

No. 21-9509

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

HEAL UTAH, NATIONAL PARKS CONSERVATION ASSOCIATION,
SIERRA CLUB, and UTAH PHYSICIANS FOR A HEALTHY
ENVIRONMENT,

Petitioners,

v.

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

Respondents.

Petition for Review from the U.S. Environmental Protection Agency

**PETITIONERS' FINAL OPENING BRIEF (DEFERRED APPENDIX
APPEAL)**

ORAL ARGUMENT REQUESTED

Jenny K. Harbine
EARTHJUSTICE
313 East Main Street
P.O. Box 4743
Bozeman, Montana 59772
(406) 586-9699 | Phone
(406) 586-9695 | Fax
jharbine@earthjustice.org

John Barth
Attorney at Law
P.O. Box 409
Hygiene, Colorado 80533
(303) 774-8868 | Phone
barthlawoffice@gmail.com

Counsel for Petitioners

CORPORATE DISCLOSURE STATEMENT

Petitioners HEAL Utah, National Parks Conservation Association, Sierra Club, and Utah Physicians for a Healthy Environment are non-profit conservation organizations. None of the petitioner organizations has a parent corporation and no publicly held corporation owns a ten-percent or greater ownership interest in any of the petitioner organizations.

TABLE OF CONTENTS

CORPORATE DISCLOSURE STATEMENT	i
TABLE OF CONTENTS.....	ii
TABLE OF AUTHORITIES	i
GLOSSARY.....	iv
STATEMENT OF RELATED CASES	1
STATEMENT OF JURISDICTION.....	1
STATEMENT OF ISSUES	2
STATEMENT OF THE CASE.....	2
STATEMENT OF FACTS	6
I. THE REGIONAL HAZE PROGRAM	6
II. UTAH SOURCES OF HAZE POLLUTION.....	13
III. HISTORY OF REGIONAL HAZE COMPLIANCE IN UTAH.....	15
IV. THE CHALLENGED RULE	19
SUMMARY OF ARGUMENT	23
ARGUMENT	24
I. STANDARD OF REVIEW.....	24
II. EPA ARBITRARILY AND UNLAWFULLY DETERMINED THAT THE UTAH BART ALTERNATIVE WOULD ACHIEVE GREATER REASONABLE PROGRESS THAN BART	25
A. EPA Irrationally Found that the BART Alternative Would Yield Greater Overall Visibility Improvement Than Would BART	25

B. EPA’s Rollback Rule is Premised on Arbitrary and Unlawful Emissions Assumptions and Modeling Inputs.31

III. THE COURT SHOULD VACATE EPA’S ROLLBACK RULE AND REINSTATE THE 2016 BART FIP40

CONCLUSION.....41

STATEMENT REGARDING ORAL ARGUMENT41

ATTACHMENTS

ATTACHMENT A: STATUTORY AND REGULATORY ADDENDUM

ATTACHMENT B: DECLARATION OF LINDSAY BEEBE

ATTACHMENT C: DECLARATION OF CORY MACNULTY

ATTACHMENT D: DECLARATION OF DR. BRIAN MOENCH

Pursuant to the Court’s December 12, 2021 order, attachments required by 10th Circuit Rule 28.2(A) need not be attached to the preliminary briefs.

TABLE OF AUTHORITIES

FEDERAL CASES

<u>Action on Smoking & Health v. C.A.B.</u> , 713 F.2d 795, 797 (D.C. Cir. 1983).....	41
<u>Ctr. for Energy & Econ. Dev. v. EPA</u> , 398 F.3d 653 (D.C. Cir. 2005).....	25, 26
<u>Ariz. ex rel. Darwin v. EPA</u> , 815 F.3d 519 (9th Cir. 2016)	12, 29
<u>Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc.</u> , 528 U.S. 167 (2000).....	25
<u>High Country Conservation Advocs. v. U.S. Forest Serv.</u> , 951 F.3d 1217 (10th Cir. 2020)	40-41, 41
<u>Motor Vehicle Mfrs. Ass’n v. EPA</u> , 768 F.2d 385 (D.C. Cir. 1985).....	25
<u>Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.</u> , 463 U.S. 29 (1983).....	24-25, 35
<u>N. Dakota v. EPA</u> , 730 F.3d 750 (8th Cir. 2013), <u>cert. denied</u> , 134 S. Ct. 2662 (May 27, 2014)	12
<u>N.M. Env’t Improvement Div. v. Thomas</u> , 789 F.2d 825 (10th Cir. 1986)	24, 30, 35, 37
<u>Nat’l Parks Conservation Ass’n v. EPA.</u> , 788 F.3d 1134 (9th Cir. 2015)	28, 29, 29-30, 30
<u>Nat’l Parks Conservation Ass’n v. FAA</u> , 998 F.2d 1523 (10th Cir. 1993)	25
<u>Oklahoma v. EPA</u> , 723 F.3d 1201 (10th Cir. 2013), <u>cert. denied</u> , 134 S. Ct. 2262 (May 27, 2014)	7-8, 12

Organized Vill. of Kake v. U.S. Dep’t of Agric.,
795 F.3d 956 (9th Cir. 2015)41

Paulsen v. Daniels,
413 F.3d 999 (9th Cir. 2005)24, 41

Sorenson Commc’ns, Inc. v. FCC,
567 F.3d 1215 (10th Cir. 2009)25

Utah Envtl. Cong. v. Richmond,
483 F.3d 1127 (10th Cir. 2007)25

Utahns for Better Transp. v. U.S. Dept. of Transp.,
305 F.3d 1152 (10th Cir. 2002)25

Utility Air Regulatory Group v. EPA,
885 F.3 714, 720 (D.C. Cir. 2018).....39, 40

Virgin Islands Tel. Corp. v. FCC,
444 F.3d 666 (D.C. Cir. 2006).....41

WildEarth Guardians v. U.S. Bureau of Land Mgmt.,
870 F.3d 1222 (10th Cir. 2017)41

Yazzie v. EPA,
851 F.3d 960 (9th Cir. 2017)39, 40

FEDERAL STATUTES

5 U.S.C. § 706..... 23-24, 40

42 U.S.C. § 74103, 7-8, 8, 12-13

 § 7472.....6, 7

 § 7491.....*passim*

 § 7607.....*passim*

FEDERAL REGULATIONS

40 C.F.R. § 51.3016

 § 51.308.....*passim*

 § 63.9984.....37

 § 63.10000.....37

64 Fed. Reg. 35,714 (July 1, 1999).....*passim*
77 Fed. Reg. 9,304 (Feb. 16, 2012)33, 35, 37
33,642 (June 7, 2012)..... 39-40
74,355 (Dec. 14, 2012)15, 16
81 Fed. Reg. 2,004 (Jan. 14, 2016)*passim*
43,894 (July 5, 2016)*passim*
85 Fed. Reg. 3,558 (Jan. 22, 2020)*passim*
75,860 (Nov. 27, 2020)*passim*
86 Fed. Reg. 7,037 (Jan. 25, 2021)5

OTHER AUTHORITIES

H.R. Rep. No. 95-294 (1977), reprinted in 1977 U.S.C.C.A.N. 1077.....6
H.R. Rep. No. 564, 95th Cong., 1st Sess. (1977)9

GLOSSARY

BART	Best Available Retrofit Technology
CAA	Clean Air Act
dv	deci-view
EPA	United States Environmental Protection Agency
FIP	Federal Implementation Plan
MATS	Mercury Air Toxics Standards
NO _x	Nitrogen Oxide
PM	Particulate Matter
SCR	Selective Catalytic Reduction
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide

STATEMENT OF RELATED CASES

The following consolidated petitions for review, now dismissed, are related to the pending case: State of Utah v. EPA, Case No. 16-9541; PacifiCorp v. EPA, Case No. 16-9542; Utah Associated Municipal Power Systems v. EPA, Case No. 16-9543; Deseret Generation and Transmission Cooperative v. EPA, Case No. 16-9545. These related petitions challenged EPA’s Final Rule, Utah Regional Haze, 81 Fed. Reg. 43,894 (July 5, 2016), which was rescinded by the final rule challenged in the pending case.

STATEMENT OF JURISDICTION

This Court has jurisdiction pursuant to 42 U.S.C. § 7607(b)(1), which authorizes judicial review of EPA’s final decisions on Clean Air Act state implementation plans in the circuit court for the circuit in which the affected state is located. This case concerns EPA’s final rule entitled “Approval and Promulgation of Air Quality Implementation Plans; Utah; Regional Haze State and Federal Implementation Plans, on November 27, 2020 (85 Fed. Reg. 75,860, included as Attachment A to the Petition for Review (“Rollback Rule” or “2020 Final Rule”)) approving Utah’s State Implementation Plan (“SIP”) and withdrawing EPA’s 2016 Federal Implementation Plan (“FIP”) addressing regional haze pollution from four large coal plant units in Utah.

Respondent EPA issued the challenged Final Rule on November 27, 2020. Pursuant to Section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1), Petitioners had sixty (60) days from the date of EPA’s issuance of the Final Rule to file a petition for review. Petitioners filed a timely Petition for Review on January 19, 2021.

STATEMENT OF ISSUES

1. Whether EPA’s Rollback Rule violated the Clean Air Act, 42 U.S.C. § 7491, and Regional Haze Regulations, 40 C.F.R. § 51.308(e), by approving Utah’s Alternative to EPA’s 2016 Best Available Retrofit Technology (“BART”) determinations for four large sources of air pollution, where such alternative would not achieve greater visibility benefits than BART.

2. Whether EPA’s Rollback Rule violated the Clean Air Act, 42 U.S.C. § 7491, and Regional Haze Regulations, 40 C.F.R. § 51.308(e), by approving Utah’s BART Alternative based on erroneous emissions assumptions that significantly understate the visibility benefits of BART.

STATEMENT OF THE CASE

This case concerns air pollution that mars vistas in some of our nation’s most treasured public lands—including Utah’s much-loved national parks such as Arches, Canyonlands, and Zion and federal wilderness areas. To restore air quality in these iconic landscapes—called “Class I areas”—the Clean Air Act requires

states to adopt implementation plans to eliminate visibility-impairing “haze pollution” from human-caused sources such as coal-fired power plants, oil and gas drilling, and industrial manufacturing. 42 U.S.C. § 7491(a)(1), (b)(2). Among other things, these state implementation plans, or “SIPs,” must establish emissions limitations for haze-forming pollutants from most of the oldest, dirtiest stationary sources of haze-causing pollution—such as antiquated coal-fired power plants—that reflect installation of the “best available retrofit technology,” or “BART.” Id. § 7491(b)(2)(A). Where a SIP does not meet minimum Clean Air Act requirements, EPA must disapprove the SIP and promulgate a FIP. 42 U.S.C. § 7410(c)(1)(B).

After rejecting Utah’s several flawed SIPs for nitrogen oxide (“NO_x”) pollution from the state’s four large coal plant units that are subject to the Clean Air Act’s BART requirements—Hunter Units 1 and 2 and Huntington Units 1 and 2—EPA in July 2016 promulgated a FIP for these units. See Final Rule, Utah Regional Haze, 81 Fed. Reg. 43,894 (July 5, 2016) (“2016 Final Rule”). In the 2016 Final Rule, EPA determined that BART for NO_x emissions must reflect the installation and operation of selective catalytic reduction (“SCR”) technology, which the agency found would yield significant, cost-effective visibility benefits. Id. at 43,904-07. In promulgating the FIP, EPA rejected Utah’s proposed alternative to BART, finding that it would not achieve greater reasonable progress

toward eliminating human-caused visibility impairment than would BART. Id. at 43,902.

After initially defending its 2016 Final Rule before this Court against state and industry challenges, EPA announced in 2017 that it was granting administrative petitions for reconsideration filed by Utah and PacifiCorp. Subsequently, in January 2020, EPA proposed a complete reversal of its 2016 Final Rule. See Proposed Rule, Utah Regional Haze, 85 Fed. Reg. 3,558 (Jan. 22, 2020) (“2020 Proposed Rule”). Specifically, EPA proposed withdrawing its FIP requiring NO_x emissions reductions reflective of SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2, and approving the exact same Utah BART Alternative EPA previously rejected. Id.

Petitioners HEAL Utah, National Parks Conservation Association, Sierra Club, and Utah Physicians for a Healthy Environment (collectively, “Conservation Organizations”) submitted extensive legal and technical comments critiquing, among other things, EPA’s reliance on visibility modeling that showed no discernible benefit of Utah’s BART Alternative and that incorporated erroneous emissions assumptions. App. at 0840-93 (EPA-R08-OAR-2015-0463-1130). Nonetheless, EPA on November 27, 2020 finalized its approval of the Utah BART Alternative and rollback of the 2016 Final Rule. Final Rule, Utah Regional Haze, 85 Fed. Reg. 75,860 (Nov. 27, 2020) (“2020 Final Rule” or “Rollback Rule”).

Pursuant to 42 U.S.C. § 7607(b)(1), the Conservation Organizations filed a petition for review of EPA’s Rollback Rule on January 19, 2021. Shortly thereafter, on February 4, 2021, EPA “ask[ed] the Court to hold the instant matter in abeyance for 120 days to provide an opportunity for new Agency leadership to review the underlying rule in conformance with the President’s Executive Order on ‘Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,’ published at 86 Fed. Reg. 7,037 (Jan. 25, 2021).” This Court granted the abeyance the same day.

Subsequently, the State of Utah sought to intervene in this case in support of Respondent EPA. PacifiCorp, Deseret Generation & Transmission Co-Operative, Utah Associated Municipal Power Systems, and Utah Municipal Power Agency (collectively, “Industry Intervenors”) also sought intervention in support of Respondent EPA. The Court took these intervention motions under advisement on February 19, 2021.

EPA filed three subsequent motions to extend the abeyance of this matter, which were granted. However, on November 29, 2021, the parties jointly requested that this Court lift the abeyance and allow the case to proceed to briefing. The Court did so and simultaneously granted all pending motions to intervene.

The issue in this appeal is whether EPA’s November 2020 decision to approve Utah’s BART Alternative and rollback the agency’s 2016 Final Rule that

required BART on some of Utah’s largest sources of regional haze pollution was arbitrary, capricious, or not in accordance with the Clean Air Act and EPA’s Regional Haze Rule.

STATEMENT OF FACTS

I. THE REGIONAL HAZE PROGRAM

The Clean Air Act imposes a legal obligation on states and EPA to abate haze pollution and its adverse visibility effects¹ in our nation’s Class I Areas—156 national parks and wilderness areas. 42 U.S.C. § 7491. In order to protect their “intrinsic beauty and historical and archeological treasures,” the regional haze program establishes a national regulatory floor and requires states to design and implement programs at least as stringent as this floor to curb haze-causing emissions located within their jurisdictions. H.R. Rep. No. 95-294, at 203-04 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1282; see also 42 U.S.C. § 7472(a) (defining Class I areas to encompass national parks and wilderness areas); id.

¹ Regional haze results from small particles in the atmosphere which impair a viewer’s ability to see long distances, color, and geologic formation. While some haze causing particles result from natural processes, most result from anthropogenic sources of pollution. Haze forming pollutants including sulfur dioxide (“SO₂”), NO_x, particulate matter (“PM”), volatile organic compounds (“VOCs”), and ammonia (“NH₃”) contribute directly to haze or form haze after being converted in the atmosphere. Visibility impairment is measured in deciviews, which is understood as the perceptible change in visibility. The higher the deciview value, the worse the impairment. See 40 C.F.R. § 51.301 (defining deciview).

§ 7491(a)(1) (establishing goal of eliminating human-caused haze). Haze pollution “reduces the clarity, color, and visible distance that one can see.” Proposed Rule, Utah Regional Haze, 81 Fed. Reg. 2,004, 2,007 (Jan. 14, 2016) (“2016 Proposed Rule”). Haze pollution results from a multitude of sources that emit fine PM and its precursors, which include SO₂ and NO_x. Id. This same pollution causes “serious health effects and mortality in humans and contributes to environmental effects such as acid deposition and eutrophication.” Id.²

To achieve Congress’s national goal of “prevent[ing] any future, and ... remedying ... any existing” human-caused haze in Class I areas, 42 U.S.C. § 7491(a)(1), the Clean Air Act requires each state to develop an implementation plan to reduce, and ultimately eliminate, air pollution from sources within its borders that causes or contributes to visibility impairment in any Class I area. Id. § 7491(b). These state implementation plans, or “SIPs,” must prescribe “emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal.” Id. § 7491(b)(2). “EPA reviews all SIPs to ensure that the plans comply with the statute,” and it “may not

² Eutrophication is a process by which a body of water acquires a high concentration of nutrients such as nitrates—a form of NO_x—which promotes excessive algae growth. As the algae die and decompose, the water is depleted of available oxygen, which kills other resident organisms such as fish. U.S. Geological Survey, Eutrophication, <https://www.usgs.gov/mission-areas/water-resources/science/nutrients-and-eutrophication> (last visited Jan. 28, 2022).

approve any plan that ‘would interfere with any applicable requirement[.]’”

Oklahoma v. EPA, 723 F.3d 1201, 1204 (10th Cir. 2013) (quoting 42 U.S.C.

§ 7410(l)), cert. denied, 134 S. Ct. 2262 (May 27, 2014). If a SIP does not satisfy statutory and regulatory requirements, EPA must disapprove it and prepare a federal implementation plan, or “FIP.” 42 U.S.C. § 7410(c)(1)(A).

“The determination of BART must be based on an analysis of the best system of continuous emission control technology available and associated emission reductions achievable” for each affected source, considering five factors:

the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

40 C.F.R. § 51.308(e)(1)(ii)(A). The BART-based emission limits adopted by the State must be sufficiently stringent that, in combination with other control measures in the SIP, they will provide for the elimination of human-caused haze in affected Class I areas at a reasonable rate of progress. 42 U.S.C. § 7491(b)(2), (b)(2)(A).

Because of their age and scale, BART sources make an outsized contribution to the regional haze problem; the need to remedy haze-causing pollution from these sources was “a major concern motivating the adoption of the [Clean Air

Act’s] visibility provisions.” Final Rule, Regional Haze Regulations, 64 Fed. Reg. 35,714, 35,737 (July 1, 1999) (“1999 Regional Haze Rule”) (quoting H.R. Rep. No. 564, 95th Cong., 1st Sess. at 155 (1977)). Thus, adequate emission controls on sources subject to BART, including Hunter and Huntington, are a necessary first step toward meeting the visibility goal of the regional haze program. BART must be installed and operated no later than five years after the SIP/FIP approval. 40 C.F.R. § 51.308(e)(1)(iv).

EPA cannot exempt emission sources from BART. The Clean Air Act and EPA’s Regional Haze Rule identify BART as a mandatory measure that must be implemented to achieve reasonable progress toward restoring natural visibility conditions during the first regional haze planning period, 2008-2018. 42 U.S.C. § 7491(b)(2); 40 C.F.R. § 51.308(d)(3). The Clean Air Act specifically requires states to adopt SIPs that “contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal ... including” installation and operation of BART at BART-eligible sources that emit any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any Class I area. 42 U.S.C. § 7491(b)(2)(A) (emphasis added).

The only permissible exemption from BART is when EPA, by rule promulgated with sufficient notice and opportunity for public comment,

determines that the source does not either by itself or in combination with other sources “emit any air pollutant which may reasonably be anticipated to cause or contribute to a significant impairment of visibility in any mandatory class I federal area.” Id. § 7491(c)(1). Further, the appropriate Federal Land Manager or managers must agree with the exemption before it can go into effect. Id. § 7491(c)(3). EPA has not issued any such exemption for the sources at issue in this appeal.

While states may not exempt sources from BART, in limited circumstances, the Regional Haze Rule allows for BART alternatives. 40 C.F.R. § 51.308(e)(3). In developing regulations governing development of alternative programs, EPA acknowledged that the regional haze program’s “legislative history demonstrates Congress’ recognition of the need to control emissions from a specific set of existing sources.” 1999 Regional Haze Rule, 64 Fed. Reg. at 35,742. Thus, in EPA’s words, “[a]llowing States to adopt alternative measures such as an emissions trading program rather than to require BART will provide the States with the flexibility to achieve greater reasonable progress towards the national goal at a lower cost, while still addressing the Congressional concern that existing sources contributing to visibility impairment be required to control emissions appropriately.” Id. at 35,741 (emphasis added).

States can propose an alternative to BART only if such alternative “achieve[s] greater reasonable progress than would be achieved through the installation and operation of BART.” 40 C.F.R. § 51.308(e)(2). EPA’s Regional Haze Rule provides:

A State which opts under 40 CFR 51.308(e)(2) to implement an emissions trading program or other alternative measure rather than to require sources subject to BART to install, operate, and maintain BART may satisfy the final step of the demonstration required by that section as follows: If the distribution of emissions is not substantially different than under BART, and the alternative measure results in greater emission reductions, then the alternative measure may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, the State must conduct dispersion modeling to determine differences in visibility between BART and the trading program for each impacted Class I area, for the worst and best 20 percent of days. The modeling would demonstrate “greater reasonable progress” if both of the following two criteria are met:

- (i) Visibility does not decline in any Class I area, and
- (ii) There is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas.³

40 C.F.R. § 51.308(e)(3).

³ If a demonstration of greater reasonable progress cannot be made based on the emissions reductions or visibility modeling tests in 40 C.F.R. § 51.308(e)(3), a BART alternative can only be justified “based on the clear weight of evidence that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources.” 40 C.F.R. § 51.308(e)(2)(i)(E).

While the Regional Haze Rule allows states to rely on alternative programs that legitimately achieve better-than-BART results, the states “exercise this authority with federal oversight.” Oklahoma, 723 F.3d at 1204; accord N. Dakota v. EPA, 730 F.3d 750, 757 (8th Cir. 2013), cert. denied, 134 S. Ct. 2662 (May 27, 2014). See also Ariz. ex rel. Darwin v. EPA, 815 F.3d 519, 532 (9th Cir. 2016) (“Congress intended that EPA, not the states alone, ultimately ensure that state determinations as to regional haze comply with the Act, and so authorized EPA to disapprove state ‘analysis that is neither reasoned nor moored to the [Act’s] provisions.’”).

In the context of alternative programs, EPA properly reviews SIPs for compliance with 40 C.F.R. § 51.308(e)(2)-(3), with the overall objective of determining, based on available information and reasonable assumptions, whether the alternative program will achieve greater reasonable progress towards improving visibility than would have been achieved by implementation of the BART requirements at BART-subject sources. 40 C.F.R. § 51.308(e)(3). If the record does not support a determination that “the alternative measure results in greater emission reductions,” that “[t]here is an overall improvement in visibility,” or that the “clear weight of evidence” supports a determination that the alternative measure achieves greater reasonable progress than BART, 40 C.F.R. § 51.308(e)(2)(i)(E), (e)(3), then EPA may not approve the alternative program and

must impose a FIP satisfying the requirements of BART, 42 U.S.C.

§ 7410(c)(1)(B).

II. UTAH SOURCES OF HAZE POLLUTION

Emissions from Utah’s coal-fired power plants are a large source of air pollution that impairs visibility at national parks both within Utah and beyond its borders. These include Utah’s “mighty five” national parks (Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capitol Reef National Park, and Zion National Park), which were established specifically to preserve and protect the contrasting scenic vistas of colorful rock canyons, arches, domes, hoodoos and spires against the clear blue skies. App. at 0095-100 (Letter from Nat’l Park Serv. to EPA (Apr. 2, 2015)). For example, as the National Park Service pointed out in an April 2015 letter to EPA, “one of the important purposes of Arches National Park is to provide visitors with opportunities to experience park resources in a majestic natural setting, with striking geologic features in the foreground and the towering La Sal Mountains in the distance creating expansive views of contrasting colors and textures.” App. at 0095. Yet, “visibility ... at Arches is impaired by anthropogenic haze approximately 83 percent of the time relative to the annual average level of natural haze.” Id. Similar circumstances impair panoramic vistas of cliffs and canyons, as well as starry night skies, at all of Utah’s parks. App. at 0095-100.



Views from Bryce Canyon National Park on a clear day (left) and on a hazy day (right). Under clean-air conditions, Navajo Mountain and Fifty-mile Mountain can be seen in the distance, and the contrasting forms and colors of the White Cliffs in Grand Staircase-Escalante National Monument can be seen clearly in the middle ground. (NPS photos.)

App. at 0097.

NO_x emissions from the Hunter Units 1 and 2 and Huntington Units 1 and 2 coal plants also impact numerous Class I areas in other states including, but not limited to: Grand Canyon National Park in Arizona and Black Canyon of the Gunnison National Park, Flat Tops Wilderness Area, and Mesa Verde National Park in Colorado. App. at 0749-50 (CAMx Visibility Assessment (Sept. 2018)). EPA has previously summarized that these BART sources in Utah “significantly impact[] several Class 1 areas” including the original focal point of the visibility program—Grand Canyon National Park. 2016 Proposed Rule, 81 Fed. Reg. at 2,037. Further, emissions controls on these units would yield “substantial visibility benefits, both total and incremental” at the affected Class I areas. *Id.* at 2,038, 2,041, 2,045, 2,048. As EPA previously represented to this Court, “[a]ddressing visibility impairment [from Hunter and Huntington] is critical not only to the

experience of visitors to these parks, but also to the economic well-being of the local communities near the parks and state-wide.” Utah v. EPA, No. 16-9541, Respondents’ Opp. to the Mots. to Stay Final Rule, at 1 (10th Cir. Dec. 16, 2016).

III. HISTORY OF REGIONAL HAZE COMPLIANCE IN UTAH

EPA’s action on review reflects a reversal of the agency’s position in rejecting Utah’s repeated prior attempts to justify exempting the PacifiCorp Hunter and Huntington coal plants from NO_x emissions reductions mandated by the Clean Air Act’s BART requirements. Consistently since 2008, Utah has proposed for PacifiCorp’s Hunter Unit 1, Hunter Unit 2, Huntington Unit 1, and Huntington Unit 2 coal-fired power plants that BART is satisfied by those units’ prior upgrade of combustion controls—which achieved necessary, but limited, NO_x reductions—but no future controls or associated emissions reductions. See App. at 0110-11(Nat’l Park Serv. Technical Comments (3/14/16)) (detailing history). When Utah first proposed in its 2008 SIP that these existing controls satisfied the Clean Air Act’s BART requirement, EPA disapproved Utah’s SIP because the state failed to perform a proper, five-factor BART analysis. 2012 Final Rule, 77 Fed. Reg. 74,355, 74,357 (Dec. 14, 2012). As EPA subsequently noted, “EPA’s disapproval of Utah’s [2008] NO_x and PM control determinations necessarily precludes finding that these same controls are all that are required to satisfy the [Regional Haze Rule’s] requirements.” 2016 Final Rule, 81 Fed. Reg. at 43,914. On June 4,

2015, Utah again requested EPA's approval of pre-existing combustion controls on Hunter Units 1 and 2 and Huntington Units 1 and 2, but this time asserted that such controls satisfied the Regional Haze Rule's requirements for a BART Alternative rather than attempting to justify the controls as BART. See id. at 43,895 (describing SIP). In addition to the past combustion-control upgrades on the BART units (Hunter Units 1 and 2 and Huntington Units 1 and 2), Utah's 2015 SIP additionally identified as part of the BART Alternative past emissions reductions from three non-BART facilities. Id.; see also 2016 Proposed Rule, 81 Fed. Reg. 2,004, 2,015, 2,018 (Jan. 14, 2016) (describing Utah's proposed BART Alternative). Specifically, Utah included in its BART Alternative the past NO_x emissions reductions from upgraded combustion controls on Hunter Unit 3, and reductions in particulate matter, NO_x, and SO₂ resulting from the permanent closure on August 15, 2015 of both units of PacifiCorp's Carbon Plant. 2016 Proposed Rule, 81 Fed. Reg. at 2,018-19.

On January 14, 2016, EPA issued a proposed rule on Utah's 2015 SIP submission for NO_x that took the form of a co-proposal. EPA proposed in the alternative either to approve Utah's NO_x BART Alternative or to disapprove it and impose a FIP containing NO_x emissions limits based on the installation and operation of Selective Catalytic Reduction ("SCR") air pollution controls as BART. Id. at 2,006. On July 5, 2016, EPA issued the final rule disapproving the

BART Alternative for NO_x promulgating a FIP. 2016 Final Rule, 81 Fed. Reg. at 43,895. In developing the FIP, EPA evaluated thousands of pages of comments and expert analysis submitted by the State of Utah and owners of the Hunter and Huntington power plants. App. at 0170-459 (2016 Responses to Comments). Among these comments, the National Park Service, in its role as the Federal Land Manager responsible for protecting the resource values of the national parks impacted by Hunter's and Huntington's NO_x emissions, wrote to urge EPA to disapprove Utah's BART Alternative and implement a FIP requiring installation and operation of BART to achieve needed visibility improvements. App. at 0102-05 (Nat'l Park Serv. Cover Letter (March 14, 2016)). EPA responded to all comments it received on the proposed rule in a 440-page "Response to Comments" document. App. at 0170-459.

Following EPA's exhaustive review, the agency concluded that "the State's NO_x BART Alternative for the power plants is not consistent with the applicable statutory and regulatory requirements. As a result, EPA has determined that final disapproval is the only path that is consistent with the Act." 2016 Final Rule, 81 Fed. Reg. at 43,895. Thus, EPA adopted a FIP that required Hunter Units 1 and 2 and Huntington Units 1 and 2 to meet NO_x emissions limits reflective of the installation of "selective catalytic reduction" or "SCR," controls which EPA determined necessary to achieve cost-effective and significant visibility

improvement. Id. at 43,904-07. EPA noted that its determination to require NOx emissions reductions consistent with the operation of SCR aligned with its decisions throughout the country to effectively reduce regional haze pollution. Id. Consistent with the Clean Air Act's requirement that BART-compliance be required no later than five years after promulgation of a FIP, 42 U.S.C. § 7491(g)(4), EPA's 2016 Final Rule required PacifiCorp to achieve the required NOx emissions reductions on its BART units no later than August 2021. 2016 Final Rule, 81 Fed. Reg. at 43,924.

Utah, PacifiCorp, and various other entities challenged EPA's FIP and disapproval of the BART Alternative for NOx before this Court. See Utah v. EPA, Case No. 16-9541 consol. (10th Cir. Sept. 1, 2016.). Initially, in December 2016, EPA vigorously defended its FIP and urged that compliance should not be delayed, despite state and industry motions to stay the rule. Id., EPA Opp. To Mot. to Stay Final Rule. Doc. No. 01019737094 (Dec. 16, 2016). However, following a change in presidential administrations and EPA leadership, EPA informed the State of Utah and PacifiCorp on July 14, 2017 that the agency was granting their requests to "reconsider" the plan. App. at 0640, 0642. To accommodate EPA's reconsideration, the Tenth Circuit litigation was held in abeyance and EPA's FIP requiring SCR installation was stayed. Utah v. EPA, Case No. 16-9541 consol., Order, Doc. No. 01019868018 (Sept. 11, 2017).

The rulemaking at issue in this appeal followed.

IV. THE CHALLENGED RULE

Following the administration’s reconsideration of the 2016 FIP, EPA proposed a rollback of the BART-based NO_x emissions reductions from Hunter Units 1 and 2 and Huntington Units 1 and 2 that it had previously found to constitute “the only path that is consistent with the Act.” 2016 Final Rule, 81 Fed. Reg. at 43,895. EPA’s proposal relied on Utah’s submission of “new technical information and a different regulatory test ... to demonstrate that the previously submitted NO_x BART Alternative achieves greater reasonable progress than BART.” 2020 Proposed Rule, 85 Fed. Reg. at 3,559. In other words, Utah’s BART Alternative was unchanged from the SIP that EPA previously rejected, but EPA considered revised air quality modeling performed by PacifiCorp to find the previously rejected SIP approvable as an alternative to the real and significant NO_x emissions reductions requirements EPA previously imposed in its FIP as BART.

In comments on EPA’s proposal, the Conservation Organizations noted that EPA’s approval of Utah’s BART Alternative would allow Utah to take credit for emission reductions at non-BART coal plants—Carbon Units 1 and 2 and Hunter Unit 3—that occurred entirely in the past in lieu of real future pollution reductions from Utah’s BART sources that would achieve significant visibility benefits. App. at 0847. The Conservation Organizations further noted that the emissions

reductions claimed for the Carbon Plant were not only historical; they were irreversible. App. at 0847-48. PacifiCorp dismantled the Carbon Plant well before EPA's proposed approval of the BART Alternative. App. at 0155-57(Conservation Organizations' Comments (Mar. 14, 2016)).

Nonetheless, EPA approved Utah's previously rejected BART Alternative based on the State's submission using a different computer model, but the same modeling inputs based on wholly past emissions reductions. 2020 Final Rule, 85 Fed. Reg. at 75,860 (stating that EPA's approval was based on Utah's submission of "new technical information and a different regulatory test, [that] seeks to demonstrate that the previously submitted NOX BART Alternative achieves greater reasonable progress than BART"). According to Utah, the new modeling results demonstrated that the BART Alternative would yield average visibility benefits over the 2001-2003 baseline conditions that are greater than—albeit infinitesimally so—those future visibility benefits achieved through installation of SCR air pollution controls as BART. 2020 Proposed Rule, 85 Fed. Reg. at 3,569 (Table 5).

In affirming for the first time Utah's claims that the BART Alternative would achieve greater reasonable progress than BART, EPA agreed to credit the BART Alternative with all emissions reductions after a baseline date of 2002 from both BART (Hunter Units 1 and 2 and Huntington Units 1 and 2) and non-BART

(Carbon Units 1 and 2 and Hunter Unit 3) sources—not just future reductions or those required to satisfy Clean Air Act regional haze requirements. 2020 Final Rule, 85 Fed. Reg. at 75,862. Further, in comparing the BART Alternative to visibility improvements that may be achieved through BART—the so-called “BART Benchmark”—EPA determined that it must assume a fictitious BART scenario in which prior irreversible emissions reductions from non-BART units had not been achieved. Id. Moreover, EPA claimed that it could not assume for the BART Benchmark scenario realistic future emissions reductions from non-BART sources that are unrelated to regional haze compliance. Id. Thus, EPA’s decision relied on visibility modeling for the BART Benchmark that incorporated emissions inputs for the Carbon Plant reflective of that plant’s emissions in the 2001-2003 time period, regardless of significant SO₂ emissions reductions that would have been necessary to allow that plant’s future operation in compliance with non-regional haze Clean Air Act requirements. Id.

The emissions assumptions employed in PacifiCorp’s modeling for the BART Alternative and BART Benchmark are qualitatively summarized in the table below. As can be seen, all of the emissions reductions credited to the BART Alternative occurred entirely in the past, while implementation of BART would achieve real, future NO_x reductions from the implementation of SCR on Utah’s

BART units.

EPA Rollback Rule Emissions Scenarios

	BART Alternative (combined emissions)	BART Benchmark (combined emissions)
Hunter Units 1 and 2 (BART units)	No SCR; NOx emissions reflective of <u>past</u> combustion control upgrades NOx: 6,194 tons/year SO2: 2,561 tons/year	NOx emissions reflective of combustion control upgrades plus <u>future</u> installation of SCR NOx: 1,594 tons/year SO2: 2,561 tons/year
Huntington Units 1 and 2 (BART units)	No SCR; NOx emissions reflective of <u>past</u> combustion control upgrades NOx: 6,513 tons/year SO2: 2,455 tons/year	NOx emissions reflective of combustion control upgrades plus <u>future</u> installation of SCR NOx: 1,546 tons/year SO2: 2,455 tons/year
Hunter Unit 3 (non-BART unit)	NOx emissions reflective of <u>past</u> combustion control upgrades NOx: 4,490 tons/year SO2: 1,230 tons/year	Continue polluting at 2001-2003 levels; No combustion control upgrades NOx: 6,530 tons/year SO2: 1,230 tons/year
Carbon Units 1 and 2 (non-BART units)	Shut down NOx: 0 tons/year SO2: 0 tons/year	Continue polluting at 2001-2003 levels; No SO2 reductions to reflect mandatory Clean Air Act compliance NOx: 3,289 tons/year SO2: 5,814 tons/year

2020 Final Rule, 85 Fed. Reg. at 75,870.

On November 27, 2020, EPA issued a Final Rule approving Utah State Implementation Plan (“SIP”) BART Alternative previously rejected and withdrawing its 2016 FIP. 2020 Final Rule, 85 Fed. Reg. at 75,871.

The Conservation Organizations filed this petition for review challenging EPA’s Rollback Rule on January 19, 2021.

SUMMARY OF ARGUMENT

EPA's Rollback Rule is arbitrary and fundamentally fails to achieve the objectives of the Clean Air Act's visibility-protection provisions, 42 U.S.C. § 7491, and should be reversed, *id.* § 7607(d)(9) (providing for reversal of arbitrary, capricious, or unlawful agency action under the Clean Air Act). As described below, EPA erred in approving Utah's BART Alternative. First, even assuming that all EPA's assumptions regarding the emissions reductions that would be achieved under the BART Alternative and BART scenarios were correct (and they are not), the modeling results demonstrating essentially equal benefits of the BART Alternative and BART scenarios could not justify EPA's finding of that the Alternative would achieve "an overall improvement in visibility," 40 C.F.R. § 51.308(e)(3)(ii), as required for its lawful approval. *See infra* Argument Pt. II.A. Second, EPA's finding relied on arbitrary and unlawful emissions assumptions that greatly underestimated the visibility benefits that would be achieved through installation of BART on Hunter Units 1 and 2 and Huntington Units 1 and 2, which are substantial. *See infra* Argument Pt. II.B.

Because EPA irrationally approved the Utah BART Alternative and repealed the 2016 BART FIP, EPA's Rollback Rule is arbitrary, capricious, and unlawful, and should be vacated. 5 U.S.C. § 706(2)(A); 42 U.S.C. § 7607(d)(9). Further, because EPA's Rollback Rule rescinded EPA's lawful, 2016 FIP, vacating the rule

reinstates the FIP and associated compliance deadlines. See Paulsen v. Daniels, 413 F.3d 999, 1008 (9th Cir. 2005) (“The effect of invalidating an agency rule is to reinstate the rule previously in force.”); infra Argument Pt. III.

ARGUMENT

I. STANDARD OF REVIEW

This petition for review is governed by section 307 of the Clean Air Act, 42 U.S.C. § 7607, under which this Court may reverse an action of the EPA that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 42 U.S.C. § 7607(d)(9)(A); see also N.M. Env’t Improvement Div. v. Thomas, 789 F.2d 825, 829 (10th Cir. 1986). “[A]n agency rule [is] arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983); see also Utah Env’tl. Cong. v. Richmond, 483 F.3d 1127, 1134 (10th Cir. 2007) (same); Motor Vehicle Mfrs. Ass’n v. EPA, 768 F.2d 385, 389 n.6 (D.C. Cir. 1985) (standard of review same under Administrative Procedure Act and Clean Air Act, 42 U.S.C. § 7607). The agency must cogently explain how it has reached its conclusions—making a rational connection between

the facts found and the choice made. See Sorenson Commc'ns, Inc. v. FCC, 567 F.3d 1215, 1220-22 (10th Cir. 2009); Utahns for Better Transp. v. U.S. Dept. of Transp., 305 F.3d 1152, 1186-92 (10th Cir. 2002).

EPA “must rationally exercise its § 169A [42 U.S.C. § 7491] discretion to approve better-than-BART SIPs.” Ctr. for Energy & Econ. Dev. v. EPA, 398 F.3d 653, 660 (D.C. Cir. 2005) (citing 42 U.S.C. § 7607(d)(9)(A)). Although the Court gives “deference to agency determinations in an area where the agency has expertise, ... [it] need not defer to irrational judgments.” Nat'l Parks Conservation Ass'n v. FAA, 998 F.2d 1523, 1532-33 (10th Cir. 1993) (citation omitted).⁴

II. EPA ARBITRARILY AND UNLAWFULLY DETERMINED THAT THE UTAH BART ALTERNATIVE WOULD ACHIEVE GREATER REASONABLE PROGRESS THAN BART

A. EPA Irrationally Found that the BART Alternative Would Yield Greater Overall Visibility Improvement Than Would BART

EPA's Rollback Rule is arbitrary and unlawful, first, because it is based on EPA's arbitrary and unlawful determination that Utah's BART Alternative would

⁴ Petitioners have standing to bring this suit on behalf of their members because: (1) their members have standing to sue in their own right; (2) the interests at stake are germane to each organization's purpose; and (3) neither the claim asserted nor the relief requested requires their members to participate directly in the lawsuit. Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs., Inc., 528 U.S. 167, 181 (2000). As set forth in the accompanying Declarations of Dr. Brian Moench, Cory MacNulty, and Lindsay Beebe, Petitioners have standing because their recreational, aesthetic, and conservation interests in clear air and visibility over Class I areas affected by Utah's BART sources are harmed by EPA's challenged actions. See id. at 183.

achieve greater visibility improvement than would NO_x emissions reductions reflective of SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2 as BART. 2020 Final Rule, 85 Fed. Reg. at 75,861.

The Clean Air Act’s regional haze provisions establish as a floor for states’ first regional haze SIPs a requirement to achieve emissions reductions consistent with the installation of BART on units subject to BART. 42 U.S.C. § 7491(b)(2). The Clean Air Act itself does not provide for any alternative to BART. Instead, such alternatives are authorized by EPA’s regional haze rule, but only to the extent they are found to achieve “greater reasonable progress” toward eliminating human-caused visibility impairment than would BART. 40 C.F.R. § 51.308(e)(2); see Ctr. for Energy & Econ. Dev., 398 F.3d at 655 (explaining that BART results establish the statutory floor for permissible pollution levels and EPA may approve a BART-alternative program only “so long as the alternative w[ill] achieve ‘better than BART’ results”). As Utah did here, states may rely on regional haze dispersion modeling to make such a demonstration. 40 C.F.R. § 51.308(e)(3). For purposes of a BART alternative, the term “greater reasonable progress” requires a State’s modeling to prove that:

- (i) Visibility does not decline in any Class I area, and
- (ii) There is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas.

40 C.F.R. § 51.308(e)(3)(i) and (ii).

In finding that Utah’s BART Alternative meets the “overall improvement in visibility” criterion, EPA’s Rollback Rule irrationally relied on differences between the BART Alternative and BART Benchmark that are so minute, they are effectively zero. EPA’s determination relied entirely on PacifiCorp’s visibility modeling. See 2020 Proposed Rule, 85 Fed. Reg. at 3,566 (stating that Utah’s SIP submission “relied on air quality modeling performed by a contractor for PacifiCorp”). However, PacifiCorp’s modeled difference between visibility impacts for the BART Benchmark and BART Alternative was only 0.00058 deciview on the 20 percent worst (haziest) days. App. at 0886 (Gebhart Report); 2020 Proposed Rule, 85 Fed. Reg. at 3,569 (Table 5). For reference, “[a] one deciview change in haziness is a small but noticeable change in haziness under most circumstances when viewing scenes in Class I areas.” 1999 Regional Haze Rule, 64 Fed. Reg. at 35,725. According to air quality modeling expert Howard Gebhart, the modeling results showed visibility differences between the two scenarios that “are so small that ... they should be interpreted as essentially zero.” App. at 0872 (Gebhart Report); see also App. at 0886. Mr. Gebhart went on to explain that “the fact that the [visibility] model projected very small visibility impacts becomes especially important when one considers the uncertainties

embedded in the modeling exercise, which likely negate any alleged benefit linked to the Utah SIP proposal.” Id. Those uncertainties, both inherent in the modeling exercise itself and in the veracity of the underlying emissions input assumptions, render EPA’s reliance on such inconsequential differences in the modeling results arbitrary. See App. at 0888 (discussing modeling uncertainties). EPA’s administrative record does not contain any evidence that the 0.00058 deciview difference between the BART Alternative and BART Benchmark will result in “an overall improvement in visibility” in the real world, which is the stated goal of the Clean Air Act and the BART alternative regulations.

While EPA may consider relative visibility benefits that are less than the level of perceptibility when evaluating air pollution controls under the regional haze program, it must provide a rational response to Mr. Gebhart’s concern that the visibility impacts EPA relied on are so small they cannot be relied upon to demonstrate any visibility benefit. See Nat’l Parks Conservation Ass’n v. EPA, 788 F.3d 1134, 1146 (9th Cir. 2015) (invalidating BART determination based on EPA’s unexplained reliance on very small visibility difference between control scenarios); c.f. Ariz. ex rel. Darwin, 815 F.3d at 536 (EPA adequately explained its reliance on visibility benefits below the level of perceptibility).

In promulgating the Rollback Rule, EPA did not meaningfully respond to the Conservation Organizations’ expert comments on this issue or rationally

explain its approach. Indeed, while acknowledging “inherent uncertainties” in the modeling exercise, EPA simply asserted that it “has confidence in the finding of relatively greater visibility benefit in the NO_x BART Alternative scenario even when the absolute visibility benefits are small.” App. at 0954-55 (EPA Responses to Comments). EPA did not address Mr. Gebhart’s comment that the modeled visibility difference is not just small, it is “essentially zero,” App. at 0872 (Gebhart Report), nor did EPA point to any other regulatory action in which its determination whether to approve a BART Alternative in lieu of BART hinged on modeled benefits that are less than one thousandth of a deciview.

The Ninth Circuit Court of Appeals previously rejected EPA’s similar attempt to defend its BART determinations for two coal plants in Montana. Nat’l Parks Conservation Ass’n, 788 F.3d at 1146-47. There, the Court addressed industry concerns that a modeled visibility difference between control scenarios of 0.085 deciview is “beyond the [visibility] model’s ability to predict with any confidence.” Id. at 1146. While industry’s concern addressed a different computer modeling program, the Court’s analysis is equally relevant to this case:

It is no answer to respond, as EPA did, that low levels of visibility impairment must be addressed even though they are not perceptible to the human eye, or that measures have been taken to minimize the margin of error. The issue is not the perceptibility of the proposed improvements, but the model’s ability to anticipate improvements at a level allegedly within its

margin of error, whether perceptible or not to the human eye. EPA simply offered no response to this objection.

Id. at 1146-47 (emphasis in original). Similarly, EPA’s defense of the Rollback Rule based on assertions that “measures have been taken to minimize the margin of error” or that the agency appropriately considers even small relative impacts are nearly identical to those the Ninth Circuit rejected. Id. at 1147. As in the Ninth Circuit case, EPA did not respond to the heart of Mr. Gebhart’s concern about the Rollback Rule: that the asserted relative benefit of the BART Alternative—just 0.00058 deciview—is “essentially zero.” App. at 0872 (Gebhart Report),

In nonetheless determining that the BART Alternative would achieve greater “overall improvement in visibility” than BART, 40 C.F.R. § 51.308(e)(3)(ii), EPA overlooked contrary record evidence and failed to consider an important aspect of the problem. N. M. Env’t Imp. Div., 789 F.2d at 830.

Absent reliable modeling results, EPA could only approve Utah’s BART Alternative if it finds “based on the clear weight of evidence that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources.” 40 C.F.R. § 51.308(e)(2)(i)(E) (emphasis added). As EPA has explained, this standard “requires that the alternative program must ‘clearly’ be better than BART, which we have explained is ‘when there is confidence that the

difference in visibility impacts between BART and the alternative scenarios are expected to be large enough’ to ensure that the alternative is, in fact, better.” 2016 Final Rule, 81 Fed. Reg. at 43,896 (quotation omitted). In previously rejecting Utah’s BART Alternative in 2016, EPA correctly determined that the alternative could not meet this standard when compared to the significant visibility benefits that would be gained through the installation of SCR on Hunter Units 1 and 2 and Huntington Units 1 and 2. *Id.* at 43,902. Absent PacifiCorp’s inconclusive visibility modeling results, no record evidence supported a different conclusion in 2020.

Because EPA’s finding that the Utah BART Alternative would achieve an “overall improvement in visibility” as compared against BART, 40 C.F.R. § 51.308(e)(3)(ii), irrationally relied on modeling results showing “essentially zero” visibility improvement under the Utah BART Alternative, App. at 0872 (Gebhart Report), EPA’s Rollback Rule is arbitrary, capricious, and unlawful.

B. EPA’s Rollback Rule is Premised on Arbitrary and Unlawful Emissions Assumptions and Modeling Inputs.

Not only is EPA’s Rollback Rule premised on illusory visibility benefits, but it also relies on significantly flawed emissions assumptions that, if corrected, would demonstrate the superior visibility benefits of the BART Benchmark and EPA’s 2016 Final Rule and FIP. For this reason, too, EPA’s Rollback Rule is

arbitrary and violates the Clean Air Act, 42 U.S.C. § 7491(b)(2); 40 C.F.R. § 51.308(e)(3), and should be vacated.

1. PacifiCorp’s modeling used inaccurate SO₂ emissions modeling inputs for the BART Benchmark.

EPA’s Rollback Rule is arbitrary and unlawful because it relies on an irrational and legally impossible scenario for the future SO₂ emissions from the Carbon Plant (Units 1 and 2) under the BART Benchmark scenario—one that significantly overstates the cumulative emissions and associated visibility impairment that would realistically occur under the BART Benchmark. App. at 0876-77 (Gebhart Report). As a result, EPA’s determination that the BART Alternative would achieve greater visibility improvement than could be achieved through the installation and operation of BART on Hunter Units 1 and 2 and Huntington Units 1 and 2 was irrational and unlawful.

PacifiCorp’s modeling inputs for Carbon Plant SO₂ emissions relied on an unreasonable and unlawful fiction. As noted, PacifiCorp closed the two Carbon Units in 2015; thus, for the BART Alternative, the modeling credited Utah for eliminating all of those units’ haze-causing NO_x and SO₂ emissions. 2020 Final Rule, 85 Fed. Reg. at 75,861. However, for the BART Benchmark scenario, the modeling assumed that those Units would continue polluting at pre-closure levels until 2025. Id. This is counter to record evidence and the law. If the Carbon Units

had not closed (as was assumed for the BART Benchmark scenario), the Units would have been required to significantly reduce their SO₂ emissions by April 15, 2015 to comply with EPA's Mercury and Air Toxics Standards ("MATS") rule. App. at 0151-53 (Stamper Report (Mar. 14, 2016)). Finalized in 2012, the MATS rule adopted stringent new standards for toxic air pollutants from new and existing coal-fired and oil-fired power plants. See Final Rule, National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units, 77 Fed. Reg. 9,304 (Feb. 16, 2012) ("MATS rule"). Among other pollution limits, the MATS rule adopted a limit on SO₂ emissions as a surrogate for harmful acid gases. Id. at 9,368-69. As evidenced in the record, compliance with EPA's MATS rule would have required the Carbon Units to reduce their SO₂ emissions by more than 50 percent.⁵ App. at 0151-53 (Stamper Report (Mar. 14, 2016)); see also App. at 0876-77 (Gebhart Report). EPA does not dispute such SO₂ emission reductions were required of the Carbon Units under the MATS rule.

However, PacifiCorp's modeling inputs did not reflect these EPA-mandated SO₂ emissions reductions, and instead assumed that the Carbon Plant's SO₂

⁵ PacifiCorp determined it would be un-economic to install the needed air pollution controls and decided to close the plant rather than comply with the MATS rule. App. at 0724 (UDAQ Staff Review).

emissions would continue at 2001-2003 levels after April 15, 2015, in gross violation of the MATS rule. 2020 Final Rule, 85 Fed. Reg. at 75,862 (affirming that the modeling “included Carbon ... emissions from the 2001-2003 baseline period (i.e. not including any reductions from MATS compliance[)]”). By failing to account for MATS compliance, PacifiCorp’s modeling inputs overestimated SO₂ emissions in the BART Benchmark scenario by more than 3,000 tons per year. App. at 0877 (Gebhart Report). The illegal 3,000 tons per year of SO₂ from the Carbon Units nullify in the modeling results the actual, real-world benefits resulting from the NO_x emissions reductions achieved by installation of SCR at Hunter Units 1 and 2 and Huntington Units 1 and 2.

EPA’s Rollback Rule did not correct PacifiCorp’s inaccurate Carbon SO₂ emission modeling inputs for the BART Benchmark. 2020 Final Rule, 85 Fed. Reg. at 75,862. Instead, EPA irrationally relied on the flawed Carbon SO₂ emissions modeling inputs for the BART Benchmark that underestimate the emission reductions and visibility benefits achieved under the BART Benchmark. EPA’s failure to correct this blatant SO₂ modeling input deficiency “runs counter to the evidence before the agency” and ignores an important aspect of the “greater reasonable progress” analysis. N. M. Env’t Improvement Div., 789 F.2d at 830 (quoting Motor Vehicle Mfrs. Ass’n., 463 U.S. at 42-43).

2. EPA’s defenses of the Rollback Rule are meritless.

EPA did not offer any legitimate defense to the irrational and legally impossible SO₂ emissions modeling inputs for the BART Benchmark in responding to comments on the Rollback Rule. Notably, EPA did not dispute that Carbon Units 1 and 2 would necessarily have decreased their future SO₂ emissions by at least half had PacifiCorp not chosen to close those units. See 2020 Final Rule, 85 Fed. Reg. at 75,862, 75,870 (discussing BART Benchmark modeling inputs but not disputing level of emissions reductions necessary for MATS rule compliance). Instead, EPA's only defense is that the BART Benchmark includes emissions assumptions unrelated to realistic future operating conditions because the Carbon Units "are not BART sources." Id. at 75,862. EPA went on to explain that if it were "to include these same emission reductions [achieved through the Carbon closure] in the BART Benchmark scenario, even though there would have been no enforceable obligation that they occur under that scenario, a proper comparison of the relative degree of visibility improvement between the two scenarios would not be possible." Id.

EPA's argument is non-responsive first because the Conservation Organizations do not advocate for including "th[e] same emission reductions" from the Carbon Plant in the BART Alternative and BART Benchmark scenarios. Id. Instead, the Conservation Organizations argue that, while EPA's BART Alternative scenario involves the elimination of emissions due to the closure of the

Carbon Units, the BART Benchmark scenario must include the future SO₂ emissions reductions mandated by EPA's MATS rule. See id. at 75,861 (summarizing comments); App. at 0876-77 (Gebhart Report).⁶ In determining whether the BART Alternative achieves greater reasonable progress than would BART, this difference in emissions reductions under the two scenario is critical. EPA's failure to require accurate SO₂ emissions modeling inputs leads directly to its flawed finding that the BART Alternative achieves greater reasonable progress than the BART Benchmark.

Second, EPA's argument must be rejected because, contrary to EPA's claim, the MATS rule creates a legally "enforceable obligation" to reduce SO₂ emissions from the Carbon Plant by at least 50 percent. 2020 Final Rule, 85 Fed. Reg. at 75,862. In adopting the MATS rule, EPA explained that power plants are the largest source of hazardous air pollutants, including acid gases, and regulation of these emissions is necessary to prevent the harmful health impacts associated with these pollutants. MATS Rule, 77 Fed. Reg. at 9,310. Under the rule, existing coal-fired power plants "must comply ... no later than April 16, 2015" and "demonstrate that compliance has been achieved" within 180 days thereafter. 40

⁶ As noted above, the Carbon Plant BART Benchmark modeling inputs must reflect at least a 50% reduction in SO₂ emissions, not a 100% reduction reflected in the BART Alternative modeling inputs.

C.F.R. § 63.9984(b), (f). And the limits “apply ... at all times except during periods of startup and shutdown.” Id. § 63.10000(a). A BART Benchmark scenario that would violate these strict limits is fiction. Likewise, a BART Benchmark modeling scenario that reflects illegal operation of the Carbon Plant into the future “runs counter to the evidence before the agency” and is “not in accordance with law.” N.M. Env’t Improvement Div., 789 F.2d at 829-30 (quotation omitted).

Third, and most fundamentally, EPA’s defense that its counterfactual assumption of future operation of the Carbon Plant without MATS compliance was necessary for “a proper comparison of the relative degree of visibility improvement between the two scenarios” cannot be squared with the Clean Air Act’s visibility provisions and the Regional Haze Rule. 2020 Final Rule, 85 Fed. Reg. at 75,862; see also id. at 75,870 (stating that the “modeling scenarios allow an accurate comparison between the BART Benchmark and the Utah NO_x BART Alternative”). As noted above, the SO₂ modeling inputs for the Carbon Plant do not produce a “proper comparison” or an “accurate comparison” of visibility benefits of the two scenarios. Id. at 75,862, 75,870. EPA regulations allow states to adopt an alternative to BART only if “[t]here is an overall improvement in visibility.” 40 C.F.R. § 51.308(e)(3)(ii). Any BART Alternative that does not result in “an overall improvement in visibility” than BART cannot satisfy the

Clean Air Act's minimum standard for visibility protection. 42 U.S.C.

§ 7491(b)(2). By failing to assume and input the real anticipated SO₂ emissions from the Carbon units under the BART Benchmark scenario, EPA failed to set up a comparison that would allow a legitimate determination that the BART Alternative would actually achieve “an overall improvement in visibility” than BART, as required by the Act.

Further, the approach in EPA's Rollback Rule has not been sanctioned by any court. In certain circumstances, courts have allowed EPA to credit BART Alternatives for emissions reductions undertaken either voluntarily or pursuant to non-BART requirements. See 2020 Final Rule, 85 Fed. Reg. at 75,862 n.13 (citing cases). However, no court has approved EPA's approach here of assuming that a single source subject to mandatory statutory requirements will operate out of compliance with those requirements into the future. In Utility Air Regulatory Group v. EPA (“UARG II”), the D.C. Circuit Court of Appeals rejected the petitioners' contention that states participating in a non-BART market-trading program could take credit for the SO₂ and NO_x emissions budget established under that program for a group of sources, which included all electric generating units subject to BART compliance. UARG II, 885 F.3 714, 720 (D.C. Cir. 2018). In that case, the court found it reasonable to assume that the BART-subject sources would comply either with BART or the BART-alternative emissions trading

program (the Cross-State Air Pollution Rule or “CSAPR”), but not both. Id. And in Yazzie v. EPA, the Court found that it was reasonable to credit voluntary, early emissions reductions from a BART source to the BART alternative, again approving the reasonableness of a BART source implementing a BART alternative in lieu of BART. 851 F.3d 960, 974 (9th Cir. 2017). These cases considered real, available alternative methods of Clean Air Act compliance. They did not sanction the false comparison present in EPA’s Rollback Rule between a BART Alternative and violations of the Clean Air Act (i.e. MATS rule non-compliance).

Moreover, both UARG II and Yazzie involved real future reductions of visibility-impairing pollutants. UARG II compared BART to an emissions trading program that “requires 28 states in the eastern half of the United States to significantly improve air quality by reducing [power plant] SO₂ and NO_x emissions that cross state lines and significantly contribute to ground-level ozone and/or fine particle pollution in other states.” Final Rule, CSAPR, 77 Fed. Reg. 33,642, 33,645 (June 7, 2012) (describing CSAPR); see UARG II, 885 F.3d at 720 (upholding CSAPR as alternative to BART). In Yazzie, future emissions reductions would be achieved through a lifetime cap on total emissions from covered sources through 2044. 851 F.3d at 967. By contrast, under the Utah BART Alternative, no future emissions reductions are contemplated or required, either from the BART sources (i.e., Hunter Units 1 and 2 and Huntington Units 1

and 2) or any other source; all emissions reductions credited to the BART Alternative have already occurred and are not in any way an “alternative” to BART compliance. No future visibility benefit is gained that could justify a determination that the Utah BART Alternative would achieve greater visibility improvement than would installation of SCR air pollution controls as BART.

III. THE COURT SHOULD VACATE EPA’S ROLLBACK RULE AND REINSTATE THE 2016 BART FIP

Because EPA’s approval of the Utah BART Alternative and rescission of EPA’s 2016 BART FIP was arbitrary and unlawful, this Court should vacate EPA’s Rollback Rule. 5 U.S.C. § 706(2)(A); 42 U.S.C. § 7607(d)(9); see High Country Conservation Advocs. v. U.S. Forest Serv., 951 F.3d 1217, 1228 (10th Cir. 2020) (stating that “[u]nder the APA, courts ‘shall’ ‘hold unlawful and set aside agency action’ that is found to be arbitrary or capricious”) (quotation omitted). Vacatur is appropriate because EPA’s irrational and unlawful analysis goes to the heart of whether EPA may approve Utah’s BART Alternative at all. High Country Conservation Advocs., 951 F.3d at 1229 (vacating challenged action based on flawed alternatives analysis in environmental impact statement); c.f. WildEarth Guardians v. U.S. Bureau of Land Mgmt., 870 F.3d 1222, 1239-40 (10th Cir. 2017) (declining to vacate challenged coal leases where Plaintiffs

prevailed on a “narrow issue” and did not first present vacatur arguments to the district court).

“The effect of invalidating an agency rule is to reinstate the rule previously in force.” Paulsen, 413 F.3d at 1008; see also Organized Vill. of Kake v. U.S. Dep’t of Agric., 795 F.3d 956, 970 (9th Cir. 2015) (same) (citation omitted); Virgin Islands Tel. Corp. v. FCC, 444 F.3d 666, 672 (D.C. Cir. 2006) (finding agency’s vacatur of rule “restored the status quo ante”); Action on Smoking & Health v. C.A.B., 713 F.2d 795, 797 (D.C. Cir. 1983) (“[B]y vacating or rescinding the recissions proposed by [the challenged regulation], the judgment of this court had the effect of reinstating the rules previously in force[.]”). Thus, vacating EPA’s Rollback Rule would reinstate the 2016 FIP that EPA rescinded in 2020, and correspondingly reinstate BART compliance deadlines for Hunter Units 1 and 2 and Huntington Units 1 and 2.

CONCLUSION

For the foregoing reasons, the Conservation Organizations respectfully request that this Court grant their petition for review of EPA’s Rollback Rule and vacate the unlawful rule.

STATEMENT REGARDING ORAL ARGUMENT

This case raises novel issues regarding implementation of the Clean Air Act’s regional haze program and concerns air quality over some of our nation’s

most treasured public lands. Given the complexity and consequence of the issues raised, the Conservation Organizations respectfully request that this Court hold oral argument.

Respectfully submitted this 17th day of June, 2022.

/s/ Jenny K. Harbine
Jenny K. Harbine
EARTHJUSTICE
313 East Main Street
P.O. Box 4743
Bozeman, Montana 59772
(406) 586-9699 | Phone
(406) 586-9695 | Fax
jharbine@earthjustice.org

/s/ John Barth
John Barth
Attorney at Law
P.O. Box 409
Hygiene, Colorado 80533
(303) 774-8868 | Phone
barthlawoffice@gmail.com

Counsel for Petitioners

CERTIFICATE OF COMPLIANCE WITH TYPE-VOUME LIMITS

As required by Fed. R. App. P. 32(a)(7)(C), I certify that this brief is proportionally spaced and contains fewer than 13,000 words. I relied on my Microsoft Word word processing tool to obtain the count.

I certify that the information in this certificate is true and correct to the best of my knowledge and belief formed after a reasonable inquiry.

Dated June 17, 2022.

/s/ Jenny K. Harbine

CERTIFICATION FOR ECF PLEADING

I hereby certify with respect to the foregoing that all required privacy redactions have been made; that if required to file hard copies with the clerk's office, the ECF submission is an exact copy of those documents; and that the ECF submission was scanned using the most recent version of a commercial virus scanning program (Microsoft Defender Antivirus, version 10.0.19041.1682), and according to the program is free of viruses.

Dated June 17, 2022.

/s/ Jenny K. Harbine

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of June, 2022, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Tenth Circuit by using the appellate CM/ECF system, which will send notification of this filing to all attorneys of record.

/s/ Jenny K. Harbine
Jenny K. Harbine

**Attachment A:
Statutory and Regulatory
Addendum**

STATUTORY AND REGULATORY ADDENDUM

STATUTES

5 U.S.C. § 706. Scope of Review1
42. U.S.C. § 7410. State implementation plans for national primary and
secondary ambient air quality standards2
42 U.S.C. § 7472. Initial classifications2
42 U.S.C. § 7491. Visibility protection for Federal class I areas3
42 U.S.C. § 7607. Administrative proceedings and judicial review7

REGULATIONS

40 C.F.R. § 51.301. Definitions14
40 C.F.R. § 51.308. Regional haze program requirements.....14
40 C.F.R. § 63.9984. When do I have to comply with this subpart?.....31
40 C.F.R. § 63.10000. What are my general requirements for complying
with this subpart?31

STATUTES

5 U.S.C. § 706. Scope of Review

To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—

- (1) compel agency action unlawfully withheld or unreasonably delayed; and
- (2) hold unlawful and set aside agency action, findings, and conclusions found to be—
 - (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
 - (B) contrary to constitutional right, power, privilege, or immunity;
 - (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;
 - (D) without observance of procedure required by law;
 - (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
 - (F) unwarranted by the facts to the extent that the facts are subject to trial de novo by the reviewing court.

In making the foregoing determinations, the court shall review the whole record or those parts of it cited by a party, and due account shall be taken of the rule of prejudicial error.

42. U.S.C. § 7410. State implementation plans for national primary and secondary ambient air quality standards

(c) Preparation and publication by Administrator of proposed regulations setting forth implementation plan; transportation regulations study and report; parking surcharge; suspension authority; plan implementation

(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator-

(A) finds that a State has failed to make a required submission or finds that the plan or plan revision submitted by the State does not satisfy the minimum criteria established under subsection (k)(1)(A) of this section, or

(B) disapproves a State implementation plan submission in whole or in part, unless the State corrects the deficiency, and the Administrator approves the plan or plan revision, before the Administrator promulgates such Federal implementation plan.

42 U.S.C. § 7472. Initial classifications

- (a) Areas designated as class I.** Upon the enactment of this part, all-
- (1) international parks,
 - (2) national wilderness areas which exceed 5,000 acres in size,
 - (3) national memorial parks which exceed 5,000 acres in size, and
 - (4) national parks which exceed six thousand acres in size,

and which are in existence on August 7, 1977, shall be class I areas and may not be redesignated. All areas which were redesignated as class I under regulations promulgated before August 7, 1977, shall be class I areas which may be redesignated as provided in this part. The extent of the areas designated as Class I under this section shall conform to any changes in the boundaries of such areas which have occurred subsequent to August 7, 1977, or which may occur subsequent to November 15, 1990.

42 U.S.C. § 7491. Visibility protection for Federal class I areas

(a) Impairment of visibility; list of areas; study and report

(1) Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.

(2) Not later than six months after August 7, 1977, the Secretary of the Interior in consultation with other Federal land managers shall review all mandatory class I Federal areas and identify those where visibility is an important value of the area. From time to time the Secretary of the Interior may revise such identifications. Not later than one year after August 7, 1977, the Administrator shall, after consultation with the Secretary of the Interior, promulgate a list of mandatory class I Federal areas in which he determines visibility is an important value.

(3) Not later than eighteen months after August 7, 1977, the Administrator shall complete a study and report to Congress on available methods for implementing the national goal set forth in paragraph (1). Such report shall include recommendations for-

(A) methods for identifying, characterizing, determining, quantifying, and measuring visibility impairment in Federal areas referred to in paragraph (1), and

(B) modeling techniques (or other methods) for determining the extent to which manmade air pollution may reasonably be anticipated to cause or contribute to such impairment, and

(C) methods for preventing and remedying such manmade air pollution and resulting visibility impairment.

Such report shall also identify the classes or categories of sources and the types of air pollutants which, alone or in conjunction with other sources or pollutants, may reasonably be anticipated to cause or contribute significantly to impairment of visibility.

(4) Not later than twenty-four months after August 7, 1977, and after notice and public hearing, the Administrator shall promulgate regulations to assure (A)

reasonable progress toward meeting the national goal specified in paragraph (1), and (B) compliance with the requirements of this section.

(b) Regulations. Regulations under subsection (a)(4) of this section shall-

(1) provide guidelines to the States, taking into account the recommendations under subsection (a)(3) of this section on appropriate techniques and methods for implementing this section (as provided in subparagraphs (A) through (C) of such subsection (a)(3)), and

(2) require each applicable implementation plan for a State in which any area listed by the Administrator under subsection (a)(2) of this section is located (or for a State the emissions from which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area) to contain such emission limits, schedules of compliance and other measures as may be necessary to make reasonable progress toward meeting the national goal specified in subsection (a) of this section, including-

(A) except as otherwise provided pursuant to subsection (c) of this section, a requirement that each major stationary source which is in existence on August 7, 1977, but which has not been in operation for more than fifteen years as of such date, and which, as determined by the State (or the Administrator in the case of a plan promulgated under section 7410(c) of this title) emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any such area, shall procure, install, and operate, as expeditiously as practicable (and maintain thereafter) the best available retrofit technology, as determined by the State (or the Administrator in the case of a plan promulgated under section 7410(c) of this title) for controlling emissions from such source for the purpose of eliminating or reducing any such impairment, and

(B) a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal specified in subsection (a) of this section.

In the case of a fossil-fuel fired generating powerplant having a total generating capacity in excess of 750 megawatts, the emission limitations required under this paragraph shall be determined pursuant to guidelines, promulgated by the Administrator under paragraph (1).

(c) Exemptions

(1) The Administrator may, by rule, after notice and opportunity for public hearing, exempt any major stationary source from the requirement of subsection (b)(2)(A) of this section, upon his determination that such source does not or will not, by itself or in combination with other sources, emit any air pollutant which may reasonably be anticipated to cause or contribute to a significant impairment of visibility in any mandatory class I Federal area.

(2) Paragraph (1) of this subsection shall not be applicable to any fossil-fuel fired powerplant with total design capacity of 750 megawatts or more, unless the owner or operator of any such plant demonstrates to the satisfaction of the Administrator that such powerplant is located at such distance from all areas listed by the Administrator under subsection (a)(2) of this section that such powerplant does not or will not, by itself or in combination with other sources, emit any air pollutant which may reasonably be anticipated to cause or contribute to significant impairment of visibility in any such area.

(3) An exemption under this subsection shall be effective only upon concurrence by the appropriate Federal land manager or managers with the Administrator's determination under this subsection.

(d) Consultations with appropriate Federal land managers

Before holding the public hearing on the proposed revision of an applicable implementation plan to meet the requirements of this section, the State (or the Administrator, in the case of a plan promulgated under section 7410(c) of this title) shall consult in person with the appropriate Federal land manager or managers and shall include a summary of the conclusions and recommendations of the Federal land managers in the notice to the public.

(e) Buffer zones

In promulgating regulations under this section, the Administrator shall not require the use of any automatic or uniform buffer zone or zones.

(f) Nondiscretionary duty

For purposes of section 7604(a)(2) of this title, the meeting of the national goal specified in subsection (a)(1) of this section by any specific date or dates shall not be considered a "nondiscretionary duty" of the Administrator.

(g) Definitions. For the purpose of this section-

(1) in determining reasonable progress there shall be taken into consideration the costs of compliance, the time necessary for compliance, and the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing source subject to such requirements;

(2) in determining best available retrofit technology the State (or the Administrator in determining emission limitations which reflect such technology) shall take into consideration the costs of compliance, the energy and nonair quality environmental impacts of compliance, any existing pollution control technology in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology;

(3) the term "manmade air pollution" means air pollution which results directly or indirectly from human activities;

(4) the term "as expeditiously as practicable" means as expeditiously as practicable but in no event later than five years after the date of approval of a plan revision under this section (or the date of promulgation of such a plan revision in the case of action by the Administrator under section 7410(c) of this title for purposes of this section);

(5) the term "mandatory class I Federal areas" means Federal areas which may not be designated as other than class I under this part;

(6) the terms "visibility impairment" and "impairment of visibility" shall include reduction in visual range and atmospheric discoloration; and

(7) the term "major stationary source" means the following types of stationary sources with the potential to emit 250 tons or more of any pollutant: fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (thermal dryers), kraft pulp mills, Portland Cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal

production facilities, chemical process plants, fossil-fuel boilers of more than 250 million British thermal units per hour heat input, petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels, taconite ore processing facilities, glass fiber processing plants, charcoal production facilities.

42 U.S.C. § 7607. Administrative proceedings and judicial review

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under section 7412 of this title, any standard of performance or requirement under section 7411 of this title, any standard under section 7521 of this title (other than a standard required to be prescribed under section 7521(b)(1) of this title), any determination under section 7521(b)(5) 1 of this title, any control or prohibition under section 7545 of this title, any standard under section 7571 of this title, any rule issued under section 7413, 7419, or under section 7420 of this title, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under section 7410 of this title or section 7411(d) of this title, any order under section 7411(j) of this title, under section 7412 of this title, under section 7419 of this title, or under section 7420 of this title, or his action under section 1857c–10(c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under section 7414(a)(3) of this title, or any other final action of the Administrator under this chapter (including any denial or disapproval by the Administrator under subchapter I of this chapter) which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of Columbia if such action is based on a determination of nationwide scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds

arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

(d) Rulemaking

(1) This subsection applies to-

(A) the promulgation or revision of any national ambient air quality standard under section 7409 of this title,

(B) the promulgation or revision of an implementation plan by the Administrator under section 7410(c) of this title,

(C) the promulgation or revision of any standard of performance under section 7411 of this title, or emission standard or limitation under section 7412(d) of this title, any standard under section 7412(f) of this title, or any regulation under section 7412(g)(1)(D) and (F) of this title, or any regulation under section 7412(m) or (n) of this title,

(D) the promulgation of any requirement for solid waste combustion under section 7429 of this title,

(E) the promulgation or revision of any regulation pertaining to any fuel or fuel additive under section 7545 of this title,

(F) the promulgation or revision of any aircraft emission standard under section 7571 of this title,

(G) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to control of acid deposition),

(H) promulgation or revision of regulations pertaining to primary nonferrous smelter orders under section 7419 of this title (but not including the granting or denying of any such order),

(I) promulgation or revision of regulations under subchapter VI of this chapter (relating to stratosphere and ozone protection),

(J) promulgation or revision of regulations under part C of subchapter I of this chapter (relating to prevention of significant deterioration of air quality and protection of visibility),

(K) promulgation or revision of regulations under section 7521 of this title and test procedures for new motor vehicles or engines under section 7525 of this title, and the revision of a standard under section 7521(a)(3) of this title,

(L) promulgation or revision of regulations for noncompliance penalties under section 7420 of this title,

(M) promulgation or revision of any regulations promulgated under section 7541 of this title (relating to warranties and compliance by vehicles in actual use),

(N) action of the Administrator under section 7426 of this title (relating to interstate pollution abatement),

(O) the promulgation or revision of any regulation pertaining to consumer and commercial products under section 7511b(e) of this title,

(P) the promulgation or revision of any regulation pertaining to field citations under section 7413(d)(3) of this title,

(Q) the promulgation or revision of any regulation pertaining to urban buses or the clean-fuel vehicle, clean-fuel fleet, and clean fuel programs under part C of subchapter II of this chapter,

(R) the promulgation or revision of any regulation pertaining to nonroad engines or nonroad vehicles under section 7547 of this title,

(S) the promulgation or revision of any regulation relating to motor vehicle compliance program fees under section 7552 of this title,

(T) the promulgation or revision of any regulation under subchapter IV–A of this chapter (relating to acid deposition),

(U) the promulgation or revision of any regulation under section 7511b(f) of this title pertaining to marine vessels, and

(V) such other actions as the Administrator may determine.

The provisions of section 553 through 557 and section 706 of title 5 shall not, except as expressly provided in this subsection, apply to actions to which this subsection applies. This subsection shall not apply in the case of any rule or circumstance referred to in subparagraphs (A) or (B) of subsection 553(b) of title 5.

(2) Not later than the date of proposal of any action to which this subsection applies, the Administrator shall establish a rulemaking docket for such action (hereinafter in this subsection referred to as a "rule"). Whenever a rule applies only within a particular State, a second (identical) docket shall be simultaneously established in the appropriate regional office of the Environmental Protection Agency.

(3) In the case of any rule to which this subsection applies, notice of proposed rulemaking shall be published in the Federal Register, as provided under section 553(b) of title 5, shall be accompanied by a statement of its basis and purpose and shall specify the period available for public comment (hereinafter referred to as the "comment period"). The notice of proposed rulemaking shall also state the docket number, the location or locations of the docket, and the times it will be open to public inspection. The statement of basis and purpose shall include a summary of-

(A) the factual data on which the proposed rule is based;

(B) the methodology used in obtaining the data and in analyzing the data;
and

(C) the major legal interpretations and policy considerations underlying the proposed rule.

The statement shall also set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by the Scientific Review Committee established under section 7409(d) of this title and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, an explanation of the reasons for such differences. All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule.

(4)(A) The rulemaking docket required under paragraph (2) shall be open for inspection by the public at reasonable times specified in the notice of proposed rulemaking. Any person may copy documents contained in the docket. The Administrator shall provide copying facilities which may be used at the expense of the person seeking copies, but the Administrator may waive or reduce such expenses in such instances as the public interest requires. Any person may request copies by mail if the person pays the expenses, including personnel costs to do the copying.

(B)(i) Promptly upon receipt by the agency, all written comments and documentary information on the proposed rule received from any person for inclusion in the docket during the comment period shall be placed in the docket. The transcript of public hearings, if any, on the proposed rule shall also be included in the docket promptly upon receipt from the person who transcribed such hearings. All documents which become available after the proposed rule has been published and which the Administrator determines are of central relevance to the rulemaking shall be placed in the docket as soon as possible after their availability.

(ii) The drafts of proposed rules submitted by the Administrator to the Office of Management and Budget for any interagency review process prior to proposal of any such rule, all documents accompanying such drafts, and all written comments thereon by other agencies and all written responses to such written comments by the Administrator shall be placed in the docket no later than the date of proposal of the rule. The drafts of the final rule submitted for such review process prior to promulgation and all such written comments thereon, all documents accompanying such drafts, and written responses thereto shall be placed in the docket no later than the date of promulgation.

(5) In promulgating a rule to which this subsection applies (i) the Administrator shall allow any person to submit written comments, data, or documentary information; (ii) the Administrator shall give interested persons an opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions; (iii) a transcript shall be kept of any oral presentation; and (iv) the Administrator shall keep the record of such proceeding open for thirty days after completion of the proceeding to provide an opportunity for submission of rebuttal and supplementary information.

(6)(A) The promulgated rule shall be accompanied by (i) a statement of basis and purpose like that referred to in paragraph (3) with respect to a proposed rule and (ii) an explanation of the reasons for any major changes in the promulgated rule from the proposed rule.

(B) The promulgated rule shall also be accompanied by a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations during the comment period.

(C) The promulgated rule may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of such promulgation.

(7)(A) The record for judicial review shall consist exclusively of the material referred to in paragraph (3), clause (i) of paragraph (4)(B), and subparagraphs (A) and (B) of paragraph (6).

(B) Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. If the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed. If the Administrator refuses to convene such a proceeding, such person may seek review of such refusal in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section). Such reconsideration shall not postpone the effectiveness of the rule. The

effectiveness of the rule may be stayed during such reconsideration, however, by the Administrator or the court for a period not to exceed three months.

(8) The sole forum for challenging procedural determinations made by the Administrator under this subsection shall be in the United States court of appeals for the appropriate circuit (as provided in subsection (b) of this section) at the time of the substantive review of the rule. No interlocutory appeals shall be permitted with respect to such procedural determinations. In reviewing alleged procedural errors, the court may invalidate the rule only if the errors were so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made.

(9) In the case of review of any action of the Administrator to which this subsection applies, the court may reverse any such action found to be-

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

(B) contrary to constitutional right, power, privilege, or immunity;

(C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or

(D) without observance of procedure required by law, if (i) such failure to observe such procedure is arbitrary or capricious, (ii) the requirement of paragraph (7)(B) has been met, and (iii) the condition of the last sentence of paragraph (8) is met.

(10) Each statutory deadline for promulgation of rules to which this subsection applies which requires promulgation less than six months after date of proposal may be extended to not more than six months after date of proposal by the Administrator upon a determination that such extension is necessary to afford the public, and the agency, adequate opportunity to carry out the purposes of this subsection.

(11) The requirements of this subsection shall take effect with respect to any rule the proposal of which occurs after ninety days after August 7, 1977.

FEDERAL REGULATIONS

40 C.F.R. § 51.301. Definitions

Deciview means a measurement of visibility impairment. A deciview is a haze index derived from calculated light extinction, such that uniform changes in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired. The deciview haze index is calculated based on the following equation (for the purposes of calculating deciview, the atmospheric light extinction coefficient must be calculated from aerosol measurements):

$$\text{Deciview haze index} = 10 \ln_e (b_{\text{ext}}/10 \text{ Mm}^{-1}).$$

Where b_{ext} = the atmospheric light extinction coefficient, expressed in inverse megameters (Mm^{-1}).

40 C.F.R. § 51.308. Regional haze program requirements

(a) What is the purpose of this section? This section establishes requirements for implementation plans, plan revisions, and periodic progress reviews to address regional haze.

(b) When are the first implementation plans due under the regional haze program? Except as provided in § 51.309(c), each State identified in § 51.300(b)(3) must submit, for the entire State, an implementation plan for regional haze meeting the requirements of paragraphs (d) and (e) of this section no later than December 17, 2007.

(c) [Reserved]

(d) What are the core requirements for the implementation plan for regional haze? The State must address regional haze in each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State which may be affected by emissions from within the State. To meet the core requirements for regional haze for these areas, the State must submit an

implementation plan containing the following plan elements and supporting documentation for all required analyses:

(1) Reasonable progress goals. For each mandatory Class I Federal area located within the State, the State must establish goals (expressed in deciviews) that provide for reasonable progress towards achieving natural visibility conditions. The reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period.

(i) In establishing a reasonable progress goal for any mandatory Class I Federal area within the State, the State must:

(A) Consider the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources, and include a demonstration showing how these factors were taken into consideration in selecting the goal.

(B) Analyze and determine the rate of progress needed to attain natural visibility conditions by the year 2064. To calculate this rate of progress, the State must compare baseline visibility conditions to natural visibility conditions in the mandatory Federal Class I area and determine the uniform rate of visibility improvement (measured in deciviews) that would need to be maintained during each implementation period in order to attain natural visibility conditions by 2064. In establishing the reasonable progress goal, the State must consider the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it for the period covered by the implementation plan.

(ii) For the period of the implementation plan, if the State establishes a reasonable progress goal that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate, based on the factors in paragraph (d)(1)(i)(A) of this section, that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and that the progress goal adopted by the State is reasonable. The State must provide to the public for review as part of its implementation plan an assessment of the

number of years it would take to attain natural conditions if visibility improvement continues at the rate of progress selected by the State as reasonable.

(iii) In determining whether the State's goal for visibility improvement provides for reasonable progress towards natural visibility conditions, the Administrator will evaluate the demonstrations developed by the State pursuant to paragraphs (d)(1)(i) and (d)(1)(ii) of this section.

(iv) In developing each reasonable progress goal, the State must consult with those States which may reasonably be anticipated to cause or contribute to visibility impairment in the mandatory Class I Federal area. In any situation in which the State cannot agree with another such State or group of States that a goal provides for reasonable progress, the State must describe in its submittal the actions taken to resolve the disagreement. In reviewing the State's implementation plan submittal, the Administrator will take this information into account in determining whether the State's goal for visibility improvement provides for reasonable progress towards natural visibility conditions.

(v) The reasonable progress goals established by the State are not directly enforceable but will be considered by the Administrator in evaluating the adequacy of the measures in the implementation plan to achieve the progress goal adopted by the State.

(vi) The State may not adopt a reasonable progress goal that represents less visibility improvement than is expected to result from implementation of other requirements of the CAA during the applicable planning period.

(2) Calculations of baseline and natural visibility conditions. For each mandatory Class I Federal area located within the State, the State must determine the following visibility conditions (expressed in deciviews):

(i) Baseline visibility conditions for the most impaired and least impaired days. The period for establishing baseline visibility conditions is 2000 to 2004. Baseline visibility conditions must be calculated, using available monitoring data, by establishing the average degree of visibility impairment for the most and least impaired days for each calendar year from 2000 to 2004. The baseline visibility conditions are the average of these

annual values. For mandatory Class I Federal areas without onsite monitoring data for 2000–2004, the State must establish baseline values using the most representative available monitoring data for 2000–2004, in consultation with the Administrator or his or her designee;

(ii) For an implementation plan that is submitted by 2003, the period for establishing baseline visibility conditions for the period of the first long-term strategy is the most recent 5–year period for which visibility monitoring data are available for the mandatory Class I Federal areas addressed by the plan. For mandatory Class I Federal areas without onsite monitoring data, the State must establish baseline values using the most representative available monitoring data, in consultation with the Administrator or his or her designee;

(iii) Natural visibility conditions for the most impaired and least impaired days. Natural visibility conditions must be calculated by estimating the degree of visibility impairment existing under natural conditions for the most impaired and least impaired days, based on available monitoring information and appropriate data analysis techniques; and

(iv)(A) For the first implementation plan addressing the requirements of paragraphs (d) and (e) of this section, the number of deciviews by which baseline conditions exceed natural visibility conditions for the most impaired and least impaired days; or

(B) For all future implementation plan revisions, the number of deciviews by which current conditions, as calculated under paragraph (f)(1) of this section, exceed natural visibility conditions for the most impaired and least impaired days.

(3) Long-term strategy for regional haze. Each State listed in § 51.300(b)(3) must submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I Federal area within the State and for each mandatory Class I Federal area located outside the State which may be affected by emissions from the State. The long-term strategy must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals established by States having mandatory Class I Federal areas. In establishing its long-term strategy for regional haze, the State must meet the following requirements:

(i) Where the State has emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal area located in another State or States, the State must consult with the other State(s) in order to develop coordinated emission management strategies. The State must consult with any other State having emissions that are reasonably anticipated to contribute to visibility impairment in any mandatory Class I Federal area within the State.

(ii) Where other States cause or contribute to impairment in a mandatory Class I Federal area, the State must demonstrate that it has included in its implementation plan all measures necessary to obtain its share of the emission reductions needed to meet the progress goal for the area. If the State has participated in a regional planning process, the State must ensure it has included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process.

(iii) The State must document the technical basis, including modeling, monitoring and emissions information, on which the State is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each mandatory Class I Federal area it affects. The State may meet this requirement by relying on technical analyses developed by the regional planning organization and approved by all State participants. The State must identify the baseline emissions inventory on which its strategies are based. The baseline emissions inventory year is presumed to be the most recent year of the consolidated periodic emissions inventory.

(iv) The State must identify all anthropogenic sources of visibility impairment considered by the State in developing its long-term strategy. The State should consider major and minor stationary sources, mobile sources, and area sources.

(v) The State must consider, at a minimum, the following factors in developing its long-term strategy:

(A) Emission reductions due to ongoing air pollution control programs, including measures to address reasonably attributable visibility impairment;

(B) Measures to mitigate the impacts of construction activities;

(C) Emissions limitations and schedules for compliance to achieve the reasonable progress goal;

(D) Source retirement and replacement schedules;

(E) Smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the State for these purposes;

(F) Enforceability of emissions limitations and control measures; and

(G) The anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the long-term strategy.

(4) Monitoring strategy and other implementation plan requirements. The State must submit with the implementation plan a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is representative of all mandatory Class I Federal areas within the State. This monitoring strategy must be coordinated with the monitoring strategy required in § 51.305 for reasonably attributable visibility impairment. Compliance with this requirement may be met through participation in the Interagency Monitoring of Protected Visual Environments network. The implementation plan must also provide for the following:

(i) The establishment of any additional monitoring sites or equipment needed to assess whether reasonable progress goals to address regional haze for all mandatory Class I Federal areas within the State are being achieved.

(ii) Procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at mandatory Class I Federal areas both within and outside the State.

(iii) For a State with no mandatory Class I Federal areas, procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at mandatory Class I Federal areas in other States.

(iv) The implementation plan must provide for the reporting of all visibility monitoring data to the Administrator at least annually for each mandatory Class I Federal area in the State. To the extent possible, the State should report visibility monitoring data electronically.

(v) A statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any mandatory Class I Federal area. The inventory must include emissions for a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions. The State must also include a commitment to update the inventory periodically.

(vi) Other elements, including reporting, recordkeeping, and other measures, necessary to assess and report on visibility.

(e) Best Available Retrofit Technology (BART) requirements for regional haze visibility impairment. The State must submit an implementation plan containing emission limitations representing BART and schedules for compliance with BART for each BART-eligible source that may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area, unless the State demonstrates that an emissions trading program or other alternative will achieve greater reasonable progress toward natural visibility conditions.

(1) To address the requirements for BART, the State must submit an implementation plan containing the following plan elements and include documentation for all required analyses:

(i) A list of all BART-eligible sources within the State.

(ii) A determination of BART for each BART-eligible source in the State that emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any mandatory Class I Federal area. All such sources are subject to BART.

(A) The determination of BART must be based on an analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each BART-eligible source that is subject to BART within the State. In this analysis, the State must take into consideration the technology available, the costs of compliance, the energy and nonair quality

environmental impacts of compliance, any pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

(B) The determination of BART for fossil-fuel fired power plants having a total generating capacity greater than 750 megawatts must be made pursuant to the guidelines in appendix Y of this part (Guidelines for BART Determinations Under the Regional Haze Rule).

(C) Exception. A State is not required to make a determination of BART for SO₂ or for NO_x if a BART-eligible source has the potential to emit less than 40 tons per year of such pollutant(s), or for PM₁₀ if a BART-eligible source has the potential to emit less than 15 tons per year of such pollutant.

(iii) If the State determines in establishing BART that technological or economic limitations on the applicability of measurement methodology to a particular source would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice, or other operational standard, or combination thereof, to require the application of BART. Such standard, to the degree possible, is to set forth the emission reduction to be achieved by implementation of such design, equipment, work practice or operation, and must provide for compliance by means which achieve equivalent results.

(iv) A requirement that each source subject to BART be required to install and operate BART as expeditiously as practicable, but in no event later than 5 years after approval of the implementation plan revision.

(v) A requirement that each source subject to BART maintain the control equipment required by this subpart and establish procedures to ensure such equipment is properly operated and maintained.

(2) A State may opt to implement or require participation in an emissions trading program or other alternative measure rather than to require sources subject to BART to install, operate, and maintain BART. Such an emissions trading program or other alternative measure must achieve greater reasonable progress than would be achieved through the installation and operation of BART. For all such emission trading programs or other alternative measures, the State must

submit an implementation plan containing the following plan elements and include documentation for all required analyses:

(i) A demonstration that the emissions trading program or other alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State and covered by the alternative program. This demonstration must be based on the following:

(A) A list of all BART–eligible sources within the State.

(B) A list of all BART–eligible sources and all BART source categories covered by the alternative program. The State is not required to include every BART source category or every BART–eligible source within a BART source category in an alternative program, but each BART–eligible source in the State must be subject to the requirements of the alternative program, have a federally enforceable emission limitation determined by the State and approved by EPA as meeting BART in accordance with section 302(c) or paragraph (e)(1) of this section, or otherwise addressed under paragraphs (e)(1) or (e)(4) of this section.

(C) An analysis of the best system of continuous emission control technology available and associated emission reductions achievable for each source within the State subject to BART and covered by the alternative program. This analysis must be conducted by making a determination of BART for each source subject to BART and covered by the alternative program as provided for in paragraph (e)(1) of this section, unless the emissions trading program or other alternative measure has been designed to meet a requirement other than BART (such as the core requirement to have a long-term strategy to achieve the reasonable progress goals established by States). In this case, the State may determine the best system of continuous emission control technology and associated emission reductions for similar types of sources within a source category based on both source-specific and category-wide information, as appropriate.

(D) An analysis of the projected emissions reductions achievable through the trading program or other alternative measure.

(E) A determination under paragraph (e)(3) of this section or otherwise based on the clear weight of evidence that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources.

(ii) [Reserved]

(iii) A requirement that all necessary emission reductions take place during the period of the first long-term strategy for regional haze. To meet this requirement, the State must provide a detailed description of the emissions trading program or other alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.

(iv) A demonstration that the emission reductions resulting from the emissions trading program or other alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP.

(v) At the State's option, a provision that the emissions trading program or other alternative measure may include a geographic enhancement to the program to address the requirement under § 51.302(c) related to BART for reasonably attributable impairment from the pollutants covered under the emissions trading program or other alternative measure.

(vi) For plans that include an emissions trading program that establishes a cap on total annual emissions of SO₂ or NO_X from sources subject to the program, requires the owners and operators of sources to hold allowances or authorizations to emit equal to emissions, and allows the owners and operators of sources and other entities to purchase, sell, and transfer allowances, the following elements are required concerning the emissions covered by the cap:

(A) Applicability provisions defining the sources subject to the program. The State must demonstrate that the applicability provisions (including the size criteria for including sources in the program) are designed to prevent any significant potential shifting within the State

of production and emissions from sources in the program to sources outside the program. In the case of a program covering sources in multiple States, the States must demonstrate that the applicability provisions in each State cover essentially the same size facilities and, if source categories are specified, cover the same source categories and prevent any significant, potential shifting within such States of production and emissions to sources outside the program.

(B) Allowance provisions ensuring that the total value of allowances (in tons) issued each year under the program will not exceed the emissions cap (in tons) on total annual emissions from the sources in the program.

(C) Monitoring provisions providing for consistent and accurate measurements of emissions from sources in the program to ensure that each allowance actually represents the same specified tonnage of emissions and that emissions are measured with similar accuracy at all sources in the program. The monitoring provisions must require that boilers, combustion turbines, and cement kilns in the program allowed to sell or transfer allowances must comply with the requirements of part 75 of this chapter. The monitoring provisions must require that other sources in the program allowed to sell or transfer allowances must provide emissions information with the same precision, reliability, accessibility, and timeliness as information provided under part 75 of this chapter.

(D) Recordkeeping provisions that ensure the enforceability of the emissions monitoring provisions and other program requirements. The recordkeeping provisions must require that boilers, combustion turbines, and cement kilns in the program allowed to sell or transfer allowances must comply with the recordkeeping provisions of part 75 of this chapter. The recordkeeping provisions must require that other sources in the program allowed to sell or transfer allowances must comply with recordkeeping requirements that, as compared with the recordkeeping provisions under part 75 of this chapter, are of comparable stringency and require recording of comparable types of information and retention of the records for comparable periods of time.

(E) Reporting provisions requiring timely reporting of monitoring data with sufficient frequency to ensure the enforceability of the emissions monitoring provisions and other program requirements and the ability to audit the program. The reporting provisions must require that boilers, combustion turbines, and cement kilns in the program allowed to sell or transfer allowances must comply with the reporting provisions of part 75 of this chapter, except that, if the Administrator is not the tracking system administrator for the program, emissions may be reported to the tracking system administrator, rather than to the Administrator. The reporting provisions must require that other sources in the program allowed to sell or transfer allowances must comply with reporting requirements that, as compared with the reporting provisions under part 75 of this chapter, are of comparable stringency and require reporting of comparable types of information and require comparable timeliness and frequency of reporting.

(F) Tracking system provisions which provide for a tracking system that is publicly available in a secure, centralized database to track in a consistent manner all allowances and emissions in the program.

(G) Authorized account representative provisions ensuring that the owners and operators of a source designate one individual who is authorized to represent the owners and operators in all matters pertaining to the trading program.

(H) Allowance transfer provisions providing procedures that allow timely transfer and recording of allowances, minimize administrative barriers to the operation of the allowance market, and ensure that such procedures apply uniformly to all sources and other potential participants in the allowance market.

(I) Compliance provisions prohibiting a source from emitting a total tonnage of a pollutant that exceeds the tonnage value of its allowance holdings, including the methods and procedures for determining whether emissions exceed allowance holdings. Such method and procedures shall apply consistently from source to source.

(J) Penalty provisions providing for mandatory allowance deductions for excess emissions that apply consistently from source to source. The tonnage value of the allowances deducted shall equal at least three times the tonnage of the excess emissions.

(K) For a trading program that allows banking of allowances, provisions clarifying any restrictions on the use of these banked allowances.

(L) Program assessment provisions providing for periodic program evaluation to assess whether the program is accomplishing its goals and whether modifications to the program are needed to enhance performance of the program.

(3) A State which opts under 40 CFR 51.308(e)(2) to implement an emissions trading program or other alternative measure rather than to require sources subject to BART to install, operate, and maintain BART may satisfy the final step of the demonstration required by that section as follows: If the distribution of emissions is not substantially different than under BART, and the alternative measure results in greater emission reductions, then the alternative measure may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, the State must conduct dispersion modeling to determine differences in visibility between BART and the trading program for each impacted Class I area, for the worst and best 20 percent of days. The modeling would demonstrate “greater reasonable progress” if both of the following two criteria are met:

(i) Visibility does not decline in any Class I area, and

(ii) There is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas.

(4) A State subject to a trading program established in accordance with § 52.38 or § 52.39 under a Transport Rule Federal Implementation Plan need not require BART-eligible fossil fuel-fired steam electric plants in the State to install, operate, and maintain BART for the pollutant covered by such trading program in the State. A State that chooses to meet the emission reduction requirements of the Transport Rule by submitting a SIP revision that establishes a trading program and is approved as meeting the requirements of § 52.38 or § 52.39 also need not require

BART-eligible fossil fuel-fired steam electric plants in the State to install, operate, and maintain BART for the pollutant covered by such trading program in the State. A State may adopt provisions, consistent with the requirements applicable to the State for a trading program established in accordance with § 52.38 or § 52.39 under the Transport Rule Federal Implementation Plan or established under a SIP revision that is approved as meeting the requirements of § 52.38 or § 52.39, for a geographic enhancement to the program to address the requirement under § 51.302(c) related to BART for reasonably attributable impairment from the pollutant covered by such trading program in that State.

(5) After a State has met the requirements for BART or implemented emissions trading program or other alternative measure that achieves more reasonable progress than the installation and operation of BART, BART-eligible sources will be subject to the requirements of paragraph (d) of this section in the same manner as other sources.

(6) Any BART-eligible facility subject to the requirement under paragraph (e) of this section to install, operate, and maintain BART may apply to the Administrator for an exemption from that requirement. An application for an exemption will be subject to the requirements of § 51.303(a)(2)-(h).

(f) Requirements for comprehensive periodic revisions of implementation plans for regional haze. Each State identified in § 51.300(b)(3) must revise and submit its regional haze implementation plan revision to EPA by July 31, 2018 and every ten years thereafter. In each plan revision, the State must evaluate and reassess all of the elements required in paragraph (d) of this section, taking into account improvements in monitoring data collection and analysis techniques, control technologies, and other relevant factors. In evaluating and reassessing these elements, the State must address the following:

(1) Current visibility conditions for the most impaired and least impaired days, and actual progress made towards natural conditions during the previous implementation period. The period for calculating current visibility conditions is the most recent five year period preceding the required date of the implementation plan submittal for which data are available. Current visibility conditions must be calculated based on the annual average level of visibility impairment for the most and least impaired days for each of these five years. Current visibility conditions are the average of these annual values.

(2) The effectiveness of the long-term strategy for achieving reasonable progress goals over the prior implementation period(s); and

(3) Affirmation of, or revision to, the reasonable progress goal in accordance with the procedures set forth in paragraph (d)(1) of this section. If the State established a reasonable progress goal for the prior period which provided a slower rate of progress than that needed to attain natural conditions by the year 2064, the State must evaluate and determine the reasonableness, based on the factors in paragraph (d)(1)(i)(A) of this section, of additional measures that could be adopted to achieve the degree of visibility improvement projected by the analysis contained in the first implementation plan described in paragraph (d)(1)(i)(B) of this section.

(g) Requirements for periodic reports describing progress towards the reasonable progress goals. Each State identified in § 51.300(b)(3) must submit a report to the Administrator every 5 years evaluating progress towards the reasonable progress goal for each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State which may be affected by emissions from within the State. The first progress report is due 5 years from submittal of the initial implementation plan addressing paragraphs (d) and (e) of this section. The progress reports must be in the form of implementation plan revisions that comply with the procedural requirements of § 51.102 and § 51.103. Periodic progress reports must contain at a minimum the following elements:

(1) A description of the status of implementation of all measures included in the implementation plan for achieving reasonable progress goals for mandatory Class I Federal areas both within and outside the State.

(2) A summary of the emissions reductions achieved throughout the State through implementation of the measures described in paragraph (g)(1) of this section.

(3) For each mandatory Class I Federal area within the State, the State must assess the following visibility conditions and changes, with values for most impaired and least impaired days expressed in terms of 5–year averages of these annual values.

(i) The current visibility conditions for the most impaired and least impaired days;

(ii) The difference between current visibility conditions for the most impaired and least impaired days and baseline visibility conditions;

(iii) The change in visibility impairment for the most impaired and least impaired days over the past 5 years;

(4) An analysis tracking the change over the past 5 years in emissions of pollutants contributing to visibility impairment from all sources and activities within the State. Emissions changes should be identified by type of source or activity. The analysis must be based on the most recent updated emissions inventory, with estimates projected forward as necessary and appropriate, to account for emissions changes during the applicable 5-year period.

(5) An assessment of any significant changes in anthropogenic emissions within or outside the State that have occurred over the past 5 years that have limited or impeded progress in reducing pollutant emissions and improving visibility.

(6) An assessment of whether the current implementation plan elements and strategies are sufficient to enable the State, or other States with mandatory Federal Class I areas affected by emissions from the State, to meet all established reasonable progress goals.

(7) A review of the State's visibility monitoring strategy and any modifications to the strategy as necessary.

(h) Determination of the adequacy of existing implementation plan. At the same time the State is required to submit any 5-year progress report to EPA in accordance with paragraph (g) of this section, the State must also take one of the following actions based upon the information presented in the progress report:

(1) If the State determines that the existing implementation plan requires no further substantive revision at this time in order to achieve established goals for visibility improvement and emissions reductions, the State must provide to the Administrator a negative declaration that further revision of the existing implementation plan is not needed at this time.

(2) If the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another State(s) which participated in a regional planning process, the State must provide

notification to the Administrator and to the other State(s) which participated in the regional planning process with the States. The State must also collaborate with the other State(s) through the regional planning process for the purpose of developing additional strategies to address the plan's deficiencies.

(3) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources in another country, the State shall provide notification, along with available information, to the Administrator.

(4) Where the State determines that the implementation plan is or may be inadequate to ensure reasonable progress due to emissions from sources within the State, the State shall revise its implementation plan to address the plan's deficiencies within one year.

(i) What are the requirements for State and Federal Land Manager coordination?

(1) By November 29, 1999, the State must identify in writing to the Federal Land Managers the title of the official to which the Federal Land Manager of any mandatory Class I Federal area can submit any recommendations on the implementation of this subpart including, but not limited to:

(i) Identification of impairment of visibility in any mandatory Class I Federal area(s); and

(ii) Identification of elements for inclusion in the visibility monitoring strategy required by § 51.305 and this section.

(2) The State must provide the Federal Land Manager with an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on an implementation plan (or plan revision) for regional haze required by this subpart. This consultation must include the opportunity for the affected Federal Land Managers to discuss their:

(i) Assessment of impairment of visibility in any mandatory Class I Federal area; and

(ii) Recommendations on the development of the reasonable progress goal and on the development and implementation of strategies to address visibility impairment.

(3) In developing any implementation plan (or plan revision), the State must include a description of how it addressed any comments provided by the Federal Land Managers.

(4) The plan (or plan revision) must provide procedures for continuing consultation between the State and Federal Land Manager on the implementation of the visibility protection program required by this subpart, including development and review of implementation plan revisions and 5-year progress reports, and on the implementation of other programs having the potential to contribute to impairment of visibility in mandatory Class I Federal areas.

40 C.F.R. § 63.9984. When do I have to comply with this subpart?

(b) If you have an existing EGU, you must comply with this subpart no later than April 16, 2015, except as provided in paragraph (g) of this section.

(f) You must demonstrate that compliance has been achieved, by conducting the required performance tests and other activities, no later than 180 days after the applicable date in paragraph (a), (b), (c), (d), (e), or (g) of this section.

40 C.F.R. § 63.10000. What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and operating limits in this subpart. These limits apply to you at all times except during periods of startup and shutdown; however, for coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGUs, you are required to meet the work practice requirements, items 3 and 4, in Table 3 to this subpart during periods of startup or shutdown.

**Attachment B:
Declaration of Lindsay Beebe**

Declaration of Lindsay Beebe

I, Lindsay Beebe, declare the following is true and accurate to the best of my personal knowledge:

1. I am currently a dues-paying member of The Healthy Environment Alliance of Utah (“HEAL Utah”) and the National Parks Conservation Association (NPCA). I have been a member of these organizations since joining in 2014 and 2016, respectively. I am a lifetime member of the Sierra Club since January 2015 and full time employee of that organization. I am a member of HEAL Utah, NPCA, and the Sierra Club because they work to protect air quality and public health, including protecting wilderness areas and national parks in Utah.

2. I was born and raised in New England. I moved west to Salt Lake City, Utah in 2011 because of the great natural beauty of Utah and the unmatched recreation opportunities located nearby. Despite having no family and very few friends in Utah at the time, I picked up my life and moved thousands of miles across the country merely to be closer to the mountains, iconic red rock landscapes, and peaceful desert of the Colorado Plateau. I came to hike, ski, backpack, run rivers, and explore the wilderness that are at once mesmerizing and mysterious to someone raised in the leafy green forests of the East.

3. I am grateful that Utah’s wilderness, mountains, and red rock formations are protected in perpetuity as national parks. These are places of the earth that have the power to speak directly to the human spirit, the power to heal and to revive. Over the past decade, I have been fortunate enough to visit each of Utah’s five parks; Arches, Canyonlands, Capitol Reef, Bryce Canyon, and Zion, many times. I have hiked through Bryce Canyon in the winter when the snow covers the spires and hoodoos in a starkly contrasting icing of sparkling white. I have backpacked Canyonlands in the spring and gazed across the undulating, broken surface of the fractured desert floor to see the still snow-capped peaks of the La Sal Mountains, and the far-off silhouette of Navajo Mountain. I have walked through the frigid waters of the Virgin River in the

summer, spring, and fall to explore the hidden, winding birthplace of the expansive Zion Valley. These places are like no other. I feel blessed to be able to experience them, and proud that our country has seen fit to protect them for future generations.

4. Unfortunately, on separate occasions I have also witnessed the dulling, shrouding impact that human-caused haze has on the views that are such an integral part of the national park experience, particularly in Utah's parks. There is an undeniable negative impact when you stand on the rim of the Island on the Sky, as I have, and gaze across what should be hundreds of miles of crisp, cascading canyons, only to see murky formless shapes. The view of Delicate Arch framing the snowcapped peaks of the La Sal mountain range is perhaps the most iconic imagery symbolizing the State of Utah, and yet, I have seen these mountains shrouded in a grey-brown veil that obscures their full dimension. The veil of anthropogenic haze is upsetting although not surprising, considering that two of Utah's largest coal-fired power plants belch uncontrolled nitrogen oxide pollution and other harmful emissions less than 100 miles upwind. I am lucky enough to be able to visit these parks regularly and occasionally see them in their natural glory, but am always disappointed and troubled when the views are damaged by haze. I consider the source of that haze, and know the impact it implies to my health and the health of my loved ones.

5. In the past ten years that I have lived in Utah, I have visited our national parks no less than twenty times, and plan to continue to visit them in similar frequency for as long as I am able. Some of my most treasured memories involve spending time with friends and family in Utah's national parks.

I have toured the national parks with visitors from Nevada, Connecticut, Washington, Illinois, Maine, and many more places. One of my most notable experiences includes a trip to Zion National Park in October 2013 where I was able to enjoy a hike through the canyon with three generations of my family, passing along appreciation for our public lands from one generation to

the next, to the next. On another trip I spent three days backpacking the Needles District of Canyonlands National Park in February 2016 with a group of U.S. Service veterans. The peaceful and otherworldly landscape of spires and hoodoos provided the perfect environment to aid in reflection and healing of the human spirit.

6. In 2018, my two grandmothers made a very rare trip across the country to tour Utah's national parks with me in an RV. Both women are in their 80's and I know with current and ongoing pandemic precautions, that trip together may have been a once in a lifetime experience with the women who raised me. We stood together at Grand Viewpoint in Canyonlands on a particularly hazy day, and my heart was conflicted. I was glad to be with them, but the horizon was obscured and blended vaguely into a dull brownish blur where the land met the sky. I knew what we were looking across was not all that the landscape had to offer, and I knew the clarity we were missing was due to nearby coal pollution. These two women had never seen a landscape like where the Colorado River meets the Green River, and the earth wrinkles into a thousand folds of warm color. Unfortunately, because of the haze that day, it is very unlikely they will ever see that viewshed in unobscured.

7. My most transformative experience with Utah's national parks actually occurred when I was a small girl, only 10 years old. In the summer of 1998 my mother took my sister and I on a whirlwind trip across the country, stopping at every national park along the way. My father had just passed away the previous fall, and the national parks were there for my family to provide retreat and solace. Although I did not know it at the time, this trip provided the foundation of my love and stewardship of wilderness and our public lands. Of course, no such trip would be complete without a tour of Utah, and I remember fondly the hike we took in Arches National Park, rounding the corner to see Delicate Arch standing solitary and proud against the backdrop of mountains and red rock. Utah's national parks have made a significant, life changing impression on me.

8. There is no question that experiences such as the ones I have been fortunate to have are elevated when the crisp, dry air of Utah's southern desert is not blanketed with haze-causing pollution. On the occasions that I have witnessed heavy haze in Utah's parks the immense scale and proportion of the landscape is obscured, and the related emotional and spiritual experience diminished. Utah has some of the most unique and visually striking landscape in the entire world. I believe we must do everything in our power to protect our parks from human impact. I know from National Park Service monitoring data that the parks most affected by nearby coal plant pollution, Arches and Canyonlands, are shrouded approximately 80% of the time in anthropogenic haze.

9. I am familiar with Hunter and Huntington coal-fired power plants, located just north and west of Utah's national parks in Emery County, Utah. Both plants are located along the UT-Route 10 corridor between Interstate 70 and Price, Utah. These two plants alone emit approximately 40% of all of the nitrogen oxide pollution coming from Utah's electricity sector. Both of them are known to significantly contribute to the pollution that affects views at Utah's national parks, pollution that reaches as far as Grand Canyon National Park in Arizona and Black Canyon of the Gunnison National Park in Colorado. In fact, the Environmental Protection Agency (EPA) has determined that Hunter and Huntington contribute to visibility impairment in nine nearby national park and wilderness areas.

10. I regularly travel near the Hunter and Hunting coal-fired power plants when traveling south from Salt Lake City for work and recreation. Both power plants are located on the way to the San Rafael Swell, where I have camped many times. During these camping trips, and on many occasions passing through the area, I have seen visible pollution being emitted from the smokestacks of these coal plants. I have seen visual pollution from Hunter Power plant looking north from Interstate 70, one of the main highways running east to west in the United

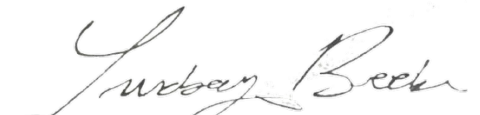
States. Based on my personal observations, combined with EPA's analysis, I believe the Hunter and Huntington coal-fired power plants are adversely impacting visibility in the national parks I visit.

11. I have personally spent considerable time reviewing EPA's actions to address regional haze in Utah's national parks and wilderness areas. I strongly disagree with EPA that the State plan is sufficient to reduce regional haze to the correct Best Available Retrofit Technology (BART) standard. Instead, I strongly support EPA's decision in the 2016 to require emission cuts resulting from installation of selective catalytic reduction on all eligible units at Hunter and Huntington. I believe EPA erred in 2020 by allowing Hunter and Huntington to avoid emissions reductions consistent with standard BART controls, or selective catalytic reduction (SCR).

12. I firmly support the comments submitted by the Sierra Club, HEAL Utah, the National Parks Conservation Association, urging the EPA to reestablish a strong federal implementation plan for regional haze in Utah and enforce SCR equivalent emission reduction at Hunter and Huntington coal plants.

Pursuant to 28 U.S.C. Section 1746, I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed at Salt Lake City, Utah on this 27th day of January 2022.


Lindsay Beebe

**Attachment C:
Declaration of Cory MacNulty**

Declaration of Cory MacNulty

I, Cory MacNulty, declare the following is true and accurate to the best of my personal knowledge:

1. I am a current dues-paying member of HEAL Utah, the Sierra Club and National Parks Conservation Association because of their work to protect national parks and other federally protected land, air and water quality, and the quality of life for all Utahns. I am also a Southwest Associate Director, a staff member of National Parks Conservation Association, an organization that works to protect and enhance our national park units for present and future generations.
2. I moved to Logan, Utah with my family (we have two boys, currently ages 13 and 15) in August 2011. Together, we love to recreate in and explore Utah's national parks, forests and other wild lands – hiking, backpacking, biking, skiing, and sightseeing. These experiences so close to home are what keep us here in Utah and contribute to our high quality of life and healthy lifestyle. Visiting Utah's many protected areas is an escape from our daily responsibilities and our favorite way to spend time together, decompress and relax.
3. In the past ten years I have had the fortune to visit all thirteen of Utah's national park sites including the five designated Class I national parks (Arches, Canyonlands, Capitol Reef, Bryce Canyon and Zion) in all seasons during at least 44 separate trips. I have also visited Grand Canyon National Park in Arizona two times in my life, most recently in early winter 2012, Black Canyon of the Gunnison National Park in Colorado several times, most recently in Oct 2014 and Mesa Verde National Park in Oct 2016. I also flew over Canyonlands and Capitol Reef in a small plane in 2016.

4. My trips to the national parks included adventures with my husband and sons – camping and hiking in Zion, Arches and Canyonlands National Parks and backpacking in Capitol Reef, Canyonlands and Bryce Canyon National Parks. I also took great pleasure in showing these National Parks to visiting family members from Wisconsin, Pennsylvania and California.
5. I am personally awed and inspired by the red rock desert landscape and the layers of deep canyons carved by the power of running water, so different from Wisconsin and Minnesota where I lived most of my life. Unlike the lakes and trees of the Midwest landscape, the topography and geology of Utah, Colorado and Arizona are best experienced at vantage points looking across the layers of colorful rock features – whether those are the hoodoos of Bryce Canyon National Park, the spires and arches in Arches National Park or the canyons carved by the Colorado River in Canyonlands and Grand Canyon National Parks.
6. As I have traveled to these spectacular destinations in the past ten years, I have witnessed both clean air days where distant features are vivid and clear, and hazy days where the distant features are shrouded and even the colors of the nearby formations are less distinct and muddy. I have learned through my work with NPCA as well as my previous job with Voyageurs National Park Association that coal fired power plants are major sources of nitrogen oxide pollution that contributes to hazy days in our national parks.
7. Also through my work, I am aware that NPS and EPA have found that the Hunter and Huntington facilities in Emery County contribute to haze pollution in eight Class I national parks, all parks that I have visited multiple times already and plan to visit many more times in the years to come. I am also aware that non-Class I national parks, and the health of communities and park visitors in the region are affected by this same pollution.

8. Haze pollution, when I have encountered it, has affected my national park experience and one visit stands out for me. A number of years ago I spent spring break camping and hiking with my husband and sons in Capitol Reef National Park. Capitol Reef has become one of our favorite destinations for its beauty, easily accessible slot canyon hikes, and utterly remote, seemingly secret destinations waiting to be explored. One morning, we ventured south down the Notom Road, up the Burr Trail Switchbacks, and over to the Upper Muley Twist Canyon trailhead where we hiked to the Strike Valley Overlook to see a magnificent panorama of the Waterpocket Fold. This 100-mile warp in the earth's crust has eroded into colorful cliffs, massive domes, soaring spires, and twisting slot canyons. But when we reached the top, what should have been an expansive view was limited by haze. Instead of seeing vivid layers of colors, our view was muddied and dull. While every step of that adventure was worth it, the final moment of expected splendor was disappointing.
9. With Capitol Reef located less than 85 miles from Rocky Mountain Power's Hunter and Huntington coal plants, I have learned that coal pollution was likely one of the factors contributing to the heavy level of haze pollution that day.
10. Because I live in Utah, my sons have had another chance to see the Waterpocket Fold on a clear day in all its majesty. But many visitors from around the world, including my extended family members, may only get one chance to create those kinds of memories.
11. And I also had to ask myself what my young boys were breathing while we climbed to the top of that cliff? One of our greatest concerns about moving to Utah ten years ago that almost prevented us from coming, was the air quality in Cache Valley in the winter. And that concern, particularly for the long-term health of my boys, remains today and has grown over the years. Visiting the national parks should be a reprieve from air quality concerns, just as it

is an escape from our everyday lives, but I am aware of the air pollutants that harm human health and know that the same emissions that diminish our views, also make their way into my lungs and those of my children.

12. Nearly all of my trips to Utah's national parks have fallen between October and April and the "off season" is my favorite time to visit the parks because it is quieter and less crowded, a chance to experience the most popular and spectacular destinations while fighting fewer crowds of people or struggling to find a parking spot. The experience at many of these popular destinations such as the Strike Valley Overlook in Capitol Reef and Island in the Sky in Canyonlands, is defined by the scenic vistas across the landscape – the layers of multi-colored rocks in the foreground and, if it is a clear day, the Henry or La Sal Mountains in the distance. These scenes are made even more beautiful in the winter by a dusting of snow but, according to Utah Department of Environmental Quality (DEQ), are also the months when haze is most prevalent in the parks. Improving visibility in the parks during the winter months is very important to me because of the special experience described above.
13. According to the National Park Service, over 15 million people visited Utah's national parks in 2019, generating over 1.2 billion in visitor spending which primarily benefits Utah's small rural gateway communities. Well over 10 million people from around the world visited Arches, Canyonlands, Bryce Canyon, Capitol Reef and Zion National Parks in 2019. While those numbers dipped in 2020 due to the pandemic, record visitation levels are expected in 2021 when the data is released, reflecting the large numbers of people who flocked to the parks during the second year of the pandemic to seek refuge and solace in the outdoors. The growing number of visitors to Utah's national parks has sparked a lot of attention to the issue of overcrowding and the challenge of protecting the resources and preserving the integrity of

the national park experience. Through my work with NPCA, I have participated in numerous discussions and planning processes around visitor use management and a solution put forward consistently by tourism professionals, community leaders and public land managers is to spread visitation to the shoulder season. As a result, visitation during the shoulder season or “off season” has been increasing dramatically as visitors seek to find the solitude and quiet that my family also seeks on our vacations. This trend is expected to intensify with the Arches National Park timed-entry system that will be piloted in 2022, requiring visitors to make reservations to enter the park during the busiest season from April through October.

14. I have personally followed the development of Utah’s regional haze plan for the past 10 years and reviewed EPA’s 2016 federal implementation plan which required Rocky Mountain Power to retrofit four units at Hunter and Huntington with the best available technology to eliminate 76 percent of the plants’ nitrogen oxide emissions—9,886 tons of it per year. Based on modeling by EPA and the National Park Service, I believe cutting this level of pollution so close to the national parks would make a difference in improving the scenic views that my family and I value so highly and provide cleaner air for us to breathe while we visit our national parks.
15. I have also tracked the 2020 revisions to Utah’s regional haze plan that removed requirements to install the pollution controls and associated emission reductions for the Hunter and Huntington plants mentioned in the above paragraph, the plan that is currently in place.
16. In order to ensure that more visitors will have the opportunity to experience the extraordinary beauty that our national parks of the southwest have to offer in all seasons—and at the same time protect the health of our visitors and community residents, I firmly agree with the Sierra

Club, National Parks Conservation Association, and HEAL Utah’s participation in their legal effort to oppose the 2020 regional haze plan revisions and advocate for a regional haze plan for Utah that requires significant reductions of nitrogen oxides and is implemented as soon as possible.

Pursuant to 28 U.S.C. Section 1746, I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed at Logan, Utah, this 24th day of January 2022.

A handwritten signature in black ink, appearing to read "Cory MacNulty". The signature is written in a cursive style with a large initial "C" and "M".

Cory MacNulty

Attachment D:
Declaration of Dr. Brian Moench

Declaration of Dr. Brian Moench

I, Dr. Brian Moench, declare the following is true and accurate to the best of my personal knowledge:

1. I am a member, Board member, and President of the Board of Directors of Utah Physicians for a Healthy Environment (UPHE).
2. I have lived in Utah since 1981. I enjoy living in Utah because it offers extraordinary recreational opportunities. I regularly hike, camp, backpack, and bicycle, including in Utah's National Parks. Over the past twenty years, I have visited Arches, Bryce, Canyonlands, Capitol Reef and Zion. I have particularly enjoyed hiking in and near Zion's at such places as the Subway, and Angel's Landing with my friends and family.
3. As a member and as Board President of UPHE, I oppose EPA's action to exempt the Hunter and Huntington power plants from having to install haze reducing air pollution controls. I have visited the parks when visibility is poor. During such visits, I do not experience the same level of enjoyment as when air is clean. Utah's parks were largely established to allow people to enjoy the amazing red rock view sheds. The main purpose of the parks is diminished when view sheds are impaired by pollution.
4. Bad visibility in the national parks also means bad air quality. As a physician, I know that bad air quality can have an adverse impact on human health. When the air quality is bad in our national parks, it diminishes my enjoyment of the park because I limit my exercise and am concerned about my health during heavy exercise. The one place I should be able to breathe clean air, and be free of such concerns, is in our national parks.
5. I am familiar with the Hunter and Huntington coal plants and the fact that EPA has previously determined that these plants have a heavy adverse impact on visibility in Utah's national parks. As a member of UPHE and as its Board President, I want these power plants to reduce their emission of haze causing pollutants by installing the best available pollution controls on all units

Pursuant to 28 U.S.C. Section 1746, I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed at Salt Lake City, Utah, this 22nd day of January, 2022.

Brian Moench, MD.

Brian Moench, MD