ORAL ARGUMENT NOT YET SCHEDULED

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 19-1019 (and consolidated cases)

STATE OF NEW YORK, *et al.*,
Petitioners,
v.

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

PETITION FOR REVIEW OF FINAL ADMINISTRATIVE ACTION OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROOF OPENING BRIEF OF CITIZEN PETITIONERS

DATED: April 19, 2019

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STATE OF NEW YORK, *et al.*, *Petitioners*, v. U.S. ENVIRONMENTAL PROTECTION AGENCY, *et al.*, *Respondents*.	No. 19-1019 (and consolidated cases)

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rule 27(a)(4), Downwinders at Risk, Appalachian Mountain Club, Chesapeake Bay Foundation, Inc., Texas Environmental Justice Advocacy Services, Air Alliance Houston, and Clean Wisconsin submit this certificate as to parties, rulings, and related cases.

(A) Parties and *Amici*

(i) Parties, Intervenors, and *Amici* Who Appeared in the District Court

This case is a petition for review of final agency action, not an appeal from the ruling of a district court.

(ii) Parties to This Case

Petitioners:

19-1019	State of New York, State of Connecticut, State of Delaware, State of Maryland, Commonwealth of Massachusetts, State of New Jersey, and The City of New York

19-1020 Downwinders at Risk, Appalachian Mountain Club, Sierra Club, and Chesapeake Bay Foundation

19-1047 Texas Environmental Justice Advocacy Services, Air Alliance Houston, and Clean Wisconsin

Respondents:

The respondents in the above-captioned cases are the United States Environmental Protection Agency ("EPA") and Andrew Wheeler, in his official capacity as Administrator of the EPA.

Intervenors:

Utility Air Regulatory Group, the State of Texas, the Texas Commission on Environmental Quality, and Homer City Generation, L.P. have been granted leave to intervene in support of Respondents.

(iii) *Amici* in This Case

None at present.

(iv) Circuit Rule 26.1 Disclosures

See disclosure statements filed herewith.

(B) Rulings Under Review

Petitioners seek review of the EPA final action published in the Federal Register at 83 Fed. Reg. 65,878 (Dec. 21, 2018) and titled "Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard."

(C) Related Cases

State of Wisconsin v. EPA, D.C. Cir. No. 16-1406 (and consolidated cases).

Oral argument held October 3, 2018. Panel: Srinivasan, Millett, Wilkins.

DATED: April 19, 2019

Respectfully submitted,

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IN THE UNITED STATES COURT OF APPEALS
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RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1, Downwinders at Risk, Appalachian Mountain Club, Sierra Club, Chesapeake Bay Foundation, Inc., Texas Environmental Justice Advocacy Services, Air Alliance Houston, and Clean Wisconsin make the following disclosures:

Downwinders at Risk

Non-Governmental Corporate Party to this Action: Downwinders at Risk.

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Downwinders at Risk, a non-profit corporation organized and existing under the laws of the State of Texas, is a diverse grassroots citizens group dedicated to protecting public health and the environment from air pollution in North Texas.

Appalachian Mountain Club

Non-Governmental Corporate Party to this Action: Appalachian Mountain Club ("AMC").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: AMC, a corporation organized and existing under the laws of the Commonwealth of Massachusetts, is a regional nonprofit organization dedicated to promoting the protection, enjoyment, and wise use of the mountains, rivers, and trails of the Northeast Outdoors.

Sierra Club

Non-Governmental Corporate Party to this Action: Sierra Club.

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Sierra Club, a corporation organized and existing under the laws of the State of California, is a national nonprofit organization dedicated to the protection and enjoyment of the environment.

Chesapeake Bay Foundation, Inc.

Non-Governmental Corporate Party to this Action: Chesapeake Bay Foundation, Inc. ("CBF").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: CBF is a corporation organized and existing under the laws of the State of Maryland. CBF is a not-for-profit organization dedicated solely to restoring and protecting the Chesapeake Bay and its tributary rivers.

Texas Environmental Justice Advocacy Services

Non-Governmental Party to this Action: Texas Environmental Justice Advocacy Services ("TEJAS").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: TEJAS is a non-profit corporation organized and existing under the laws of the State of Texas. TEJAS promotes environmental protection through education, policy development, community awareness, and legal action to ensure that everyone, regardless of race or income, is entitled to live in a clean environment.

Air Alliance Houston

Non-Governmental Corporate Party to this Action: Air Alliance Houston.

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Air Alliance Houston, a corporation organized and existing under the laws of the State of Texas, is a nonprofit organization working to reduce air pollution in the Houston region to protect public health and environmental integrity through research, education, and advocacy.

Clean Wisconsin

Non-Governmental Corporate Party to this Action: Clean Wisconsin.

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Clean Wisconsin is a not-for-profit corporation organized under the laws of the State of Wisconsin and incorporated under Section 501(c)(3) of the Internal Revenue Code. Clean Wisconsin is a membership organization dedicated to environmental education, advocacy, and legal action to protect air quality, water quality, and natural resources in the State of Wisconsin.

DATED: April 19, 2019

Respectfully submitted,

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FEDERAL REGISTER NOTICES

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Pursuant to D.C. Circuit Rule 28(a)(3), the following is a glossary of uncommon acronyms and abbreviations used in this brief.

EPA	Environmental Protection Agency
mmBTU	million British thermal units
NRDC	Natural Resources Defense Council

INTRODUCTION

This case challenges the U.S. Environmental Protection Agency's decision not to prohibit interstate air pollution that contributes to violations of the 2008 air quality standard for ozone after the deadline for attainment of the standard. EPA's decision subjects millions of people in downwind states to unhealthy levels of pollution and elevated risk of asthma attacks, permanent lung damage, and death. These health harms are borne disproportionately by communities of color, and children are especially vulnerable.

As detailed in this brief, EPA's decision is contrary to the Clean Air Act, which establishes deadlines for attainment of clean air standards and requires EPA to address interstate pollution consistent with those deadlines. The decision also rests on an unreasonable and arbitrary statutory interpretation that undermines the Clean Air Act's central requirement—timely attainment of clean air standards—and fails to protect public health or the environment. In addition, the decision is arbitrary because it rests on an irrational and unsupported claim that no reductions in interstate pollution are feasible before 2023, while overlooking feasible control measures that could be implemented within a year.

JURISDICTIONAL STATEMENT

This Court has jurisdiction under 42 U.S.C. § 7607(b)(1)-(2) to review the final action taken by EPA at 83 Fed. Reg. 65,878 (Dec. 21, 2018), JA____, entitled

"Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard; Final Rule ("Close-Out Rule" or "Rule"). Petitioners filed timely petitions for review of this action on January 30, 2019, and February 19, 2019.

STATUTES AND REGULATIONS

Pertinent statutes are in a separate addendum.

ISSUES PRESENTED

1. Is EPA's decision not to prohibit interstate air pollution that will contribute significantly to violations of the 2008 ozone standard after the deadline for attainment of that standard contrary to the plain language of the Clean Air Act, which directs EPA to prohibit this pollution consistent with the deadline?

2. Is EPA's decision based on an unreasonable interpretation of the Clean Air Act and arbitrary, where EPA failed to consider the harm to public health and welfare that will result from continued violations of the 2008 ozone standard and the disproportionate burdens borne by communities of color and children?

3. Is EPA's decision contrary to the Clean Air Act's requirement to secure necessary pollution reductions as expeditiously as practicable and arbitrary, given that:

a. pollution reductions are practicable in the short term through engaging idled pollution controls and improving the operation of installed controls;

b. pollution reductions are practicable in the short term through shifting of power generation to lower-polluting sources; and

c. pollution reductions are practicable in less than a year at non-power plant industrial sources according to EPA's own estimates, and the only support the agency offers for its claim that these reductions "may" take four years is a purported lack of information?

STATEMENT OF THE CASE

I. STATUTORY BACKGROUND

The Clean Air Act requires EPA to set national ambient air quality standards for certain pollutants that endanger public health or welfare. 42 U.S.C. §§ 7408, 7409. These clean air standards must be established at a level that protects public health with "an adequate margin of safety." *Id.* § 7409(b). States and EPA then must identify areas of the country where air quality fails to meet the standard and designate them as "nonattainment" areas. *Id.* § 7407(d). For ozone, these nonattainment areas are further classified according to the severity of their nonattainment—marginal, moderate, serious, severe, or extreme. *Nat. Res. Def.*

Council v. EPA ("*NRDC*"), 777 F.3d 456, 460 (D.C. Cir. 2014) (citing 42 U.S.C. § 7511(a)(1) & tbl. 1). Nonattainment areas that subsequently attain the standard are called "maintenance" areas. *Id.* at 458-59.

As multiple decisions of the Supreme Court and this Court recognize, Congress's core objective in enacting the Clean Air Act Amendments of 1970, as well as subsequent amendments, was ensuring timely attainment of clean air standards. *Train v. Nat. Res. Def. Council, Inc.*, 421 U.S. 60, 64 (1975) (Congress reacted to "disappointing" progress "by taking a stick to the States"); *Union Elec. Co. v. EPA*, 427 U.S. 246, 256 (1976) (Clean Air Act is "a drastic remedy to … [the] problem of air pollution"); *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 484 (2001). In pursuit of that objective, Congress established deadlines that "require[]" attainment of the standards "within a specified period of time." *Train*, 421 U.S. at 64-65. These deadlines are not only "central to the … regulatory scheme," *Sierra Club v. EPA*, 294 F.3d 155, 161 (D.C. Cir. 2002) (quoting *Union Elec.*, 427 U.S. at 258), but constitute the very "heart" of the Act. *Train*, 421 U.S. at 66-67.

The Act requires attainment of ozone standards "as expeditiously as practicable but not later than" deadlines given in Table 1 of 42 U.S.C. § 7511(a)(1). *NRDC*, 777 F.3d at 460. Thus, areas classified as being in "marginal" nonattainment, for example, must attain the ozone standard by a deadline three

years from the date they are designated nonattainment, while "moderate" nonattainment areas have six years from the date of designation, and "serious" areas have nine years. 42 U.S.C. § 7511(a)(1) & tbl. 1.

To ensure timely attainment, the Act also specifies earlier deadlines for states to adopt plans providing for implementation, maintenance, and enforcement of the clean air standards, and submit these plans to EPA for approval. 42 U.S.C. § 7410(a). If EPA finds that a state has failed to make a required submission or disapproves a plan submitted by a state, EPA must issue a federal implementation plan for the state within two years. *Id.* § 7410(c)(1).

State and federal implementation plans must satisfy the requirements of the Good Neighbor Provision, 42 U.S.C. § 7410(a)(2)(D)(i)(I). *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1593-95 (2014). Adopted by Congress to address the problem of interstate air pollution, the Good Neighbor Provision directs that plans

> shall … contain adequate provisions prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the State from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any such [national ambient air quality standard].

42 U.S.C. § 7410(a)(2)(D)(i)(I).

Because "this subchapter" is a reference to Title I of the Clean Air Act, this Court has held that this language imposes a "statutory mandate" to implement the

Good Neighbor Provision "consistent with the provisions in Title I mandating compliance deadlines for downwind states." *North Carolina v. EPA*, 531 F.3d 896, 911-12 (D.C. Cir. 2008); *accord id.* at 913 ("EPA must determine what level of emissions constitutes an upwind state's significant contribution to a downwind nonattainment area 'consistent with the provisions of [Title I],' which include the deadlines for attainment …, and set the emissions reduction levels accordingly." (quoting § 7410(a)(2)(D)(i)) (emphasis added)).

II. FACTUAL BACKGROUND

Ground-level ozone, the main component of urban smog, is a corrosive air pollutant formed from the interaction of other pollutants, called ozone precursors, in the presence of heat and sunlight. *See Am. Trucking Ass'ns v. EPA*, 283 F.3d 355, 359 (D.C. Cir. 2002) (citing EPA Office of Air Quality Planning and Standards, Ozone: Good Up High, Bad Nearby 2-3 (1997)). Nitrogen oxides—emitted by power plants, factories, and motor vehicles—are important ozone precursors. 83 Fed. Reg. at 65,893/1, JA____.

Exposure to ozone causes serious harm to human health, including asthma attacks, permanent lung damage, and early death.[1] In addition, ozone and its

[1] 81 Fed. Reg. 74,504, 74,574 tbl.VIII.4 (Oct. 26, 2016) ("2016 Transport Rule"), JA____; Comments of Earthjustice et al., EPA-HQ-OAR-2018-0225-0319 (Aug. 31, 2018) ("Citizen Petitioner Comments") at 11 & Ex. G at 1 (EPA, Ozone and Children's Health), JA___, ____.

precursors harm crops, forests, and ecosystem diversity, and contribute to eutrophication of water bodies, causing "dead zones" that cannot support marine life. 83 Fed. Reg. at 65,879/3, JA____; Citizen Petitioner Comments at 12, JA____.

To protect public health and the environment, EPA has adopted a clean air standard for ozone and strengthened it several times. 62 Fed. Reg. 38,856 (July 18, 1997), JA____ (80 parts per billion); 73 Fed. Reg. 16,436 (Mar. 27, 2008), JA____ (75 parts per billion); 80 Fed. Reg. 65,292 (Oct. 26, 2015), JA____ (70 parts per billion). Although EPA adopted a more-protective, 70-parts-per-billion ozone standard in 2015, major population centers all across the United States are still failing to meet even the less-protective 2008 ozone standard of 75 parts per billion. Citizen Petitioner Comments at 5-7 (compiling 2018 EPA data), JA____-__.

The harms from breathing this unhealthy air are borne disproportionately by communities of color and children. People living in areas of the eastern United States that receive significant interstate ozone pollution and continue to experience violations of the 2008 ozone standard—which include Houston, Dallas, Baltimore, and New York—are more than fifty percent more likely to be members of a minority racial or ethnic group (53.6% versus 34.2%), significantly more likely to be black (17.8% versus 15.2%), and almost twice as likely to be Hispanic or Latino (25.5% versus 13.9%), compared to areas in the eastern region that do not violate

the standard. Citizen Petitioner Comments at 28-29 (presenting demographic data from the U.S. Census), JA____-__. As EPA has repeatedly recognized, children are especially vulnerable to the harmful effects of ozone, including asthma. *E.g.*, 80 Fed. Reg. at 65,310/3, 65,446/1, JA____, ____; Citizen Petitioner Comments at Ex. G (EPA, Ozone and Children's Health), JA____. Asthma-related hospitalizations and deaths are elevated "among children in general and black children in particular." 62 Fed. Reg. at 38,864/2, JA____. *See also* EPA, Children's Environmental Health Disparities: Black and African American Children and Asthma at 3, https://www.epa.gov/sites/production/files/2014-05/documents/hd_aa_asthma.pdf (accessed April 8, 2019) ("Black children are two times as likely to be hospitalized for asthma and are four times as likely to die from asthma as White children.").

III. REGULATORY BACKGROUND

A. Implementation of the 2008 Ozone Standard.

When EPA adopted the 2008 ozone standard of 75 parts per billion on March 12, 2008, 73 Fed. Reg. at 16,511/2, JA____, that revision triggered EPA's obligation to promulgate nonattainment designations by March 12, 2010. *NRDC*, 777 F.3d at 463. EPA extended the two-year deadline by an additional year, to March 12, 2011, 77 Fed. Reg. 30,088, 30,090/3-91/1 (May 21, 2012), JA____-__, then missed the extended deadline. *NRDC*, 777 F.3d at 463. Conservation groups

filed suit to compel the designations, and EPA issued them on July 20, 2012. 80 Fed. Reg. 12,264, 12,268/2 (Mar. 6, 2015), JA____.

EPA then attempted to postpone the attainment deadlines. *See NRDC*, 777 F.3d at 463. After this Court rejected that attempt, *id.*, EPA established attainment deadlines of July 20, 2015, for marginal nonattainment areas and July 20, 2018, for moderate nonattainment areas, in accordance with Table 1 of 7511(a), 42 U.S.C. § 7511(a). *See* 80 Fed. Reg. at 12,268/2, JA____. No ozone nonattainment areas in the eastern United States were initially classified as serious, severe, or extreme. 80 Fed. Reg. at 12,310-12 App. B, JA____-__.

The statutory deadline for upwind states to adopt plans implementing their Good Neighbor obligations was March 12, 2011, but EPA waited until July 13, 2015 to determine that 24 states missed the deadline. 81 Fed. Reg. at 74,512/1, JA____. EPA's determination triggered EPA's obligation to issue a federal Good Neighbor plan within two years. 42 U.S.C. § 7410(c)(1).

B. The 2016 Transport Rule.

In 2016, EPA made an initial attempt to implement the Good Neighbor Provision and address the contribution of interstate pollution to ongoing violations of the 2008 ozone standard. 81 Fed. Reg. 74,504, JA____. EPA admitted, however, that the 2016 rule did not fully discharge its obligations under the Good Neighbor Provision. Reasoning that it should focus its efforts on assisting downwind states in

attaining the standard by the then-upcoming moderate-area attainment deadline of July 20, 2018, EPA only required reductions that it determined could be implemented quickly, by the 2017 ozone season. *Id.* at 74,516/3-17/1, JA____-__.

EPA projected that the 2016 rule would reduce ozone levels by an average of only 0.29 parts per billion in downwind areas with attainment and maintenance problems, even though many of those areas faced ozone levels many parts per billion above the 75-parts-per-billion standard. EPA, Regulatory Impact Analysis at 3-10, EPA-HQ-OAR-2015-0500-0580 (Sept. 2016), JA____; 81 Fed. Reg. at 74,533, JA____. EPA acknowledged that further controls would be necessary to address nonattainment and maintenance problems that it projected would persist. *Id.* at 74,506/1, 74,520/2-22/1, JA____, ____-__. *Accord* 83 Fed. Reg. at 65,884/3, JA____.

Two of the Citizen Petitioners here—Sierra Club and Appalachian Mountain Club—challenged the 2016 rule in this Court, arguing that EPA's failure to eliminate significant contributions to downwind nonattainment by the applicable attainment deadlines violated the Clean Air Act, that the rule failed to eliminate significant contributions as expeditiously as practicable, and that EPA's failure to require greater emission reductions was arbitrary and capricious. Oral argument was held October 3, 2018. *Wisconsin v. EPA*, D.C. Cir. No. 16-1406 (and consolidated cases).

C. Persistent Ozone Violations.

As predicted, the 2016 rule proved inadequate to eliminate significant interstate contributions to nonattainment and maintenance problems in downwind states. EPA's 2018 data show that eleven monitor locations in five downwind areas covered by the 2016 rule experienced 2015-2017 average design values (EPA's test for attainment problems, 83 Fed. Reg. at 65,916/1, JA____) above the 2008 standard. Citizen Petitioner Comments at 6, JA____.[2] EPA data also show that two additional sites covered by the 2016 rule, in Tarrant County, Texas, experienced maximum design values (EPA's test for maintenance problems, 83 Fed. Reg. at 65,916/1, JA____) above the 2008 standard, and that many more monitors not identified by the 2016 rule in fact experienced nonattainment or maintenance problems. Citizen Petitioner Comments at 6-7, JA____-__. These persistent violations of the 2008 standard are due, in significant part, to pollution transported from upwind states.[3]

As a result, several downwind areas in the eastern United States failed to attain the 2008 standard by the deadline of July 20, 2018. On November 14, 2018,

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[2] The areas are Dallas-Fort Worth, TX; Houston-Galveston-Brazoria, TX; New York-North New Jersey-Long Island, NY-NJ-CT; Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE; and Sheboygan County, WI. *Id.*

[3] Air Quality Modeling Technical Support Document for the 2015 Ozone NAAQS at 20-21, EPA-HQ-OAR-2018-0225-0035 (Dec. 2016), JA____-__; Citizen Petitioner Comments at 14-15, JA____-__.

EPA proposed to extend the deadline for one of these areas—Sheboygan County, Wisconsin—by one year, to July 20, 2019. 83 Fed. Reg. 56,781, 56,781/3 (Nov. 14, 2018), JA____. EPA proposed to reclassify five of these areas to "serious" nonattainment, as required by 42 U.S.C. § 7511(b)(2). *Id.* at 56,781/3-82/1, JA____-__. Upon finalization of the proposal, those five downwind areas will become subject to more stringent pollution control obligations and a new attainment deadline of July 20, 2021. 80 Fed. Reg. at 12,268/1-2, JA____; 42 U.S.C. §§ 7511(b)(2)(A), 7511a(b).

Modeling conducted by the Ozone Transport Commission on behalf of downwind states, using an EPA-approved model, shows that violations of the 2008 standard will persist in 2020 for at least two covered downwind areas—New York-North New Jersey-Long Island, and Baltimore, Maryland. Citizen Petitioner Comments at 9-11 & tbl. 4, JA____-__. The Ozone Transport Commission modeling does not cover Texas, but the most recent EPA data show that the Dallas-Fort Worth and Houston-Galveston-Brazoria nonattainment areas are experiencing ozone levels well above the standard, and EPA does not claim that these exceedances will abate by 2020. *See* 83 Fed. Reg. at 65,885 tbl. II.D.-1 & II.D.-2, JA____; Citizen Petitioner Comments at 6 tbl. 2 & 9, JA____. EPA data show that a significant portion of the ozone pollution in these downwind areas is transported from upwind states. Citizen Petitioner Comments at 11, JA____; EPA-HQ-OAR-

2018-0225-0035 at 20-21, JA____-__. Thus, interstate ozone pollution will continue to expose the many millions of people who live in these areas to unhealthy air and prevent these areas from attaining and maintaining the 2008 ozone standard by the 2021 deadline.

D. The Close-Out Rule.

On December 21, 2018, EPA issued the rule at issue in this case, which determines that upwind states in the eastern region have no further obligation to reduce interstate ozone pollution under the 2008 ozone standard. 83 Fed. Reg. 65,878, JA___. Despite the fact that covered downwind states are subject to a 2018 deadline and will soon become subject to a 2021 deadline, EPA claims that it need not address ongoing interstate ozone pollution that will significantly contribute to nonattainment and maintenance problems in those states between now and 2023. *Id.* at 65,908/2-3, JA____. Instead, EPA claims that the Good Neighbor Provision is satisfied by modeling that allegedly demonstrates that violations of the standard will not persist in 2023. *Id.* at 65,878/1, JA____.

EPA's decision rests on its claim that the requirement to implement the Good Neighbor Provision consistent with downwind states' attainment deadlines constitutes a statutory "gap" which EPA has discretion to fill. *Id.* at 65,906/1, JA____. EPA interprets the statute to allow it to "consider" the attainment

deadlines as a "factor" along with its assessment of the economic and technological feasibility of implementing controls. *Id*. at 65,890/2.

EPA then claims that no emission reduction measures can reasonably be implemented before 2023. 83 Fed. Reg. at 65,905/1, JA____. EPA claims that engaging and optimizing already-installed selective catalytic control devices would not yield any pollution reductions, even though EPA calculates that a rate of 0.10 pounds per mmBTU would reflect good performance of these units, 81 Fed. Reg. 74,543/3, JA____, and that they currently emit at an average rate of 0.12 pounds per mmBTU, which is 20 percent higher. 83 Fed. Reg. at 65,898/3, JA____. EPA claims that engaging already-installed selective non-catalytic reduction devices would be too expensive, pointing to its conclusion in the 2016 Transport Rule that engaging these devices is not the approach that "maximize[s]" cost-effectiveness. *Id.* at 65,898/1, JA____. But EPA then primarily bases its feasibility determination on a measure that EPA claims is less cost-effective—the installation of new selective catalytic reduction devices. *Compare id.* at 65,897/3 ($3400 per ton of nitrogen oxide removed for existing selective non-catalytic reduction), JA____, *with id.* at 65,895/1 ($5000 per ton of nitrogen oxide removed for new selective catalytic reduction), JA____. EPA claims that fleetwide installation of new catalytic reduction devices on units lacking them would take "up to" 39 months,

and that 48 months is "a reasonable time period" for pollution control. *Id.* at 65,895/1-2, JA____.

EPA admits that shifting generation to low- or no-emission sources is "already occurring and expected to continue to occur" and can be "phased in on a time and cost continuum." *Id.* at 65,894/2-3, JA____. But EPA rejects requiring further reductions through generation shifting on the ground that these reductions "may" be "limited" and that it is more "reasonable" to "focus on . . . . specific control strategies other than generation shifting." *Id.* at 65,894/2-3, JA____.

Finally, EPA claims that, although it has previously estimated that emissions reduction measures can be implemented in less than a year by many non-power plant industrial source categories, *id.* at 65,902/2, JA____, EPA now views these estimates as "uncertain" because it lacks information. *Id.* at 65,903/1, JA____. EPA concludes that it is "reasonable to assume" that these measures may require "four years or more." *Id.* at 65,903/2, JA____.

On this basis, EPA claims that no pollution reduction can be achieved before 2023. Pointing to modeling that it claims shows that no violations of the 2008 ozone standard will occur in 2023, EPA concludes that no pollution control is required. 83 Fed. Reg. at 65,905/1, JA____.

SUMMARY OF ARGUMENT

EPA's rule contravenes the "statutory mandate" to implement the Good Neighbor Provision consistent with the attainment deadlines faced by downwind states. *North Carolina*, 531 F.3d at 911-12; 42 U.S.C. § 7410(a)(2)(D); 42 U.S.C. § 7511(a). EPA's decision to allow significant contributions to downwind nonattainment and maintenance problems to continue until 2023 is plainly inconsistent with the applicable deadlines of 2018, 2019, and 2021.

EPA's contrary interpretation—that so long as it "considers" the deadlines, it can elevate claims of economic and technological impracticability over timely attainment—flouts the deadlines. It also is contrary to decisions of this Court and the Supreme Court establishing that the Clean Air Act's attainment deadlines leave no room for claims of economic and technological infeasibility, and unreasonably and arbitrarily ignores harm to public health and the environment that will result from this approach.

Further, EPA's claim that ozone pollution reductions are not practicable until 2023 is baseless. EPA's own findings actually confirm that significant pollution reductions are practicable in the short term through engaging controls that are already installed, but idled; improving the performance of installed controls; shifting generation to lower-polluting and clean power sources; and

installing controls on non-power plant industrial sources. EPA's reasons for rejecting these immediately available control measures are illogical and arbitrary.

STANDARD OF REVIEW

Judicial review focuses on whether EPA's action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. § 7607(d)(9)(A). When a "statute's language is plain, the sole function of the courts—at least where the disposition required by the text is not absurd—is to enforce it according to its terms." *Lamie v. U.S. Trustee*, 540 U.S. 526, 534 (2004) (internal citation and quotations omitted). Under *Chevron* step two, EPA's interpretation of an ambiguous statutory provisions must be rejected if, among other things, the agency has not provided "a reasoned explanation for why it chose that interpretation," *Vill. of Barrington v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011), or the interpretation "frustrate[s] the policy that Congress sought to implement," *Shays v. FEC*, 528 F.3d 914, 925 (D.C. Cir. 2008).

EPA's action is arbitrary and capricious if the agency has not considered statutory requirements, *see Massachusetts v. EPA*, 549 U.S. 497, 532-34 (2007), or has not explained how its action comports with those requirements, *see Mountain Commc'ns, Inc. v. FCC*, 355 F.3d 644, 648-49 (D.C. Cir. 2004). Agency action is also arbitrary and capricious if the agency decision "entirely failed to consider an important aspect of the problem," *Motor Vehicle Mfrs. Ass'n v. State Farm Mut.*

Auto. Ins. Co., 463 U.S. 29, 43 (1983), or rests on reasoning that is not "logical and rational," *Siegel v. SEC*, 592 F.3d 147, 161 (D.C. Cir. 2010).

STANDING

Petitioners Downwinders at Risk, Appalachian Mountain Club, Sierra Club, Chesapeake Bay Foundation, Inc., Texas Environmental Justice Advocacy Services, Air Alliance Houston, and Clean Wisconsin ("Citizen Petitioners") have standing to bring this suit on behalf of their members. *See Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 180-81 (2000). Citizen Petitioners are public interest, non-profit environmental and health organizations representing members harmed by ground-level ozone pollution. Their members are exposed to elevated ozone levels where they live, work, and recreate, due in significant part to emissions of ozone and ozone precursors transported from upwind states. *See* Declarations; EPA-HQ-OAR-2018-0225-0035 at 20-21, JA____-__. These members suffer harm to their health and a diminished ability to engage in and enjoy recreational and aesthetic interests. *See* Declarations.

For example, Elizabeth Bennett of Prospect, Jefferson County, Kentucky suffers from asthma, as does her granddaughter. Bennett Decl. ¶¶ 3, 5-6. When air quality is poor, Ms. Bennett's breathing becomes heavy and labored, and she and her granddaughter must forgo outdoor activities. *Id.* at ¶¶ 5-7, 11. Francis Blake of Houston, Harris County, Texas also has asthma. His symptoms, including

constricted airways and breathing that is more shallow and labored, are worse on bad air days. Blake Decl. ¶¶ 4, 6, 9, 13. Bad air quality forces Mr. Blake to take extra precautions, such as taking medication more frequently, and particularly bad air days cause him to limit his outdoor recreational activities. *Id.* at ¶¶ 9, 13-14. Barbara Evans is a lifelong outdoor enthusiast from Hartsdale, Westchester County, New York who also suffers from asthma, and allergies. Evans Decl. ¶¶ 4-5, 7. Poor air quality days render her inhaler ineffective in controlling her asthma symptoms, so she too must limit her outdoor recreation and forgo family quality time. *Id.* at ¶¶ 7, 13-14. Christina Browning of Millsboro, Sussex County, Delaware lives with Chronic Obstructive Pulmonary Disease that is aggravated by poor air quality in her area. Browning Decl. ¶¶ 1, 4-5, 8, 10. Geralyn Leannah of Sheboygan County, Wisconsin is a teacher with respiratory problems that are worsened by poor air quality in her area. Leannah Decl. ¶¶ 5-6, 9, 18.

Because the Close-Out Rule allows upwind states to continue emitting pollution that contributes to elevated ozone emissions where Citizen Petitioners' members live, work, and recreate, the rule prolongs and increases these harms. The Court can redress this injury by vacating the rule and remanding to EPA to adopt a rule that comports with the Clean Air Act. *See, e.g., Sierra Club v. EPA*, 699 F.3d 530, 533 (D.C. Cir. 2012).

ARGUMENT

I. EPA'S FAILURE TO PROHIBIT SIGNIFICANT CONTRIBUTIONS TO OZONE NONATTAINMENT BY THE DEADLINES FOR ATTAINMENT IS UNLAWFUL.

A. The Clean Air Act Unambiguously Requires EPA to Prohibit Significant Contributions to Nonattainment by the Applicable Attainment Deadlines.

EPA's obligation under the Good Neighbor Provision is to "prohibit[]" sources in upwind states "from emitting any air pollutant in amounts which will contribute significantly to nonattainment … or interfere with maintenance in … any other State[.]" 42 U.S.C. § 7410(a)(2)(D). Further, EPA must prohibit these emissions consistent with downwind areas' attainment deadlines. *North Carolina*, 531 F.3d at 911-13 (quoting 42 U.S.C. § 7410(a)(2)(D)). Because relevant downwind areas are currently subject to the moderate-area deadline of July 20, 2018, and will shortly become subject to additional pollution-control requirements and a new serious-area deadline of July 20, 2021, 80 Fed. Reg. at 12,268/2, JA____, EPA's refusal to address interstate ozone pollution before 2023 is unlawful. Under this circuit's precedent, EPA has an unambiguous "statutory mandate" to implement § 7410(a)(2)(D) "consistent with the provisions . . . mandating compliance deadlines for downwind states." *North Carolina*, 531 F.3d at 911-12. "[T]he court, as well as the agency, must give effect to the

unambiguously expressed intent of Congress." *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837, 842-43 (1984).

Nor is § 7511(a)(1) ambiguous as to whether attainment is required by the deadlines. That section provides, "the primary standard attainment date for ozone shall be as expeditiously as practicable but not later than the date provided in table 1," 42 U.S.C. § 7511(a)(1) (emphasis added), and Table 1 then lists the "primary standard attainment date" as 3, 6, 9, 15, or 20 years from the date of designation. *Id.* These dates, therefore, constitute deadlines for attainment, with which EPA must comply. *Sierra Club*, 294 F.3d at 161 ("[Section] 7511(a)(1) . . . sets a deadline"); *Train*, 421 U.S. at 64-65 (Congress "required" attainment of air quality standards "within a specified period of time").

EPA seizes on purported ambiguity in the word "consistent," 83 Fed. Reg. 65,905/3-06/1, JA____-__, but even if there were "any ambiguity" in the language of § 7410(a)(2)(D) considered in isolation, statutory interpretation requires "an examination of the relevant language in . . . context." *North Carolina*, 531 F.3d at 912. Here, the key context is that § 7410(a)(2)(D) requires EPA to act "consistent" with deadlines, *Sierra Club*, 294 F.3d at 161, which by their nature demand timely compliance—as Congress made clear with the phrase "not later than." 42 U.S.C. § 7511(a)(1). EPA's claim that it acts "consistent" with deadlines for attainment by considering the deadlines and allowing nonattainment to continue "later than" the

deadlines writes the word "not" out of § 7511(a)(1), and is incompatible with Congress's decision to impose deadlines. *Cf. City of Arlington v. FCC*, 569 U.S. 290, 296 (2013) (agencies only "possess whatever degree of discretion the ambiguity allows.") (internal quotations omitted). EPA's claim that it need not comply with the deadlines also deprives the deadlines of effect, collapsing two requirements of § 7511(a)(1)—"expeditiously as practicable" and "not later than" the deadlines—into one. *See Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004) ("[an agency] must comply with all of its statutory mandates").

EPA's reliance (83 Fed. Reg. at 65,889/3, JA____) on the term "will" is misplaced, because the pollution at issue here "will" significantly contribute to violations of the standard between now and 2023. EPA's claim that other pollution emitted at some other time will not contribute to violations of the standard does not excuse EPA's failure to prohibit the pollution that will. *See* 42 U.S.C. § 7410(a)(2)(D) (requiring EPA to prohibit "any" emissions activity that will contribute to violations of "any" clean air standard).

B. EPA's Contrary Interpretation of the Act is Unreasonable and Arbitrary.

EPA's claim that the Act does not require it to prohibit significant contributions to downwind nonattainment by the attainment deadlines is also unreasonable at *Chevron* step two and arbitrary, for the reasons given above as to *Chevron* step one and the following additional reasons.

1. EPA's Interpretation is Unreasonable and Arbitrary Because it Undermines the Clean Air Act's Core Requirement and Ignores Grave Harm to Vulnerable Populations.

First, EPA's interpretation is unreasonable because it undermines the Clean Air Act's core requirement—timely attainment of clean air standards. As multiple decisions of this Court and the Supreme Court recognize, Congress enacted the Clean Air Act to ensure timely attainment of clean air standards. *Supra* at 4. EPA's interpretation here undermines that core requirement by empowering EPA to avoid prohibiting interstate emissions that contribute significantly to downwind nonattainment, even after the deadlines for attainment. Indeed, EPA does not dispute that downwind areas will continue to experience violations of the 2008 ozone standard between now and 2023—that is, after the deadline for attainment—due in large part to interstate transport emissions. This Court has rejected EPA's previous attempts to interpret the Clean Air Act in a manner that "would subvert the purposes of the [Clean Air] Act" by delaying attainment, *Sierra Club*, 294 F.3d at 161, and should do so again here. *See also Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. Ruckelshaus*, 719 F.2d 1159, 1165 (D.C. Cir. 1983) ("A statute should ordinarily be read to effectuate its purposes rather than to frustrate them.").

EPA's statutory interpretation is also unreasonable because its central rationale contradicts multiple decisions of this Court and the Supreme Court holding that the Clean Air Act's attainment deadlines cannot be overriden based on

"claims of technological or economic infeasibility." *NRDC*, 777 F.3d at 468 (quoting *Sierra Club*, 294 F.3d at 161). EPA claims the Clean Air Act evinces a Congressional intent to require attainment only when attainment is "reasonable" "based on technological feasibility," 83 Fed. Reg. at 65,906/2-3, JA____, but this Court and the Supreme Court have repeatedly rejected that very claim. In the words of the Supreme Court, the Clean Air Act's attainment deadlines are "intended to foreclose the claims of emission sources that it would be economically or technologically infeasible for them to achieve emission limitations sufficient to protect the public health within the specified time." *Union Elec.*, 427 U.S. at 258.

And this Court has repeatedly applied the Supreme Court's holding to reject EPA's attempts to privilege its own claims of alleged infeasibility over timely compliance with clean air standards. *NRDC*, 777 F.3d at 468 ("the attainment deadlines … leave no room for claims of technological or economic infeasibility.") (quoting *Sierra Club*, 294 F.3d at 161); *North Carolina*, 531 F.3d at 912-13 (rejecting EPA's attempt to delay Good Neighbor reductions based on "reasons of feasibility"); *see also Union Elec.*, 427 U.S. at 259 (Congress "determined that existing sources of pollutants either should meet the standard of the law or be

closed down") (quoting S. Rep. No. 91-1196 at 2-3 (1970)).[4]

EPA's interpretation is also unlawful at *Chevron* step two because EPA unreasonably and arbitrarily failed to weigh important and statutorily relevant objectives. *Sec'y of Labor, Mine Safety & Health Admin. v. Nat'l Cement Co. of Cal.*, 494 F.3d 1066, 1074-75 (D.C. Cir. 2007) (at *Chevron* step two, agency "must bring its experience and expertise to bear in light of competing interests at stake"); *State Farm*, 463 U.S. at 43 (arbitrary for agency to "entirely fail[] to consider an important aspect of the problem"). Citizen Petitioners informed EPA that the rule creates "serious environmental justice concerns" because "[m]any of the downwind areas most impacted by the decision to authorize continued pollution are [disproportionately][5] home to communities of color and low-income communities." Public hearing transcript at 41, EPA-HQ-OAR-2018-0225-0081, JA____. Indeed, U.S. Census data demonstrate that people living in downwind areas are more than fifty percent more likely to be members of racial and ethnic minority groups—the very groups that suffer disproportionately from ozone-related ailments, such as asthma. Citizen Petitioner Comments at 28-29, Ex. G at 2,

[4] Even the concurring opinion on which EPA relies refutes, rather than supports, EPA's claim that the deadlines can be overridden based on claims of infeasibility. *Whitman*, 531 U.S. at 493-94 (Breyer, J.) (stating that, if additional time is needed beyond extensions expressly authorized by statute, "Congress"—not EPA—"can change those statutory limits").

[5] The public hearing transcript contains an error: Petitioners used the word "disproportionately" not "dispassionately."

JA____-__, ____. Petitioners likewise explained that EPA's decision not to reduce ozone pollution will disproportionately harm children. *Id.* at 11, 28, 30, JA____, ____, ____.

The Clean Air Act is centrally concerned with protecting these vulnerable groups from harm, as EPA has recognized. *Ethyl Corp. v. EPA*, 541 F.2d 1, 41 n.89 (D.C. Cir. 1976) (Act is intended to protect "the most vulnerable in our population") (quoting 91st Cong., 2d Sess, at 74 (1970) (statement of Senator Muskie)); 79 Fed. Reg. 75,234, 75,244 n.15 (Dec. 17, 2014) (recognizing that clean air rules should protect vulnerable "at-risk" groups, including groups with lower socioeconomic status.), JA____. Yet while EPA considered the allegedly negative consequences of complying with the attainment deadlines to justify its interpretation of the statute, 83 Fed. Reg. at 65,907/3, JA____, EPA unreasonably and arbitrarily failed to consider the harm to public health and welfare from continued nonattainment. EPA failed to determine, for example, how many children and adults will die from exposure to elevated ozone in downwind areas between now and 2023 as a result of the agency's decision, how many will experience asthma attacks, or how many will suffer permanent lung damage. *Cf.* 81 Fed. Reg. at 74,574 (calculating that the modest pollution reductions achieved by the 2016 Transport Rule would prevent 31-83 premature deaths, 66 hospital admissions, and 67,270 asthma attacks in the year 2017), JA____. EPA likewise

failed to consider that its decision will exacerbate the serious racial health disparities that afflict this country. EPA's failure to consider children's health and environmental justice before choosing not to prohibit harmful pollution was unreasonable and arbitrary. *See Nat'l Cement Co*, 494 F.3d at 1074-75; *PDK Labs., Inc. v. U.S. DEA*, 362 F.3d 786, 796 (D.C. Cir. 2004) ("the problem Congress sought to solve should be taken into account."); *State Farm*, 463 U.S. at 43.

In addition to ignoring these centrally important public health and equity considerations in developing its statutory interpretation, EPA refused to consider environmental justice and children's health under Executive Orders 12898 and 13045.[6] EPA never suggested that the claims it made with respect to the executive orders were relevant to its statutory interpretation. But to the extent that EPA seeks to rely on claims it made with respect to the executive orders, the Court should reject the agency's reasoning as arbitrary. With respect to the children's health executive order, EPA claims in the final rule that "there is no health or safety risk which may disproportionately affect children." 83 Fed. Reg. at 65,922/3, JA____. But rather than attempt to reconcile this claim with its own repeated recognition that unhealthy ozone levels disproportionately harm children, or the undisputed

[6] Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 16, 1994), JA____; Executive Order 13045, Protection of Children From Environmental Health and Safety Risks, 62 Fed. Reg. 19,885 (Aug. 2, 2016), JA____.

record evidence that millions of people, including children, are and will continue to be exposed to unhealthy ozone levels due to interstate pollution, *see supra* at 11-13, EPA claims that it "lacks the authority" to prohibit pollution when there are no future downwind air quality problems. 83 Fed. Reg. at 65,922/3 (claiming there is no health or safety risk "under such circumstances"), JA____. EPA makes the same claim with respect to the environmental justice executive order and record evidence of disproportionate harm to communities of color. *Id.* at 65,923/2-3, JA____.

EPA's claim that lack of authority excuses its failure to consider the consequences of its action, however, completely ignores the fact that EPA purports to identify a statutory "gap." *Supra* at 14. EPA claims this gap allows it to implement the Good Neighbor Provision in the year it views as economically and technologically feasible, instead of addressing interstate pollution by the deadlines specified in the Act. *Id.* Thus EPA's purported lack of authority is—by EPA's own account—the product of EPA's discretionary statutory interpretation, and any attempt to rely on this lack of authority to justify the statutory interpretation would be circular. *See Siegel*, 592 F.3d at 161 (agency decision "must be logical and rational").

EPA also claims that the executive orders do not require it to consider the public health and equity consequences of its failure to address persistent unhealthy

ozone levels because the ozone standard was adopted in 2008, 83 Fed. Reg. at 65,922/3, 65,923/2, JA____, ____, and its effects were considered at that time. If EPA seeks to rely on this claim to justify its statutory interpretation, the Court should reject it as irrational. Consideration of the health and equity consequences of adopting a stronger health standard is no substitute for weighing the consequences of the current decision to allow that health standard to be exceeded between now and 2023. *See Rio Grande Pipeline Co. v. FERC*, 178 F.3d 533, 543 (D.C. Cir. 1999) (vacating agency orders that "defy good reason").

2. EPA's Interpretation is Unreasonable and Arbitrary Because it Ignores Harm to the Environment.

EPA also failed to consider the harmful consequences of continued nonattainment for ecosystems. *See, e.g.*, Citizen Petitioners' Comments at 12-13, Exh. E at 8-9, JA____-__, ____-__. EPA does not dispute that ozone negatively impacts ecosystems, 83 Fed. Reg. at 65,879/3, JA____, or that its final rule will allow continued ozone nonattainment in downwind areas, *supra* at 10. Instead, EPA claims that "addressing impacts to watersheds is outside the scope of the EPA's authority under the good neighbor provision." EPA Response to Comments at 75, EPA-HQ-OAR-2018-0225-0423, JA____. In this way, EPA attempts to improperly narrow its obligation under the Act by interpreting the Good Neighbor Provision out of the context of the Act and its central requirement to protect public health and welfare. *See* 42 U.S.C. §§ 7409(b) ("Protection of public health and

welfare"), 7602(h) (defining "effects on welfare" to include effects on water, "whether caused by transformation, conversion, or combination with other air pollutants.").[7]

Ozone and its precursors damage ecosystems, including the Chesapeake Bay watershed. Citizen Petitioner Comments at 12, JA____. In particular, excess nitrogen oxides deposited to surface waters lead to algae blooms which cause dead zones where no aquatic life can survive. *Id.* In 2010, EPA responded to pervasive dead zones in the Chesapeake Bay by establishing a federal-state clean-up plan called the Chesapeake Bay Total Maximum Daily Load.[8] In this plan, EPA identified atmospheric deposition as contributing roughly one-third of the total nitrogen loads to the Chesapeake Bay, with fifty percent of that airborne nitrogen originating in areas outside of the Bay watershed. *Id*. at 4-33–34, JA____-__. EPA recognized this air-water interconnection and committed to reducing atmospheric deposition through regulations implemented "to meet National Ambient Air Quality Standards for criteria pollutants in 2020," including the Clean Air Interstate Rule, the precursor to the Cross-State Air Pollution Rule. *Id*. at 6-28 and

[7] *See also* 73 Fed. Reg. at 16,436/1 (setting the 2008 secondary ozone standard, to protect public welfare, at the same level as the primary standard of 75 parts per billion), JA____.

[8] EPA, Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment (Dec. 2010), https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document, JA____.

Appendix L-24, JA____, ____. Contrary to EPA's new claim that such considerations are "outside the scope" of the Good Neighbor Provision, that provision seeks attainment of air quality standards set to protect public health and welfare, 42 U.S.C. §§ 7409(a) and (b), 7410(a)(2)(D)(i)(I). Moreover, EPA assumed the burden of meeting nitrogen oxide reduction goals, in part via the transport rules, thus acknowledging the link between interstate ozone transport and watershed restoration. EPA's decision to now interpret the Good Neighbor Provision to foreclose consideration of environmental consequences is "an unexplained inconsistency in agency policy," and therefore arbitrary. *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (internal citation and quotations omitted).

The Close-Out Rule ignores the emissions that will cause violations of the 2008 ozone standard between now and 2023, Citizen Petitioner Comments at 1–11, JA____-__, and the real-world harms that undisputedly will result. *Id*. at 28 and Exhibit E at 8, JA____, ____. EPA's statutory interpretation is unreasonable, and its reasoning arbitrary, because the agency gave no consideration to the environmental harm caused by continued nonattainment. *See PDK Labs., Inc.*, 362 F.3d at 796 ("the problem Congress sought to solve should be taken into account.").

II. EPA'S CLAIM THAT NO POLLUTION REDUCTIONS ARE PRACTICABLE BEFORE 2023 IS ARBITRARY.

Apart from being inconsistent with the attainment deadlines, EPA's decision also rests on the flawed premise that no pollution reductions are practicable before 2023. In fact, the record makes clear that significant pollution reductions are practicable through measures that can be implemented quickly, within a few months. As explained below, EPA's reasons for rejecting these practicable pollution reductions are illogical, unsupported, and arbitrary, and EPA's failure to adopt them is contrary to the statutory obligation to prohibit interstate pollution to achieve downwind attainment "as expeditiously as practicable." 42 U.S.C. §§ 7410(a)(2)(D)(i), 7511(a); *North Carolina*, 531 F.3d at 912.

A. EPA Arbitrarily Rejected Pollution Reductions from Improved Utilization of Already-Installed Controls.

EPA data demonstrate that power plants with installed catalytic reduction devices can achieve nitrogen oxide emission rates below 0.065 pounds per mmBTU by consistently and efficiently utilizing their installed controls. Citizen Petitioner Comments at 20-23, JA____-__. EPA's own position is that these units can consistently achieve a rate of 0.10 pounds per mmBTU, even with "broken-in components and routine maintenance schedules," and EPA used a rate of 0.10 pounds per mmBTU for these units to calculate the emission budgets in the 2016 Transport Rule. 81 Fed. Reg. at 74,543/3, JA____. Yet EPA admits that units with

installed catalytic reduction devices are not achieving this rate. Rather, EPA states that these units emitted at a rate of 0.12 pounds per mmBTU in 2017—a rate twenty percent higher than the rate EPA admits is achievable—and at a rate of 0.121 pounds per mmBTU in 2018. 83 Fed. Reg. at 65,898/3 & n. 94, JA____. EPA's claim that these units cannot reduce their emissions is inconsistent with the agency's own finding that they are emitting at a rate twenty percent higher than the rate that reflects good operation of their already-installed controls. *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1153 (D.C. Cir. 2011) (rejecting agency decision that was "internally inconsistent and therefore arbitrary").

EPA also arbitrarily rejected pollution reductions that are available from switching on selective non-catalytic reduction devices. The agency does not deny that some operators with this control device are simply refusing to run them. 83 Fed. Reg. at 65,897/3-98/1 (recognizing that some plants have "idled [selective non-catalytic reduction]"), JA____-__. EPA claims that switching on this installed equipment would be too expensive, but in support it merely points back to a prior claim that engaging these idled devices does not "maximize" "air quality improvement relative to cost." *Id.* at 65,898/1 (emphasis added), JA____. Even if it remains true that this measure does not "maximize" cost-effectiveness, it simply does not follow that switching on already-installed controls is not practicable. *Intl.*

Union of Operating Engineers v. NLRB, 294 F.3d 186, 191 (D.C. Cir. 2002) (vacating agency decision based on "logical gap" and "non-sequitur").

In addition, EPA's rejection of switching on idled selective non-catalytic reduction devices as too expensive is in unexplained conflict with the agency's decision to focus on a more expensive control measure in determining what is practicable. EPA's selection of 2023 hinges primarily on claims about the timeline for installation of new selective catalytic reduction devices—specifically, that their installation could take "up to" 39 months, and that 48 months is therefore "reasonable." 83 Fed. Reg. at 65,894-96, JA____-__. But EPA calculates the cost of new selective catalytic reduction devices as $5000 per ton, *id.* at 65,895/1, JA____, which is higher than the $3400 per ton cost it calculates for switching on an idled selective non-catalytic reduction device, *id.* at 65,897/3, JA____. If a $5000 per ton cost does not disqualify new devices from consideration in determining what is practicable, why does the lower cost of switching on an idled device? EPA does not (and cannot) explain the discrepancy. The Court should reject EPA's claim as one that "def[ies] good reason." *Rio Grande Pipeline Co.*, 178 F.3d at 543.

B. EPA Arbitrarily Rejected Pollution Reductions from Shifting of Power Generation to Lower-Polluting and Clean Sources.

Generation shifting reduces emissions by transferring generation from uncontrolled or poorly controlled sources to cleaner sources. Sources can thus

"achieve an effective degree of emission limitation" that otherwise might have required expensive investments in end-of-stack controls. 81 Fed. Reg. at 74,544/3, JA____. EPA has described generation shifting as a control strategy that is "widely in use," "readily available," and "consistent with demonstrated [power plant] dispatch behavior," 81 Fed. Reg. at 74,540/3, 74,544/2, JA____, ____, and concedes—in this rule—that generation shifting is an "easily implemented control strateg[y] that could be implemented in the short term." 83 Fed. Reg. at 65,910/2, JA____. EPA further concedes that generation shifting can be "phased in on a time- and cost-continuum." *Id.* at 65,894/2-3, JA____. Nonetheless, EPA refuses to deploy this attainment tool, claiming that available reductions from generation shifting "may" be limited due to "market drivers" and also that it is more "reasonable" to "focus on . . . control strategies other than generation shifting" because of "EPA's historical consideration of this strategy as a secondary factor." *Id.* These claims cannot support a conclusion that pollution reductions through generation shifting are not practicable.

EPA offers no reason or supporting data as to why the presence of "market drivers" would prevent the use of regulatory tools to encourage or require generation shifting; indeed, EPA's own transport regime relies on a mix of regulation and markets. Further, EPA's reliance on its "historical consideration" of generation shifting as a "secondary factor" is conclusory and fails to explain why

generation shifting is rejected in this rulemaking. *See United Techs. Corp. v. DOD*, 601 F.3d 557, 562-63 (D.C. Cir. 2010) ("We do not defer to the agency's conclusory or unsupported suppositions.") (internal citation and quotations omitted).

Particularly in light of EPA's repeated and consistent recognition that pollution reductions through generation shifting are readily available and easily implemented, EPA's rejection of this control measure is arbitrary and inconsistent with EPA's obligation to secure reductions "as expeditiously as practicable." 42 U.S.C. § 7511(a).

C. EPA Arbitrarily Rejected Pollution Reductions from Non-Power Plant Industrial Sources.

Every year, thousands of tons of nitrogen oxide emissions from industrial sources other than power plants contribute to ozone nonattainment problems. In 2016, EPA estimated that these non-power plant sources would emit 545,000 tons of ozone-season nitrogen oxide pollution in 37 eastern states—and that their share was growing.[9]

Despite these large and proportionally increasing emissions, and despite states' failure to meet the attainment deadlines, EPA did not require any reductions of non-power plant emissions in the Close-Out Rule. EPA attempts to justify this

[9] Assessment of Non-EGU NOx Emission Controls, August 2016 at 5, 7, EPA-HQ-OAR-2018-0225-0009, JA____, ____.

failure by claiming it is "reasonable to assume" that installation of controls on non-power plants may take four years or more. 83 Fed. Reg. at 65,903/1-2, JA____. This claim, however, is not supported by any record evidence. In fact, EPA's own analysis of available pollution reductions from non-power plant sources shows that cost-effective reductions are available in less than one year at cement kilns, coal drying facilities, iron and steel mills, petroleum refineries, and many other industrial source categories. EPA-HQ-OAR-2018-0225-0009 at 11-17, JA____-__. EPA's claim that pollution reductions from these sources may take four years is arbitrary because EPA failed to "address [this] contrary evidence in more than a cursory fashion," *Transmission Agency of N. Cal. v. FERC*, 628 F.3d 538, 543-44 (D.C. Cir. 2010), and because "the only evidence in the record available to this Court actually supports the opposite conclusion[]." *Clark Cty. v. FAA*, 522 F.3d 437, 441-42 (D.C. Cir. 2008).

Lacking record evidence to support the "assum[ption]" that pollution reductions will take four years, EPA seeks to rely on its "lack [of] information," "limited experience," and resulting "uncertainty," including uncertainty about the time needed for sector-wide compliance. 83 Fed. Reg. at 65,902-03, JA____-__. Lack of information, however, cannot support EPA's claim. "[R]ational decisionmaking … requires more than an absence of contrary evidence; it requires substantial evidence to support a decision." *Intercollegiate Broadcast Sys. v.*

Copyright Royalty Bd., 574 F.3d 748, 767 (D.C. Cir. 2009). Because a lack of evidence is not substantial evidence, EPA's claim that no pollution reductions are available from non-power plant sources is arbitrary.

Further, EPA's attempt to rely on a lack of information regarding non-power plant sources is arbitrary for the additional reason that EPA has been citing lack of information to avoid controlling these sources for more than a decade. EPA cited lack of information to justify declining to require reductions from non-power plant sources for the Clean Air Interstate Rule in 2005, claiming it was "working to improve its inventory of emissions and control cost information." 70 Fed. Reg. 25,162, 25,214-15 (May 12, 2005), JA____-__. Eleven years later, in the 2016 Transport Rule, EPA was "still in the process," and again begged off. 81 Fed. Reg. at 74,522/2, JA____.

EPA "has offered no good reason for treating this problem with such passivity," *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1222 (D.C. Cir. 2004), particularly because the Act grants EPA authority to collect the information it needs, 42 U.S.C. § 7414(a)(1). "Having chosen not to [collect the appropriate data], EPA cannot now rely on the resulting paucity of data[.]" *North Carolina*, 531 F.3d at 920.

CONCLUSION AND RELIEF REQUESTED

For the foregoing reasons, the rule should be vacated. Given several areas' failure to attain the 2008 ozone standard by the deadlines established by Congress, and the need to use data from the May to September 2020 ozone season to meet the upcoming 2021 deadline, *see* 83 Fed. Reg. at 65,892/2, EPA should be ordered to promulgate a replacement rule within five months from the date of remand. *NRDC v. EPA*, 22 F.3d 1125, 1137 (D.C. Cir. 1994) (setting five-month deadline to approve or disapprove state implementation plans); *Delaney v. EPA*, 898 F.2d 687, 695 (9th Cir. 1990) (setting six-month deadline to promulgate federal implementation plan).

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Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT

Counsel hereby certifies, in accordance with Federal Rules of Appellate Procedure 32(g)(1) and 32(a)(7)(B)(i) and the Court's April 1, 2019 briefing order, that the foregoing **Proof Opening Brief Of Citizen Petitioners** contains 8,565 words, as counted by counsel's word processing system. The undersigned is informed that the brief filed by State Petitioners in this matter contains fewer than 9,200 words and thus the total word count of the two briefs complies with the 18,000 word limit.

Further, this document complies with the typeface and type-style requirements of Federal Rule of Appellate Procedure 32(a)(5) & (a)(6) because this document has been prepared in a proportionally spaced typeface using **Microsoft Word 2016** using **size 14 Times New Roman** font.

DATED: April 19, 2019

/s/ Neil Gormley
Neil Gormley

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of April, 2019, I have served the foregoing **Proof Opening Brief Of Citizen Petitioners**, and Addendum thereto, on all registered counsel through the Court's electronic filing system (ECF).

/s/ Neil Gormley
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