.

Figure 2



EPA states that spikes in brown carbon data "leading up to and including June 24 and 25[,] 2022, show there were elevated levels of woodsmoke in the air mass in the Detroit area." 88 Fed. Reg. at 32,586 [App. __]. There are two

problems with this assertion. First, the graph of data included in the record (while imprecise) contradicts that assertion; it appears to illustrate a short-term spike in the 1-hour average brown carbon concentration on June 23, no short-term spike in brown carbon concentrations on June 24, and a relatively small, short-term spike in the 1-hour average brown carbon concentrations on June 25. This does not reasonably support the assertion that brown carbon pollution was elevated throughout the exceptional event period – which EPA claimed to have occurred and which EPA was required to find in order to support its exceptional event determination for both days. Second, EPA has not explained how small, short-term spikes that occurred sporadically before the exceptional event and during one of the two exceptional event days in question are evidence that woodsmoke was present in the area and affected the East 7 Mile monitor during all of June 24 and 25. For instance, EPA never places the brown carbon data during the exceptional event in its historical context to demonstrate that brown carbon concentrations during the exceptional event were abnormally high and thus evidence of wildfire smoke being present in the Detroit area, which EPA guidance notes is necessary. *See* ARC-62 at 22 [App. __] (noting that pollutant corroboration analyses should identify pollutants "that have increases or differences in typical behavior" to demonstrate wildfire emissions affected a monitor). EPA also never explains how Figure 2 – which illustrates brown carbon data being at rather low levels for most

of the exceptional event period – is evidence that wildfire smoke affected the East 7 Mile monitor. In fact, later in its exceptional event demonstration, Michigan relied on similar brown carbon data – which showed brown carbon concentrations generally being below 1 ug/m3 with short-term spikes - as evidence that wildfire smoke *did not* impact the East 7 Mile monitor on other days utilized in its matching day analysis. *See* ARC-02 at 57-58 [App. __]. If brown carbon is an indicator of wildfire smoke, elevated concentrations should have been present during the entirety of the exceptional event period.

In short, none of the air quality data gathered at the East 7 Mile monitor or at the Dearborn, Michigan monitor demonstrate that there were elevated levels of pollutants commonly associated with wildfire smoke during the entirety of the exceptional event period and thus the data fails to show the wildfire emissions affected the East 7 Mile monitor. Michigan and the EPA relied on this analysis to corroborate less reliable evidence, such as the smoke trajectory maps commonly associated with a Tier 1 analysis, and to provide evidence to establish that wildfire smoke affected the East 7 Mile monitor. *See Bahr v. Regan,* 6 F.4th 1059, 1078 (9th Cir. 2021) (upholding exceptional events determination only where monitoring data showed "unnatural increases in both ozone and its precursor compounds" for the duration of the exceptional event period). Both EGLE and EPA first examined the pollutants commonly associated with wildfire smoke –

$PM_{2.5}$ and carbon monoxide. Neither supported a finding that wildfire smoke was present in the area during the exceptional event period. EPA instead rested its decision on brown carbon data; but this evidence showed brown carbon pollution peaking *before* the exceptional event and remaining at low levels for the majority of the exceptional event. EPA has not established a clear, causal relationship between wildfire smoke and the high ozone events at the East 7 Mile monitor that it excluded as exceptional events. EPA was required provide some documentary support and to articulate a rational connection between the facts found and its decision to conclude that wildfire smoke affected the East 7 Mile monitor. *Hosseini v. Nielsen,* 911 F.3d 366, 371 (6th Cir. 2018). In this instance, EPA pointed to a pollutant corroboration analysis as support for its determination that wildfire smoke affected the East 7 Mile monitor. However, that analysis does not support that decision nor did EPA articulate a rational connection between the facts and its ultimate decision.

B. EPA's Determination that Fire Emissions Caused the Ozone Exceedances at the East 7 Mile Monitor was Arbitrary and Capricious Because It Failed to Assess Whether EGLE Properly Omitted Several Days From its Matching Day Analysis

Even if EPA could show that wildfire smoke affected the East 7 Mile monitor, its decision would still be arbitrary because the record lacks any evidence connecting that smoke to the ozone exceedance. *See* ARC-62 at 26 [App. __]. To show that wildfire emissions caused the ozone exceedance, Michigan's exceptional

event demonstration provided a matching day analysis which analyzed ozone concentrations on previous days with similar meteorological conditions to those that existed during the exceptional event. ARC-02 at 53-59 [App. __]. Since ozone formation is dependent on meteorology, a matching day analysis seeks to utilize meteorological variables that are associated with ozone formation to identify whether there are significant differences in ozone concentrations among days with similar weather conditions. ARC-62 at 27 [App. __]. If ozone concentrations are high on days with meteorological conditions that have not typically been associated with elevated ozone in the past, it may be evidence that non-typical sources, such as wildfire smoke, influenced ozone pollution. *Id.* EPA notes that since high ozone days "may be relatively rare, air agencies should examine several years of data from similar meteorology…." *Id*. Given that high ozone days are rare, excluding data from a matching day analysis can significantly skew the results.

That is exactly what Michigan did with its exceptional event demonstration. Michigan noted that it omitted "several days" that had similar meteorological conditions to June 24 and 25 2022 from its matching day analysis but that also experienced "potential smoke influence." ARC-02 at 53 [App. __]. The state's description suggests that these were days that had similar meteorological conditions to those that existed on June 24 and 25 as well as high levels of ozone pollution. *See id.* If those days had been included in the matching day analysis, the

analysis might have suggested that ozone levels were higher on June 24 and 25 simply due to local meteorological conditions and the many local sources of pollution, not because of wildfire smoke. Ultimately, Michigan only included four days with similar meteorological conditions to June 24 and 25 in its matching day analysis. *Id.* at 56 [App. __]. It also provided local brown carbon data and a LADCO analysis for each of the four days to demonstrate that ozone concentrations on the matching days were not influenced by wildfire smoke. *Id.* at 57-59 [App. __]. At no point in its exceptional event demonstration did Michigan specify which days it had excluded due to potential smoke impacts. When the Sierra Club noted this in its comments, rather than provide its analysis so that the petitioners could provide detailed comments, Michigan responded that its analysis "could be duplicated" by the petitioners. *Id.* at 87 (Response to Comments) [App. __].

Rather than assess whether Michigan properly excluded these days from its matching day analysis, EPA blindly accepted Michigan's conclusion that the exclusion of these days was proper due to "potential smoke influence." *Id.* at 53 [App. __]. When the petitioners noted Michigan had not previously submitted an exceptional event demonstration to support EGLE's determination that wildfire smoke had impacted the East 7 Mile monitor on "several days," EPA responded by stating Michigan analyzed "smoke influence" by utilizing smoke maps and

HYSPLIT back trajectories. 88 Fed. Reg. at 32,590 [App. __]. However, none of this evidence was provided in the administrative record. Instead, all that Michigan provided was brown carbon data, LADCO analyses, weather maps, and HYSPLIT back trajectories to support its conclusion that smoke did not affect the East 7 Mile monitor on the four matching days, but provided no evidence to support the decision to omit several days from the matching day analysis due to potential smoke influence. ARC-02, Appendix A at 57-59 [App. __]

A court reviewing an agency decision under the APA must determine "whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did." *Occidental Eng'g Co. v. Immigr. & Naturalization Serv.,* 753 F.2d 766, 769 (9th Cir. 1985). Any agency decision is arbitrary and capricious if the agency fails to examine relevant evidence. *Bangura,* 434 F.3d at 502 (citing *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 23-43). Here, there is simply no evidence in the administrative record supporting EPA's decision to omit "several days" from the matching day analysis due to potential smoke impacts. While the Ninth Circuit has found that a proper matching day analysis can be probative evidence that supports the finding of a clear causal relationship between wildfire smoke and exceedances at the East 7 Mile monitor, such an analysis must be properly supported by information in the administrative record. *See Bahr,* 6 F.4th at 1079-80. EPA's analysis is not.

C. EPA's Determination that Wildfire Emissions Caused the Ozone Exceedance at the East 7 Mile Monitor is Unlawful Because It Did Not Analyze Local Conditions' Contribution to High Ozone Levels on the Exceptional Event Days

In its final rule, EPA acknowledged that local weather conditions and pollution sources could be responsible for the high ozone concentrations at the East 7 Mile monitor. 88 Fed. Reg. at 32,590 [App. __]. Sierra Club noted in its comments that significant sources of ozone precursor pollutants recently began operating near the East 7 Mile monitor that could have influenced ozone concentrations. ARC-31 at 31 [App. __]. The comments also noted that many states that had previously submitted exceptional event requests claiming wildfire smoke had affected air quality in urban areas had included some type of analysis to differentiate the contributions of local pollution sources to high ozone concentrations from wildfire smoke. *Id.* at 29-30 [App. __].

EPA guidance instructs states submitting a Tier 3 analysis to include evidence that wildfire smoke caused the ozone exceedances during the exceptional event. ARC-62 at 25-30 [App. __]. It also provides three generally acceptable types of analysis capable of making this demonstration, including a matching day analysis. *Id.* While Michigan chose to provide a matching day analysis to demonstrate that fire emissions caused the ozone exceedance during the exceptional event, as discussed above, that analysis lacked sufficient evidentiary support. *See supra* at 52-55. However, even if it was adequately supported, EPA

guidance clearly notes that the evidentiary support required for an exceptional event demonstration will vary on a case-by-case basis and will be dependent in part on the number of local pollution sources that are present in the area that also affected ozone pollution at an air quality monitor. ARC-62 at 3 [App. __]. EPA guidance also provides that photochemical models can "differentiate the contributions from specific sources on model predicted [ozone]…concentrations" and that this evidence can be used to demonstrate a clear causal relationship between wildfire smoke and ozone exceedances. *Id.* at 29 [App. __].

Rather than attempt to disentangle and differentiate the impact of local weather conditions and pollution sources from wildfire smoke and their respective impacts on ozone pollution at the East 7 Mile monitor, EPA simply noted that neither the exceptional event rule nor EPA guidance requires states to perform a photochemical analysis or any other type of analysis capable of differentiating the impact of local weather condition and pollution sources from wildfire smoke on ozone pollution. While it is true this type of analysis is not mandated by law or guidance, the Act still requires EPA to find a "clear causal relationship…between the measured exceedances of a national ambient air quality standard and the exceptional event to demonstrate that the exceptional event caused a specific air pollution concentration at a particular air quality monitoring location." 42 U.S.C. § 7619(b)(3)(B)(ii). In situations such as this, where EPA has acknowledged local

weather and pollution conditions potentially contributed to high ozone concentrations during the exceptional event, such an analysis is required to satisfy the Act's requirement. At the very least, EPA was obligated to provide a satisfactory explanation for its decision to not analyze local conditions and their contribution to the high ozone levels during the exceptional event, particularly since many states have done so as a part of past exceptional event demonstrations. *Bangura,* 434 F.3d at 502. A conclusory explanation that such an analysis is not always required by statute or guidance is not enough to satisfy even the deferential arbitrary and capricious standard. *Int'l Union, United Mine Workers,* 626 F.3d at 94.

For all of the above reasons, the Court must vacate the Exceptional Event Approval and the Clean Data Determination that relied upon that approval to find that the area had attained the standard. *See* 88 Fed. Reg. at 32,584 [App. __].

III. EPA's Redesignation to Attainment Was Unlawful Because EPA Lacked a Rational Basis to Conclude that the Area Was Attaining the Air Quality Standard in Light of 2022 Data

EPA's unlawful decision to grant Michigan's exceptional events request renders its decision to redesignate the Detroit area to attainment unlawful as well. This is because § 7407(d)(3)(E)(i) requires EPA to determine that an area "has attained" the standard before it can redesignate the area, a requirement that both EPA and this Court have taken to mean that "the attainment *must continue until the*

date of redesignation." *Commonwealth of Ky. v. EPA*, 165 F.3d 26 (6th Cir. 1998) (unpublished), 1998 WL 661138, at *3 (emphasis added); *accord Sw. Pa. Growth All.*, 121 F.3d at 113 (holding that EPA may not redesignate nonattainment area to attainment status if EPA knows that area is not meeting the NAAQS).[10] In issuing the final Redesignation in May 2023, EPA found that "the area has continued to attain the standard" subsequent to the 2019-21 period, and relied upon 2022 data in making that determination. 88 Fed. Reg. at 32,613 [App. __]. As monitoring data showed enough exceedances to push the area out of attainment in 2022, however, EPA could *only* make a finding of continued attainment by relying on the Exceptional Events Approval that allowed the agency to toss out two days measuring exceedances. As a result, if the Court agrees that the Exceptional Events Approval was irrational, then the Court must also find that EPA had no basis for finding the area "has attained" the standard, and need not evaluate the remainder of the flaws in EPA's Redesignation. 42 U.S.C. § 7407(d)(3)(E)(i).

[10] *See also, e.g.*, Final Disapproval of the Request to Redesignate the Kentucky Portion of the Cincinnati-Northern Kentucky Moderate Ozone Nonattainment Area to Attainment and the Associated Maintenance Plan, 61 Fed. Reg. 50,718, 50,718-19 (Sept. 27, 1996).

IV. EPA's Redesignation Was Unlawful Because the State Has Not Met Its Obligation to Adopt RACT Measures to Reduce Ozone Precursor Emissions in the Detroit Nonattainment Area, a "Requirement Applicable to the Area" That is a Prerequisite for Redesignation

Even if the Court finds that EPA reasonably determined that the area met the ozone standard in 2022, EPA failed to satisfy a different prerequisite for redesignation. EPA "may not promulgate a redesignation of a nonattainment area . . . to attainment unless. . . the State containing such area *has met all requirements applicable to the area* under section 7410 of [Title I of the Act] and part D." *Id.* § 7407(d)(3)(E)(v) (emphasis added). When EPA issued the Redesignation in May 2023, the "requirements applicable to the area" included those for a Moderate ozone nonattainment area. 88 Fed. Reg. at 6,634 (making Moderate area requirements effective Mar. 1, 2023). For Moderate areas, the ozone provisions in subpart 2 of part D require that the state "shall submit a revision to the applicable implementation plan to include provisions to require the implementation of [RACT]" for certain sources of VOC pollution and for major sources of NOx. 42 U.S.C. § 7511a(b)(2); 40 C.F.R. § 51.1312(a)(1).[11] As discussed above, Congress

[11] In addition, under § 7502(c)(1), Michigan was required to implement all reasonably available control measures ("RACM") for these pollutants. *See also* 40 C.F.R. § 51.1313; 42 U.S.C. § 7511a(f). For ozone plans, RACM consists of control measures on sources of ozone precursors, either inside or outside the nonattainment area, as necessary to demonstrate attainment. *See* 40 C.F.R. § 51.1312(c). A valid Clean Data Determination pauses the RACM requirement, but not the RACT requirement. 40 C.F.R. § 51.1318.

added RACT requirements to the Act as part of a new regime to constrain EPA discretion, whereby increasingly strict tiers of regulation are triggered by a state's failure to meet its attainment deadline. *S. Coast Air Quality Mgmt. Dist.*, 472 F.3d at 886-87. The RACT requirements ensure that states take concrete measures to secure emission reductions from culprit polluters– reductions that will not only achieve attainment but ensure that such air quality improvements endure. 42 U.S.C. § 7511a(b)(2); *id.* § 7505a(d) (maintenance plan provisions must include measures already in the state plan, among other requirements).

Sierra Club commented, and EPA did not dispute, that Michigan has *not* satisfied the RACT requirements for a Moderate ozone nonattainment area.[12] EPA acknowledged that the "RACT . . . plan[] became due March 1, 2023." 88 Fed. Reg. at 32,611 [App. __]; *see also id.* at 32,598. EPA approved the redesignation nonetheless, claiming it could exempt the state from this prerequisite because the RACT plan came due after the state originally submitted its request for redesignation. *Id.* at 32,611-12. EPA thus seeks to redefine "all requirements applicable to the area" as *only* those requirements that *were* applicable when the

[12] Sierra Club raised this issue during the administrative proceeding and EPA addressed it. *See* Sierra Club Supplemental Comments, ARR-48 at 3-4; 88 Fed. Reg. at 32,610-12. *See NRDC, Inc. v. EPA*, 824 F.2d 1146, 1150–51 (D.C. Cir. 1987) (exhaustion will not bar a claim under the Administrative Procedures Act when "the agency had the opportunity to consider the very argument pressed by the petitioner on judicial review" (internal quotations omitted)).

state submitted its request. The plain language, context, and structure of the Act all foreclose that interpretation. *See Chevron*, 467 U.S. at 834 n.9 (courts may not defer to an agency's statutory interpretation unless "exhaust[ing] all the 'traditional tools of construction" a court cannot determine the statute's meaning); *see also Sw. Airlines Co. v. Saxon*, 596 U.S. 450, 455 (2022) (reviewing context of statutory terms to confirm plain meaning). This Court has previously halted similar attempts by EPA to redesignate nonattainment areas without checking all the statutory boxes based on supposed ambiguity in the word "applicable," and the Court should do so again here. *Wall*, 265 F.3d at 440; *Sierra Club*, 793 F.3d at 669-70.

A. The Act's Plain Text Forecloses EPA's Interpretation of "Applicable to the Area"

1. "Applicable" Is Not Ambiguous as to Timing

EPA asserts that the supposed ambiguity of the term "applicable" in the phrase "all requirements applicable to the area" allows for EPA's "longstanding," "30-year interpretation" that the state's undisputed obligation to submit RACT provisions for the Detroit area was not "applicable" because Michigan had submitted its request for redesignation before the RACT provisions came due. 88 Fed. Reg. at 32,611-12 [App. __] (citing *inter alia* ARR-17 [Mem. from J. Calcagni, Procedures for Processing Requests to Redesignate Areas to Attainment] at 4-5 [App.__]). The age of EPA's submittal-date interpretation carries no weight, however, as the Court must still jettison it if it departs from the plain meaning of

the statute. *See, e.g.*, *Sierra Club v. EPA*, 21 F.4th 815, 819-23, 827-28 (D.C. Cir. 2021) (invalidating two of EPA's longstanding interpretations related to ozone plans, regarding "interprecursor trading" and contingency measures.).

That is the case here. The plain meaning of the statute, evident when the term "all requirements applicable" is read in context, refers to requirements applicable at the time of EPA's action, not a subset of requirements that "were applicable" at some prior date. *See, e.g.*, *Greenbaum v. EPA*, 370 F.3d 527, 535-36 (6th Cir. 2004) (in determining whether statutory text is ambiguous, the "words of a statute must be read in their context and with a view to their place in the overall statutory scheme") (quoting *Davis v. Mich. Dep't of Treasury*, 489 U.S. 803, 809 (1989)). As discussed below, in studying not only the provision at issue, but interlocking and adjacent provisions of the Act, along with this Court's precedent evaluating some of the very same provisions, there can be no question as to the statute's meaning.

First, by using the present perfect tense to describe requirements the state "has met," the provision "denotes past action with an abiding effect or continuing relevance," as opposed to "noncontinuing compliance." *Commonwealth of Ky.*, No. 96-4274, 1998 WL 661138, at *3; *see also, e.g., U.S. v. Jackson*, 480 F.3d 1014, 1018-19 (9th Cir. 2007) ("[O]ne would not refer in the present tense to something that had already happened"). In addition, the word "all" requires an expansive

reading. *See, e.g.*, *Knott v. McDonald's Corp.*, 147 F.3d 1065, 1067 (9th Cir. 1998) ("all" is not ambiguous, and "means all").

Congress's use of the present tense in each of the four requirements adjacent to § 7407(d)(3)(E)(v) is further evidence that Congress meant for EPA to evaluate a state's compliance with requirements applicable to the area at time of redesignation, not at the time of the request. *See, e.g.*, *Carr v. U.S.*, 560 U.S. 438, 449 (2010) (a "statute's undeviating use of the present tense" is a "striking indicator of its prospective orientation") (internal quotation and alteration omitted). For example, as discussed above, courts and EPA interpret the precondition that an area "has attained" the standard in prong (i), to require that the area *is* attaining based on the latest data on air quality at the time of redesignation. *Sw. Pa. Growth All.*, 121 F.3d at 113. Likewise, EPA reads the requirement that it "has fully approved" the "applicable implementation plan" in prong (ii) to mean that the plan *is* fully approved at the time of redesignation. ARR-17 at 3 ("The SIP for the area must be fully approved. … An area cannot be redesignated if" conditions other than full approval exist.). Yet in prong (v), EPA seeks to interpret "has met all requirements applicable. . ." as *not* requiring that the state *is* meeting requirements effective at the time of redesignation. While "the presumption of consistent usage" may "yield to context," *Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 320 (2014), there are no differences in context here that might permit EPA to impart different

meanings to these adjacent subparts. Had Congress meant for past conduct to satisfy some requirements, but not others, it "presumably would have varied the verb tenses to convey this meaning." *Carr*, 560 U.S. at 450. Moreover, each requirement here is part of the same section that Congress specifically added to the Act to ensure that EPA would rigorously evaluate states' requests for redesignation.

The statute's insistence on continuing compliance with the relevant nonattainment area requirements up through the date of redesignation is confirmed by 42 U.S.C. § 7505a. This section addresses the requirements for the maintenance plan a state must submit to accompany a redesignation request to EPA. As described above, maintenance plans are essential to the Act's public health protections because they assure that redesignated areas not only meet air quality standards at the time of redesignation, but will do so long-term. Submission of a maintenance plan is part and parcel with a redesignation request, and approval of the plan is one of the five requirements for redesignation. *See* 42 U.S.C. § 7407(d)(3)(E)(iv); ARR-02 (Redesignation Request) at 25-30 [App. __]. Section 7505a(c) is entitled "Nonattainment requirements applicable pending plan approval," and specifically addresses how the submission of a maintenance plan to EPA affects a state's compliance obligations: in short, it does not. Rather, "*until* [the maintenance plan] is approved and *an area is redesignated as attainment* for

any area designated as a nonattainment area, *the requirements of this part* [i.e., part D, which includes the Moderate nonattainment area requirements] *shall continue in force and effect* with respect to such area." 42 U.S.C. § 7505a(c) (emphasis added). In other words, the Moderate nonattainment area requirements – including the obligation to adopt RACT rules to limit ozone precursors– must "continue in force and effect" until an area is redesignated. *Id.*[13] EPA's interpretation directly bypasses this text by instead stopping the clock on the state's nonattainment obligations at the time the state submits its maintenance plan. In doing so, EPA eliminates the RACT requirement and with it the "force and effect" of the Act's Moderate area requirements and bump-up scheme. *Id.*

Well-established rules of statutory construction, confirmed by the plain language of § 7505a, thus demand that the Court read prong (v) as a continuing obligation evaluated at the time of redesignation.

[13] The Senate Report accompanying the bill containing the 1990 Amendments provides further evidence on this point, as it specifically clarifies that "the *pendency* of a State request for a redesignation to attainment" would have "*no effect* on the [State Implementation Plan] requirements for the area for which the redesignation is requested." Sen. Rep. No. 101-228,1990 U.S.C.C.A.N. 3385, at 3401 (1989) (emphasis added).

2. Sixth Circuit Precedent Instructs that "Applicable" Must Be Read in the Context of the RACT Provision Itself, Which Leaves No Room for Exceptions

By focusing on the term "applicable" alone to claim there is ambiguity as to whether the state must comply with requirements effective at the time of redesignation, EPA ignores Sixth Circuit precedent. This Court has twice held that EPA must not interpret the term "all requirements applicable to the area" in a vacuum. *Wall*, 265 F.3d at 440; *Sierra Club*, 793 F.3d at 669-70. Instead, EPA must consult the statutory text describing the requirement EPA is attempting find inapplicable. *Sierra Club*, 793 F.3d at 670 ("Instead [of considering only the language of 7407(d)..], … [the court] look[s] to *Wall*'s teachings on the type of language that does occur in the provisions directly under review.") In *Wall* and *Sierra Club*, the Court rejected two other EPA attempts to exclude RACT from "all requirements applicable to the area" in § 7407(d)(3)(E)(v). The Court found in each case that EPA's various excuses for providing states with leeway as to the RACT requirement could not overcome the unambiguous language of the RACT provision, which requires that a state's implementation plan under the Act "shall provide for the implementation of RACT measures. *Wall*, 265 F.3d at 440-42 (citing 7511a(b)(2)); *Sierra Club*, 793 F.3d at 669-70.

In *Wall*, EPA redesignated the Cincinnati ozone nonattainment area based on its acceptance of the state's "commitment to implement . . . RACT rules as

contingency measures in the maintenance plan" (*i.e.*, rules that may or may not come into play depending on the results of future air monitoring), instead of requiring RACT rules to be in place as a prerequisite to redesignation. 265 F.3d at 433. EPA had also claimed it need not enforce the RACT requirement because emission reductions from additional pollution control measures were not needed for attainment. *Id.* at 441. The Court rejected EPA's approach, holding that EPA could not exempt the state from the RACT requirement in § 7511a(b)(2) – the same requirement at play here – given the clear and mandatory nature of that subsection's language. *Id.* at 440. "Congress clearly intended that actual provisions to require implementation of RACT measures must be contained in SIPs submitted with respect to redesignation requests." *Id.* at 442; *see Sierra Club*, 793 F.3d at 669. However persuasive EPA's practical arguments, they did "not allow the EPA to take a position that conflicts with the clear intention of Congress." *Wall*, 265 F.3d at 441.

Wall noted, too, that EPA's failure to enforce the RACT requirement as a prerequisite to redesignation has consequences for how the state must address post-redesignation relapses in pollution that are inconsistent with the Act's provisions for quickly remedying those relapses. Maintenance plans must contain contingency measures "to assure that the State will promptly correct any violation of the standard . . . which occurs after the redesignation of the area as an attainment,"

including "a requirement that the State will implement" all relevant measures that "*were contained* in the [SIP] … before redesignation." *Id.* at 442 (quoting 42 U.S.C. § 7505a(d)) (emphasis in original). If EPA does not require a state to incorporate RACT measures into its SIP before redesignation, those measures also remain absent from the mandatory contingency measures for the area, making it less likely that future violations of the standard will be "promptly" corrected. 42 U.S.C. § 7505a(d).[14]

In *Sierra Club*, petitioners challenged EPA's redesignation of the Cincinnati-Hamilton metropolitan area from nonattainment to attainment for particulate pollution. 793 F.3d at 660-61. EPA again sought to interpret "applicable" requirements to exclude RACT measures based on EPA's practical concern that the emission reductions that would result from RACT were not necessary to achieve attainment. *Id.* at 668. The Court explicitly rejected EPA's argument that it must defer to the agency's interpretation of what requirements are "applicable." *Id.* at 670. Rather, the Court found the plain language of RACT/RACM requirements—that a State seeking redesignation "shall provide for

[14] While Michigan's maintenance plan includes RACT controls as "potential" contingency measures that "may" be implemented to address new NAAQS violations, these are not mandatory and, even if selected, need only be implemented 18 months after the measured violation or other triggering event. *See* 88 Fed. Reg. at 32,606 [App. __].

the implementation" of those measures—to be controlling, and to contradict EPA's interpretation. *Id.* at 669-70.

Wall and *Sierra Club* together instruct that EPA does not have discretion to interpret the word "applicable" in a manner that exempts the state from requirements that the Act makes mandatory. Here, the "provision[] directly under review," *Sierra Club,* 793 F.3d at 670, is again the RACT requirement for Moderate areas: "The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of" RACT for a set of specified sources. 42 U.S.C. § 7511a(b)(2). As in *Wall* and *Sierra Club,* the term "shall" is mandatory; as in those cases, the plain language contains no exception for early redesignation request submittals.

EPA's reason for seeking to excuse the state from the RACT requirement here may be different than in *Wall* and *Sierra Club*; but here, as in those cases, EPA's purported rationale would bypass requirements the statute makes mandatory. EPA's timing-based interpretation has no grounding in the text of the statute, and thus should be no more compelling a reason to depart from the unambiguous language requiring RACT than EPA's non-textual rationales were in those cases. "[T]here must be evidence that Congress meant something other than what it literally said before a court can depart from plain meaning." *Sierra Club v. EPA*, 294 F.3d 155, 161 (D.C. Cir. 2002) (quoting *Engine Mfrs. v. EPA,* 88 F.3d

1075, 1088 (D.C. Cir. 1996)). EPA lacks any evidence that it can properly define the term "requirements applicable to the area" in § 7407(d)(3)(E)(v) as "requirements that were applicable at the time of the state's request for redesignation" and thereby eliminate the requirement found in § 7511a(b)(2) and (f) that states must implement RACT for Moderate areas. Consistent with its precedent, this Court must therefore reject EPA's interpretation.

3. EPA is Wrong that This and Other Courts' Precedent Supports Its Approach.

EPA's final rule relies on *Wall* and *Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004), as supporting an interpretation of "applicable" that exempts Michigan from the RACT requirement. Neither case supports the agency's position. *Wall* did allow EPA to redesignate Cincinnati without the state having completed the Part D requirement to issue "transportation-conformity" requirements (rules to ensure transportation-related projects do not contribute to air quality violations). 265 F.3d at 431, 438-40. But the Court did not give EPA free-wheeling authority to define "applicable" without regard to statutory text and context; rather, *Wall* held that the language of the transportation-conformity requirements themselves and the overall structure of the Act supported EPA's conclusion that they were not applicable for purposes of redesignation, *Id.* at 438-39. There is a key distinction in those provisions that is not present in the RACT provision relevant here: EPA could be assured that the state would abide by the transportation-conformity requirements

after redesignation. This is because states need to comply with transportation-conformity requirements whether or not the area is in nonattainment. *Id*. (citing 42 U.S.C. § 7506(c)(1)(A)). Likewise, areas "must implement conformity under Federal rules if state rules are not yet approved." *Id.* at 433. Neither is true of the RACT requirement. RACT *only* applies while the area is in nonattainment, and there is no duplicate federal requirement. As such, EPA's failure to enforce the *prerequisite* nature of the state's RACT rules for redesignation is equivalent to exempting the state from a mandatory Clean Air Act requirement. Once redesignated, the RACT requirement evaporates. 88 Fed. Reg at 32,598 [App. __] ("[U]pon the effective date of this redesignation to attainment, nonattainment requirements, including Moderate area requirements, will no longer apply to the Detroit area."). In short, even though the *Wall* Court countenanced a limited exception to "applicable," there is no textual basis for extending this holding to the exception EPA seeks here, based merely on the timing of the state's submission of its redesignation request. *See also Sierra Club,* 793 F.3d at 670.

Nor does the Seventh Circuit case relied upon by EPA in its response to comments apply here. *See* 88 Fed. Reg. at 32,612 [App. __]. Applying the broadest view of *Chevron* deference, that court held that it was reasonable for EPA to interpret "applicable" requirements as only those measures necessary to achieve attainment. *Sierra Club*, 375 F.3d at 540-42. Where it was undisputed that the area

was already attaining, the Court found RACT was not required as a condition of redesignation. *Id.* at 541 ("As the reason to take additional steps was to achieve an adequate reduction in ozone, it would be odd to require them even when they turned out to be unnecessary."). EPA's description of the opinion as upholding the redesignation "based on the timing of submittal" is incorrect. 88 Fed. Reg. at 32,612 [App. __]. While the opinion does mention in dicta that the submittal came prior to the deadline for RACT requirements, 375 F.3d at 541, the court's holding is based upon EPA's rationale that additional controls would not help the area meet the standard. *See, e.g.*, *id.* at 540 (describing the crux of the issue as whether "applicable requirements" were "limited to those measures that have proved to be necessary to achieve compliance"). Here, EPA purports to provide an exception due to the timing of submittal, not attainment status and, in any event, the attainment status is very much in dispute. *See supra* at 41-58 and *infra* at 82-91.

There is no reason to expand the Seventh Circuit's approach to encompass the separate claims at issue here, especially where any effort to "exhaust" the "traditional tools of statutory construction" contradicts EPA's interpretation. *Chevron,* 467 U.S. at 834 n.9; *see Keeley*, 910 F.3d at 885-86. The Seventh Circuit's cursory declaration that the term "applicable" was ambiguous enough to permit EPA to limit it to the measures necessary to achieve attainment, *Sierra Club*, 375 F.3d at 541, does not demand that this Court read that term as

encompassing only those requirements applicable at the time of the redesignation request, especially where the text and context of the statute contradict that reading.[15]

4. Allowing Exceptions to the RACT Requirement by Countenancing EPA's Interpretation of "Applicable," Would Undermine the Act's Strict Deadlines for Complying with Moderate Area Requirements.

Beyond being incompatible with the text of the maintenance plan and RACT provisions, EPA's interpretation effectively nullifies the Act's attainment deadlines and the bump-up scheme that follows. The ozone provisions give a mandatory schedule for attainment deadlines and EPA's related determinations. 42 U.S.C. § 7511(a)(1) tbl. 1, (b)(2). "Those 'attainment deadlines' … are central to the regulatory scheme." *NRDC*, 777 F.3d at 466-67 (citation omitted). And the Act sets a strict schedule for the mandatory controls that are required for reclassified areas. *E.g.* 42 U.S.C. § 7511a(b)(2) (2 years for RACT submittal after reclassification to Moderate). Although the Detroit area's RACT plan was due in March 2023 as a result of its failure to attain by its 2021 deadline, EPA excused

[15] Furthermore, the Seventh Circuit's finding of ambiguity in the word "applicable" from the phrase "applicable implementation plan" ignores the statutory definition of the phrase. The Act defines the whole phrase "applicable implementation plan" as, in relevant part: "the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 7410 of this title" 42 U.S.C. § 7602(q). In other words, that phrase must be read as a whole, and it refers to the state's currently approved implementation plan.

Michigan from that deadline. 88 Fed. Reg. at 32,611 [App. __]. Such an extension of the effective date of a bump-up and its accompanying requirements is unauthorized by any statutory language, and similar attempts have been rejected by other courts.[16]

Courts have rejected EPA's attempts to implicitly extend the Act's deadlines when not explicitly permitted by the statutory text, including in the context of ozone area bump-ups. For example, in *Sierra Club v. EPA*, 311 F.3d 853 (7th Cir. 2002), the Court held that EPA could not delay the St. Louis ozone nonattainment area's bump-up to Serious despite EPA's belief that it would be unfair to impose more stringent requirements where out-of-state pollution was contributing to the city's nonattainment problem. The Court found that the "reading of the statute the EPA has adopted, and that it defends here, 'would subvert the plain meaning of the statute, making its mandatory language merely permissive.'" *Id.* at 858-59 ("[A] literal interpretation of deadlines and time limits is the only proper reading of those words.") (internal citation omitted). "Congress addressed in great detail the circumstances under and extent to which the EPA could grant exceptions to the nonattainment schedule," leaving EPA and courts without discretion to disturb that

[16] If EPA intended to rely upon § 7511a(i), which permits "adjustment" of applicable deadlines to "assure consistency among the required [state implementation plan] submissions," it did not state as much in its decision, nor would this be an appropriate adjustment.

scheme. *Id.* at 862. *See also, e.g.*, *Sierra Club*, 294 F.3d at 161 (rejecting another EPA attempt to extend a state's attainment deadline due to pollution from upwind areas).[17] Regarding the Detroit nonattainment area, EPA has already missed two statutory deadlines: the deadline for nonattainment designations and the deadline for reclassifying the Detroit Nonattainment Area from Marginal to Moderate nonattainment. *See supra* at 15-16. This Court must also reject EPA's backdoor attempt to extend the state's deadline to meet moderate nonattainment area requirements.

B. EPA's Concerns About the Practical Effects of Rejecting Its Timing-Based Interpretation of "Applicable" Are Overblown and Fail to Overcome the Term's Plain Meaning

1. EPA is Wrong that Applying the Plain Language Would Make the Statute Unworkable

EPA has but one rationale for its position that it is not a "reasonable reading of the CAA to require states to make additional SIP submissions" due to a bump-up following the redesignation request: that "such an interpretation would almost necessarily delay action on the redesignation request beyond the 18-month time frame" permitted for EPA to approve or deny the request. 88 Fed. Reg. at 32,612 [App. __]. EPA's fears that "the State might never be able to have the area

[17] While courts have in rare circumstances allowed EPA to extend the Act's deadlines, the conditions present in such cases - like EPA's failure to timely complete necessary guidance for states to meet their deadlines – are not present here. *E.g., NRDC v. EPA*, 22 F.3d 1125, 1135 (D.C. Cir. 1994).

redesignated" should it interpret the statute without its submittal-timing exception are overblown. *Id.* This is not a situation where the state cannot ever catch up with ever-accumulating requirements that post-date its request for redesignation. Moreover, the agency's concern with its deadline to potentially relieve the state from having to impose pollution controls, while ignoring the deadlines intended to protect public health, gets the purpose of the Act exactly backwards.

First, a reminder of the local context. Michigan took a gambit in submitting a request for redesignation request in early 2022 even though it should have been obvious that there was a high risk of ozone exceedances that summer. When the East 7 Mile monitor did in fact exceed the standard during the 2022 ozone season, a long delay followed as the state sought to preserve a finding of attainment by seeking permission to ignore these exceedances. Michigan submitted an exceptional event demonstration in January 2023. ARC-02 [App. __]. EPA concurred with the demonstration within the week, 88 Fed. Reg. at 32,592, and proposed to approve it and find the area was attaining less than two months later, in February 2023. 88 Fed. Reg. 7,382 [App.__]. That was just prior to the effective date of March 1, 2023 for the bump-up to Moderate. Then, just three months after the proposed exceptional event approval, EPA finalized that approval, the Redesignation, and the Clean Data Determination. This timeline shows both that EPA can act quickly (and on multiple submissions) when it wants to, and that the

Moderate area designation came due in this case for the entirely legitimate reason that monitors continued to observe high ozone levels. Had air quality remained within the standard, EPA would have been able to finalize its redesignation before the Moderate area bump-up occurred and would not need a contorted interpretation of "applicable" to protect the state from meeting requirements that came due after the state originally submitted its request.

More generally, reading "applicable" in the present tense does not render the redesignation process unworkable. If at the time of submittal, the area meets the requirements for redesignation, but EPA is aware a bump-up is imminent, EPA can simply approve the redesignation request before the deadlines for new requirements. While there is an outermost 18-month limit on EPA action, EPA can act more expeditiously. 42 U.S.C. § 7410(k)(2), (3). EPA has even created a device to assist in doing so: "parallel processing" of a SIP submission, under which EPA can propose approval of a SIP even before the state has fully adopted it. 40 C.F.R. Part 51, App'x V § 2.3.1.

EPA's concern that states "might never be able to have the area redesignated" is misplaced for another reason as well. 88 Fed. Reg. at 32,612 [App. __]. Following a bump-up, the Act gives increasing time periods for states to impose the additional requirements and to bring the area into attainment before the next date of the statutory determination. 42 U.S.C § 7511(a)(1) tbl. 1 (9 years for

Serious areas, 15 years for Severe, and 20 years for Extreme). This gives more than enough time for the state to meet requirements for redesignation before new requirements come due. For example, even if EPA waited to redesignate the Detroit area until after RACT measures are adopted by the state and approved by EPA, the redesignation would occur well before a further bump-up to Serious. Furthermore, the Act allows EPA to grant up to two one-year extensions of the attainment deadline if the area has good air quality in the year immediately preceding the attainment deadline. 42 U.S.C. § 7511(a)(5). Thus, a state with an area on the verge of attaining the standards can get even more time.

Also, for an area legitimately attaining the standard, EPA has the option of issuing a Clean Data Determination so that the state can work towards completing requirements such as RACT for a full redesignation while being relieved of its obligation to carry out most of the requirements associated with nonattainment. Clean Data Determinations, unlike redesignations, require nothing more than a finding of attainment, such that EPA would not have to wait to approve the state implementation plan revisions required for redesignation. *See* 40 C.F.R. § 51.1318.

Finally, EPA forgets that the state is not entitled to have its redesignation request approved in the absence of meeting the statutory requirements. *See, e.g.*, 40 C.F.R. § 81.305 (California areas for 1-hour ozone standard that have been classified Extreme since 1990). Nothing in the Act requires EPA to *approve*

redesignations within 18 months. EPA could meet its 18-month deadline by denying the redesignation request; the consequence would be only (as the Act requires) that the State adopt a RACT revision into its state plan and resubmit its request for redesignation with that additional safeguard against pollution relapses in place.

With these many pathways available to EPA and states, the statute is workable as Congress intended without rewriting plain language. Indeed, these approaches would be far more consistent with congressional intent to ensure public health protections are in place before EPA lifts the more stringent requirements applicable to nonattainment areas. The purpose of the Act is not to smooth a path to minimal requirements for states and industry, but to reduce dangerous pollution. *See, e.g.*, 42 U.S.C. § 7401(b)(1); *Sierra Club*, 60 F.4th at 1012 ("One of the Act's 'primary goal[s]' is to 'encourage or otherwise promote reasonable . . . State[] and local governmental actions . . . for pollution prevention'") (citing 42 U.S.C. § 7401(c)). Holding EPA accountable to this priority is particularly important where EPA has recognized that the impacted community suffers far greater environmental risk than average. *See, e.g.*, 88 Fed. Reg. at 32,596 [App. __] (finding that Wayne County ranks in the 80th percentile nationally for a range of environmental burdens scored by EPA's environmental justice screening and mapping tool).

2. EPA's Interpretation Invites States to Game the Redesignation Process

It is EPA's interpretation that in fact creates practical problems, as it would encourage states to submit premature redesignation requests in advance of expected bump-ups. Michigan's submission just weeks before a bump-up was due itself smacks of this possibility.[18] While EPA responds that "there is no incentive for states to submit a redesignation request before an area qualifies for redesignation" because such an application would not "have been considered complete," 88 Fed Reg. at 32,612 [App. __], that response is nonsensical. Because a determination of completeness does not constitute a determination on the merits of a submission,[19] a state could submit a technically complete but substantively faulty application simply to avoid having to meet the requirements associated with

[18] Michigan submitted its redesignation request in January 2022, just weeks before the moderate area bump-up would have been final had EPA acted in accordance with statutory deadlines to reclassify the area following its failure to attain. 87 Fed. Reg. at 21,844 (noting attainment date of August 3, 2021); 42 U.S.C. § 7511(b)(2) (requiring EPA to determine within six months after attainment date – that is, by February 3, 2022 – whether there was a failure to attain); 87 Fed. Reg. 21,842-01, at 21845-46 (Apr. 13, 2022) (proposing a finding of failure to attain for Detroit and noting that once final, that finding would effectuate the moderate area classification by operational of law); ARR-02 (Michigan redesignation request dated January 3, 2022) [App. __].

[19] The completeness determination is "essentially ministerial," "taking at most six months." *NRDC v. Browner*, 57 F.3d 1122, 1126 (D.C. Cir. 1995). In contrast, "the plan approval process may take up to twelve months due to the more extensive technical analyses necessary to ensure that the SIP meets the Act's substantive requirements." *Id.*

a bump-up. Avoiding meeting those requirements is strong incentive for states under pressure from industries that would like to avoid stricter controls, and there is no adverse consequence for this type of premature submittal to deter states from making one.

EPA's response thus fails to provide assurance that states would not seek to self-extend a bump-up deadline by submitting a premature redesignation request before the deadline arises. Under EPA's submittal-date interpretation, a state could submit a maintenance plan and redesignation request before the RACT requirement is due with an inadequate showing that the area is attaining, in the hopes that the next year's data will better support the attainment status. This is the type of "administrative gamesmanship" that Congress "sought to end" through the 1990 Amendments. *NRDC v. EPA*, 706 F.3d 428, 375 n.7 (D.C. Cir. 2013). Again, all available evidence points to the necessity of reading "requirements applicable to the area," and the related mandate to implement RACT for Moderate areas, as they were written. 42 U.S.C. § 7407(d)(3)(E)(v); *id.* § 7511a(b)(2), (f).

V. EPA's Redesignation Was Unlawful Because EPA Lacked a Rational Basis to Conclude that the Air Quality Improvement Was "Due to Permanent and Enforceable Reductions in Emissions"

To satisfy another of the Act's prerequisites for redesignating an area as attainment, EPA had to determine that the improvement in air quality evident from the 2019-2021 design value was "due to permanent and enforceable reductions in

emissions." 42 U.S.C. § 7407(d)(3)(E)(iii). EPA lacked a rational basis to conclude as much. The three-year period in question saw lockdowns and a major economic downturn resulting from the COVID-19 pandemic, exactly the type of unusual circumstances that EPA's own guidance advises can prevent EPA from "reasonably attribut[ing]" air quality improvements to permanent reductions. ARR-17 at 4 [App. __]. The guidance instructs that "Attainment resulting from temporary reductions in emission rates (e.g., reduced production or shut down *due to temporary adverse economic conditions)* . . . would not qualify as an air quality improvement due to permanent and enforceable emission reductions." *Id.* (emphasis added).

As the air quality improvement was just barely enough to achieve the standard, EPA's conclusion that it was due to enforceable measures like state and federal rules, and not these other factors, is especially vulnerable. That conclusion is based on an implicit finding by EPA that the highest ozone concentrations would not be *even 1 ppb* higher at the area's highest reading monitors in any of the relevant years absent the pandemic. Examining the air quality data helps illustrate this point. Had the St. Clair County monitor's fourth highest measured ozone concentration been 1 ppb higher in any one of the three years, that monitor would

have violated the NAAQS.[20] 88 Fed. Reg. at 32,596 [App. __] (three-year average at Port Huron was at the standard of 70 ppb). The same is true of the E. 7 Mile monitor in Detroit. *Id.* These razor-thin margin mean that any readings higher than 70 ppb would have flipped the area into nonattainment. In other words, under these circumstances, an anomaly like a major pandemic could easily be the reason that design values were *at* 70 ppb instead of just above, even if the anomaly's impact was small. As shown below, EPA failed to "clearly show that the air quality improvements are the result of implemented controls," ARR-17 at 4 [App. __], and not this anomaly.

A. Commenters Presented Evidence That the Economic Downturn Associated With the COVID-19 Pandemic Temporarily Lowered Ozone Concentrations

Commenters presented evidence that ozone precursor emissions from Midwest power plants, as well as overall vehicular traffic, were both significantly lower than usual in 2020 and 2021, corresponding with COVID lockdowns and the economic downturn. ARR-10 at 16-17 [App. __]. Coal power plant emissions reached an all-time low during 2020, and only gradually increased through 2021. *Id.* at 16 n.62 [App. __ n.62]. Coal consumption for electric power in Michigan and the upwind states of Indiana and Illinois declined dramatically between 2019 and

[20] *See generally Wall*, 265 F.3d at 429 ("[A]n area will attain the NAAQS only if, over the three-year period, each of its monitoring sites record three or fewer times during which the ozone concentration has exceeded the NAAQS.").

2020 and was still down relative to 2019 in 2021. *Id.* at n.63 [App. __ n.63]. Automobile travel similarly declined during 2020 and did not return to pre-pandemic levels until June 2021. ARR-10, Ex. 9 [App. __]. As would be expected, NOx and VOC emissions correspondingly dropped dramatically during this time. For example, point source VOC emissions in the seven nonattainment counties dropped from near 10,000 tons in 2019 to below 8,000 tons in 2020, while point source NOx emissions from the nonattainment area dropped from more than 30,000 tons in 2019 to under 25,000 tons in 2020. ARR-02 (Redesignation Request), Charts 5, 6 at 18-19 [App. __].

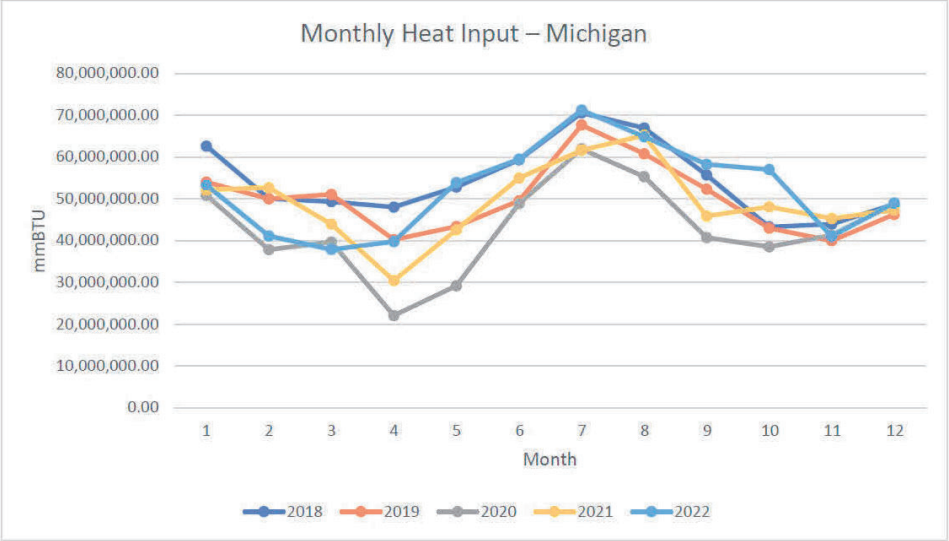
The evidence in the record drawing a direct link between temporary economic conditions and reductions of precursor pollution, along with the substantial temporary decline in specific industries and activities that create precursor pollution distinguishes this case from others where a court has deferred to EPA's finding that reductions were permanent and enforceable. *See Sierra Club v. EPA*, 774 F.3d 383, 393 (7th Cir. 2014) (upholding EPA's attribution of air quality improvement to permanent and enforceable reductions where, unlike here, there was "no information in the record to support a conclusion that … the[] reductions were temporary or that any temporary reductions contributed to the attainment of the NAAQS").

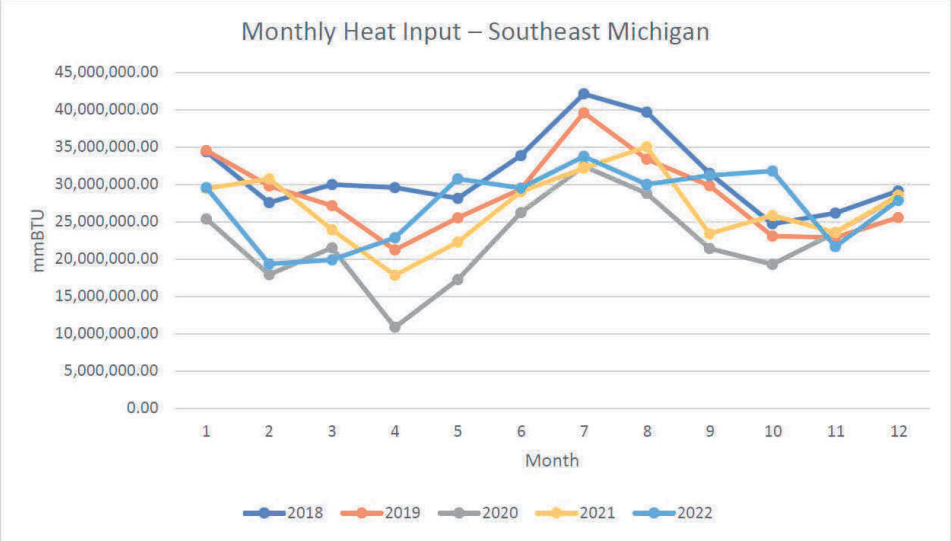
B. EPA's Responses Fail to Show That Attainment Was Due to Permanent Emissions Reductions

EPA cannot "reasonably attribute[]" the emissions reductions to permanent and enforceable measures in the context of these significant, temporary influences. ARR-17 at 4 [App. __]. EPA responded to the comments on economic influences with new analysis of the emissions impact of the economic downturn in the final rule, but EPA's response is incomplete and relies on emissions rebounding by June 2020 or later, after the ozone season had already started. EPA acknowledges a "pronounced effect on electricity production" at "Detroit[-]area" power plants in April 2020, but argues that "emissions activity from these sources increased in subsequent months following the same monthly patterns that were observed in 2018 and 2019." 88 Fed. Reg. at 32,603 [App. __].

There are several problems with EPA's response. First, while power plant emissions across the Midwest contribute to ozone pollution in Michigan, sometimes even more significantly than local sources, EPA analyzed only the emissions patterns of local plants to determine the impact of the pandemic. *See generally Clean Wisconsin*, 964 F.3d at 1165 (noting EPA's position that ozone "violations in western Michigan were caused primarily by Chicago-area emissions"). Second, EPA's own heat input data (with heat input being a measure of the amount of fossil fuel burned in a boiler) show power plant operation in both Southeast Michigan and statewide to be dramatically lower in May 2020 than in

May of other years, and still lagging in June. ARR-12 (Redesignation Technical Support Document), Appendix B at 25-26 [App. __] (charts reproduced below); 88 Fed. Reg. at 32,603-04 [App. __].





EPA fails to account for the real possibility that, absent the downturn, ozone exceedances *prior* to the rebound – e.g., in May 2020 – would have pushed the 2019-2021 design value above 70 ppm. As ozone exceedances are often measured

in May, this is a fatal gap in EAP's analysis. *See* ARR-12, Appendix E at 43-44 [App. __] (showing many past exceedances occurring in the month of May).

Moreover, other evidence presented by commenters confirms that the emissions-influencing depression in economic activity in fact continued through 2021. For example, analysis from the International Energy Association found that demand for oil, coal, and gas in the United States were all down in 2021 relative to 2019. *See* ARR-10, Ex. 10 [App. __]; *see also id.*, Ex. 8 at 2 (Congressional Research Service report stating that "many economic indicators show that economic activity ha[d] still not fully recovered [as of May 2021]."). While EPA points to certain types of manufacturing, like production of personal protective equipment, ramping *up* during the pandemic, EPA does not link these operations to increased emissions of NOx and VOCs that would counteract the decline in fossil fuel burning during the relevant time period, and therefore fails to refute Sierra Club's main point. 88 Fed. Reg. at 32,604 [App. __]. (Nor is it likely that this type of manufacturing would come anywhere close to the levels of NOx and VOCs typically produced by fossil-fuel burning power plants.)

EPA's response to the decline in vehicular traffic pointed out by commenters is similarly flawed. EPA points to data showing that, "*beginning in June 2020*," vehicle-miles-traveled levels were comparable to those before the start of the pandemic. 88 Fed. Reg. at 32,603 [App. __] (emphasis added). EPA states, "This is

significant because EPA has found that in the upper Midwest, the majority of ozone exceedances occur in late May though late July." *Id.* But again, this only proves petitioners point: EPA is arbitrarily disregarding the good possibility that "late May" exceedances in 2020 would have pushed the area into nonattainment for the 2019-21 period. Moreover, even if the "majority" of ozone exceedances begin in late May, *any* earlier exceedances would be significant. As noted above, even one or two high ozone days can significantly impact the ozone design value for a three-year period. *See supra* at 13, 22.

Tellingly, EPA acknowledges the pandemic's impact on ozone concentrations elsewhere in the record, stating that "[t]he decreases [in ozone concentrations] seen in 2020 may have been partially due to reductions in precursor emissions caused by stay-at-home orders during the COVID-19 pandemic, with increases in 2021 as normal economic activity resumed." ARR-43 (Trends in Ozone Adjusted for Weather Conditions) at 2 [App. __].

Because the fourth highest ozone readings for six out of seven of the area's monitors were already at or above 70 ppb in 2020, it is very likely that non-pandemic levels of precursor emissions would have pushed the 2019-2021 design values to nonattainment. *See* ARR-10, Ex. 3 at 2; *see* 88 Fed. Reg. at 32,596 [App. __] (list of relevant monitors). The COVID recession is simply too important of a temporary influence for EPA to be able to "reasonably attribute" the improved air

quality to *permanent* emission reductions, especially where just one additional violation could have pushed the area into nonattainment. By relying on a faulty and incomplete analysis on this central issue, EPA "entirely failed to consider an important aspect of the problem" before it, and failed to satisfy § 7407(d)(3)(E)(iii). *Nat'l Ass'n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 658 (2007) (quoting *Motor Vehicle Mfrs. Ass'n.,* 463 U.S. at 43). As would be expected if the 2019-21 design value were the result not of permanent and enforceable pollution reductions, but of unusual conditions, ozone levels rose again in 2022, as discussed *supra* and in Sierra Club's comments on the Clean Data Determination.[21] This evidence further weakens EPA's conclusion that lower concentrations in 2019-2021 were due to permanent emissions reductions rather than temporary conditions. Yet, instead of accepting the most obvious conclusion from the 2022 data that the pandemic temporarily had depressed ozone concentrations, EPA proceeded to finalize the Redesignation, removing still-needed protections for the Detroit area. Doing so was arbitrary. *See, e.g.*, *id*; *State of Ohio v. EPA*, 784 F.2d 224, 230-31 (6th Cir. 1986) (finding EPA action arbitrary where unsupported by adequate evidence).

[21] These comments were before EPA when it made its decision on redesignation and are part of the administrative record for the Redesignation, as was the technical analysis underlying EPA's Clean Data Determination and Exceptional Event Approval. *See supra* nn. 1, 4, 12.

EPA's core failure in declaring the Detroit area's ozone problem solved where the record did not support– and even contradicted– that finding, undermines the Act's provisions to protect public health. By making this unsupported finding, EPA relegates the Detroit area to a far weaker regime of pollution protections (described *supra* at 16-17, 23-26, 38-39) and undermines the agency's own conclusion that it has sufficiently protected environmental justice communities in Wayne County. 88 Fed. Reg. at 32,600 [App. __]. Whereas EPA seeks to assure the asthma-burdened communities of Detroit that their air is safe to breathe, EPA is only able to reach that conclusion by relying on skewed data: either by throwing out two days of valid data, or by relying on years with unusually low ozone precursor pollution. Precisely because Congress feared this type of lax enforcement by EPA, it set out very specific statutory criteria for both nonattainment areas and redesignation, leaving as little as possible to EPA's discretion. By strictly enforcing these mandates and requiring reasoned agency decision-making under the APA, the Court will ensure the Act serves its core function to protect the public from illness and disease.

CONCLUSION

For the foregoing reasons, the Court should vacate both of the rulemakings challenged here, encompassing EPA's redesignation of the Detroit Nonattainment

Area to attainment, its Clean Data Determination for the same area, and its approval of Michigan's exceptional events request.

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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32 and 6 Cir. R. 32, I hereby certify that the foregoing Petitioner's Brief is 21,306 words, excluding exempted portions, according to the count of Microsoft Word, and thereby complies with the Order of the Clerk dated Nov. 6, 2023 [Doc. 10] setting the word limit for Petitioner's Brief at 22,000 words.

I further certify that the response complies with Fed. R. App. P. 32(a)(5) and (6) because it has been prepared in 14-point Times New Roman font.

Dated: January 9, 2024

/s/Elena Saxonhouse
Elena Saxonhouse

CERTIFICATE OF SERVICE

I hereby certify that on January 9, 2024, I caused the foregoing Petitioner's Brief with corrected Certificate of Compliance to be electronically filed with the Clerk of the Court by using the Court's CM/ECF system. All registered counsel will be served by the Court's CM/ECF system.

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