ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1357

Consolidated with Nos. 20-1359, 20-1363

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

STATE OF CALIFORNIA, et al.,

Petitioners,

v.

ANDREW WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondent,

GPA MIDSTREAM ASS'N, et al.; INTL. ASS'N OF DRILLING CONTRACTORS, et al.; STATE OF NORTH DAKOTA,

Respondent-Intervenors.

OPENING PROOF BRIEF FOR STATE PETITIONERS STATE OF CALIFORNIA, et al.

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2016 Standard	Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources; Final Rule, 81 Fed. Reg. 35,824 (June 3, 2016)
EPA	United States Environmental Protection Agency
Rescission Rule	Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review Rule, 85 Fed. Reg. 57,018 (Sept. 14, 2020)

INTRODUCTION

EPA acknowledges that the Rescission Rule at issue here will increase air pollution, impair public health, and result in more than 10 million additional tons of greenhouse gases being emitted over the next decade. The agency has not, and cannot, offer a reasoned explanation for this rulemaking. Instead, the rule is the product of textbook arbitrary and capricious decision making, full of internal inconsistencies, inexplicable reversals in policy, and faulty legal conclusions.

In August 2016, after determining that methane emissions from the oil and natural gas industry significantly contributed to pollution that endangered public health and welfare, EPA finalized common-sense and cost-effective performance standards under the Clean Air Act to control leaks of methane and smog-forming volatile organic compounds from new sources in that sector. EPA's Rescission Rule reverses the findings it made and standards it issued in 2016, allowing greater emissions of these harmful pollutants. EPA's reversal is not the result of new fact-finding, but instead is a convenient smokescreen the agency uses to escape its mandatory duty to control methane emissions from hundreds of thousands of *existing* sources in the oil and gas industry—a duty triggered by its prior 2016 rulemaking. Emissions from existing sources represent the largest industrial source of methane in the country, and thus the impacts of EPA's actions are significant.

The Rescission Rule does its regulatory damage through two mechanisms. First, it rescinds all standards for controlling methane emissions from the oil and gas industry. EPA justifies this action by manufacturing a novel and unsupported prerequisite to regulation and then retroactively applying this new legal construct to its 2016 rule, and only to that rule. In issuing dozens of similar standards for other sectors, over decades, under the same statutory authority, EPA has never before found the need to constrain its discretion in this manner. EPA fails to justify reversing its legal position now and fails to explain why it retroactively imposes its new prerequisite only on the 2016 methane standards, but not on any of the dozens of others. EPA alternatively argues that regulation of methane from these sources would be redundant. This argument ignores—without adequate explanation—the impact of the prior standards on reducing methane emissions from existing sources.

Second, the Rescission Rule exempts one of the three segments of the oil and natural gas sector, transmission and storage, from any regulation of air emissions whatsoever. Here, EPA relies on an untenably narrow reinterpretation of its statutory authority that ignores the substantial record supporting its prior rulemaking and the reliance interests it engendered, and runs contrary to the purpose and structure of the Clean Air Act. For these reasons, the Rescission Rule

is arbitrary and capricious and unlawful under the Clean Air Act. Petitioners[1] respectfully request this Court vacate EPA's Rescission Rule.

JURISDICTIONAL STATEMENT

State Petitioners timely sought review of the agency action published at 85 Fed. Reg. 57,018 (Sept. 14, 2020) (the "Rescission Rule"). *See* Case No. 20-1357 (filed Sept. 14, 2020). This Court has jurisdiction under 42 U.S.C. § 7607(b)(1) to review the Rescission Rule, which is a standard of performance under section 111 of the Clean Air Act, 42 U.S.C. § 7411(b).

STATEMENT OF ISSUES

1. Whether EPA's elimination of methane controls on the production and processing segments of the oil and natural gas source category is arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with the Clean Air Act, 42 U.S.C. § 7411(b).

2. Whether EPA's elimination of standards of performance for the transmission and storage segment of the oil and natural gas source category is

[1] The State of California, by and through Attorney General Xavier Becerra, and the California Air Resources Board; the State of Colorado, by and through Attorney General Philip J. Weiser and the Colorado Department of Public Health and Environment; the States of Connecticut, Delaware, Illinois, Maine, Maryland, Minnesota, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, Vermont, and Washington; the People of the State of Michigan; the Commonwealths of Massachusetts, Pennsylvania, and Virginia; the City of Chicago; the District of Columbia; and the City and County of Denver (collectively, "State Petitioners").

arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with the Clean Air Act, 42 U.S.C. § 7411(b).

STATUTES AND REGULATIONS

Relevant statutory and regulatory provisions are contained in the separate Addendum to this brief.

STATEMENT OF THE CASE

I. STATUTORY AND REGULATORY FRAMEWORK

Section 111 of the Clean Air Act contains the New Source Performance Standards program, which directs EPA to follow certain steps in regulating categories of stationary sources of air pollution. First, EPA must establish a list of source categories which, in the EPA Administrator's judgment, "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). In making that determination, EPA evaluates the emissions from both new *and existing* sources, an industry-wide approach this Court has long upheld. 84 Fed. Reg. 50,244, 50,269 n.85 (Sept. 24, 2019) (citing *Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 433 n.48 (D.C. Cir. 1980)).

After listing a source category, EPA "shall" promulgate "standards of performance" for new sources in that source category, 42 U.S.C. § 7411(b)(1)(B), including existing sources that are modified or reconstructed thereafter, *id.* § 7411(a)(2). EPA sets performance standards for new sources by reference to

emissions levels that can be achieved using the most up-to-date control technology that is both feasible and cost-effective for each type of pollutant. *Id.* § 7411(a)(1). Consistent with the Clean Air Act's "technology-forcing objective," *Whitman v. Amer. Trucking Ass'ns*, 531 U.S. 457, 492 (2001) (Breyer, J., concurring), EPA is required to periodically "review and, if appropriate, revise such standards." 42 U.S.C. § 7411(b)(1)(B). Once EPA establishes standards for new sources under section 111(b), EPA is then required under section 111(d) to publish guidelines for controlling emissions from the much larger universe of existing sources in that source category. *See* 42 U.S.C. § 7411(d); 40 C.F.R. § 60.22a(a).

II. THE OIL AND GAS INDUSTRY

The oil and gas sector emits millions of tons of methane and volatile organic compounds each year, making it the largest industrial source of both compounds in the United States. Before the Rescission Rule, EPA defined the oil and natural gas source category to include three different segments: oil and gas production, gas processing, and gas transmission and storage.[2] 76 Fed. Reg. 52,738, 52,744 (Aug. 23, 2011); 84 Fed. Reg. at 50,255 n.43. Thus, the source category encapsulates the lifecycle of gas from its extraction as a raw product to its transmission to the market as a saleable product.

[2] Only oil *production* is included in the category at issue here, but not the processing or transmission and storage of oil. *See* 40 C.F.R. § 60, Subparts J & Ja (regulating the petroleum refinery source category).

Production. Equipment in the production segment extracts oil and gas from the ground. 76 Fed. Reg. at 52,744. The production segment includes the wells and related extraction processes, and initial processing to separate, treat, and store oil, condensate, water, and gas. *Id.*

Processing. In the processing segment, gas removed from the ground is processed into commercial products at standalone gas processing plants. *Id.* While natural gas is primarily made up of methane, the gas extracted from the ground is typically mixed with other hydrocarbons, water vapor, hydrogen sulfide, carbon dioxide, and other compounds, and therefore requires processing before it can be sold. *Id.* Processing includes oil and condensate separation, water removal, separation of gas liquids, sulfur and carbon dioxide removal, and other processes. *Id.*

Transmission and Storage. The transmission and storage (or "downstream") segment encompasses the distribution network that moves the processed gas to market. *Id.* This includes interstate pipelines, compressor stations along the pipeline to keep the gas pressurized, and underground storage facilities used to match demand. *Id.*

Emission Points and Controls. Emissions from the oil and gas industry are primarily the result of leaks from compressors, pumps, storage vessels, and other functionally identical components found throughout all three segments. *See* 81

Fed. Reg. 35,824, 35,838, 35,843-47 (June 3, 2016). Strategies to control those emissions include regular leak detection and repair protocols designed to fix leaks before significant emissions occur. *See id.* at 35,846. The technologies and methods for controlling emissions from equipment throughout the industry is the same irrespective of which segment it is located in.

Methane emissions. The oil and natural gas source category is the largest industrial emitter of methane in the United States. 85 Fed. Reg. at 57,021-22. In 2018, existing oil and natural gas sources emitted 163 million tons of methane in terms of carbon-dioxide equivalent. *Id.* at 57,022. Methane is a potent greenhouse gas that, pound for pound, warms the earth 84 to 86 times more than an equivalent amount of carbon dioxide for the first two decades after release. JA __[EPA-HQ-OAR-2017-0757-2335_Attachment2_EPAadmissions_p1). "Methane . . . contributes to warming of the atmosphere, which, over time, leads to increased air and ocean temperatures, changes in precipitation patterns, melting and thawing of global glaciers and ice, increasingly severe weather events, such as hurricanes of greater intensity and sea level rise." 77 Fed. Reg. 49,490, 49,535 (Aug. 16, 2012).

Volatile organic compounds. The oil and gas industry is also the largest industrial emitter of volatile organic compounds in the United States, with existing sources emitting more than 2.5 million tons in 2017. 85 Fed. Reg. at 57,022. The public health impacts of volatile organic compounds, the main precursor to the

formation of ozone (a major component of smog), are well documented. 81 Fed. Reg. at 35,889. Short-term exposure leads to harmful respiratory symptoms such as acute bronchitis and asthma, and long-term exposure may result in premature death from lung and heart disease. *Id.*

III. REGULATION OF THE OIL AND NATURAL GAS SOURCE CATEGORY UNDER CLEAN AIR ACT SECTION 111

In 1979, EPA listed crude oil and natural gas production under section 111(b) as a source category that contributes significantly to air pollution that "may reasonably be anticipated to endanger public health and welfare," 42 U.S.C. § 7411(b)(1)(A), based on emissions from both new and existing sources. *See* 44 Fed. Reg. 49,222 (Aug. 21, 1979). In 1985, EPA promulgated new source performance standards for emissions of volatile organic compounds from production and processing segments in the oil and natural gas source category. 50 Fed. Reg. 26,122 (June 24, 1985). EPA completed its mandated periodic review and published revised new source performance standards for emissions of volatile organic compounds from production, processing, and transmission and storage segments in the oil and natural gas source category in August 2012. 77 Fed. Reg. 49,490 (Aug. 16, 2012). At that time, EPA declined to issue performance standards for methane emissions but noted that the agency had recently finalized reporting requirements that would allow EPA to determine if such standards were appropriate. *Id.* at 49,513-4.

IV. THE 2016 NEW SOURCE PERFORMANCE STANDARD

In September 2015, EPA proposed revised standards of performance to regulate emissions of both volatile organic compounds and methane from new sources in the oil and natural gas source category. 80 Fed. Reg. 56,593 (Sept. 18, 2015). Based on compelling data and an extensive administrative record, EPA finalized the 2016 Standard to reduce emissions of methane and volatile organic compounds from the production, processing, and transmission and storage segments. 81 Fed. Reg. 35,824 (June 3, 2016).

EPA explicitly determined under section 111(b)(1)(A) that methane emissions from the production, processing, and transmission and storage segments of the industry together significantly contribute to air pollution that may endanger public health or welfare.[3] 81 Fed. Reg. at 35,833-40. The 2016 Standard also tightened emission controls for volatile organic compounds for all regulated segments of the source category. *Id.* at 35,825.

[3] EPA explained that, alternatively, it had authority to regulate methane from the source category under section 111(b)(1)(B), even without a significant contribution finding, due to the overwhelming record of methane's adverse impacts on public health and welfare and the high quantities emitted from the source category. 81 Fed. Reg. at 35,833-43. EPA's reversal of that legal position with a new interpretation it never proposed is the subject of pending administrative petitions for reconsideration. *See* Environmental Petitioners' and State Petitioners' Petitions for Reconsideration, Dkt. IDs EPA-HQ-OAR-2017-0757-2723 & EPA-HQ-OAR-2017-0757-2724 (Nov. 13, 2020).

According to EPA, the 2016 Standard was expected to reduce 510,000 tons of methane, 210,000 tons of volatile organic compounds, and 3,900 tons of hazardous air pollutants in 2025 alone. *Id.* at 35,827. Between the health benefits of the rule and the increased revenues that operators would realize from recovering natural gas that would otherwise be released, EPA determined that the 2016 Standard would result in a net benefit estimated at $35 million in 2020 and $170 million in 2025. *Id.* at 35,827-28.

Importantly, EPA's promulgation of the 2016 Standard for new sources also triggered its statutory obligation to issue methane emission guidelines for existing sources in the oil and natural gas sector.[4] 42 U.S.C. § 7411(d)(1)(A).

EPA was well aware that its issuance of the 2016 Standard would trigger this obligation. *See* 81 Fed. Reg. at 35,831-32 (indicating that EPA intended to begin the formal process to regulate methane emissions from existing sources). On the same day it finalized the 2016 Standard, the agency also proposed an information

[4] EPA takes the position that its duty to issue existing source guidelines was not triggered by its prior standards because *volatile organic compounds* fall within the exception for pollutants already controlled by the Clean Air Act's national ambient air quality standards program. 85 Fed. Reg. at 57,040-41. *Methane*, on the other hand, does not fall within either of section 111's exceptions for pollutants already controlled by the national ambient standards under section 108(a) or by the hazardous air pollution program under section 112. *See* 42 U.S.C. § 7411(d)(1)(A).

collection request to obtain specific information from facilities to use in addressing existing source emissions. 81 Fed. Reg. 35,763-64 (June 3, 2016).

V. EPA'S REVERSAL ON REGULATING METHANE FROM THE OIL AND GAS INDUSTRY

In March 2017, EPA withdrew the existing source information request, abruptly halting its efforts to regulate existing sources, without any notice or opportunity to comment. 82 Fed. Reg. 12,817 (Mar. 7, 2017). EPA did not provide any reasoned analysis for this withdrawal, but it occurred shortly after a request from an industry representative. Comments of State Petitioners (Nov. 22, 2019) ("Multistate Comments"), JA __-__[EPA-HQ-OAR-2017-0757-2335_Attachment9_p5-19].

EPA then issued an administrative stay of the 2016 Standard for new sources, which this Court summarily vacated. *Clean Air Council v. Pruitt*, 862 F.3d 1, 14 (D.C. Cir. 2017). EPA signaled that it had no intention of implementing the 2016 Standard and proposed two additional stays of the requirements. 82 Fed. Reg. 27,641 (June 16, 2017); 82 Fed. Reg. 27,645 (June 16, 2017).

In April 2018, a subset of State Petitioners sued EPA in federal district court seeking to enforce EPA's nondiscretionary duty under section 111(d) to issue guidelines directing states to limit methane emissions from existing sources in the oil and natural gas sector. *See New York v. Wheeler*, No. 1:18-cv-00773-RBW (D.D.C. filed Apr. 5, 2018). In September 2019, EPA proposed revisions to the

2016 Standard that would rescind all requirements to reduce emissions of methane and completely deregulate sources in the transmission and storage segment—leaving only regulations addressing volatile organic compounds from the production and processing segments. EPA claimed these changes would eliminate the statutory trigger to control emissions from existing sources, and therefore its obligation and authority to do so. 84 Fed. Reg. at 50,244, 50,254. EPA then sought to stay the existing source litigation pending finalization of its proposed rule. *See* Defs.' Mot., *New York v. Wheeler*, No. 1:18-cv-00773-RBW (Sept. 27, 2019), ECF No. 59; Order (Dec. 2, 2019), ECF No. 68; Order (June 18, 2020), ECF No. 83. On August 13, 2020, one day before its opposition to plaintiffs' motion for summary judgment was due in that case and nearly one year after proposing the rule, EPA signed the Rescission Rule and finalized its elimination of methane standards for new sources. In its opposition to summary judgment filed the following day, EPA argued that issuance of the Rescission Rule had mooted the agency's obligation to regulate existing sources. *Id.* Defs.' Mem. at 9 (Aug. 14, 2020), ECF No. 91.

EPA published the Rescission Rule the following month (with an immediate effective date), and State Petitioners filed the subject petition for review on the day of publication. 85 Fed. Reg. 57,018 (Sept. 14, 2020). The day after publishing the Rescission Rule, EPA published a second rule that weakened the remaining

standards for volatile organic compounds. 85 Fed. Reg. 57,398 (Sept. 15, 2020). That rule is the subject of a separate challenge, in Case No. 20-1360.

STANDARD OF REVIEW

The Clean Air Act prescribes the scope of judicial review for promulgation or revision of standards of performance under Clean Air Act section 111. 42 U.S.C. § 7607(d)(1)(C). This Court "may reverse any such action found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" or "in excess of statutory . . . authority." *Id.* § 7607(d)(9).

SUMMARY OF ARGUMENT

In the Rescission Rule, EPA has rolled back cost-effective, reasonable regulations without adequate explanation.

1. EPA's rescission of all methane controls is arbitrary and capricious and unlawful under the Clean Air Act because the agency failed to provide the reasoned explanation required to reverse the policies contained in the 2016 Standard, introduced unexplained inconsistencies with past agency practice, and improperly disregarded significant impacts from the agency's circumvention of its nondiscretionary duty to control emissions from existing sources.

2. EPA's deregulation of the transmission and storage segment is arbitrary and capricious and unlawful under the Clean Air Act because the agency failed to provide the detailed justification required when a decision rests upon factual

findings that contradict its prior factual findings, and failed to explain the internal inconsistencies within its purported basis for deregulation.

STANDING

EPA admits that the Rescission Rule will increase emissions of methane, volatile organic compounds, and other harmful air pollutants nationwide. 85 Fed. Reg. at 57,065. This increased pollution will cause concrete and lasting injury to the interests of State Petitioners.

Specifically, the Rescission Rule will increase methane emissions by 448,000 tons (equivalent to 10.1 million tons of carbon dioxide) by 2030, 85 Fed. Reg. at 57,065, exacerbating climate change harms that State Petitioners already experience. These harms include an increase in destructive wildfires, droughts, sea level rise, damaging floods, and increased deaths and illnesses due to intensified and prolonged heat waves; loss of sovereign territory; threats to natural resources including forests and water supplies; damage to state-owned parks and infrastructure; lost tax revenue resulting from harm to major industries relating to tourism, fishing, and forest products among others; and increased government expenditures required to protect health, safety, and infrastructure. Decl. of Jay Chamberlin ¶¶8-14; Decl. of Carolyn Lozo ¶¶4-9; Decl. of Lisa Berry Engler ¶¶7-26; Decl. of Jared Snyder ¶¶12-32; Decl. of Catherine R. McCabe ¶¶6-22; Decl. of Erica Fleishman ¶¶7-21; Decl. of Kathy Taylor ¶¶4-9. The rule will also cause an

additional 12,000 tons of volatile organic compounds and 400 tons of hazardous air pollutants to be emitted by 2030. 85 Fed. Reg. at 57,065. These emissions will interfere with the ability of some State Petitioners, such as New Mexico, to attain or maintain federal air quality standards, thereby increasing the regulatory burdens on those Petitioners and subjecting them to the risk of serious sanctions such as the loss of federal highway funding. Decl. of Elizabeth Bisby-Kuehn ¶¶10-18. The increased emissions will also result in increased health care costs for State Petitioners, and will adversely impact state revenues. *Id.*

These impacts are directly traceable to the EPA's issuance of the Rescission Rule, and would be redressed through State Petitioners' requested relief to vacate the Rescission Rule and reinstate the 2016 Standard. Accordingly, State Petitioners have standing under Article III to pursue their claims. *Mass. v. EPA*, 549 U.S. 497, 520 (2007) (states entitled to "special solicitude" in standing analysis to protect quasi-sovereign interest); *see also Del. Dep't of Nat. Res. & Envtl. Control v. EPA*, 785 F.3d 1, 9-10 (D.C. Cir. 2015) (Delaware's standing to challenge EPA regulations was "self-evident" when emissions increases caused by those regulations would negatively impact the state's ability to meet federal ambient air quality standards).

ARGUMENT

I. EPA'S RESCISSION OF ALL METHANE EMISSION CONTROLS WAS ARBITRARY AND CAPRICIOUS AND UNLAWFUL

EPA's wholesale rescission of the methane controls is a quintessential example of unlawful and arbitrary and capricious rulemaking. Because EPA could not justify the rescission on a desire to avoid regulating methane from existing sources, the agency contrived two other explanations for the rescission that are as disingenuous as they are deficient. First, EPA argued that its 2016 finding that methane emissions from the oil and natural gas source category significantly contributed to dangerous air pollution was invalid on two grounds: (a) EPA failed to use "established criteria" in 2016 for judging the significance of methane emissions from the category, even though EPA had never done so before for any source category and even today cannot say what those criteria are; and (b) in 2016 EPA considered emissions from the now-deregulated transmission and storage segment. Second, EPA argued that it must rescind methane requirements because they provide no additional benefits compared to the requirements for volatile organic compounds, improperly discounting that the prior methane standards triggered the regulation of existing sources. As discussed below, each of these justifications is flawed; together, they fail to provide the requisite reasoned explanations for the agency's complete about-face.

A. EPA's retroactive requirement that it employ unspecified significance criteria does not provide a reasoned explanation and creates unexplained inconsistencies.

EPA fully and cogently explained in 2016 why it determined that methane emissions from oil and gas sources contribute significantly to dangerous air pollution. 81 Fed. Reg. at 35,839-41. In the Rescission Rule EPA does not reject or even reexamine the science or the factual record it relied on in 2016. Instead, EPA claims its 2016 significance finding was invalid because EPA did not employ "some type of (reasonably explained and intelligible) standard and/or established set of criteria" in making that finding, 85 Fed. Reg. at 57,038; *see also id.* at 57,019, a prerequisite EPA apparently devised specifically for this rulemaking. EPA fails to acknowledge, much less justify, the inconsistency created by suddenly imposing a new constraint on its decades-old section 111(b) rulemaking process and then retroactively applying this new requirement to the 2016 listing but not to any other source category regulated under section 111(b) in the last 50 years. Even today, EPA is unable to articulate what criteria it says it was obligated to apply in 2016. EPA's lack of reasoning renders its action arbitrary and capricious. *See Physicians for Soc. Responsibility v. Wheeler*, 956 F.3d 634, 644 (D.C. Cir. 2020) ("[W]hen departing from precedents or practices, an agency must 'offer a reason to distinguish them or explain its apparent rejection of their approach.'") (quoting *Sw. Airlines Co. v. FERC*, 926 F.3d 851, 856 (D.C. Cir. 2019)).

In the preceding decades, EPA routinely applied the language of section 111(b)(1)(A) on a case-by-case basis to the factual circumstances of specific source categories to determine which sources and pollutants could be regulated; it never suggested that it could not carry out its obligations without first developing and then applying other criteria to constrain its judgment. For example, the original 1979 listing for the oil and natural gas source category—which EPA now asserts is the only valid one, 85 Fed. Reg. at 57,025—also addressed 58 other diverse source categories, including Synthetic Organic Chemical Manufacturing, Plywood Manufacture, Asphalt Roofing Plants, Dry Cleaning, and Uranium Refining. In a five-page Federal Register notice, EPA announced, as to all 59 categories collectively:

> Promulgation of this list . . . constitutes notice that all source categories on the priority list are considered significant sources of air pollution and are hereby listed in accordance with section 111(b)(1)(A).

44 Fed. Reg. at 49,225. The 1979 listing did not apply, nor even imply, a "standard or established set of criteria" for any of the 59 source categories; nor does it discuss a single pollutant to be regulated. The 1985 standards for volatile organic compound emissions from these sources similarly did not apply the test EPA suggests is now necessary. Rather, EPA issued these standards based on the fundamental and self-explanatory finding required by section 111(b)(1)(A): "the Administrator's determination that emissions from the [source category] cause, or

contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 50 Fed. Reg. at 26,122. It is normal and proper for EPA to ground its determinations on the language of the Clean Air Act instead of on extra-statutory benchmarks. *See Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 122-23 (D.C. Cir. 2012) (rejecting claim that EPA must establish threshold of risk or harm before determining whether air pollutant endangers public health or welfare), *aff'd & rev'd in part on other grounds*, *Util. Air Regulatory Grp. v. EPA*, 573 U.S. 302 (2014).

In neither the proposed nor final Rescission Rule did EPA provide a single example of a standard issued under section 111(b) that it has issued using a "standard or established set of criteria" as it now demands.[5] Indeed, a comparison of the 1979 listing for this source category and the 2016 pollutant-and-source-category-specific finding for methane shows that it is actually the 2016 listing that explicitly analyzes the quantity and harms of pollution emitted by these sources. EPA's alleged failure to apply still-undefined criteria it has never used before does not provide the requisite reasoned explanation for departing from its longstanding practice and repealing the 2016 Standard. *Encino Motorcars, LLC v. Navarro*, 136

[5] EPA's practice has often been to list source categories under section 111(b)(1)(A) without first making specific "contribute significantly" findings for any specific pollutants. *See* 36 Fed. Reg. 5,931 (Mar. 31, 1971); 44 Fed. Reg. 49,222 (Aug. 21, 1979).

S. Ct. 2117, 2125 (2016) ("[A]n agency must give adequate reasons for its decisions.").

EPA also failed to provide a reasoned explanation for singling out the 2016 significance finding from the dozens of other significance findings over the past 50 years for retroactive application of "some type of . . . standard and/or established set of criteria."[6] EPA's application of its new constraint only to the 2016 significance finding for methane is the very definition of arbitrary. *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005) ("Unexplained inconsistency" in agency policy is "a reason for holding an interpretation to be an arbitrary and capricious change from agency practice."). Indeed, while EPA argues in the Rescission Rule that applying "established criteria" is an absolute prerequisite to regulation under section 111(b), in other pending litigation the agency is arguing to this Court that sometimes it must find emissions to be significant under that section, even in the absence of established criteria controlling the significance determination. In *American Lung Association v. EPA* (D.C. Cir., No. 19-1140), EPA is defending its authority to regulate

[6] Not at issue here is whether EPA has the discretion someday to develop criteria to guide its application of the phrase "significantly contributes" in Section 111(b)(1)(A) through a future rulemaking. Congress added that language to the Clean Air Act in 1970, and EPA has implemented it over 70 times since then without being troubled by the alleged ambiguity it now considers debilitating.

greenhouse gas emissions from existing fossil-fuel power plants on the basis of its 2015 section 111(b)(1)(A) significance finding, even though in making that finding the agency did not apply the allegedly mandatory "established criteria." *See* 85 Fed. Reg. at 57,039-40 n.49.[7] But EPA's newly articulated prerequisite cannot simultaneously be *mandatory* for *all* section 111(b) rulemakings but *unnecessary* to apply in *some* section 111(b) rulemakings. EPA's inconsistency on the need for "established criteria" underscores the arbitrary and capricious nature of its decision making here.

B. EPA failed to show that emissions from the production and processing segments do not significantly contribute to dangerous pollution.

EPA's claim that the 2016 significant contribution finding (and, as a result, the methane standards) must be rescinded because it was not limited to the production and processing segments is also insufficient to justify the agency's reversal.[8] 85 Fed. Reg. at 57,038. Even if the source category should have included only the production and processing segments (as it now argues), EPA

[7] EPA's position at oral argument in that case was that it would have been "irrational," as a matter of law, for EPA not to have regulated those emissions under section 111(b). Oral Argument at 3:43:10-3:45:50, *Am. Lung Ass'n v. EPA* (Oct. 8, 2020) (D.C. Cir., No. 19-1140), https://www.cadc.uscourts.gov/recordings/recordings2020.nsf/440063610ABBCE45852585FC00645FC4/$file/19-1140.mp3.

[8] For the reasons stated below, EPA's removal of the transmission and storage segments from the source category is unlawful. *See* section II, *infra*.

erred by invalidating the 2016 significance finding without first determining that emissions from those remaining segments did *not* significantly contribute under section 111(b)(1)(A). EPA simply concluded that the 2016 finding is now without effect, without undertaking this analysis. 85 Fed. Reg. at 57,057. EPA's wholesale rescission of the 2016 significance finding without consideration of the core issue—whether methane emissions from the category contribute significantly to dangerous pollution—was arbitrary and capricious. *See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency must "examine the relevant data and articulate a satisfactory explanation for its action").

Indeed, the vast majority of methane emissions from the source category, as defined in 2016, come from the production and processing segments that EPA retains in the Rescission Rule. 85 Fed. Reg. at 57,022 tbl.4 (79 percent of 2018 emissions). EPA has made no attempt to show that somewhat reducing the size of the source category affects the validity of the 2016 significant contribution finding. It is arbitrary and capricious for EPA to throw out its 2016 significant contribution finding simply because it has now decided to exclude facilities that emit a minority of those pollutants. *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515-16 (2009).

C. EPA's redundancy rationale is legally baseless and arbitrary and capricious.

EPA's further claim that methane standards for the production and processing segments are "redundant" of the remaining standards governing volatile organic compounds is similarly contrived. 85 Fed. Reg. at 57,019; *see also id.* at 57,030 (purporting that "[methane] requirements . . . establish no additional health protections, and are, thus, unnecessary"). Most notably, it fails to account for the enormous impact rescission of these standards has on existing source emissions. EPA's willful refusal to consider the facts on which the 2016 Standard is based renders its action arbitrary and capricious. *See State Farm*, 463 U.S. at 43; *Fox*, 556 U.S. at 515-16.

As discussed above, once EPA establishes standards for new sources under section 111(b) of the Clean Air Act, EPA is required under section 111(d) to publish guidelines for controlling emissions from existing sources in that source category. *See* 42 U.S.C. § 7411(d); 40 C.F.R. § 60.22a(a). EPA claims in the Rescission Rule that removing standards for methane eliminates its obligation and even its authority to regulate emissions from existing oil and gas sources, asserting that the volatile organic compound standards do not themselves trigger the obligation to regulate these sources. 85 Fed. Reg. at 57,033, 57,040-41 (contending that volatile organic compounds fall under the exclusion in section 111(d)(1)(A)(i) because they are a precursor to a pollutant for which ambient air

quality criteria have been issued). As a consequence of this position, the regulation of existing source emissions clearly has a significant impact on total emissions from the source category, and therefore on public health and welfare.

Methane emissions from existing sources constitute the vast majority of methane emissions from the oil and natural gas sector. Thus, in concluding in the 2016 Standard that methane emissions from the oil and natural gas source category warrant regulation under section 111, EPA considered methane emissions from the *entire* source category, including from existing sources. *See* 81 Fed. Reg. at 35,838-39, tbls. 4 & 5 (quantifying total methane emissions from existing sources in the oil and natural gas source category); 35,842 (stating that, in making its rational basis determination, "EPA focuses on methane emissions from this category" and citing to Tables 4 & 5); 35,877 (reviewing methane emissions in 2014); *see also* 42 U.S.C. § 7411(b)(1)(A).

EPA's failure to issue guidelines for the regulation of existing oil and natural gas sources will result in substantial additional emissions of methane and thereby cause significant harm to public health and welfare. Evidence before EPA when it issued the Rescission Rule demonstrates that its failure to regulate methane emissions from existing sources from 2016 to 2019 has already resulted in the emission of 12.2 million tons of methane pollution that could have been prevented by regulations for existing sources. Multistate Comments, JA __[EPA-HQ-OAR-

2017-0757-2335_p.30]. EPA, however, declined to undertake any quantitative assessment of existing source methane pollution in the Rescission Rule. *See* 85 Fed. Reg. at 57,033.

Thus, EPA's claims that eliminating methane regulation from new and modified oil and natural gas facilities will not result in a substantial amount of lost emission reductions are contrary to the evidence before the agency, and inconsistent with findings EPA itself made in issuing the 2016 Standard. *See Lone Mountain Processing, Inc. v. Sec'y of Labor*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) ("[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored. Failing to supply such analysis renders the agency's action arbitrary and capricious.") (citations omitted); *see also Gen. Chem. Corp. v. United States*, 817 F.2d 844, 846 (D.C. Cir. 1987) (agency decision that was "internally inconsistent and inadequately explained . . . was arbitrary and capricious").

EPA argues that the impact of the Rescission Rule on existing sources is simply a "legal consequence" that results from the application of the Clean Air Act section 111 requirements and thereby requires no analysis. 85 Fed. Reg. at 57,033, 57,061. But section 111 is an integrated emissions control program, the primary purpose of which is to prevent and reduce air pollution from both new and existing sources. EPA's proposal to deregulate methane entirely from the oil and natural

gas source category without any affirmative determination that such emissions do not endanger public health and welfare or that the oil and natural gas sector does not significantly contribute to such endangerment is in fact impermissible under section 111(d) of the Clean Air Act. *See Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 426-27 (2011) (Clean Air Act "directs EPA to establish emissions standards for categories of stationary sources" where pollution from those sources endangers public health or welfare).

Moreover, EPA offers no evidentiary support or analysis for its assertion that the regulation of existing sources is unnecessary because these emissions will likely be abated over time by voluntary industry programs, state regulation, and the eventual replacement of old equipment. *See, e.g.*, 85 Fed. Reg. at 57,041 ("EPA did not prepare and include a quantitative analysis"). And such speculative claims run counter to evidence before the agency, both from the prior rulemaking and from comments submitted in conjunction with the proposed rule. *See, e.g.*, Multistate Comments, JA __-__[EPA-HQ-OAR-2017-0757-2335_p29-35]; Comments of Cal. Air Res. Bd. (Nov. 25, 2019) ("CARB Comments"), JA __-__[EPA-HQ-OAR-2017-0757-2113_p13-17]. Moreover, EPA's position runs counter to Congress's purpose in enacting section 111 to require EPA to establish federal standards in order to yield a consistent and accountable national program. *See* Multistate Comments, JA __[EPA-HQ-OAR-2017-0757-2335_p34]. These

actions thus clearly constitute arbitrary and capricious agency action. *See State Farm*, 463 U.S. at 43; *Fox*, 556 U.S. at 515-16.

And even with regard to new and modified sources, EPA's methane regulations in the 2016 Standard are not redundant. The 2016 Standard does not duplicate requirements for emissions controls; rather, it controls both methane emissions and volatile organic compound emissions separately using the same technology and processes. But nothing in the Rescission Rule requires operators to use technologies that will continue to control methane.[9] And EPA admits that in the future, control technologies, and thus the performance standards based on the capabilities of those technologies, could diverge. 85 Red. Reg. at 57,050-51. Further, removing methane from the 2016 Standard means that the methane requirements will not be subject to periodic mandatory review under section 111(b)(1)(B) and possible revisions to reflect those changing realities. It is thus arbitrary and capricious to remove methane controls on the basis of some claimed near-term redundancy when, as even EPA admits, that redundancy may not last.

Finally, EPA provides no evidence that any claimed "redundancy" in the methane standards actually poses any burden on industry that could even arguably

[9] Nor is use of the same technologies necessarily the case. *See* CARB Comments, JA __[EPA-HQ-OAR-2017-0757-2113_p10] (explaining activated carbon adsorbers can be used to control volatile organic compounds, but not methane).

justify a reversal of the agency's prior policy. *See id.* at 57,051-52. The costs of the 2016 Standard are minimal when viewed as a percentage of industry revenues and profits; and indeed, to the extent that the methane standards are redundant (as EPA contends), there is no additional cost to industry to control methane emissions from new sources. *See* 84 Fed. Reg. at 50,281 (proposed rescission will result in $0 of cost savings); CARB Comments, JA __-__[EPA-HQ-OAR-2017-0757-2113_p2-4] (explaining that the California Air Resources Board introduced methane controls to both new and existing sources across the oil and gas industry without substantial implementation issues). On the other hand, there is a significant benefit obtained by ensuring the regulation of existing source emissions.

In sum, EPA's redundancy rationale does not supply the requisite "good reasons" for the Rescission Rule and indeed amounts to "an explanation for its decision that runs counter to the evidence before the agency." *North Carolina v. EPA*, 531 F.3d 896, 906 (D.C. Cir. 2008) (quoting *State Farm*, 463 U.S. at 43). And in truth, EPA's contrived explanations for the Rescission Rule are as insincere as they are inadequate. As the history and timing of the Rescission Rule makes clear, this rulemaking is the latest facet of EPA's efforts to eliminate regulation of existing sources altogether. Indeed, EPA actively seeks with its Rescission Rule to dismiss Petitioners' separate case seeking to enforce the agency's obligations to

control emissions from existing sources under section 111(d). *See New York v. Wheeler*, No. 1:18-cv-00773-RBW (D.D.C. filed Apr. 5, 2018). But EPA cannot have it both ways—arguing here that methane standards are redundant with standards to control volatile organic compounds, while simultaneously asserting that rescission of those same standards eliminates EPA's duty to regulate emissions from existing sources. This Court need not countenance such efforts.

II. REMOVAL OF THE TRANSMISSION AND STORAGE SEGMENT FROM THE OIL AND NATURAL GAS SOURCE CATEGORY WAS ARBITRARY AND CAPRICIOUS AND UNLAWFUL

In the Rescission Rule, EPA unlawfully and without reasoned explanation entirely removed the transmission and storage segment from the oil and natural gas source category. 85 Fed. Reg. at 57,022. By doing so, the agency completely deregulated a segment that the agency previously found significantly contributed to air pollution which may reasonably be expected to endanger public health and welfare, 81 Fed. Reg. 35,833, and which emits the *same* pollutants from the *same* types of equipment as the segments still subject to regulation, 80 Fed. Reg. at 56,600. EPA fails to grapple with the substantial record from the 2016 Standard demonstrating the reasonableness, efficiency, and public health and environmental benefits of regulating the three segments in one source category, and also ignores significant reliance interests engendered by the 2016 Standard. Even if EPA were operating on a blank slate, its proffered explanation is contrary to the purpose and

structure of the Clean Air Act and its conclusion is inconsistent with its own factual findings.

A. EPA failed to provide a reasoned explanation for ignoring its prior findings and reversing its prior determinations.

The Rescission Rule's deregulation of the transmission and storage segment "rests upon factual findings that contradict those which underlay" the 2012 and 2016 Standards. *Fox*, 556 U.S. at 515. Therefore, EPA is subject to a heightened standard requiring it to "provide a more detailed justification than what would suffice for a new policy created on a blank slate." *Id.* In 2012, EPA issued performance standards for equipment leaks from sources located in the natural gas transmission and storage segment for the first time. 77 Fed. Reg. at 49,498. During the rulemaking for the 2016 Standard, EPA reaffirmed the appropriateness of regulating sources in the transmission and storage segment as part of the "interrelated" "sequence of functions" designed to prepare recovered gas for distribution along with the production and processing segments. 80 Fed. Reg. at 56,600. Further, EPA found that increases in gas production and processing as a result of the hydraulic fracturing boom were causing concomitant emission increases in the transmission and storage segment as higher throughput upstream led to additional gas moving to market or being stored. *Id.* And finally, EPA found that the three segments utilize the same equipment and emit the same pollutants, which can be controlled using the same technologies. *Id.* Together,

these factual similarities demonstrated the "good reasons" for regulating all three segments in one source category. *Id.*

In the Rescission Rule, EPA notes that "finding commonality in emissions, processes, and applicable controls for . . . otherwise different sources" should form the basis for "EPA determin[ing] that they should be part of the same source category." 85 Fed. Reg. at 57,027 (discussing the asphalt processing and roofing source category). But then EPA goes on to ignore the interrelatedness and similarities in equipment, pollutants, and control technologies across all three segments of the oil and natural gas source category. *Id.* at 57,029. Instead, EPA concludes that operations in the transmission and storage segment are distinct from the production and processing segments because the gas entering the transmission and storage segment has minor differences in composition and characteristics than that entering the production and processing segments, and because the segments have different "purposes." *Id.* at 57,028-9. But EPA never addresses its previous findings regarding the commonalities among the segments, or explains why its newfound distinctions based on purpose and gas composition are relevant to defining the source category.

In addition, in changing its position, EPA has ignored reliance interests engendered by its prior regulation of the transmission and storage segment. "When an agency changes course . . . it must be cognizant that longstanding policies may

have engendered serious reliance interests that must be taken into account." *Dep't of Homeland Security v. Regents of Univ. of Cal.*, 140 S.Ct. 1891, 1913 (2020) (internal quotation marks omitted). By removing the transmission and storage segment from the regulated source category, EPA has left those sources no longer subject to any regulation under section 111. 85 Fed. Reg. at 57,030. EPA acknowledges this deregulation will immediately increase emissions, resulting in the emission of an additional 12,000 tons of volatile organic compounds by 2030. *Id*. at 57,065.

Members of State Petitioners' coalition have relied on the 2016 Standard's expected reductions in emissions of volatile organic compounds, a precursor to ozone, in their long-term air quality planning to meet the federal ambient air quality standard for ozone. *See* Comments of New Mexico Env. Dep't (Oct. 24, 2019) ("New Mexico Comments"), JA __[EPA-HQ-OAR-2017-0757-0092_p3]; *see also* Multistate Comments, JA __-__[EPA-HQ-OAR-2017-0757-2335_p41-43]. For example, ozone concentrations in some areas of New Mexico have increased to within five percent of federal ambient air quality standards, almost entirely as a result of volatile organic compounds emitted from oil and gas operations in New Mexico and Texas. New Mexico Comments, JA __[EPA-HQ-OAR-2017-0757-0092_p3]. Increased emissions of volatile organic compounds can therefore impede a state's ability to remain in attainment with federal

standards, risking potential sanctions and other repercussions. *Id.*, JA __[EPA-HQ-OAR-2017-0757-0092_p4]; 42 U.S.C. §§ 7407(d), 7506(c). Despite State Petitioners raising these significant reliance interests in their comments on the proposal, EPA failed to acknowledge, let alone address, them in the final Rescission Rule. This falls far short of the agency's obligation to "assess whether there were reliance interests, determine whether they were significant, and weigh any such interests against competing policy concerns." *DHS v. Regents*, 140 S.Ct. at 1915.

At minimum, EPA should have considered alternatives to total deregulation that would have mitigated State Petitioners' reliance interests. *See id.* at 1913 ("[W]hen an agency rescinds a prior policy its reasoned analysis must consider the alternatives that are within the ambit of the existing policy.") (internal quotation marks and brackets omitted). EPA previously determined that "there is ample evidence that this source category as a whole (oil and gas production, processing, transmission, and storage) contributes significantly to air pollution that may reasonably be anticipated to endanger public health and welfare." 81 Fed. Reg. 35,833. Therefore, even if EPA were correct that the transmission and storage segment could not be included in the same source category as production and processing, the agency should have assessed whether, rather than wholly deregulating the segment, it should regulate transmission and storage as a separate

source category, as the agency has done for other industries.[10] *See*, *e.g.*, 85 Fed. Reg. at 57,029 (discussing the three source categories in the petroleum industry for production facilities, refineries, and bulk gasoline terminals). Instead, EPA merely states that it "may" at some point "in the future" consider whether the transmission and storage segment should be listed as a separate source category. *Id.* at 57,030.

B. Even if EPA were acting on a blank slate, excluding transmission and storage would still be arbitrary and capricious and unlawful.

To justify its deregulation of the transmission and storage segment, EPA contrives an argument that it was *required* to do so under a new interpretation of its own statutory authority. *Id.* at 57,027. EPA asserts that segments within an industry can be grouped under one source category listing only if they are "sufficiently related," a phrase the agency acknowledges is not found in the Clean Air Act. *Id.* ("[Clean Air Act] section 111 does not define the term 'source category' or use the phrase 'sufficiently related[.]'"). With this vague and non-statutory test in hand, EPA then determines that the transmission and storage

[10] EPA claimed that it did not make a finding in the 2016 Standard that the contribution from the transmission and storage segment was independently significant as would be required to regulate the segment as its own source category. 85 Fed. Reg. at 57,029. But this contradicts the agency's own response to comments on the 2016 Standard that it considered the segment's contributions to be independently significant. JA __-__[EPA-HQ-OAR-2017-0757-2335_Attachment15_2016RTC_p1-2] ("[T]he overall emissions from each segment, including transmission and storage, are significant.").

segment is not "sufficiently related" to the production and processing segments. *Id.* at 57,027-28.

But EPA's new interpretation improperly constrains its authority in a realm where Congress intentionally provided the agency with a broad mandate to fill gaps left by other programs under the Clean Air Act in order to address air pollution. *See* S. Rep. No. 91-1196 at 17-18 (Sept. 17, 1970) (explaining that new source performance standards were intended to reduce emissions that could not be controlled by ambient air quality standards and hazardous air pollution standards, *i.e.* today's Clean Air Act sections 108 and 112, respectively). And EPA has broadly categorized sources since it began implementing section 111(b)—including in its 1979 priority list of major source categories for which EPA would issue the first performance standards. *See* 44 Fed. Reg. at 49,224 (noting the synthetic organic chemical manufacturing industry source category included "over 600 different processes"); *see also* 45 Fed. Reg. 76,427, 76,427-28 (Nov. 18, 1980) ("Source categories are intended to be broad enough in scope to include all processes associated with the particular industry."). EPA has not explained why it is now taking such a constrained view of its authority, nor does it address the inconsistencies its new interpretation creates with respect to its prior broad source categorizations.

Even if EPA's new "sufficiently related" test did find support in the Clean Air Act, its proffered evidence for why the three segments at issue here are not so related hardly provides the required "satisfactory explanation" and "rational connection" with its conclusion to deregulate. *State Farm*, 463 U.S. at 43.

First, EPA points to different "purposes of the operations" for the three segments. 85 Fed. Reg. 57,028. But this ignores the overarching purpose of the three segments: to move natural gas to market. Each molecule of methane that makes its way to market from the transmission and storage segment was first removed from the ground in the production segment and then treated in the processing segment through one continuous, interrelated chain of operations. And EPA fails to explain why purported differences in purpose have any relevance to the emissions from each segment or how those emissions should be regulated—because it cannot. Regardless of "purpose," each segment is operationally related through the use of identical equipment and identical air pollution controls.

Second, EPA relies on purported differences in gas composition between the transmission and storage segment in comparison with the production and processing segments. EPA claims that the transmission and storage segment must be distinct because it handles gases with an average methane content of 94 to 95 percent, as compared to gas production (83 percent) and gas processing (78 percent). 85 Fed. Reg. at 57,029. Yet the analysis EPA relies upon shows

significant variation in the gas composition reported for equipment in the production and processing segment, too. JA __, __[EPA-HQ-OAR-2017-0757-2682_Fig1&2]; *see also* JA__-__[EPA-HQ-OAR-2017-0757-2682_p25-35] (concluding there are significant differences in methane concentration between oil production and gas production, and between different gas wells in different geological formations). EPA's arbitrary and capricious conclusion that the transmission and storage segment must be excised from the source category based on gas composition is not supported by the evidence before it. *State Farm*, 463 U.S. at 43; *see also Air Transp. Ass'n of Am. v. Dep't of Transp.*, 119 F.3d 38, 43 (D.C. Cir. 1997) (holding that illogical and internally inconsistent distinctions in regulation merited vacatur).

CONCLUSION

EPA has failed to meet its obligation to provide reasoned explanations for the many reversals in position it made in rescinding the 2016 Standard. The Rescission Rule is an unlawful, arbitrary and capricious rulemaking designed to eliminate EPA's duty to control methane emissions from hundreds of thousands of existing sources in the oil and gas industry, contrary to the purposes of the Clean Air Act. Accordingly, this Court should vacate the Rescission Rule.

Dated: Dec. 7, 2020

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rules of Appellate Procedure 27(d) and D.C. Circuit Rule 27(a)(2), I hereby certify that the foregoing complies with all applicable format and length requirements, and contains 8,460 words as calculated by Microsoft Word, exclusive of the caption, signature block, and certificates of counsel.

In accordance with this Court's October 27, 2020 Order providing for 16,000 words between two briefs, Petitioners have agreed that Environmental Petitioners' Opening Brief will not exceed 7,500 words, and State Petitioners' Opening Brief will not exceed 8,500 words.

/s/ Meredith J. Hankins
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CERTIFICATE OF SERVICE

Pursuant to Federal Rule of Appellate Procedure 25(c), I hereby certify that the foregoing was electronically filed with the Clerk of the Court using the CM/ECF system, which automatically sends a notification to the attorneys of record in this matter, who are registered with the Court's CM/ECF system.

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ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1357

Consolidated with Nos. 20-1359, 20-1363

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

STATE OF CALIFORNIA, et al.,

Petitioners,

v.

ANDREW WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondent,

GPA MIDSTREAM ASS'N, et al.; INTL. ASS'N OF DRILLING CONTRACTORS, et al.; STATE OF NORTH DAKOTA,

Respondent-Intervenors.

STATE PETITIONERS' ADDENDUM OF STATUTES, REGULATIONS, AND STANDING DECLARATIONS

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42 U.S.C.A. § 7407

§ 7407. Air quality control regions

Effective: January 23, 2004
Currentness

(a) Responsibility of each State for air quality; submission of implementation plan

Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.

(b) Designated regions

For purposes of developing and carrying out implementation plans under section 7410 of this title--

(1) an air quality control region designated under this section before December 31, 1970, or a region designated after such date under subsection (c), shall be an air quality control region; and

(2) the portion of such State which is not part of any such designated region shall be an air quality control region, but such portion may be subdivided by the State into two or more air quality control regions with the approval of the Administrator.

(c) Authority of Administrator to designate regions; notification of Governors of affected States

The Administrator shall, within 90 days after December 31, 1970, after consultation with appropriate State and local authorities, designate as an air quality control region any interstate area or major intrastate area which he deems necessary or appropriate for the attainment and maintenance of ambient air quality standards. The Administrator shall immediately notify the Governors of the affected States of any designation made under this subsection.

(d) Designations

(1) Designations generally

(A) Submission by Governors of initial designations following promulgation of new or revised standards

By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 7409 of this title, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State, designating as--

(i) nonattainment, any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant,

(ii) attainment, any area (other than an area identified in clause (i)) that meets the national primary or secondary ambient air quality standard for the pollutant, or

(iii) unclassifiable, any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

The Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.

(B) Promulgation by EPA of designations

(i) Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.

(ii) In making the promulgations required under clause (i), the Administrator may make such modifications as the Administrator deems necessary to the designations of the areas (or portions thereof) submitted under subparagraph (A) (including to the boundaries of such areas or portions thereof). Whenever the Administrator intends to make a modification, the Administrator shall notify the State and provide such State with an opportunity to demonstrate why any proposed modification is inappropriate. The Administrator shall give such notification no later than 120 days before the date the Administrator promulgates the designation, including any modification thereto. If the Governor fails to submit the list in whole or in part, as required under subparagraph (A), the Administrator shall promulgate the designation that the Administrator deems appropriate for any area (or portion thereof) not designated by the State.

(iii) If the Governor of any State, on the Governor's own motion, under subparagraph (A), submits a list of areas (or portions thereof) in the State designated as nonattainment, attainment, or unclassifiable, the Administrator shall act on such designations in accordance with the procedures under paragraph (3) (relating to redesignation).

(iv) A designation for an area (or portion thereof) made pursuant to this subsection shall remain in effect until the area (or portion thereof) is redesignated pursuant to paragraph (3) or (4).

(C) Designations by operation of law

(i) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(A), (B), or (C) of this subsection (as in effect immediately before November 15, 1990) is designated, by operation of law, as a nonattainment area for such pollutant within the meaning of subparagraph (A)(i).

(ii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(E) (as in effect immediately before November 15, 1990) is designated by operation of law, as an attainment area for such pollutant within the meaning of subparagraph (A)(ii).

(iii) Any area designated with respect to any air pollutant under the provisions of paragraph (1)(D) (as in effect immediately before November 15, 1990) is designated, by operation of law, as an unclassifiable area for such pollutant within the meaning of subparagraph (A)(iii).

(2) Publication of designations and redesignations

(A) The Administrator shall publish a notice in the Federal Register promulgating any designation under paragraph (1) or (5), or announcing any designation under paragraph (4), or promulgating any redesignation under paragraph (3).

(B) Promulgation or announcement of a designation under paragraph (1), (4) or (5) shall not be subject to the provisions of sections 553 through 557 of Title 5 (relating to notice and comment), except nothing herein shall be construed as precluding such public notice and comment whenever possible.

(3) Redesignation

(A) Subject to the requirements of subparagraph (E), and on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate, the Administrator may at any time notify the Governor of any State that available information indicates that the designation of any area or portion of an area within the State or interstate area should be revised. In issuing such notification, which shall be public, to the Governor, the Administrator shall provide such information as the Administrator may have available explaining the basis for the notice.

(B) No later than 120 days after receiving a notification under subparagraph (A), the Governor shall submit to the Administrator such redesignation, if any, of the appropriate area (or areas) or portion thereof within the State or interstate area, as the Governor considers appropriate.

(C) No later than 120 days after the date described in subparagraph (B) (or paragraph (1)(B)(iii)), the Administrator shall promulgate the redesignation, if any, of the area or portion thereof, submitted by the Governor in accordance with subparagraph (B), making such modifications as the Administrator may deem necessary, in the same manner and under the same procedure as is applicable under clause (ii) of paragraph (1)(B), except that the phrase "60 days" shall be substituted for the phrase "120 days" in that clause. If the Governor does not submit, in accordance with subparagraph (B), a redesignation for an area (or portion thereof) identified by the Administrator under subparagraph (A), the Administrator shall promulgate such redesignation, if any, that the Administrator deems appropriate.

(D) The Governor of any State may, on the Governor's own motion, submit to the Administrator a revised designation of any area or portion thereof within the State. Within 18 months of receipt of a complete State redesignation submittal, the Administrator shall approve or deny such redesignation. The submission of a redesignation by a Governor shall not affect the effectiveness or enforceability of the applicable implementation plan for the State.

(E) The Administrator may not promulgate a redesignation of a nonattainment area (or portion thereof) to attainment unless--

(i) the Administrator determines that the area has attained the national ambient air quality standard;

(ii) the Administrator has fully approved the applicable implementation plan for the area under section 7410(k) of this title;

(iii) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable implementation plan and applicable Federal air pollutant control regulations and other permanent and enforceable reductions;

(iv) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 7505a of this title; and

(v) the State containing such area has met all requirements applicable to the area under section 7410 of this title and part D.

(F) The Administrator shall not promulgate any redesignation of any area (or portion thereof) from nonattainment to unclassifiable.

(4) Nonattainment designations for ozone, carbon monoxide and particulate matter (PM-10)

(A) Ozone and carbon monoxide

(i) Within 120 days after November 15, 1990, each Governor of each State shall submit to the Administrator a list that designates, affirms or reaffirms the designation of, or redesignates (as the case may be), all areas (or portions thereof) of the Governor's State as attainment, nonattainment, or unclassifiable with respect to the national ambient air quality standards for ozone and carbon monoxide.

(ii) No later than 120 days after the date the Governor is required to submit the list of areas (or portions thereof) required under clause (i) of this subparagraph, the Administrator shall promulgate such designations, making such modifications as the Administrator may deem necessary, in the same manner, and under the same procedure, as is applicable under clause (ii) of paragraph (1)(B), except that the phrase “60 days” shall be substituted for the phrase “120 days” in that clause. If the Governor does not submit, in accordance with clause (i) of this subparagraph, a designation for an area (or portion thereof), the Administrator shall promulgate the designation that the Administrator deems appropriate.

(iii) No nonattainment area may be redesignated as an attainment area under this subparagraph.

(iv) Notwithstanding paragraph (1)(C)(ii) of this subsection, if an ozone or carbon monoxide nonattainment area located within a metropolitan statistical area or consolidated metropolitan statistical area (as established by the Bureau of the Census) is classified under part D of this subchapter as a Serious, Severe, or Extreme Area, the boundaries of such area are hereby revised (on the date 45 days after such classification) by operation of law to include the entire metropolitan statistical area or consolidated metropolitan statistical area, as the case may be, unless within such 45-day period the Governor (in consultation with State and local air pollution control agencies) notifies the Administrator that additional time is necessary to evaluate the application of clause (v). Whenever a Governor has submitted such a notice to the Administrator, such boundary revision shall occur on the later of the date 8 months after such classification or 14 months after November 15, 1990, unless the Governor makes the finding referred to in clause (v), and the Administrator concurs in such finding, within such period. Except as otherwise provided in this paragraph, a boundary revision under this clause or clause (v) shall apply for purposes of any State implementation plan revision required to be submitted after November 15, 1990.

(v) Whenever the Governor of a State has submitted a notice under clause (iv), the Governor, in consultation with State and local air pollution control agencies, shall undertake a study to evaluate whether the entire metropolitan statistical area or consolidated metropolitan statistical area should be included within the nonattainment area. Whenever a Governor finds and demonstrates to the satisfaction of the Administrator, and the Administrator concurs in such finding, that with respect to a portion of a metropolitan statistical area or consolidated metropolitan statistical area, sources in the portion do not contribute significantly to violation of the national ambient air quality standard, the Administrator shall approve the Governor's request to exclude such portion from the nonattainment area. In making such finding, the Governor and the Administrator shall consider factors such as population density, traffic congestion, commercial development, industrial development, meteorological conditions, and pollution transport.

(B) PM-10 designations

By operation of law, until redesignation by the Administrator pursuant to paragraph (3)--

(i) each area identified in 52 Federal Register 29383 (Aug. 7, 1987) as a Group I area (except to the extent that such identification was modified by the Administrator before November 15, 1990) is designated nonattainment for PM-10;

(ii) any area containing a site for which air quality monitoring data show a violation of the national ambient air quality standard for PM-10 before January 1, 1989 (as determined under part 50, appendix K of title 40 of the Code of Federal Regulations) is hereby designated nonattainment for PM-10; and

(iii) each area not described in clause (i) or (ii) is hereby designated unclassifiable for PM-10.

Any designation for particulate matter (measured in terms of total suspended particulates) that the Administrator promulgated pursuant to this subsection (as in effect immediately before November 15, 1990) shall remain in effect for purposes of implementing the maximum allowable increases in concentrations of particulate matter (measured in terms of total suspended particulates) pursuant to section 7473(b) of this title, until the Administrator determines that such designation is no longer necessary for that purpose.

(5) Designations for lead

The Administrator may, in the Administrator's discretion at any time the Administrator deems appropriate, require a State to designate areas (or portions thereof) with respect to the national ambient air quality standard for lead in effect as of November 15, 1990, in accordance with the procedures under subparagraphs (A) and (B) of paragraph (1), except that in applying subparagraph (B)(i) of paragraph (1) the phrase "2 years from the date of promulgation of the new or revised national ambient air quality standard" shall be replaced by the phrase "1 year from the date the Administrator notifies the State of the requirement to designate areas with respect to the standard for lead".

(6) Designations

(A) Submission

Notwithstanding any other provision of law, not later than February 15, 2004, the Governor of each State shall submit designations referred to in paragraph (1) for the July 1997 $PM_{2.5}$ national ambient air quality standards for each area within the State, based on air quality monitoring data collected in accordance with any applicable Federal reference methods for the relevant areas.

(B) Promulgation

Notwithstanding any other provision of law, not later than December 31, 2004, the Administrator shall, consistent with paragraph (1), promulgate the designations referred to in subparagraph (A) for each area of each State for the July 1997 $PM_{2.5}$ national ambient air quality standards.

(7) Implementation plan for regional haze

(A) In general

Notwithstanding any other provision of law, not later than 3 years after the date on which the Administrator promulgates the designations referred to in paragraph (6)(B) for a State, the State shall submit, for the entire State, the State implementation plan revisions to meet the requirements promulgated by the Administrator under section 7492(e)(1) of this title (referred to in this paragraph as "regional haze requirements").

(B) No preclusion of other provisions

Nothing in this paragraph precludes the implementation of the agreements and recommendations stemming from the Grand Canyon Visibility Transport Commission Report dated June 1996, including the submission of State implementation plan revisions by the States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, or Wyoming by December 31, 2003, for implementation of regional haze requirements applicable to those States.

(e) Redesignation of air quality control regions

(1) Except as otherwise provided in paragraph (2), the Governor of each State is authorized, with the approval of the Administrator, to redesignate from time to time the air quality control regions within such State for purposes of efficient and effective air quality management. Upon such redesignation, the list under subsection (d) shall be modified accordingly.

(2) In the case of an air quality control region in a State, or part of such region, which the Administrator finds may significantly affect air pollution concentrations in another State, the Governor of the State in which such region, or part of a region, is located may redesignate from time to time the boundaries of so much of such air quality control region as is located within such State only with the approval of the Administrator and with the consent of all Governors of all States which the Administrator determines may be significantly affected.

(3) No compliance date extension granted under section 7413(d)(5) of this title (relating to coal conversion) shall cease to be effective by reason of the regional limitation provided in section 7413(d)(5) of this title if the violation of such limitation is due solely to a redesignation of a region under this subsection.

CREDIT(S)

(July 14, 1955, c. 360, Title I, § 107, as added Pub.L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 1678; amended Pub.L. 95-95, Title I, § 103, Aug. 7, 1977, 91 Stat. 687; Pub.L. 101-549, Title I, § 101(a), Nov. 15, 1990, 104 Stat. 2399; Pub.L. 108-199, Div. G, Title IV, § 425(a), Jan. 23, 2004, 118 Stat. 417.)

Notes of Decisions (64)

42 U.S.C.A. § 7407, 42 USCA § 7407
Current through P.L. 116-193.

End of Document

KeyCite Yellow Flag - Negative Treatment
Proposed Legislation

United States Code Annotated
Title 42. The Public Health and Welfare
Chapter 85. Air Pollution Prevention and Control (Refs & Annos)
Subchapter I. Programs and Activities
Part A. Air Quality and Emissions Limitations (Refs & Annos)

42 U.S.C.A. § 7411

§ 7411. Standards of performance for new stationary sources

Currentness

(a) Definitions

For purposes of this section:

(1) The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

(2) The term "new source" means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source.

(3) The term "stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant. Nothing in subchapter II of this chapter relating to nonroad engines shall be construed to apply to stationary internal combustion engines.

(4) The term "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

(5) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(6) The term "existing source" means any stationary source other than a new source.

(7) The term "technological system of continuous emission reduction" means--

(A) a technological process for production or operation by any source which is inherently low-polluting or nonpolluting, or

(B) a technological system for continuous reduction of the pollution generated by a source before such pollution is emitted into the ambient air, including precombustion cleaning or treatment of fuels.

(8) A conversion to coal (A) by reason of an order under section 2(a) of the Energy Supply and Environmental Coordination Act of 1974 or any amendment thereto, or any subsequent enactment which supersedes such Act, or (B) which qualifies under section 7413(d)(5)(A)(ii) of this title, shall not be deemed to be a modification for purposes of paragraphs (2) and (4) of this subsection.

(b) List of categories of stationary sources; standards of performance; information on pollution control techniques; sources owned or operated by United States; particular systems; revised standards

(1)(A) The Administrator shall, within 90 days after December 31, 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

(B) Within one year after the inclusion of a category of stationary sources in a list under subparagraph (A), the Administrator shall publish proposed regulations, establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one year after such publication, such standards with such modifications as he deems appropriate. The Administrator shall, at least every 8 years, review and, if appropriate, revise such standards following the procedure required by this subsection for promulgation of such standards. Notwithstanding the requirements of the previous sentence, the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard. Standards of performance or revisions thereof shall become effective upon promulgation. When implementation and enforcement of any requirement of this chapter indicate that emission limitations and percent reductions beyond those required by the standards promulgated under this section are achieved in practice, the Administrator shall, when revising standards promulgated under this section, consider the emission limitations and percent reductions achieved in practice.

(2) The Administrator may distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards.

(3) The Administrator shall, from time to time, issue information on pollution control techniques for categories of new sources and air pollutants subject to the provisions of this section.

(4) The provisions of this section shall apply to any new source owned or operated by the United States.

(5) Except as otherwise authorized under subsection (h), nothing in this section shall be construed to require, or to authorize the Administrator to require, any new or modified source to install and operate any particular technological system of continuous emission reduction to comply with any new source standard of performance.

(6) The revised standards of performance required by enactment of subsection (a)(1)(A)(i) and (ii) shall be promulgated not later than one year after August 7, 1977. Any new or modified fossil fuel fired stationary source which commences construction prior to the date of publication of the proposed revised standards shall not be required to comply with such revised standards.

(c) State implementation and enforcement of standards of performance

(1) Each State may develop and submit to the Administrator a procedure for implementing and enforcing standards of performance for new sources located in such State. If the Administrator finds the State procedure is adequate, he shall delegate to such State any authority he has under this chapter to implement and enforce such standards.

(2) Nothing in this subsection shall prohibit the Administrator from enforcing any applicable standard of performance under this section.

(d) Standards of performance for existing sources; remaining useful life of source

(1) The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section 7410 of this title under which each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under section 7408(a) of this title or emitted from a source category which is regulated under section 7412 of this title but (ii) to which a standard of performance under this section would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such standards of performance. Regulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies.

(2) The Administrator shall have the same authority--

(A) to prescribe a plan for a State in cases where the State fails to submit a satisfactory plan as he would have under section 7410(c) of this title in the case of failure to submit an implementation plan, and

(B) to enforce the provisions of such plan in cases where the State fails to enforce them as he would have under sections 7413 and 7414 of this title with respect to an implementation plan.

In promulgating a standard of performance under a plan prescribed under this paragraph, the Administrator shall take into consideration, among other factors, remaining useful lives of the sources in the category of sources to which such standard applies.

(e) Prohibited acts

After the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.

(f) New source standards of performance

(1) For those categories of major stationary sources that the Administrator listed under subsection (b)(1)(A) before November 15, 1990, and for which regulations had not been proposed by the Administrator by November 15, 1990, the Administrator shall--

(A) propose regulations establishing standards of performance for at least 25 percent of such categories of sources within 2 years after November 15, 1990;

(B) propose regulations establishing standards of performance for at least 50 percent of such categories of sources within 4 years after November 15, 1990; and

(C) propose regulations for the remaining categories of sources within 6 years after November 15, 1990.

(2) In determining priorities for promulgating standards for categories of major stationary sources for the purpose of paragraph (1), the Administrator shall consider--

(A) the quantity of air pollutant emissions which each such category will emit, or will be designed to emit;

(B) the extent to which each such pollutant may reasonably be anticipated to endanger public health or welfare; and

(C) the mobility and competitive nature of each such category of sources and the consequent need for nationally applicable new source standards of performance.

(3) Before promulgating any regulations under this subsection or listing any category of major stationary sources as required under this subsection, the Administrator shall consult with appropriate representatives of the Governors and of State air pollution control agencies.

(g) Revision of regulations

(1) Upon application by the Governor of a State showing that the Administrator has failed to specify in regulations under subsection (f)(1) any category of major stationary sources required to be specified under such regulations, the Administrator shall revise such regulations to specify any such category.

(2) Upon application of the Governor of a State, showing that any category of stationary sources which is not included in the list under subsection (b)(1)(A) contributes significantly to air pollution which may reasonably be anticipated to endanger public health or welfare (notwithstanding that such category is not a category of major stationary sources), the Administrator shall revise such regulations to specify such category of stationary sources.

(3) Upon application of the Governor of a State showing that the Administrator has failed to apply properly the criteria required to be considered under subsection (f)(2), the Administrator shall revise the list under subsection (b)(1)(A) to apply properly such criteria.

(4) Upon application of the Governor of a State showing that--

(A) a new, innovative, or improved technology or process which achieves greater continuous emission reduction has been adequately demonstrated for any category of stationary sources, and

(B) as a result of such technology or process, the new source standard of performance in effect under this section for such category no longer reflects the greatest degree of emission limitation achievable through application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impact and energy requirements) has been adequately demonstrated,

the Administrator shall revise such standard of performance for such category accordingly.

(5) Unless later deadlines for action of the Administrator are otherwise prescribed under this section, the Administrator shall, not later than three months following the date of receipt of any application by a Governor of a State, either--

(A) find that such application does not contain the requisite showing and deny such application, or

(B) grant such application and take the action required under this subsection.

(6) Before taking any action required by subsection (f) or by this subsection, the Administrator shall provide notice and opportunity for public hearing.

(h) Design, equipment, work practice, or operational standard; alternative emission limitation

(1) For purposes of this section, if in the judgment of the Administrator, it is not feasible to prescribe or enforce a standard of performance, he may instead promulgate a design, equipment, work practice, or operational standard, or combination thereof, which reflects the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. In the event the Administrator promulgates a design or equipment standard under this subsection, he shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(2) For the purpose of this subsection, the phrase "not feasible to prescribe or enforce a standard of performance" means any situation in which the Administrator determines that (A) a pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State, or local law, or (B) the application of measurement methodology to a particular class of sources is not practicable due to technological or economic limitations.

(3) If after notice and opportunity for public hearing, any person establishes to the satisfaction of the Administrator that an alternative means of emission limitation will achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such air pollutant achieved under the requirements of paragraph (1), the Administrator shall permit the use of such alternative by the source for purposes of compliance with this section with respect to such pollutant.

(4) Any standard promulgated under paragraph (1) shall be promulgated in terms of standard of performance whenever it becomes feasible to promulgate and enforce such standard in such terms.

(5) Any design, equipment, work practice, or operational standard, or any combination thereof, described in this subsection shall be treated as a standard of performance for purposes of the provisions of this chapter (other than the provisions of subsection (a) and this subsection).

(i) Country elevators

Any regulations promulgated by the Administrator under this section applicable to grain elevators shall not apply to country elevators (as defined by the Administrator) which have a storage capacity of less than two million five hundred thousand bushels.

(j) Innovative technological systems of continuous emission reduction

(1)(A) Any person proposing to own or operate a new source may request the Administrator for one or more waivers from the requirements of this section for such source or any portion thereof with respect to any air pollutant to encourage the use of an innovative technological system or systems of continuous emission reduction. The Administrator may, with the consent of the Governor of the State in which the source is to be located, grant a waiver under this paragraph, if the Administrator determines after notice and opportunity for public hearing, that--

(i) the proposed system or systems have not been adequately demonstrated,

(ii) the proposed system or systems will operate effectively and there is a substantial likelihood that such system or systems will achieve greater continuous emission reduction than that required to be achieved under the standards of performance which would otherwise apply, or achieve at least an equivalent reduction at lower cost in terms of energy, economic, or nonair quality environmental impact,

(iii) the owner or operator of the proposed source has demonstrated to the satisfaction of the Administrator that the proposed system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation, function, or malfunction, and

(iv) the granting of such waiver is consistent with the requirements of subparagraph (C).

In making any determination under clause (ii), the Administrator shall take into account any previous failure of such system or systems to operate effectively or to meet any requirement of the new source performance standards. In determining whether an unreasonable risk exists under clause (iii), the Administrator shall consider, among other factors, whether and to what extent

the use of the proposed technological system will cause, increase, reduce, or eliminate emissions of any unregulated pollutants; available methods for reducing or eliminating any risk to public health, welfare, or safety which may be associated with the use of such system; and the availability of other technological systems which may be used to conform to standards under this section without causing or contributing to such unreasonable risk. The Administrator may conduct such tests and may require the owner or operator of the proposed source to conduct such tests and provide such information as is necessary to carry out clause (iii) of this subparagraph. Such requirements shall include a requirement for prompt reporting of the emission of any unregulated pollutant from a system if such pollutant was not emitted, or was emitted in significantly lesser amounts without use of such system.

(B) A waiver under this paragraph shall be granted on such terms and conditions as the Administrator determines to be necessary to assure--

(i) emissions from the source will not prevent attainment and maintenance of any national ambient air quality standards, and

(ii) proper functioning of the technological system or systems authorized.

Any such term or condition shall be treated as a standard of performance for the purposes of subsection (e) of this section and section 7413 of this title.

(C) The number of waivers granted under this paragraph with respect to a proposed technological system of continuous emission reduction shall not exceed such number as the Administrator finds necessary to ascertain whether or not such system will achieve the conditions specified in clauses (ii) and (iii) of subparagraph (A).

(D) A waiver under this paragraph shall extend to the sooner of--

(i) the date determined by the Administrator, after consultation with the owner or operator of the source, taking into consideration the design, installation, and capital cost of the technological system or systems being used, or

(ii) the date on which the Administrator determines that such system has failed to--

(I) achieve at least an equivalent continuous emission reduction to that required to be achieved under the standards of performance which would otherwise apply, or

(II) comply with the condition specified in paragraph (1)(A)(iii),

and that such failure cannot be corrected.

(E) In carrying out subparagraph (D)(i), the Administrator shall not permit any waiver for a source or portion thereof to extend beyond the date--

(i) seven years after the date on which any waiver is granted to such source or portion thereof, or

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(ii) four years after the date on which such source or portion thereof commences operation,

whichever is earlier.

(F) No waiver under this subsection shall apply to any portion of a source other than the portion on which the innovative technological system or systems of continuous emission reduction is used.

(2)(A) If a waiver under paragraph (1) is terminated under clause (ii) of paragraph (1)(D), the Administrator shall grant an extension of the requirements of this section for such source for such minimum period as may be necessary to comply with the applicable standard of performance under this section. Such period shall not extend beyond the date three years from the time such waiver is terminated.

(B) An extension granted under this paragraph shall set forth emission limits and a compliance schedule containing increments of progress which require compliance with the applicable standards of performance as expeditiously as practicable and include such measures as are necessary and practicable in the interim to minimize emissions. Such schedule shall be treated as a standard of performance for purposes of subsection (e) of this section and section 7413 of this title.

CREDIT(S)

(July 14, 1955, c. 360, Title I, § 111, as added Pub.L. 91-604, § 4(a), Dec. 31, 1970, 84 Stat. 1683; amended Pub.L. 92-157, Title III, § 302(f), Nov. 18, 1971, 85 Stat. 464; Pub.L. 95-95, Title I, § 109(a) to (d)(1), (e), (f), Title IV, § 401(b), Aug. 7, 1977, 91 Stat. 697 to 703, 791; Pub.L. 95-190, § 14(a)(7) to (9), Nov. 16, 1977, 91 Stat. 1399; Pub.L. 95-623, § 13(a), Nov. 9, 1978, 92 Stat. 3457; Pub.L. 101-549, Title I, § 108(e) to (g), Title III, § 302(a), (b), Title IV, § 403(a), Nov. 15, 1990, 104 Stat. 2467, 2574, 2631.)

MEMORANDA OF PRESIDENT

PRESIDENTIAL MEMORANDUM

Memorandum of the President of the United States, June 25, 2013, 78 F.R. 39535, relating to power sector carbon pollution standards, was revoked by Ex. Ord. No. 13783, § 3(a)(ii), March 28, 2017, 82 F.R. 16093.

Notes of Decisions (121)

42 U.S.C.A. § 7411, 42 USCA § 7411
Current through P.L. 116-193.

End of Document

KeyCite Yellow Flag - Negative Treatment
Proposed Legislation

United States Code Annotated
Title 42. The Public Health and Welfare
Chapter 85. Air Pollution Prevention and Control (Refs & Annos)
Subchapter I. Programs and Activities
Part D. Plan Requirements for Nonattainment Areas
Subpart 1. Nonattainment Areas in General (Refs & Annos)

42 U.S.C.A. § 7506

§ 7506. Limitations on certain Federal assistance

Effective: August 10, 2005
Currentness

(a), (b) Repealed. Pub.L. 101-549, Title I, § 110(4), Nov. 15, 1990, 104 Stat. 2470

(c) Activities not conforming to approved or promulgated plans

(1) No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under section 7410 of this title. No metropolitan planning organization designated under section 134 of Title 23, shall give its approval to any project, program, or plan which does not conform to an implementation plan approved or promulgated under section 7410 of this title. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means--

(A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

(B) that such activities will not--

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

The determination of conformity shall be based on the most recent estimates of emissions, and such estimates shall be determined from the most recent population, employment, travel and congestion estimates as determined by the metropolitan planning organization or other agency authorized to make such estimates.

(2) Any transportation plan or program developed pursuant to Title 23 or chapter 53 of Title 49 shall implement the transportation provisions of any applicable implementation plan approved under this chapter applicable to all or part of the area covered by such transportation plan or program. No Federal agency may approve, accept or fund any transportation plan, program or project unless such plan, program or project has been found to conform to any applicable implementation plan in effect under this chapter. In particular--

(A) no transportation plan or transportation improvement program may be adopted by a metropolitan planning organization designated under Title 23 or chapter 53 of Title 49, or be found to be in conformity by a metropolitan planning organization until a final determination has been made that emissions expected from implementation of such plans and programs are consistent with estimates of emissions from motor vehicles and necessary emissions reductions contained in the applicable implementation plan, and that the plan or program will conform to the requirements of paragraph (1)(B);

(B) no metropolitan planning organization or other recipient of funds under Title 23 or chapter 53 of Title 49 shall adopt or approve a transportation improvement program of projects until it determines that such program provides for timely implementation of transportation control measures consistent with schedules included in the applicable implementation plan;

(C) a transportation project may be adopted or approved by a metropolitan planning organization or any recipient of funds designated under Title 23 or chapter 53 of Title 49, or found in conformity by a metropolitan planning organization or approved, accepted, or funded by the Department of Transportation only if it meets either the requirements of subparagraph (D) or the following requirements--

(i) such a project comes from a conforming plan and program;

(ii) the design concept and scope of such project have not changed significantly since the conformity finding regarding the plan and program from which the project derived; and

(iii) the design concept and scope of such project at the time of the conformity determination for the program was adequate to determine emissions.

(D) Any project not referred to in subparagraph (C) shall be treated as conforming to the applicable implementation plan only if it is demonstrated that the projected emissions from such project, when considered together with emissions projected for the conforming transportation plans and programs within the nonattainment area, do not cause such plans and programs to exceed the emission reduction projections and schedules assigned to such plans and programs in the applicable implementation plan.

(E) The appropriate metropolitan planning organization shall redetermine conformity of existing transportation plans and programs not later than 2 years after the date on which the Administrator--

(i) finds a motor vehicle emissions budget to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004);

(ii) approves an implementation plan that establishes a motor vehicle emissions budget if that budget has not yet been determined to be adequate in accordance with clause (i); or

(iii) promulgates an implementation plan that establishes or revises a motor vehicle emissions budget.

(3) Until such time as the implementation plan revision referred to in paragraph (4)(C) is approved, conformity of such plans, programs, and projects will be demonstrated if--

(A) the transportation plans and programs--

(i) are consistent with the most recent estimates of mobile source emissions;

(ii) provide for the expeditious implementation of transportation control measures in the applicable implementation plan; and

(iii) with respect to ozone and carbon monoxide nonattainment areas, contribute to annual emissions reductions consistent with sections 7511a(b)(1) and 7512a(a)(7) of this title; and

(B) the transportation projects--

(i) come from a conforming transportation plan and program as defined in subparagraph (A) or for 12 months after November 15, 1990, from a transportation program found to conform within 3 years prior to November 15, 1990; and

(ii) in carbon monoxide nonattainment areas, eliminate or reduce the severity and number of violations of the carbon monoxide standards in the area substantially affected by the project.

With regard to subparagraph (B)(ii), such determination may be made as part of either the conformity determination for the transportation program or for the individual project taken as a whole during the environmental review phase of project development.

(4) Criteria and procedures for determining conformity

(A) In general

The Administrator shall promulgate, and periodically update, criteria and procedures for determining conformity (except in the case of transportation plans, programs, and projects) of, and for keeping the Administrator informed about, the activities referred to in paragraph (1).

(B) Transportation plans, programs, and projects

The Administrator, with the concurrence of the Secretary of Transportation, shall promulgate, and periodically update, criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.

(C) Civil action to compel promulgation

A civil action may be brought against the Administrator and the Secretary of Transportation under section 7604 of this title to compel promulgation of such criteria and procedures and the Federal district court shall have jurisdiction to order such promulgation.

(D) The procedures and criteria shall, at a minimum--

(i) address the consultation procedures to be undertaken by metropolitan planning organizations and the Secretary of Transportation with State and local air quality agencies and State departments of transportation before such organizations and the Secretary make conformity determinations;

(ii) address the appropriate frequency for making conformity determinations, but the frequency for making conformity determinations on updated transportation plans and programs shall be every 4 years, except in a case in which--

(I) the metropolitan planning organization elects to update a transportation plan or program more frequently; or

(II) the metropolitan planning organization is required to determine conformity in accordance with paragraph (2)(E); and

(iii) address how conformity determinations will be made with respect to maintenance plans.

(E) Inclusion of criteria and procedures in SIP

Not later than 2 years after August 10, 2005, the procedures under subparagraph (A) shall include a requirement that each State include in the State implementation plan criteria and procedures for consultation required by subparagraph (D)(i), and enforcement and enforceability (pursuant to sections 93.125(c) and 93.122(a)(4)(ii) of title 40, Code of Federal Regulations) in accordance with the Administrator's criteria and procedures for consultation, enforcement and enforceability.

(F) Compliance with the rules of the Administrator for determining the conformity of transportation plans, programs, and projects funded or approved under Title 23 or chapter 53 of Title 49 to State or Federal implementation plans shall not be required for traffic signal synchronization projects prior to the funding, approval or implementation of such projects. The supporting regional emissions analysis for any conformity determination made with respect to a transportation plan, program, or project shall consider the effect on emissions of any such project funded, approved, or implemented prior to the conformity determination.

(5) Applicability

This subsection shall apply only with respect to--

(A) a nonattainment area and each pollutant for which the area is designated as a nonattainment area; and

(B) an area that was designated as a nonattainment area but that was later redesignated by the Administrator as an attainment area and that is required to develop a maintenance plan under section 7505a of this title with respect to the specific pollutant for which the area was designated nonattainment.

(6) Notwithstanding paragraph 5,[1] this subsection shall not apply with respect to an area designated nonattainment under section 7407(d)(1) of this title until 1 year after that area is first designated nonattainment for a specific national ambient air quality standard. This paragraph only applies with respect to the national ambient air quality standard for which an area is newly designated nonattainment and does not affect the area's requirements with respect to all other national ambient air quality standards for which the area is designated nonattainment or has been redesignated from nonattainment to attainment with a maintenance plan pursuant to section 7505a of this title (including any pre-existing national ambient air quality standard for a pollutant for which a new or revised standard has been issued).

(7) Conformity horizon for transportation plans

(A) In general

Each conformity determination required under this section for a transportation plan under section 134(i) of Title 23 or section 5303(i) of Title 49 shall require a demonstration of conformity for the period ending on either the final year of the transportation plan, or at the election of the metropolitan planning organization, after consultation with the air pollution control agency and solicitation of public comments and consideration of such comments, the longest of the following periods:

(i) The first 10-year period of any such transportation plan.

(ii) The latest year in the implementation plan applicable to the area that contains a motor vehicle emission budget.

(iii) The year after the completion date of a regionally significant project if the project is included in the transportation improvement program or the project requires approval before the subsequent conformity determination.

(B) Regional emissions analysis

The conformity determination shall be accompanied by a regional emissions analysis for the last year of the transportation plan and for any year shown to exceed emission budgets by a prior analysis, if such year extends beyond the applicable period as determined under subparagraph (A).

(C) Exception

In any case in which an area has a revision to an implementation plan under section 7505a(b) of this title and the Administrator has found the motor vehicles emissions budgets from that revision to be adequate in accordance with section 93.118(e)(4) of title 40, Code of Federal Regulations (as in effect on October 1, 2004), or has approved the revision, the demonstration of conformity at the election of the metropolitan planning organization, after consultation with the air pollution control agency

and solicitation of public comments and consideration of such comments, shall be required to extend only through the last year of the implementation plan required under section 7505a(b) of this title.

(D) Effect of election

Any election by a metropolitan planning organization under this paragraph shall continue in effect until the metropolitan planning organization elects otherwise.

(E) Air pollution control agency defined

In this paragraph, the term "air pollution control agency" means an air pollution control agency (as defined in section 7602(b) of this title) that is responsible for developing plans or controlling air pollution within the area covered by a transportation plan.

(8) Substitution of transportation control measures

(A) In general

Transportation control measures that are specified in an implementation plan may be replaced or added to the implementation plan with alternate or additional transportation control measures--

(i) if the substitute measures achieve equivalent or greater emissions reductions than the control measure to be replaced, as demonstrated with an emissions impact analysis that is consistent with the current methodology used for evaluating the replaced control measure in the implementation plan;

(ii) if the substitute control measures are implemented--

(I) in accordance with a schedule that is consistent with the schedule provided for control measures in the implementation plan; or

(II) if the implementation plan date for implementation of the control measure to be replaced has passed, as soon as practicable after the implementation plan date but not later than the date on which emission reductions are necessary to achieve the purpose of the implementation plan;

(iii) if the substitute and additional control measures are accompanied with evidence of adequate personnel and funding and authority under State or local law to implement, monitor, and enforce the control measures;

(iv) if the substitute and additional control measures were developed through a collaborative process that included--

(I) participation by representatives of all affected jurisdictions (including local air pollution control agencies, the State air pollution control agency, and State and local transportation agencies);

(II) consultation with the Administrator; and

(III) reasonable public notice and opportunity for comment; and

(v) if the metropolitan planning organization, State air pollution control agency, and the Administrator concur with the equivalency of the substitute or additional control measures.

(B) Adoption

(i) Concurrence by the metropolitan planning organization, State air pollution control agency and the Administrator as required by subparagraph (A)(v) shall constitute adoption of the substitute or additional control measures so long as the requirements of subparagraphs (A)(i), (A)(ii), (A)(iii) and (A)(iv) are met.

(ii) Once adopted, the substitute or additional control measures become, by operation of law, part of the State implementation plan and become federally enforceable.

(iii) Within 90 days of its concurrence under subparagraph (A)(v), the State air pollution control agency shall submit the substitute or additional control measure to the Administrator for incorporation in the codification of the applicable implementation plan. Nothwithstanding [2] any other provision of this chapter, no additional State process shall be necessary to support such revision to the applicable plan.

(C) No requirement for express permission

The substitution or addition of a transportation control measure in accordance with this paragraph and the funding or approval of such a control measure shall not be contingent on the existence of any provision in the applicable implementation plan that expressly permits such a substitution or addition.

(D) No requirement for new conformity determination

The substitution or addition of a transportation control measure in accordance with this paragraph shall not require--

(i) a new conformity determination for the transportation plan; or

(ii) a revision of the implementation plan.

(E) Continuation of control measure being replaced

A control measure that is being replaced by a substitute control measure under this paragraph shall remain in effect until the substitute control measure is adopted by the State pursuant to subparagraph (B).

(F) Effect of adoption

Adoption of a substitute control measure shall constitute rescission of the previously applicable control measure.

(9) Lapse of conformity

If a conformity determination required under this subsection for a transportation plan under section 134(i) of Title 23 or section 5303(i) of Title 49 or a transportation improvement program under section 134(j) of such Title 23 or under section 5303(j) of such Title 49 is not made by the applicable deadline and such failure is not corrected by additional measures to either reduce motor vehicle emissions sufficient to demonstrate compliance with the requirements of this subsection within 12 months after such deadline or other measures sufficient to correct such failures, the transportation plan shall lapse.

(10) Lapse

In this subsection, the term "lapse" means that the conformity determination for a transportation plan or transportation improvement program has expired, and thus there is no currently conforming transportation plan or transportation improvement program.

(d) Priority of achieving and maintaining national primary ambient air quality standards

Each department, agency, or instrumentality of the Federal Government having authority to conduct or support any program with air-quality related transportation consequences shall give priority in the exercise of such authority, consistent with statutory requirements for allocation among States or other jurisdictions, to the implementation of those portions of plans prepared under this section to achieve and maintain the national primary ambient air-quality standard. This paragraph extends to, but is not limited to, authority exercised under chapter 53 of Title 49, Title 23, and the Housing and Urban Development Act.

CREDIT(S)

(July 14, 1955, c. 360, Title I, § 176, as added Pub.L. 95-95, Title I, § 129(b), Aug. 7, 1977, 91 Stat. 749; amended Pub.L. 95-190, § 14(a)(59), Nov. 16, 1977, 91 Stat. 1403; Pub.L. 101-549, Title I, §§ 101(f), 110(4), Nov. 15, 1990, 104 Stat. 2409, 2470; Pub.L. 104-59, Title III, § 305(b), Nov. 28, 1995, 109 Stat. 580; Pub.L. 104-260, § 1, Oct. 9, 1996, 110 Stat. 3175; Pub.L. 106-377, § 1(a)(1) [Title III], Oct. 27, 2000, 114 Stat. 1441, 1441A-44; Pub.L. 109-59, Title VI, § 6011(a) to (f), Aug. 10, 2005, 119 Stat. 1878.)

Notes of Decisions (48)

Footnotes

1 So in original. Probably should be "paragraph (5),".
2 So in original. Probably should be "Notwithstanding".

42 U.S.C.A. § 7506, 42 USCA § 7506
Current through P.L. 116-193.

End of Document

United States Code Annotated
Title 42. The Public Health and Welfare
Chapter 85. Air Pollution Prevention and Control (Refs & Annos)
Subchapter III. General Provisions

42 U.S.C.A. § 7607

§ 7607. Administrative proceedings and judicial review

Currentness

(a) Administrative subpenas; confidentiality; witnesses

In connection with any determination under section 7410(f) of this title, or for purposes of obtaining information under section 7521(b)(4) [1] or 7545(c)(3) of this title, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under the [2] chapter (including but not limited to section 7413, section 7414, section 7420, section 7429, section 7477, section 7524, section 7525, section 7542, section 7603, or section 7606 of this title),, [3] the Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for emission data, upon a showing satisfactory to the Administrator by such owner or operator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes of such owner or operator, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of Title 18, except that such paper, book, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter, to persons carrying out the National Academy of Sciences' study and investigation provided for in section 7521(c) of this title, or when relevant in any proceeding under this chapter. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpena served upon any person under this subparagraph [4], the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(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,, [3] 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) 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).

(c) Additional evidence

In any judicial proceeding in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, in such manner and upon such terms and conditions as to[5] the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

(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 (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 (relating to stratosphere and ozone protection),

(J) promulgation or revision of regulations under part C of subchapter I (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,

(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 (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)). 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)) 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.

(e) Other methods of judicial review not authorized

Nothing in this chapter shall be construed to authorize judicial review of regulations or orders of the Administrator under this chapter, except as provided in this section.

(f) Costs

In any judicial proceeding under this section, the court may award costs of litigation (including reasonable attorney and expert witness fees) whenever it determines that such award is appropriate.

(g) Stay, injunction, or similar relief in proceedings relating to noncompliance penalties

In any action respecting the promulgation of regulations under section 7420 of this title or the administration or enforcement of section 7420 of this title no court shall grant any stay, injunctive, or similar relief before final judgment by such court in such action.

(h) Public participation

It is the intent of Congress that, consistent with the policy of subchapter II of chapter 5 of Title 5, the Administrator in promulgating any regulation under this chapter, including a regulation subject to a deadline, shall ensure a reasonable period for public participation of at least 30 days, except as otherwise expressly provided in section [6] 7407(d), 7502(a), 7511(a) and (b), and 7512(a) and (b) of this title.

CREDIT(S)

(July 14, 1955, c. 360, Title III, § 307, as added Pub.L. 91-604, § 12(a), Dec. 31, 1970, 84 Stat. 1707; amended Pub.L. 92-157, Title III, § 302(a), Nov. 18, 1971, 85 Stat. 464; Pub.L. 93-319, § 6(c), June 22, 1974, 88 Stat. 259; Pub.L. 95-95, Title III, §§ 303(d), 305(a), (c), (f) to (h), Aug. 7, 1977, 91 Stat. 772, 776, 777; Pub.L. 95-190, § 14(a)(79), (80), Nov. 16, 1977, 91 Stat. 1404; Pub.L. 101-549, Title I, §§ 108(p), 110(5), Title III, § 302(g), (h), Title VII, §§ 702(c), 703, 706, 707(h), 710(b), Nov. 15, 1990, 104 Stat. 2469, 2470, 2574, 2681-2684.)

Notes of Decisions (364)

Footnotes

1 Repealed. See References in Text notes set out under this section.
2 So in original. Probably should be “this”.
3 So in original.
4 So in original. Probably should be “subsection,”.
5 So in original. The word “to” probably should not appear.
6 So in original. Probably should be “sections”.

42 U.S.C.A. § 7607, 42 USCA § 7607
Current through P.L. 116-193.

End of Document

Code of Federal Regulations
Title 40. Protection of Environment
Chapter I. Environmental Protection Agency (Refs & Annos)
Subchapter C. Air Programs
Part 60. Standards of Performance for New Stationary Sources (Refs & Annos)
Subpart BA. Adoption and Submittal of State Plans for Designated Facilities (Refs & Annos)

40 C.F.R. § 60.22a

§ 60.22a Publication of emission guidelines.

Effective: September 6, 2019
Currentness

(a) Concurrently upon or after proposal of standards of performance for the control of a designated pollutant from affected facilities, the Administrator will publish a draft emission guideline containing information pertinent to control of the designated pollutant from designated facilities. Notice of the availability of the draft emission guideline will be published in the Federal Register and public comments on its contents will be invited. After consideration of public comments and upon or after promulgation of standards of performance for control of a designated pollutant from affected facilities, a final emission guideline will be published and notice of its availability will be published in the Federal Register.

(b) Emission guidelines published under this section will provide information for the development of State plans, such as:

(1) Information concerning known or suspected endangerment of public health or welfare caused, or contributed to, by the designated pollutant.

(2) A description of systems of emission reduction which, in the judgment of the Administrator, have been adequately demonstrated.

(3) Information on the degree of emission limitation which is achievable with each system, together with information on the costs, nonair quality health environmental effects, and energy requirements of applying each system to designated facilities.

(4) Incremental periods of time normally expected to be necessary for the design, installation, and startup of identified control systems.

(5) The degree of emission limitation achievable through the application of the best system of emission reduction (considering the cost of such achieving reduction and any nonair quality health and environmental impact and energy requirements) that has been adequately demonstrated for designated facilities, and the time within which compliance with standards of performance can be achieved. The Administrator may specify different degrees of emission limitation or compliance times or both for different sizes, types, and classes of designated facilities when costs of control, physical limitations, geographical location, or similar factors make subcategorization appropriate.

(6) Such other available information as the Administrator determines may contribute to the formulation of State plans.

(c) The emission guidelines and compliance times referred to in paragraph (b)(5) of this section will be proposed for comment upon publication of the draft guideline document, and after consideration of comments will be promulgated in subpart C of this part with such modifications as may be appropriate.

SOURCE: 36 FR 24877, Dec. 23, 1971; 50 FR 36834, Sept. 9, 1985; 52 FR 37874, Oct. 9, 1987; 53 FR 2675, Jan. 29, 1988; 57 FR 32338, July 21, 1992; 58 FR 40591, July 29, 1993; 60 FR 65384, Dec. 19, 1995; 62 FR 8328, Feb. 24, 1997; 62 FR 48379, Sept. 15, 1997; 64 FR 7463, Feb. 12, 1999; 65 FR 78275, Dec. 14, 2000; 72 FR 59204, Oct. 19, 2007; 84 FR 32575, July 8, 2019, unless otherwise noted.

AUTHORITY: 42 U.S.C. 7401 et seq.

Current through November 26, 2020; 85 FR 75828.

End of Document

Code of Federal Regulations
Title 40. Protection of Environment
Chapter I. Environmental Protection Agency (Refs & Annos)
Subchapter C. Air Programs
Part 60. Standards of Performance for New Stationary Sources (Refs & Annos)
Subpart Ooooa. Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After September 18, 2015 (Refs & Annos)

40 C.F.R. § 60.5390a

§ 60.5390a What VOC standards apply to pneumatic controller affected facilities?

Effective: September 14, 2020
Currentness

For each pneumatic controller affected facility you must comply with the VOC standards, based on natural gas as a surrogate for VOC, in either paragraph (b)(1) or (c)(1) of this section, as applicable. Pneumatic controllers meeting the conditions in paragraph (a) of this section are exempt from the requirements in paragraph (b)(1) or (c)(1) of this section.

(a) The requirements of paragraph (b)(1) or (c)(1) of this section are not required if you determine that the use of a pneumatic controller affected facility with a bleed rate greater than the applicable standard is required based on functional needs, including but not limited to response time, safety and positive actuation. However, you must tag such pneumatic controller with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller, as required in § 60.5420a(c)(4)(ii).

(b)(1) Each pneumatic controller affected facility at a natural gas processing plant must have a bleed rate of zero.

(2) Each pneumatic controller affected facility at a natural gas processing plant must be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that pneumatic controller as required in § 60.5420a(c)(4)(iv).

(c)(1) Each pneumatic controller affected facility at a location other than at a natural gas processing plant must have a bleed rate less than or equal to 6 standard cubic feet per hour.

(2) Each pneumatic controller affected facility at a location other than at a natural gas processing plant must be tagged with the month and year of installation, reconstruction or modification, and identification information that allows traceability to the records for that controller as required in § 60.5420a(c)(4)(iii).

(d) You must demonstrate initial compliance with standards that apply to pneumatic controller affected facilities as required by § 60.5410a(d).

(e) You must demonstrate continuous compliance with standards that apply to pneumatic controller affected facilities as required by § 60.5415a(d).

(f) You must perform the reporting as required by § 60.5420a(b)(1) and (5) and the recordkeeping as required by § 60.5420a(c)(4).

Credits
[85 FR 57070, Sept. 14, 2020]

SOURCE: 36 FR 24877, Dec. 23, 1971; 50 FR 36834, Sept. 9, 1985; 52 FR 37874, Oct. 9, 1987; 53 FR 2675, Jan. 29, 1988; 57 FR 32338, July 21, 1992; 58 FR 40591, July 29, 1993; 60 FR 65384, Dec. 19, 1995; 62 FR 8328, Feb. 24, 1997; 62 FR 48379, Sept. 15, 1997; 64 FR 7463, Feb. 12, 1999; 65 FR 78275, Dec. 14, 2000; 72 FR 59204, Oct. 19, 2007; 81 FR 35898, June 3, 2016, unless otherwise noted.

AUTHORITY: 42 U.S.C. 7401 et seq.

Current through December 3, 2020; 85 FR 78189.

End of Document

Code of Federal Regulations
Title 40. Protection of Environment
Chapter I. Environmental Protection Agency (Refs & Annos)
Subchapter C. Air Programs
Part 60. Standards of Performance for New Stationary Sources (Refs & Annos)
Subpart Ooooa. Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After September 18, 2015 (Refs & Annos)

40 C.F.R. § 60.5397a

§ 60.5397a What fugitive emissions VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site and the affected facility which is the collection of fugitive emissions components at a compressor station?

Effective: November 16, 2020
Currentness

For each affected facility under § 60.5365a(i) and (j), you must reduce VOC emissions by complying with the requirements of paragraphs (a) through (j) of this section. The requirements in this section are independent of the closed vent system and cover requirements in § 60.5411a.

(a) You must comply with paragraph (a)(1) of this section, unless your affected facility under § 60.5365a(i) (i.e., the collection of fugitive emissions components at a well site) meets the conditions specified in either paragraph (a)(1)(i) or (ii) of this section. If your affected facility under § 60.5365a(i) (i.e., the collection of fugitive emissions components at a well site) meets the conditions specified in either paragraph (a)(1)(i) or (ii) of this section, you must comply with either paragraph (a)(1) or (2) of this section.

(1) You must monitor all fugitive emission components, as defined in § 60.5430a, in accordance with paragraphs (b) through (g) of this section. You must repair all sources of fugitive emissions in accordance with paragraph (h) of this section. You must keep records in accordance with paragraph (i) of this section and report in accordance with paragraph (j) of this section. For purposes of this section, fugitive emissions are defined as any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 parts per million (ppm) or greater using Method 21 of appendix A–7 to this part.

(i) First 30–day production. For the collection of fugitive emissions components at a well site, where the total production of the well site is at or below 15 barrels of oil equivalent (boe) per day for the first 30 days of production, according to § 60.5415a(j), you must comply with the provisions of either paragraph (a)(1) or (2) of this section. Except as provided in this paragraph (a)(1)(i), the calculation must be performed within 45 days of the end of the first 30 days of production. To convert gas production to equivalent barrels of oil, divide the cubic feet of gas produced by 6,000. For well sites that commenced construction, reconstruction, or modification between October 15, 2019, and November 16, 2020, the owner or operator may use the records of the first 30 days of production after becoming subject to this subpart, if available, to determine if the total well site production is at or below 15 boe per day, provided this determination is completed by December 14, 2020.

(ii) Well site production decline. For the collection of fugitive emissions components at a well site, where, at any time, the total production of the well site is at or below 15 boe per day based on a rolling 12–month average, you must comply with the provisions of either paragraph (a)(1) or (2) of this section. To convert gas production to equivalent barrels of oil, divide the cubic feet of gas produced by 6,000.

(2) You must maintain the total production for the well site at or below 15 boe per day based on a rolling 12–month average, according to §§ 60.5410a(k) and 60.5415a(i), comply with the reporting requirements in § 60.5420a(b)(7)(i)(C), and the recordkeeping requirements in § 60.5420a(c)(15)(ii), until such time that you perform any of the actions in paragraphs (a)(2)(i) through (v) of this section. If any of the actions listed in paragraphs (a)(2)(i) through (v) of this section occur, you must comply with paragraph (a)(3) of this section.

(i) A new well is drilled at the well site;

(ii) A well at the well site is hydraulically fractured;

(iii) A well at the well site is hydraulically refractured;

(iv) A well at the well site is stimulated in any manner for the purpose of increasing production, including well workovers; or

(v) A well at the well site is shut-in for the purpose of increasing production from the well.

(3) You must determine the total production for the well site for the first 30 days after any of the actions listed in paragraphs (a)(2)(i) through (v) of this section is completed, according to § 60.5415a(j), comply with paragraph (a)(3)(i) or (ii) of this section, the reporting requirements in § 60.5420a(b)(7)(i)(C), and the recordkeeping requirements in § 60.5420a(c)(15)(iii).

(i) If the total production for the well site is at or below 15 boe per day for the first 30 days after the action is completed, according to § 60.5415a(j), you must either continue to comply with paragraph (a)(2) of this section or comply with paragraph (a)(1) of this section.

(ii) If the total production for the well site is greater than 15 boe per day for the first 30 days after the action is completed, according to § 60.5415a(j), you must comply with paragraph (a)(1) of this section and conduct an initial monitoring survey for the collection of fugitive emissions components at the well site in accordance with the same schedule as for modified well sites as specified in § 60.5397a(f)(1).

(b) You must develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with paragraphs (c) and (d) of this section.

(c) Fugitive emissions monitoring plans must include the elements specified in paragraphs (c)(1) through (8) of this section, at a minimum.

(1) Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by paragraphs (f) and (g) of this section.

(2) Technique for determining fugitive emissions (i.e., Method 21 of appendix A–7 to this part or optical gas imaging meeting the requirements in paragraphs (c)(7)(i) through (vii) of this section).

(3) Manufacturer and model number of fugitive emissions detection equipment to be used.

(4) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. Your repair schedule must meet the requirements of paragraph (h) of this section at a minimum.

(5) Procedures and timeframes for verifying fugitive emission component repairs.

(6) Records that will be kept and the length of time records will be kept.

(7) If you are using optical gas imaging, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.

(i) Verification that your optical gas imaging equipment meets the specifications of paragraphs (c)(7)(i)(A) and (B) of this section. This verification is an initial verification, and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitive emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.

(A) Your optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.

(B) Your optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤60g/hr from a quarter inch diameter orifice.

(ii) Procedure for a daily verification check.

(iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.

(iv) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.

(v) Procedures for conducting surveys, including the items specified in paragraphs (c)(7)(v)(A) through (C) of this section.

(A) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

(B) How the operator will deal with adverse monitoring conditions, such as wind.

(C) How the operator will deal with interferences (e.g., steam).

(vi) Training and experience needed prior to performing surveys.

(vii) Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

(8) If you are using Method 21 of appendix A–7 of this part, your plan must also include the elements specified in paragraphs (c)(8)(i) through (iii) of this section. For the purposes of complying with the fugitive emissions monitoring program using Method 21 of appendix A–7 of this part a fugitive emission is defined as an instrument reading of 500 ppm or greater.

(i) Verification that your monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A–7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID–based instrument. If you wish to use an analyzer other than a FID–based instrument, you must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID–based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest).

(ii) Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A–7, including Section 8.3.1.

(iii) Procedures for calibration. The instrument must be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A–7 of this part. At a minimum, you must also conduct precision tests at the interval specified in Method 21 of appendix A–7 of this part, Section 8.1.2, and a calibration drift assessment at the end of each monitoring day. The calibration drift assessment must be conducted as specified in paragraph (c)(8)(iii)(A) of this section. Corrective action for drift assessments is specified in paragraphs (c)(8)(iii)(B) and (C) of this section.

(A) Check the instrument using the same calibration gas that was used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A–7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. If multiple scales are used, record the instrument reading for each scale used. Divide the arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage.

(B) If a calibration drift assessment shows a negative drift of more than 10 percent, then all equipment with instrument readings between the fugitive emission definition multiplied by (100 minus the percent of negative drift/divided by 100) and the fugitive emission definition that was monitored since the last calibration must be re-monitored.

(C) If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment with instrument readings above the fugitive emission definition and below the fugitive emission definition multiplied by (100 plus the percent of positive drift/divided by 100) monitored since the last calibration may be re-monitored.

(d) Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) through (3) of this section, at a minimum, as applicable.

(1) If you are using optical gas imaging, your plan must include procedures to ensure that all fugitive emissions components are monitored during each survey. Example procedures include, but are not limited to, a sitemap with an observation path, a written narrative of where the fugitive emissions components are located and how they will be monitored, or an inventory of fugitive emissions components.

(2) If you are using Method 21 of appendix A–7 of this part, your plan must include a list of fugitive emissions components to be monitored and method for determining the location of fugitive emissions components to be monitored in the field (e.g., tagging, identification on a process and instrumentation diagram, etc.).

(3) Your fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with paragraph (g)(3) of this section, and the written plan for fugitive emissions components designated as unsafe-to-monitor in accordance with paragraph (g)(4) of this section.

(e) Each monitoring survey shall observe each fugitive emissions component, as defined in § 60.5430a, for fugitive emissions.

(f)(1) You must conduct an initial monitoring survey within 90 days of the startup of production, as defined in § 60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 90 days of the startup of production for each collection of fugitive emissions components after the modification or by June 3, 2017, whichever is later. Notwithstanding the preceding deadlines, for each collection of fugitive emissions components at a well site located on the Alaskan North Slope, as defined in § 60.5430a, that starts up production between September and March, you must conduct an initial monitoring survey within 6 months of the startup of production for a new well site, within 6 months of the first day of production after a modification of the collection of fugitive emission components, or by the following June 30, whichever is latest.

(2) You must conduct an initial monitoring survey within 90 days of the startup of a new compressor station for each collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a compressor station, the initial monitoring survey must be conducted within 90 days of the modification or by June 3, 2017, whichever is later. Notwithstanding the preceding deadlines, for each collection of fugitive emissions components at a new compressor station located on the Alaskan North Slope that starts up between September and March, you must conduct an initial monitoring survey within 6 months of the

startup date for new compressor stations, within 6 months of the modification, or by the following June 30, whichever is latest.

(g) A monitoring survey of each collection of fugitive emissions components at a well site or at a compressor station must be performed at the frequencies specified in paragraphs (g)(1) and (2) of this section, with the exceptions noted in paragraphs (g)(3) through (5) of this section.

(1) Except as provided in this paragraph (g)(1), a monitoring survey of each collection of fugitive emissions components at a well site must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart and no more than 7 months apart. A monitoring survey of each collection of fugitive emissions components at a well site located on the Alaskan North Slope must be conducted at least annually. Consecutive annual monitoring surveys must be conducted at least 9 months apart and no more than 13 months apart.

(2) Except as provided in this paragraph (g)(2), a monitoring survey of the collection of fugitive emissions components at a compressor station must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart and no more than 7 months apart. A monitoring survey of the collection of fugitive emissions components at a compressor station located on the Alaskan North Slope must be conducted at least annually. Consecutive annual monitoring surveys must be conducted at least 9 months apart and no more than 13 months apart.

(3) Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of paragraphs (g)(3)(i) through (iv) of this section.

(i) A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.

(ii) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.

(iii) The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.

(iv) The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

(4) Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of paragraphs (g)(4)(i) through (iv) of this section.

(i) A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.

(ii) The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.

(iii) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.

(iv) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

(5) You are no longer required to comply with the requirements of paragraph (g)(1) of this section when the owner or operator removes all major production and processing equipment, as defined in § 60.5430a, such that the well site becomes a wellhead only well site. If any major production and processing equipment is subsequently added to the well site, then the owner or operator must comply with the requirements in paragraphs (f)(1) and (g)(1) of this section.

(h) Each identified source of fugitive emissions shall be repaired, as defined in § 60.5430a, in accordance with paragraphs (h)(1) and (2) of this section.

(1) A first attempt at repair shall be made no later than 30 calendar days after detection of the fugitive emissions.

(2) Repair shall be completed as soon as practicable, but no later than 30 calendar days after the first attempt at repair as required in paragraph (h)(1) of this section.

(3) If the repair is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair must be completed during the next scheduled compressor station shutdown for maintenance, scheduled well shutdown, scheduled well shut-in, after a scheduled vent blowdown, or within 2 years, whichever is earliest. For purposes of this paragraph (h)(3), a vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.

(4) Each identified source of fugitive emissions must be resurveyed to complete repair according to the requirements in paragraphs (h)(4)(i) through (iv) of this section, to ensure that there are no fugitive emissions.

(i) The operator may resurvey the fugitive emissions components to verify repair using either Method 21 of appendix A–7 of this part or optical gas imaging.

(ii) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged during the monitoring survey when the fugitives were initially found for identification purposes and subsequent repair. The digital photograph must include

the date that the photograph was taken and must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

(iii) Operators that use Method 21 of appendix A–7 of this part to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs (h)(4)(iii)(A) and (B) of this section.

(A) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A–7 of this part are used.

(B) Operators must use the Method 21 monitoring requirements specified in paragraph (c)(8)(ii) of this section or the alternative screening procedures specified in section 8.3.3 of Method 21 of appendix A–7 of this part.

(iv) Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in paragraphs (h)(4)(iv)(A) and (B) of this section.

(A) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.

(B) Operators must use the optical gas imaging monitoring requirements specified in paragraph (c)(7) of this section.

(i) Records for each monitoring survey shall be maintained as specified § 60.5420a(c)(15).

(j) Annual reports shall be submitted for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station that include the information specified in § 60.5420a(b)(7). Multiple collection of fugitive emissions components at a well site or at a compressor station may be included in a single annual report.

Credits

[82 FR 25733, June 5, 2017; 83 FR 10638, March 12, 2018; 85 FR 57070, Sept. 14, 2020; 85 FR 57440, Sept. 15, 2020]

SOURCE: 36 FR 24877, Dec. 23, 1971; 50 FR 36834, Sept. 9, 1985; 52 FR 37874, Oct. 9, 1987; 53 FR 2675, Jan. 29, 1988; 57 FR 32338, July 21, 1992; 58 FR 40591, July 29, 1993; 60 FR 65384, Dec. 19, 1995; 62 FR 8328, Feb. 24, 1997; 62 FR 48379, Sept. 15, 1997; 64 FR 7463, Feb. 12, 1999; 65 FR 78275, Dec. 14, 2000; 72 FR 59204, Oct. 19, 2007; 81 FR 35898, June 3, 2016, unless otherwise noted.

AUTHORITY: 42 U.S.C. 7401 et seq.

Notes of Decisions (7)

Current through December 3, 2020; 85 FR 78189.

End of Document

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, *et al.*, *Petitioners*, v. ANDREW R. WHEELER, in his official capacity as Administrator, United States Environmental Protection Agency, *et al.*, *Respondents.*	No. 20-1357 (and consolidated cases)

DECLARATION OF JAY CHAMBERLIN

I, Jay Chamberlin, state and declare as follows:

1. I submit this declaration in support of the State Petitioners' standing to challenge the final action of the United States Environmental Protection Agency entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review," published at 85 Fed. Reg. 57,018 (September 14, 2020) (Rescission Rule). I make this declaration of my own personal knowledge, unless otherwise indicated.

2. I am the Chief of the Natural Resources Division of the California Department of Parks and Recreation ("DPR"), a position I have held since 2010. I have worked in the conservation field for more than 20 years. I received a Masters of Science in Natural Resources and Environment from the University of Michigan in 1998. Prior to my current position, I served as Environmental Program Manager at the California Department of Water Resources from 2008 to 2010, and Deputy Assistant Secretary at the California Natural Resources Agency from 2005 to 2008. I have also worked as a consultant to the Ecosystem Restoration Program for

the California Bay-Delta Authority, and as Policy Manager for the Pacific Forest Trust, where my work focused on climate projects and policies.

3. I regularly give presentations on climate change and its impacts to the California State Park System, and on plans, management practices, and policies for addressing those impacts. I have given such presentations to professionals, students and other audiences, including, for example, the California State Assembly's Select Committee on Sea Level Rise and the California Economy. I have also given a series of climate change presentations and updates (in January 2018, September 2018, and May 2019) to the California State Parks and Recreation Commission, the body with authority for guiding policy and planning for the State Park System.

4. DPR manages the California State Park System, which consists of 280 park units and approximately 1.6 million acres of land. Parks are located in every bioregion of California, and the State Park System protects some of the most important natural resources in California, including old growth forests, grasslands, woodlands, lakes and reservoirs, habitat for native and rare wildlife, and roughly one-quarter of the California coastline. The State Park System also protects the largest assemblage of cultural resources in California, including historic buildings and archaeological sites. The State Park System receives in excess of 80,000,000 visitors per year, and it is the primary destination for shoreline recreation in California.

5. I am familiar with scientific studies and models related to global climate change and with evidence of the influence that climate change is having on resources in the State Park System. My knowledge is based on my ongoing review of the current scientific literature, attendance and participation at professional conferences, trainings, and workshops, and my work for DPR. Scientific models of global climate change – which link the buildup of Greenhouse

Gases (GHGs) to increased global temperatures – predict that by the year 2100 the average annual maximum daily temperature in California will increase by 5.6 to 8.8 degrees Fahrenheit.

6. For years, DPR staff have been engaged in active management, documentation, and monitoring of resource conditions throughout the State Park System. Many of the specific threats to biological diversity and native species that have emerged in recent years are attributable to, or compounded by, the influence of climate change. Climate-influenced impacts on State Park System resources include accelerated coastal erosion, the spread of pests and pathogens (such as bark beetles), changes in phenology (the timing of seasonal natural phenomena such as blossoms on trees or flowers), alterations to wildlife health and behavior, and increases in the frequency and severity of wildfires. These changes in natural systems due to climate change damage the land, native plants, and wildlife that are the primary natural resources of the State Park System. In the course of my work, I have reviewed information and reports by DPR and other agency staff concerning these phenomena.

7. Scientific studies and models predict that – as a result of increased temperatures, and consequent thermal expansion and glacial ice melt, caused by GHG emissions – by 2100, mean sea levels along the coast will rise between 1 and 7 feet, greatly exacerbating the effects of wave run up (the upper level reached by a wave on a beach) and storm surges. Due to uncertainty in the models, actual mean sea level rise could well exceed the predicted levels by considerable margins. Also, sea level rise will vary by location, and certain areas could experience sea levels that exceed the predicted mean levels.

8. Based upon my professional experience and knowledge of California's State Park System, if the predicted changes in temperature, precipitation, and sea level occur, they would have significant adverse and costly impacts on the State Park System. Additional emissions of

greenhouse gases will continue to drive climate change that will worsen these impacts in the future.

9. Rising sea levels will drastically reduce the amount of beach available for park visitors and shorebirds, including threatened and endangered species. In fact, many of California's beaches, including many in the State Park System, such as Crystal Cove in Orange County, are narrow bands of sand backed by steep cliffs. If the sea level rises as models predict, many beaches will not simply move inland, but will completely disappear. Also, any additional rise in sea level will affect the salinity, temperature, and hydrology in California's many estuaries and lagoons, thereby harming the aquatic life – including rare, threatened and endangered fish – that rely on estuaries for breeding or rearing. In addition, sea level rise threatens infrastructure in the more than 100 coastal units of the State Park System, including numerous campgrounds, trails and roads, and other facilities, including water and waste systems that exist along the ocean's edge. The reduced or destroyed beaches, coastal estuaries, lagoons, and wetlands and the destruction of other fish and wildlife habitats are material impacts to State trust resources. Moreover, damaged infrastructure will also negatively impact the ability of visitors to access the coast, another material impact to the purpose of State Beaches to provide for recreational access to the coast. Finally, sea level rise will negatively impact the balance of payments of the State – as revenues from visitors may decline even as costs to maintain, restore, and protect park resources and facilities increases.

10. In addition, the California State Park System includes many important cultural resources, including archeological and historic sites, such as Native American sites, 18th century missions, historic lighthouses and piers, and buildings, including historic campgrounds and other sites constructed by the Civilian Conservation Corps. These kinds of resources are irreplaceable,

and the protection or documentation of cultural resources that would be inundated by sea level rise would be very expensive. For instance, even a small rise in sea level will erode or inundate the State Park System's many ancient shell middens. These cultural resources, which contain remnants from California's earliest human residents, dating back thousands of years, would be permanently lost for ancestors, visitors, and researchers alike.

11. Global climate change models in combination with other predictive studies also suggest that wildfires will increase in frequency and severity. The State's recent experiences concerning wildfires are generally consistent with these predictions. In 2017, California had the highest average summer temperatures in recorded history. Over the last 40 years, California's fire season has increased 78 days – and in some places in the State the fire season is nearly year-round. Fifteen of the 20 most destructive wildfires in the State's history have occurred since 2000, with 10 of the most destructive occurring since 2015.

12. Increases in the frequency and severity of wildfires will have a significant impact on the State Park System. DPR and its allied agencies, including the California Department of Forestry and Fire Protection, currently expend significant resources to protect park infrastructure and natural and cultural resources from wildfires and to prevent these fires. Growing wildfire activity also increases the risk that irreplaceable resources will be lost, including historic structures. Over the last 15 years, several state parks have been impacted by wildfires, and the increasing frequency of wildfires has become a more important problem for the State Park System. For example, the October 2017 Wine Country fires in Napa and Sonoma Counties burned through several state parks, including Trione-Annadel State Park, Sugarloaf Ridge State Park and Robert Louis Stevenson State Historic Park, and threatened Jack London State Historic Park.

13. Observed changes, along with global climate change models, also suggest that coastal fog declines observed in recent decades could accelerate due to GHG-driven warming and changed ocean circulation. Diminished fog would have a severe and damaging impact on natural forest types that are dependent upon fog, including Torrey pine, Monterey pine, and Coast redwood. In addition to the ecological impacts, these forest types draw many visitors to the State Park System, and a decline in these forests would reflect a critical impact on the natural resources of the State Park System, would result in fewer visitors, and a loss of revenue to DPR.

14. DPR also manages several parks in winter snow areas, as well as the Sno-Park Program for California, which provides the public roadside access to winter sports recreation. Global climate change models and other studies predict reductions in winter-spring snowpack, which would result in loss of recreational opportunities, increased flooding downstream, along with operational challenges and associated costs at reservoir parks. It may also reduce associated revenues associated with the Sno-Park Program.

15. While significant and unavoidable impacts from climate change are already impacting the resources of the State Park System as summarized above, the most extreme impacts of climate change on the State Park System likely depend on current and future greenhouse gas emissions and measures taken to reduce those emissions. Continued emissions of greenhouse gases, such as methane from the oil and natural gas industry, will result in increased impacts to the State Park System of the type I have described in this declaration.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on November 17, 2020 in Bangor, Pennsylvania.

JAY CHAMBERLIN

DECLARATION OF CAROLYN LOZO

I, Carolyn Lozo, state and declare as follows:

1. The facts contained in this Declaration are based on my personal knowledge and are true and correct to the best of my knowledge and belief.

2. I am currently employed by the California Air Resources Board (CARB) as the Branch Chief of the Oil and Gas and Greenhouse Gas Mitigation Branch, a position I have held since May 2019. CARB is the expert agency charged with overseeing all air pollution control efforts in California to attain and maintain health-based air quality standards. CARB's mission is to promote and protect public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering effects on the economy. CARB's major goals include ensuring all Californians have safe, clean air, reducing California's emission of greenhouse gases, and providing leadership and innovative approaches for implementing air pollution controls. CARB is part of the California Environmental Protection Agency, an organization that reports directly to the Governor's Office in the Executive Branch of California State Government. In addition to developing statewide rules, CARB works with local California air districts, many of which regulate oil and gas pollution at the regional or county level.

3. I have been employed with CARB since 2008, and was previously employed with CARB from 1990 to 2000. I have extensive professional knowledge and experience regarding the air pollution impacts of the oil and natural gas industry. I manage a team working with California's local air districts to regulate emissions from California's oil and gas industry. I oversee implementation of CARB's methane regulation for the oil and gas sector, coordinate with the California Public Utilities Commission on a methane emission proceeding for natural gas transmission and distribution utilities, and develop programs evaluating well stimulation and other oil- and gas-related issues. I have also designed and implemented elements of California's Low Carbon Fuel Standard. I supervise a team of over 20 scientists and engineers. Many of the staff I oversee have significant professional experience with the air pollution impacts from the oil and natural gas industry.

I am submitting this declaration in support of State Petitioners' standing to challenge the United States Environmental Protection Agency's final action entitled *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review*, 85 Fed. Reg. 57.018 (Sept. 14, 2020). The statements made in this declaration are based on my review of various publicly available administrative records and scientific literature, as well as my extensive knowledge and experience detailed above.

4. Although all states face serious risks from climate change, California faces particularly acute climate vulnerabilities. The state is already experiencing the adverse effects of climate change, including increased wildfire risk, a decline in the average annual snowpack that provides approximately 35 percent of the State's water supply,[1] and increased erosion of beaches and low-lying coastal properties from rising sea levels. California's vibrant agricultural economy is sensitive to rising temperatures and increased risk of drought and heavy rainfall events. Greenhouse gas emissions and climate impacts also cause serious harm to human health, including increased heat-related hospitalizations[2] and deaths[3] and extreme weather events.

5. Removing the transmission and storage sector from U.S. EPA's regulated source category will cause significant increases in methane emissions, speeding the rate of climate change and therefore harming California residents directly. The removal of the entire transmission and storage sector from U.S. EPA's regulated source category was estimated in 2019 to result in an increase in annual methane emissions of between 33,000 short tons per year in 2019 and

[1] Office of Environmental Health Hazard Assessment, California Environmental Protection Agency (2018). Indicators of Climate Change in California, p. 110, available at https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf.

[2] Knowlton, K., M. Rotkin-Ellman, G. King, H. G. Margolis, D. Smith, G. Solomon, R. Trent and P. English (2008). "The 2006 California heat wave: impacts on hospitalizations and emergency department visits." Environmental health perspectives 117(1): 61-67.

[3] Poumadere, M., C. Mays, S. Le Mer and R. Blong (2005). "The 2003 heat wave in France: dangerous climate change here and now." Risk Analysis: an International Journal 25(6): 1483-1494.

72,000 short tons per year in 2025, for a total of 370,000 short tons over 2019 through 2025.[4] Methane, the primary component of natural gas, is an extremely potent greenhouse gas, with climate impacts roughly 85 times those of a similar mass of carbon dioxide when measured over a 20-year period, or 28 times when measured over a 100-year period.[5] Global methane emissions accounted for 16 percent of global greenhouse gas emissions in 2010, and methane emissions from the United States are estimated to be approximately 10 percent of those global emissions.[6] Short-lived climate pollutants such as methane remain in the atmosphere for a shorter period of time than carbon dioxide. Given the relatively short lifetime, reducing methane can effectively slow the rate of climate change in the near term and can have an immediate beneficial impact.

6. The removal of all methane requirements from the NSPS will also end federal efforts to regulate methane from existing oil and natural gas sources, a major source of methane emissions, because U.S. EPA claims it would "obviate the need for development of emission guidelines under CAA section 111(d) and 40 CFR part 60, subpart B to address methane emissions from existing sources within

[4] Regulatory Impact Analysis for the Proposed Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review, August 2019, EPA-452/R-19-001.
[5] Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.), p. 87.
[6] Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.), p. 46.

the crude oil and natural gas production industry."[7] Methane emissions controls represent one of the most important ways of slowing the pace of global climate change because they can be readily and cost-effectively implemented. In 2018, the oil and gas sector was one of the top methane emissions sources in the United States, representing about a third of all U.S. methane emissions.[8] Many of these operations are existing sources that will not become subject to the NSPS unless they undergo modifications. Failure to control methane emissions from existing sources will lead to more rapid climate change that will further harm California residents.

7. Over 90% of the natural gas consumed in California is imported.[9,10] The majority of that natural gas is produced in other U.S. states and carried to California through a network of transmission pipelines. The U.S. EPA Greenhouse Gas Emissions Inventory indicates that 67% of vented and fugitive methane emissions from the natural gas life cycle are from exploration, production, and processing, all of which occur outside of the State for imported gas. This figure would be 91% if emissions from transmission and storage, which occur partially outside of the State, were included. Thus, while CARB programs and regulations

[7] 84 Fed. Reg. at 50,254.
[8] U.S. Environmental Protection Agency (2020) Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2018.
[9] Energy Information Administration (2020) Natural Gas Consumption by End Use. https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm
[10] Energy Information Administration (2020) Natural Gas Gross Withdrawals and Production. https://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_FGW_mmcf_a.htm

target reductions of in-state vented and fugitive emissions, the majority of potentially abatable emissions associated with natural gas consumed in California occur in other states where California has no jurisdiction. CARB recently calculated the out-of-state emissions associated with imported gas, including flaring emissions, and found them to be approximately 9.4 million metric tons CO_2-equivalent using a 100-year global warming potential.[11] Because California cannot directly limit emissions from imported natural gas, strong national standards are necessary to decrease methane emissions associated with natural gas consumed in the State and reduce the harm caused to California residents by climate change.

8. The removal of the transmission and storage sector from the NSPS is estimated to result in cost savings for affected operators on the scale of $19 million per year (estimated annualized value with a 3% discount rate).[12] However, California operators would still be incurring the costs of complying with our regulations and requirements, which are cost-effective and necessary to protect public health and mitigate climate change. Thus, the proposed actions would result

[11] California Air Resources Board (2020). Out-of-State Greenhouse Gas Emissions from Loss, Release, and Flaring of Natural Gas Imported to California, available at: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2018/ab_2195_out_of_state_natural_gas_emissions.pdf

[12] Regulatory Impact Analysis for the Proposed Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review, August 2019, EPA-452/R-19-001.

in a relative financial burden for California operators compared to out-of-state operators.

9. Federal regulations provide important additional enforcement oversight within California. Federal rules provide needed federal oversight of national and international corporations operating in California. Federal rules impose reporting requirements that provide valuable emissions inventory data—data not easily replicated by California's efforts alone. Federal rules provide important additional enforcement oversight by creating obligations under the federal Clean Air Act that may be enforced by U.S. EPA or citizen suit. And federal rules, provided they are revised to be as stringent as California's regulation, ensure that imported natural gas has similar rates of methane emissions to that of natural gas produced within California.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed in Sacramento, California on November 23rd, 2020.

Carolyn Lozo

Carolyn Lozo
Chief, Oil and Gas and Greenhouse Gas Mitigation Branch
California Air Resources Board

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, *et al.*, *Petitioners*, v. ANDREW R. WHEELER, in his official capacity as Administrator, United States Environmental Protection Agency, *et al.*, *Respondents.*	No. 20-1357 (and consolidated cases)

DECLARATION OF LISA BERRY ENGLER

I, Lisa Berry Engler, declare of my personal knowledge as follows:

1. I am currently employed by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) as Director of the Office of Coastal Zone Management (CZM). CZM is the lead policy and planning agency on coastal and ocean issues in Massachusetts. I have held this position for 20 months. I have been employed by CZM since 2011, having held positions with increasing responsibility. I previously held the positions of Assistant Director, Boston Harbor Regional Coordinator, Acting Director for the Massachusetts Bays National Estuary Program (MassBays), and MetroBoston Regional Coordinator for

MassBays. Prior to joining CZM, I held positions with the Massachusetts Department of Transportation and the Massachusetts Department of Conservation and Recreation.

2. I have extensive professional knowledge and experience regarding the impacts of climate change on coastal resources and communities in Massachusetts, as well as Massachusetts' efforts to plan and prepare for such impacts. My job duties include providing oversight and administration for CZM and directing policy development, planning efforts, and technical approaches for CZM program areas. I supervise a team of 34 multidisciplinary professionals working in a range of program areas, including climate change adaptation and coastal resilience administered as CZM's StormSmart Coasts Program. Many of the staff I oversee have significant professional experience in coastal and environmental management, planning, science, policy, and other related fields. I routinely engage and partner with scientific and technical subject matter experts in federal agencies and academia. As part of my management responsibilities, I oversee CZM's work to provide information, strategies, tools, and financial resources to support communities and people working and living on the Massachusetts coast to address the challenges of erosion, flooding, storms, sea level rise, and other climate-change impacts. For instance, I oversee the development of sea level rise decision-support tools and services including inundation maps and guidance documents. I also direct

CZM's work to provide policy and planning support and technical assistance to other state agencies, local communities, and private entities regarding adapting and increasing resilience to current and future impacts of climate change on our coast. For example, I oversee CZM's StormSmart Coasts Program that offers competitive grants, hands-on technical and planning assistance, and decision-support tools to Massachusetts cities and towns and non-profit organizations for the purposes of planning for and adapting to sea level rise and other climate-change-related coastal hazards.

3. In my role with CZM, I chair and participate in various legislative and executive branch official groups, including the Massachusetts Ocean Advisory Commission and Science Advisory Council and associated work groups. I also represent the Commonwealth of Massachusetts (Commonwealth) on several multi-state organizations, including the Coastal States Organization, Northeast Regional Ocean Council, and the Gulf of Maine Council on the Marine Environment.

4. I have a bachelor's degree in Biology from Colby College and a master's degree in Environmental Management from Duke University.

5. I am aware of and familiar with the science related to global and local climate change. My knowledge comes from my review of scientific peer-reviewed literature and consensus assessment reports, attendance at professional conferences and workshops, and professional exposure to other research and material. As a

result of my professional experience and my knowledge of the peer-reviewed literature and reports, as well as my knowledge of the Massachusetts coastal resources and policies and planning related thereto, I can attest to the following.

6. The purposes of this declaration are to: (i) briefly describe the serious harms that climate change, caused in part by methane emissions from new and existing sources in the oil and natural gas sector, is causing and will continue to cause to Massachusetts' coastal resources, infrastructure, and communities; and (ii) briefly summarize extensive state and local initiatives, programs, and plans to respond to and prepare for such impacts. I am submitting this declaration in support of State Petitioners' standing to challenge the United States Environmental Protection Agency's final action entitled *Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review*, 85 Fed. Reg. 57.018 (Sept. 14, 2020).

Climate Change Threatens Massachusetts' Coastal Resources and Communities

7. The accelerated rate of global sea level rise and the severity and timing of coastal impacts due to this rise in sea level are largely dependent on current and future global greenhouse gas emissions, including carbon dioxide emissions, and reduction measures. Continued emissions of greenhouse gases, including methane emissions from new and existing sources in the oil and natural

gas sector, will result in increases in global temperature, yielding additional contributions to global sea level rise (*i.e.*, increased contributions from thermal expansion of warmer waters and melting of land-based ice sheets).[1]

8. Human-caused climate change has led to a rise in global mean sea levels of 7 to 8 inches since 1900, and a rate of rise greater than that in any preceding century in the last 2,800 years.[2] Global average sea levels will continue to rise by 1 to 4 feet by 2100, and emerging science regarding Antarctic ice sheet instability indicates sea level rise of as much as 8 feet by 2100 cannot be ruled out.[3] Due to the relationship of the East Coast to the Gulf Stream and melting Antarctic ice sheets, sea level rise will be higher than the global average on the East Coast of the United States.[4]

9. A March 2018 report entitled *Massachusetts Climate Change Projections* (2018 Projections Report), informed by a team of scientists from the U.S. Department of the Interior's Northeast Climate Adaptation Science Center at the University of Massachusetts Amherst, presents the best available, peer-

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[1] *See generally* U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME I (D.J. Wuebbles et al. eds., 2017), https://science2017.globalchange.gov/.

[2] *Id.* at 10.

[3] *Id.*

[4] *Id.*

reviewed science on climate change downscaled, or localized, for Massachusetts through the end of this century.[5] The 2018 Projections Report identifies substantial increases in air temperature, precipitation, and sea levels across Massachusetts as a result of human-caused greenhouse gas emissions.

10. A key component of the 2018 Projections Report is sea level rise projections for the state's coastline. The analysis for Massachusetts consisted of a probabilistic assessment of future relative sea level rise at tide gauge stations with long-term records at Boston Harbor, MA, Nantucket, MA, Woods Hole, MA, and Newport, RI.[6] The sea level projections are based on a methodology that provides complete probability distributions for different greenhouse gas emissions scenarios.[7] Working with the principal investigators (Robert DeConto and Robert Kopp) and a team of external peer reviewers, CZM reviewed and synthesized the downscaled projections, which are made available by the Commonwealth, to set forth a standard set of sea level rise projections to be used by municipalities, state

[5] MASSACHUSETTS CLIMATE CHANGE PROJECTIONS (2018), https://nescaum-dataservices-assets.s3.amazonaws.com/resources/production/MA%20Statewide%20and%20MajorBasins%20Climate%20Projections_Guidebook%20Supplement_March2018.pdf.

[6] *See id.* at 11 (citing Robert M. DeConto & Robert E. Kopp, *Massachusetts Sea Level Assessment and Projections*, Technical Memorandum (2017).

[7] *See id.* (citing Robert E. Kopp et al., *Probabilistic 21st and 22nd century sea level projections at a global network of tide gauge sites*, 2 EARTH'S FUTURE 383–406 (2014)).

government, industry, the private sector, and others to assess vulnerability and identify and prioritize actions to reduce risk. Given a high emissions pathway (Representative Concentration Pathway 8.5), Massachusetts is projected to experience approximately 4.0 to 7.6 feet of sea level rise over the twenty-first century (99.5% probability), with as much as 10.2 feet possible when accounting for higher ice sheet contributions (99.9% probability).

11. Massachusetts has 2,819 miles of tidal coastline, and a coastal zone (land areas from the shoreline to 100 feet inland of major roads or railways from New Hampshire to Rhode Island) that encompasses 886 square miles. Approximately 4.9 million people or 75% of the Commonwealth's population (as of the 2010 U.S. census) reside in coastal counties. In 2014, the total output of the Massachusetts coastal economy was $249.2 billion, representing over 54% of the state's annual gross domestic product, and coastal counties accounted for 53% of the state's employment and wages.[8] Approximately 170,000 year-round residents are currently (as of the 2010 U.S. census) located within coastal flood hazard areas, as defined by the Federal Emergency Management Agency (FEMA), and are susceptible to 1% annual chance coastal storm flooding under current sea level

[8] NAT'L OCEAN ECONOMICS PROGRAM, STATE OF THE U.S. OCEAN AND COASTAL ECONOMIES: COASTAL STATES SUMMARIES – 2016 UPDATE 29 (2016), http://midatlanticocean.org/wp-content/uploads/2016/03/CoastalStatesSummaryReports_2016.pdf.

conditions.[9] Accelerated sea level rise will lead to more regular flooding of developed and natural coastal areas due to an increase in the extent of tidal inundation, and will also exacerbate erosion along beaches, dunes, and coastal banks.

12. In addition, there is very high confidence that climate change and sea level rise will increase the frequency and extent of flooding associated with coastal storms, such as hurricanes and nor'easters.[10] Moderate to major coastal storm events will cause inundation of larger areas, and will occur more frequently, damaging or destroying coastal engineering structures such as seawalls, critical infrastructure such as pump stations, wastewater treatment plants and transportation systems, businesses, and private property.

13. More frequent severe storm surges will create serious risks for public safety and health, especially where roads, sewer mains and pump stations are impacted. Frequent tidal flooding from sea level rise may also lead to increases in respiratory diseases due to mold from dampness in homes.[11] Saltwater intrusion—

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[9] *See* Mark Crowell et al., *Estimating the United States Population at Risk from Coastal Flood-Related Hazards*, *in* COASTAL HAZARDS, 151, 167 (Charles W. Finkl ed., 2013), https://tinyurl.com/yaolf6bk.

[10] *See* U.S GLOBAL CHANGE RESEARCH PROGRAM, *supra*, at 27.

[11] *See generally* CENTERS FOR DISEASE CONTROL & PREVENTION, U.S. DEP'T OF HEALTH & HUMAN SERVS., COASTAL FLOODING, CLIMATE CHANGE, AND YOUR HEALTH: WHAT YOU CAN DO TO PREPARE (2017),

or the increased penetration of salt water into sources of fresh water—from sea level rise will impact water resources (such as drinking water) by contaminating freshwater sources with salt water and also through the corrosion of water supply infrastructure.

14. The Massachusetts coast includes a diverse array of marine and estuarine ecosystems including, among others, sandy beaches, rocky shores, barrier beaches, islands, and salt marshes. These ecosystems offer immense commercial, recreational, cultural, and aesthetic values to the residents of and visitors to the Commonwealth, while also serving important ecological functions. For instance, natural coastal resources, especially beaches and salt marshes provide valuable coastal resilience services to the Commonwealth by buffering inland coastal communities and the built environment from waves and storm surges. Salt water will also impact natural coastal resources, as saltwater intrusion into salt marshes and freshwater wetlands will alter the composition of plant species and affect wildlife that depend on these ecosystems.

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www.cdc.gov/climateandhealth/pubs/CoastalFloodingClimateChangeandYourHealth-508.pdf.

Massachusetts is Experiencing Economic Impacts from Climate Change and is Expending Significant Resources to Adapt and Prepare for Impacts of Climate Change on Our Coastal Areas

15. The Commonwealth is already experiencing impacts of climate change. The relative sea level trend at the Boston tide station is 2.86 millimeters per year based on monthly mean sea level data from 1921 to 2019, which is equivalent to a change of 0.94 feet over 100 years.[12]

16. These impacts are directly harming the welfare of Massachusetts residents and causing significant economic losses. Coastal storms currently result in flooding with extensive damages to public infrastructure, private homes and businesses, and a significant demand for emergency response and recovery services. For example, a nor'easter on March 2–3, 2018, which reached the third-highest water level recorded at the Boston Harbor tide gauge, resulted in major flooding, damages, and expenditures for response and recovery. On April 30, 2018, Massachusetts Governor Charles Baker requested a federal disaster declaration, which the Trump Administration approved on June 25, 2018. The disaster declaration authorized FEMA Public Assistance funding for eligible applicants

[12] *See* Nat'l Oceanic & Atmospheric Admin., *Relative Sea Level Trend 8443970 Boston, Massachusetts*, TIDES & CURRENTS, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?id=8443970.

(FEMA DR-5372-MA), and as of October 2020, FEMA has obligated over $27 million for public storm-related costs related to the event.

17. Rising sea levels increase the frequency, depth, and duration of coastal flooding events; and the associated magnitude of damage costs, including costs associated with the increased demand on first responders, will escalate accordingly.

18. Sea level rise and other impacts of a changing climate pose major risks to communities in Massachusetts' coastal zone. Looking out to the end of the century, a 2018 study analyzed the number of coastal homes and commercial properties throughout the United States that will be at risk from frequent tidal flooding (meaning at least 26 higher tides per year) as a result of projected sea level conditions without any storm events.[13] In Massachusetts, over 89,000 existing homes and 8,000 commercial properties may be disrupted by chronic tidal flooding or inundation by 2100 under a high-emissions scenario. The 2018 market value of residential buildings at risk of higher tides in 2100 was estimated at $63 billion,

[13] *See* UNION OF CONCERNED SCIENTISTS, UNDERWATER: RISING SEAS, CHRONIC FLOODS, AND THE IMPLICATIONS FOR US COASTAL REAL ESTATE (2018), www.ucsusa.org/resources/underwater.

and these homeowners currently contribute over $400 million to the local property tax base.[14]

19. Development along the Massachusetts coast is afforded protection from coastal buffers such as beaches and dunes, and from engineered coastal infrastructure such as revetments and seawalls. These coastal engineered structures will experience greater impacts from flooding and wave energy from the anticipated increase in frequency and intensity of coastal storm events associated with accelerated sea level rise and climate change. With these greater impacts will come more frequent need for maintenance and replacement of coastal engineered structures as well as beaches in the form of sediment nourishment at significant costs. For example, the Town of Winthrop needed additional protection from storm surge and flooding impacts for a suburban neighborhood with existing engineered shoreline structures (*i.e.*, seawalls, groins, and breakwaters) and an eroding beach. At a cost of approximately $25 million in state funding, 460,000 cubic yards of sand, gravel, and cobble were placed along 4,200 linear feet of shoreline in 2013–2014. The community gained approximately 150 feet of beach width at high tide and increased protection against wave energy and coastal storms. Other communities across Massachusetts (*e.g.*, New Bedford, Rockport, Duxbury, and

[14] *See* Massachusetts-specific data available at: www.ucsusa.org/sites/default/files/attach/2018/06/underwater-data-by-state.xlsx.

Scituate) have worked to design beach nourishment projects and address erosion and failing coastal engineered structures that will be exacerbated by accelerated sea level rise and increased flooding from coastal storms.

20. Coastal engineered structures, such as seawalls and revetments, have been constructed along over a quarter of the Commonwealth's ocean-facing shoreline to protect public and private infrastructure and assets from flooding and erosion. The Commonwealth and its municipalities own approximately 92 miles of such structures along the coastline. As a result of wave forces on the coastal structures and lowered beach elevations, the Commonwealth and local governments routinely invest millions of dollars to repair and reinforce these structures so they can adequately protect coastal communities. For example, in 2018 a seawall reconstruction project was completed in the Town of Marshfield to address coastal flooding and public safety issues. The Commonwealth provided a $1.85 million grant and loan award to the town, which was matched with roughly $620,000 in local funds. The approximately 600-foot section of seawall sustained damages during a coastal storm in January 2015, and the state-funded project increased the height of the seawall by two to three feet to better protect a public road, utilities, and homes. The Town of Marshfield has 32 coastal engineered structures along 12 miles of exposed shoreline, totaling over 20,000 feet (3.9 miles), that have been identified as needing repairs and retrofits to address the

current and future threats of sea level rise and coastal storms. With higher flood levels and greater storm surges, significantly more investments will be required to achieve the current flood-design protections afforded by these engineered structures across the coast.

21. The Commonwealth owns a substantial portion of the state's coastal property and infrastructure. The Commonwealth owns, operates, and maintains approximately 177 coastal state parks, beaches, reservations, and wildlife refuges located within the Massachusetts coastal zone. The Commonwealth also owns, operates, and maintains numerous properties, facilities, and infrastructure in the coastal zone, including roads, parkways, piers, and dams. Rising sea levels along the Massachusetts coast will result in either the permanent or temporary loss of the Commonwealth's coastal property through inundation, storm surge, flooding, and erosion events. These projected losses of coastal property will likely destroy or damage many of the state-owned facilities and infrastructure described above. The Commonwealth likely will be required to expend significant resources to protect, repair, rebuild, or possibly relocate the affected properties, facilities, and infrastructure. According to the Commonwealth's 2018 *State Hazard Mitigation and Climate Adaptation Plan*,[15] the replacement cost of state-owned facilities

[15] Available at: www.mass.gov/service-details/massachusetts-integrated-state-hazard-mitigation-and-climate-adaptation-plan.

exposed to FEMA's 1% annual chance flood event in coastal counties exceeds $500 million.

22. The Massachusetts coastal zone is home to several major ports including the Port of Boston and New Bedford/Fairhaven Harbor. Recent economic studies indicate the income generated from the Massachusetts maritime economy supports 2.6% of the state's direct employment and 1.3% of gross domestic product.[16] In 2018, New Bedford/Fairhaven Harbor alone generated $3.7 billion in direct business revenue from seafood processing and fleet operation businesses.[17] By nature of their purpose, the state's ports and harbors are generally low-lying, coastal-dependent areas of high density-built environment and are susceptible to service interruption and associated revenue loss when flooded or otherwise impacted by coastal events. Additionally, coastal dependent businesses, maritime schools, and public facilities and departments will face disruptions in service in post-storm conditions.

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[16] *See* DAVID R. BORGES ET AL., UMASS DARTMOUTH PUBLIC POLICY CTR., NAVIGATING THE GLOBAL ECONOMY: A COMPREHENSIVE ANALYSIS OF THE MASSACHUSETTS MARITIME ECONOMY 11 (2018), www.mass.gov/files/documents/2018/01/24/Maritime_Economy.pdf.

[17] MARTIN ASSOCIATES & FOTH-CLE ENG'G GROUP, ECONOMIC IMPACT STUDY OF THE NEW BEDFORD/FAIRHAVEN HARBOR 5 (2019), https://www.fairhaven-ma.gov/system/files/uploads/economic_impact_study_nbfh_harbor_2019-martin-report_0.pdf.

23. The Commonwealth is committed to protecting public safety, human health, the environment, and public resources through programs and policies that address sea level rise and other climate-change-related coastal hazards. EEA and CZM provide information, strategies, and tools to help other state agencies and communities plan for and address the challenges of erosion, flooding, storms, sea level rise, and other climate change impacts.

24. Of more than $41 million requested over the past seven years, CZM has awarded approximately $21 million in state-funded grants to local communities and non-profit organizations to support sea level rise adaptation planning and implementation through the Coastal Resilience Grant Program. Local governments and non-profit organizations have matched these state funds with roughly $11.5 million in local funds and in-kind services. Since 2017, EEA has awarded over $44 million of $116 million requested in municipal grants for climate vulnerability planning and implementation statewide through the Municipal Vulnerability Preparedness (MVP) Program. Since the start of the MVP Program, local governments have matched MVP grants with almost $18 million in local funds and staff time. Between both CZM and EEA climate grant programs, the total amount of funding requested for State Fiscal Year (SFY) 2020 was over $19 million, and the request for SFY 2021 increased to over $33 million—demonstrating a significant and growing need for support at the local level.

25. Municipalities, private entities, and other partners have begun to support planning and fund implementation of adaptation measures to address the impacts of sea level rise and other climate change impacts in Massachusetts. Adaptation planning efforts include vulnerability assessments to determine areas and infrastructure susceptible to coastal impacts, prioritization of vulnerable assets and areas, and development of adaptation alternatives to mitigate climate risks in the near and long term. One example is the City of Boston's "Climate Ready Boston" initiative, which is developing district-level adaptation plans to address near-term coastal flooding and establish a framework for the funding and implementation of long-term, broader scale solutions. For the East Boston and Charlestown neighborhoods, the City of Boston identified near-term (2030–2050) and long-term (2050–2070) actions for addressing future flood risks created by sea level rise. The City of Boston's report estimates the costs for these actions range from $202 million to $342 million for East Boston and Charlestown alone.[18] More recently, the city completed a coastal resilience plan for the South Boston neighborhood and a similar plan for the Downtown area in 2020. Another example of planning for the impacts of coastal climate change is the *Great Marsh Coastal*

[18] *See* COASTAL RESILIENCE SOLUTIONS FOR EAST BOSTON AND CHARLESTOWN: FINAL REPORT (2017), https://www.boston.gov/sites/default/files/embed/c/climatereadyeastbostoncharlestown_finalreport_web.pdf.

Adaptation Plan led by the National Wildlife Federation in partnership with the Ipswich River Watershed Association.[19] The plan assesses climate impacts and vulnerability for the Great Marsh region and each of its six communities (Salisbury, Newburyport, Newbury, Rowley, Ipswich, and Essex), examining the risk and exposure of critical infrastructure and natural resources, and identifies areas of special concern. The plan states that in Newburyport, estimated one-time damages to buildings and structures (not contents) from a 1% annual exceedance probability storm (also known as the 100-year storm) under 1.09 feet of sea level rise would be $18.3 million, and under 3.45 feet of sea level rise the damages would increase to $32.4 million.[20]

26. In conclusion, any increase in the rate of sea level rise and the frequency, magnitude, and severity of coastal flooding, erosion, and storms related to greenhouse gas emissions, including methane emissions from new and existing sources in the oil and natural gas sector, will adversely impact the Commonwealth and its residents and will require the Commonwealth to expend additional resources and incur additional costs.

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[19] *See* TAJ SCHOTTLAND ET AL., GREAT MARSH COASTAL ADAPTATION PLAN (2017), www.nwf.org/-/media/Documents/PDFs/NWF-Reports/NWF-Report_Great-Marsh-Coastal-Adaptation-Plan_2017.ashx.

[20] *Id.* at 49, tbl.3.3-3.

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Belmont, Massachusetts on December 1, 2020.

Lisa Berry Engler
Director
Massachusetts Office of Coastal Zone Management

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, et al., *Petitioners*, v. ANDREW R. WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al., *Respondents*.	No. 20-1357 Consolidated with Nos. 20-1359, 20-1363

DECLARATION OF CATHERINE R. MCCABE

I, Catherine R. McCabe, declare as follows:

1. I am the Commissioner of the New Jersey Department of Environmental Protection ("NJDEP"). In this capacity, I am responsible for overseeing the development, implementation, and enforcement of NJDEP's programs to protect public health and New Jersey's natural and historic resources from pollution and its impacts. I am also responsible for fulfilling New Jersey Governor Murphy's environmental goals, including reducing greenhouse gas emissions and

air pollution in the State, responding to the impacts of air pollution including greenhouse gas emissions, and increasing the State's resilience and adaptation to the effects of climate change already experienced in the State.

2. I submit this declaration in support of the State Petitioners' standing to challenge the final actions of the United States Environmental Protection Agency and Administrator Andrew R. Wheeler, in his official capacity (collectively, "EPA"), titled "Oil and Natural Gas Sector: Emissions Standards for New Reconstructed and Modified Sources Review" and set forth in the Federal Register notice published at 85 Fed. Red. 57,018 (Sept. 14, 2020) ("Rule").

PERSONAL BACKGROUND AND QUALIFICATIONS

3. I received a Bachelor of Arts degree in environmental science from Barnard College and studied environmental science at the graduate level in Columbia University's Graduate School of Arts and Sciences. I earned a law degree from Columbia Law School.

4. I have been the NJDEP Commissioner since early 2018, when the Murphy Administration took office. Before joining NJDEP, I served at EPA from 2005 to 2017 in various capacities, including as the

Principal Deputy Assistant Administrator for the Office of Enforcement and Compliance Assurance, as a judge on EPA's Environmental Appeals Board, and as Deputy Regional Administrator of EPA's Region 2 office in New York City. Prior to that, I worked for the United States Department of Justice in the Environment and Natural Resources Division as a trial attorney and manager. Prior to federal service, I served as an Assistant Attorney General in the New York Attorney General's Environmental Protection Bureau.

5. As NJDEP Commissioner, I oversee the units within NJDEP, including the Office of Climate and Flood Resilience, the Office of Air Quality, Energy and Sustainability, the Office of Watershed and Land Use Management, and the Division of Science and Research, which are among the principal programs working to address, mitigate, and respond to the impacts of climate change in New Jersey. The Office of Climate and Flood Resilience directs and informs NJDEP's efforts to make the State more resilient and adapt to climate change impacts. The Office of Climate and Flood Resilience also provides planning and technical support to communities to adapt to the effects of climate change. Watershed and Land Use Management protects and enhances

the State's environment by developing and implementing regulations for land use and managing coastal and other sensitive natural resources. The Air Quality, Energy and Sustainability program controls and reduces air pollutants, including climate change pollutants, maintains emissions inventories, evaluates existing federal and State programs intended to reduce greenhouse gas emissions, and develops and implements programs to help achieve the State's greenhouse gas emission reduction goals. The work of the Division of Science and Research ensures that NJDEP's decisions are based on current and sound science.

CLIMATE CHANGE HARMS THREATENING NEW JERSEY

6. New Jersey has more than 1,800 miles of coastline from the New York State border to the head of tide along the Delaware River. The coastal zone covers 3,218 square miles and comprises 239 communities. Fifteen of the 21 counties in the State touch some part of the coastline.

7. Approximately 53 percent of New Jersey's total population resides in the coastal zone, with thousands more visiting cities, towns, beaches, parks, and other popular places every day. The coastal zone

features thousands of attractive destinations; indeed, New Jersey's tourism industry is a multi-billion-dollar economic engine, and other sectors also rely on waterfront access. The communities in this region are diverse and encompass characteristics of all New Jersey communities, including large urbanized cities, shore towns, and hamlets surrounded by undeveloped land.

8. New Jersey's coastal zone faces significant threats and challenges in the face of a changing climate and rising seas. The New Jersey coast is particularly vulnerable to inundation because of its sandy beaches, flat coastal plain and gradually sloping shoreline, low-lying barrier islands, and gradual subsidence.[1]

9. Since 1911, the sea-level rose 17.6 inches along New Jersey's coast, compared to a global mean sea-level rise of 7.6 inches.[2] Between

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[1] Union of Concerned Scientists, *Confronting Climate Change in the U.S. Northeast* (2007), at 4, available at https://www.state.nj.us/dep/cleanair/hearings/pdf/09_confronting.pdf (last accessed March 31, 2020).

[2] Kopp, R.E., C. Andrews, A. Broccoli, A. Garner, D. Kreeger, R. Leichenko, N. Lin, C. Little, J.A. Miller, J.K. Miller, K.G. Miller, R. Moss, P. Orton, A. Parris, D. Robinson, W. Sweet, J. Walker, C.P. Weaver, K.White, M. Campo, M. Kaplan, J. Herb, and L. Auermuller. *New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel*, at 2. Rutgers, The State

1979 and 2019, sea-level along the coast rose 8.2 inches, compared to global mean sea-level rise of 4.3 inches.[3]

10. Areas within the coastal zone are already vulnerable to inundation from tides, coastal storms, and rain events. Future coastal storm impacts will be exacerbated because of greater overall storm flood levels due to future sea-level rise.[4] The State's 239 coastal communities are particularly vulnerable to the effects of sea-level rise, storm surges, flooding, erosion, polluted runoff, and saltwater intrusion.[5] The effects of sea-level rise are magnified during storm events, which increase the severity of coastal flooding and erosion. For example, the storm surge of Superstorm Sandy reached 9-10 feet above normal in some coastal areas. The estimated damage the State experienced from severe winds and coastal flooding reached $29.4 billion in repair, response, and

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University of New Jersey. Prepared for the New Jersey Department of Environmental Protection. Trenton, New Jersey. Available at https://www.nj.gov/dep/climatechange/pdf/nj-rising-seas-changing-coastal-storms-stap-report.pdf (last accessed April 1, 2020).

[3] *Id.*

[4] *Id.* at 24.

[5] Stacey Small-Lorenz, Bill Shadel, and Patty Glick, *Building Ecological Solutions to Coastal Community Hazards: A Guide for New Jersey Coastal Communities*, at12, available at https://www.nj.gov/dep/oclup/docs/bescch-final.pdf (last accessed March 31, 2020).

restoration costs.[6] Sandy cost the State an estimated $11.7 billion in lost gross domestic product, including $950 million in tourism losses.[7]

11. Sea-level rise of only 12 inches could cause shorelines to recede by as much as 120 feet.[8] If the sea rises four feet, barrier islands on the Atlantic Coast from Bay Head to Cape May could be broken up by new inlets or lost to erosion.[9] A four-foot sea-level rise would inundate up to 3 percent of the State's land area.[10]

12. Additionally, high-tide flooding, also called sunny day flooding because these floods occur without an associated storm, is likely to increase in certain coastal areas.[11] According to one report, sea-level rise since 1980 has increased the number of homes at risk of frequent flooding by approximately 110%.[12] Twenty-three thousand

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[6] *Id.* at 6.

[7] *Id.* at 5.

[8] *Id.* at 16.

[9] EPA, *What Climate Change Means for New Jersey*, EPA 430-F-16-032 (August 2016) at 1, available at https://www.epa.gov/sites/production/files/2016-09/documents/climate-changenj.pdf (last accessed March 31, 2020).

[10] Small-Lorenz, *supra* note 5, at 12.

[11] Kopp, *supra* note 2, at 25-26.

[12] Rhodium Group, *New Jersey's Rising Coastal Risk* (October 2019), at 5, available at https://rhg.com/wp-content/uploads/2019/10/Rhodium_NJCoastalRisk_Oct2019final.pdf (last accessed April 1, 2020).

more buildings, including homes, worth $13 billion total are at risk of frequent flooding today than if sea levels had remained at 1980s levels. New Jersey has been ranked as one of the most threatened states when considering the value of coastal real estate at risk from sea-level rise and chronic flooding in the next decades.[13] One estimate places the expected average annual loss to the State from current hurricane-related wind and flood damage at around $670 million to $1.3 billion higher compared to 1980s activity and sea levels.[14]

13. New Jersey has also seen an increase in annual precipitation. Between 2005 and 2015, precipitation was about 8% above average and the number of extreme precipitation events, i.e., days with more than two inches, also exceeded the average. New Jersey experienced the highest number of extreme precipitation events between 2010 and 2014 compared to any other 5-year period.[15]

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[13] Union of Concerned Scientists, *Underwater: Rising Seas, Chronic Floods, and the Implications for US Coastal Real Estate* (June 2018), at 5-7, 10-11, available at https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf (last accessed March 31, 2020).

[14] Rhodium Group, *supra* note 12, at 10.

[15] NOAA National Centers for Environmental Information, *State Climate Summaries: New Jersey*, available at https://statesummaries.ncics.org/nj (last accessed March 31, 2020).

14. Although precipitation is likely to increase during winter and spring, drought is likely during summer and fall due to rising temperatures, increased evaporation, and drier soil.[16] Heat and drought will decrease surface water supplies and groundwater recharge and lower reservoir water levels. Already at risk of flooding and failure due to aging infrastructure, water supply and wastewater treatment systems will also be increasingly threatened. During Superstorm Sandy, for example, the Passaic Valley Sewerage Commission's main treatment facility in Newark was inundated with over 200 million gallons of water due to tidal surge and dumped about 240 million gallons of raw or partially treated sewage a day into Newark Bay and Upper New York Bay. Increased warming and runoff from heavy rains can also degrade water quality and perpetuate harmful algal blooms. [17]

15. Sea-level rise, storm surge, and extreme weather events also threaten critical infrastructure in the State. During Superstorm Sandy,

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[16] EPA, *supra* note 9, at 1.

[17] NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities for the Water Resources Sector in New Jersey* (March 2014), at 5, available at https://njadapt.rutgers.edu/docman-lister/resource-pdfs/98-njcaa-water/file (last accessed March 31, 2020).

the four electric distribution companies in the State reported 2.9 million outages, approximately 73% of the State's electric customers.[18] During Hurricane Irene in 2011, approximately 1.9 million of 3.9 million electricity customers were affected by outages due to flood water inundation.[19]

16. The State's coastal ecosystems are particularly vulnerable to climate change. Tidal wetlands buffer coastal communities from flooding and provide ecological value and carbon sequestration. Coastal habitats and the species that rely on tidal wetlands will become increasingly threatened by sea-level rise, increased storm intensity, and hotter temperatures. The State's coastal wetlands are an important stopover point for about 1.5 million migratory birds and are home to the world's largest population of horseshoe crabs.[20] Delaware Bay is a

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[18] NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities for Telecommunications and Energy Utilities in New Jersey* (March 2014), at 6, available at https://njadapt.rutgers.edu/docman-lister/resource-pdfs/97-njcaa-utilities/file (last accessed March 31, 2020).

[19] *Id.*

[20] NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities Affecting Natural Resources in New Jersey* (March 2014), at 1, available at https://njadapt.rutgers.edu/docman-lister/working-briefs/106-njcaa-natural-resources/file (last accessed April 1, 2020).

major stopover area for at least six species of migratory shorebirds that feed on its beaches and tidal flats, including most of the Western Hemisphere's red knot population.[21]

17. Droughts, excess winter precipitation, and spread of pests and diseases as temperatures rise will also reduce agriculture yields. New Jersey has a diverse, billion-dollar agricultural industry, including fruits, vegetables, field crops, equine, poultry, eggs, dairy, specialty crops, and fish and seafood. The State's agricultural sector is threatened by pests and weeds which will continue to expand northward with rising winter temperatures. Crops like blueberries and cranberries, which require long periods of winter chill, will also be directly threatened. Milk production could decline 5 to 20 percent in certain months, since dairy cows produce less milk when temperatures exceed 75°.[22]

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[21] EPA, *supra* note 9, at 1.

[22] NJ Climate Adaptation Alliance, *A Summary of Climate Change Impacts and Preparedness Opportunities for the Agricultural Sector in New Jersey* (March 2014), at 1, 5, 6, available at https://njadapt.rutgers.edu/docman-lister/resource-pdfs/96-njcaa-agriculture/file (last accessed April 1, 2020).

18. Ocean acidification caused by high carbon dioxide concentrations may harm commercial fishing in the State by impairing the ability of young scallops and surf clams to build shells. These shellfish account for about two-thirds of the State's commercial fishing revenue. Crabs and hard-shell clams, which account for about 15 percent of fishing revenues, could also be harmed by higher acidity in estuaries and the loss of wetlands and eelgrass. Warming temperatures will also impact marine fisheries as fish species seek waters within their normal temperature ranges.[23]

19. Hot days are themselves dangerous, particularly for vulnerable populations such as children, the elderly, the sick, and lower income families. Higher temperature days can cause heat stroke, dehydration, and impact cardiovascular and nervous systems. Warmer temperatures can also increase the formation of ground-level ozone, increasing respiratory problems, and the length and severity of the pollen season. The risk of diseases caused by insects, such as ticks that

[23] EPA, *supra* note 9, at 1.

transmit Lyme disease and the Asian tiger mosquito, which can carry the West Nile virus, will also increase.[24]

20. Reducing greenhouse gas emissions is critical to mitigating climate change impacts on the State. Continued emissions of greenhouse gases, including from oil and gas production, will result in increased impacts. Any increase in impacts and their severity related to greenhouse gas emissions will impact New Jersey, its residents, and its natural resources and will require New Jersey to incur additional costs and harms.

THE RULE WILL INCREASE GREENHOUSE GAS EMISSIONS THAT CAUSE CLIMATE CHANGE HARMS

21. Based on EPA's own analysis, the Rule will increase methane emissions by 448,000 tons from 2021 to 2030, the equivalent of 10.1 million tons of CO_2 emissions.[25]

22. The New Jersey Global Warming Response Act, N.J.S.A. 26:2C-37 to -44, establishes a 2050 greenhouse gas emissions limit, which equals 80% less than the 2006 level of Statewide greenhouse gas

[24] *Id.*
[25] *See* 85 Fed. Reg. at 57,065.

emissions. N.J.S.A. 26:2C-39. The statute requires the State to meet the 2050 limit by January 1, 2050. N.J.S.A. 26:2C-40. Because the Rule will impair New Jersey's efforts to achieve its greenhouse gas emission reduction requirements and goals, New Jersey will need to develop and implement additional greenhouse gas emission reduction efforts.

I declare under penalty of perjury that the forgoing is true and correct.

Executed in Trenton, New Jersey on November 20, 2020

ORAL ARGUMENT NOT YET SCHEDULED

No. 20-1357

Consolidated with No. 20-1359

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

STATE OF CALIFORNIA, et al.,
Petitioners,

v.

ANDREW WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,
Respondents,

DECLARATION OF ELIZABETH BISBEY-KUEHN

I, Elizabeth Bisbey-Kuehn, state and declare as follows:

1. I submit this declaration in support of the State Petitioner's standing to challenge the final action of the United States Environmental Protection Agency entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review," published at 85 Fed. Reg. 57,018 (September 14, 2020) (the "Final Rule").

2. I have been the Bureau Chief with the New Mexico Environment Department Air Quality Bureau since 2018.

3. My position provides leadership and supervision of the administrative, financial, compliance, permitting, operations, and planning sections of the Air Quality Bureau. My position directs the overall management of resources including staff who enforce the state and

federal air quality standards; provide air quality related planning and policy, operational, permitting, and compliance and enforcement services to New Mexico employers; financial oversight of the bureau's federal grant and state matching funds, and support services for the bureau.

4. My previous experience with the Air Quality Bureau includes over 13 years of experience as a staff and manager of two sections within the Permitting program that included direct experience implementing state and federal oil and gas air regulations, developing state general construction permits for the oil and gas sector, and advising the development of air quality regulations.

5. I am familiar with the Final Rule, which revises the new source performance standards (NSPS) at 40 Code of Federal Regulations (CFR) part 60, subparts OOOO and OOOOa.

6. The Final Rule removes the transmission and storage segment from NSPS OOOO and OOOOa, rescinds VOC and methane emissions standards for that segment, and rescinds methane emissions standards for the production and processing segments.

7. According to EPA's Regulatory Impact Analysis (RIA), the Final Rule will result in the emission of 11,000 extra tons of volatile organic compounds (VOC) and 330 tons of hazardous air pollutants. It will also result in 400,000 tons of extra methane emissions, equivalent to 9 million tons of carbon dioxide. The RIA does not contain any state-specific emission projections.

8. New Mexico is home to a large and growing oil and gas industry. In 2018 it accounted for 4% of U.S. natural gas production. Between 2013 and 2018, annual crude oil

production in New Mexico more than doubled, raising the state from the 7th to the 3rd largest oil producer in the nation, accounting for 6% of national production.[1]

9. The Permian basin, which straddles the New Mexico-Texas state line, is the most prolific crude oil production region in the U.S. Despite the economic downturn caused by the Covid-19 pandemic, the U.S. Energy Information Agency forecasts that Permian crude oil production will increase by 0.8 million barrels/day from 2019 levels, to a 2020 average for 5.2 million b/d.[2] According to state data compiled by the Oil Conservation Division, New Mexico contains over 59,000 active oil and gas wells. Given the size of New Mexico's oil and gas production industry, and its prospect for continued growth, it is inevitable that the deregulatory actions of the Final Rule will increase emissions in New Mexico.

10. The Final Rule therefore directly undermines New Mexico's public health and environmental investment to reduce VOC emissions that contribute to unhealthy ozone levels. Several ozone monitors in New Mexico show that air quality is approaching the level of the 2015 ozone National Ambient Air Quality Standard (NAAQS). The Sunland Park area in southern New Mexico is currently designated as nonattainment of the 2015 ozone NAAQS, with an additional seven areas in the State monitoring ozone concentrations at or above 95% of the standard. Monitored ozone concentrations increased throughout New Mexico over the past five years (2014-2018), including in both of New Mexico's oil and natural gas producing regions, the San Juan and Permian Basins.

11. According to the EPA's latest National Emissions Inventory (EPA, 2014 NEI version II), over 80% of the local emissions in these areas are from oil and natural gas sources.

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[1] Energy Information Agency, https://www.eia.gov/state/?sid=NM#tabs-3

[2] https://www.eia.gov/todayinenergy/detail.php?id=42615#:~:text=EIA%20forecasts%20that%20Permian%20crude,of%205.6%20million%20b%2Fd.

The Carlsbad ozone air monitor (AQS ID # 35-015-1005) in the Permian Basin, which as noted is an area of rapid growth in oil production, demonstrates the air pollution problems facing New Mexico. The design value for ozone at this monitor has elevated from 68 ppb in 2016 to 74 ppb in 2018. Preliminary 2019 and 2020 data shows some of the highest monitored ozone concentrations recorded in the past decade, indicating this upward trend will continue throughout the state.

12. To improve air quality in these areas, NMED developed the Ozone Attainment Initiative (OAI) and joined the EPA's Ozone Advance program in 2018 and 2019. As part of the OAI, NMED is currently researching and reviewing possible options for mandatory control measures for all source sectors through photochemical modeling; however, future year emissions inventories and modeling assume that both the 2012 and 2016 NSPS rules will be in place, casting doubt on the ability of resultant control measures selected for adoption through the OAI to achieve emissions reductions.

13. NSPS OOOO and OOOOa are fundamental to reducing emissions from the oil and natural gas sector, with any roll back or relaxation of emission standards making it more difficult for New Mexico to keep these counties in attainment. Removing NSPS requirements that limit ozone precursors while ozone levels are dangerously close to exceeding the NAAQS increases the risk of a nonattainment designation and nonattainment permitting requirements for New Mexico's oil and natural gas industry.

14. Previous modeling studies (Adelman et.al, 2016) and preliminary back-trajectory analyses indicate that interstate transport from the Permian Basin in Texas contributes to high ozone concentrations in southern and southeastern New Mexico. While New Mexico faces nonattainment designations and increased permitting requirements, Texas does not operate an

ozone monitor on their side of the Permian Basin. Thus, the EPA lacks the required information to make a regulatory determination regarding attainment of the ozone standard, thereby creating an uneven playing field across state lines. This increases the need for strong, federally-enforceable NSPS emissions standards for the oil and natural gas sector to ensure fair and equitable requirements in a basin that spans state lines.

15. Exceeding ozone standards results in a nonattainment status designation which leads to expensive requirements for communities and the State of New Mexico. A nonattainment designation under section 107(d) of the CAA carries potentially serious sanctions and damaging repercussions for an area, including the potential loss of federal highway funding and economic development opportunities. States that contain nonattainment areas are required to develop a State Implementation Plan (SIP) designed to bring an area back into attainment with the NAAQS through the adoption of stricter emission controls (e.g., Reasonably Available Control Technology) and permitting requirements (emissions offsets) for emission sources that cause or contribute to poor air quality. Once an area in New Mexico is designated nonattainment for ozone, not only will this trigger minor New Source Review (NSR) construction permits for sources at the minor source permit threshold of 10 pounds per hour (pph) or 25 tons per year (tpy) of VOC emissions, major source nonattainment permits will be required when VOC emissions from a new source or from a major modification at an existing source are projected to occur. The applicability thresholds of nonattainment permitting will depend on the nonattainment designation but are generally low thresholds and will affect thousands of sources. These permitting requirements will have a significant and negative impact on NMED and permittees.

16. Permittees looking to construct or modify a facility in an ozone nonattainment area are subject to the following: (1) Lowest Achievable Emission Rate (LAER) control

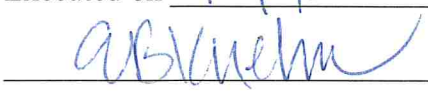
techniques, which unlike PSD, do not consider the cost of controls; (2) requiring applicants to obtain permanent emission reductions through the purchase of emission offsets, which may or may not be available, from permittees of existing sources; (3) requiring complicated ambient air impact analyses to demonstrate a net air quality benefit from the proposed project; (4) requiring additional public outreach and participation from Federal Land Managers and the EPA; and (5) requiring expensive air quality permits that take significant resources and time for the permittee and NMED to prepare and process. Such changes require pre-approval through an air quality permit. Without similar requirements across state lines, New Mexico is at a competitive disadvantage.

17. New Mexico relies upon the NSPS OOOO and OOOOa regulations as they are incorporated into state law to control VOC emissions from small oil and natural gas sources with the goal of mitigating ozone ambient impacts within New Mexico and neighboring states. Without these regulations in place, New Mexico faces adverse public health impacts and a nonattainment designation, including minor and major nonattainment air quality permitting.

18. The EPA failed to account for the incremental costs to states in implementing a nonattainment NSR program as a direct result of the Final Rule preempting state law. Further, the Final Rule also fails to account for the increased cost of health care to states and lost economic revenues to states from preempting state authority.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 12/1/20 (date)


(Signature)

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

STATE OF CALIFORNIA, et al., *Petitioners*, v. ANDREW R. WHEELER, et al., *Respondents*.	No. 20-1357

DECLARATION OF JARED SNYDER

I, Jared Snyder, declare as follows:

1. I am the Deputy Commissioner for Climate Change, Air and Energy at the New York State Department of Environmental Conservation (DEC). In this capacity, I am responsible for overseeing the development and implementation of clean air programs and climate change strategies in New York State. This includes regulations required for the implementation of the Clean Air Act (Act), other State actions to reduce air pollution, and State efforts to reduce greenhouse gas (GHG) emissions, including emissions of methane, and combat climate change.

2. I submit this declaration in support of the State Petitioners' standing to challenge the final action of the United States Environmental

Protection Agency (EPA): (1) rescinding the 2016 new source performance standards regulating emissions of methane, volatile organic compounds (VOCs), and hazardous air pollutants from the transmission and storage segment of the oil and natural gas industry; and (2) rescinding the 2016 new source performance standards regulating methane emissions from the remaining sources in the oil and natural gas source category. EPA's final rule is entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review," published at 85 Fed. Reg. 57,018 (Sept. 14, 2020) (Rule).

PERSONAL BACKGROUND AND QUALIFICATIONS

3. I received a Bachelor of Arts degree in economics from Cornell University in 1981. I obtained a Juris Doctor from Harvard Law School in 1984.

4. I have been in my current role since joining DEC in 2007, although the name of the position has changed. Prior to joining DEC, I managed air and climate change litigation for the New York State Office of the Attorney General. Prior to that, I worked for the United States Department of Justice handling environmental enforcement matters.

5. My responsibilities as Deputy Commissioner include oversight of DEC's Office of Climate Change and DEC's Division of Air Resources. Among other things, both units within DEC assess the sources of GHG emissions within the State, evaluate existing federal and State programs aimed at reducing such emissions, consider potential regulations and other strategies to further reduce GHG emissions, and develop and implement such programs to help achieve the State's overall GHG emission reduction objectives and requirements.

STATEWIDE GHG EMISSION REDUCTION OBJECTIVES AND PROGRAMS

6. The State's overall GHG emission reduction objectives include requirements to reduce Statewide GHG limits by 40 percent from 1990 levels by 2030, and by 85 percent from 1990 levels by 2050, as established by the recently enacted Climate Leadership and Community Protection Act, Chapter 106 of the Laws of 2019 (CLCPA). Environmental Conservation Law (ECL) § 75-0107.

7. The Statewide GHG emission reduction requirements established by State statute in the CLCPA are applicable to all sources of GHG emissions, including but not limited to oil and natural gas facilities subject to the Rule, which emit the potent GHG methane.

Importantly, as defined by the CLCPA, Statewide GHG emissions include all emissions of GHGs from sources within the State, as well as GHGs produced outside of the State associated with either the generation of electricity imported into the State or the extraction and transmission of fossil fuels imported into the State. ECL § 75-0101(13).

8. Under the CLCPA, DEC is required to take multiple regulatory actions. This includes the requirement that DEC promulgate regulations to ensure compliance with the Statewide GHG emission limits. ECL § 75-0109. In promulgating such regulations, the CLCPA requires DEC to incorporate measures to minimize leakage, which is defined as a reduction of GHG emissions within the State that is offset by an increase in emissions outside of the State. *Id.*; ECL § 75-0101(12).

9. On top of these Statewide GHG emission reduction and rulemaking requirements, the CLCPA also requires that 70 percent of the State's electricity come from renewable energy sources by 2030, and that 100 percent of the State's electricity come from carbon-free energy generation sources by 2040. Public Service Law § 66-p.

10. Consistent with the Statewide GHG emission reduction and clean energy generation requirements set forth in the CLCPA, the State

has established numerous regulatory programs to reduce GHG emissions. For instance, the State participates in the Regional Greenhouse Gas Initiative (RGGI) program, which is implemented through and codified in DEC regulations. N.Y. Comp. Codes R. & Regs. (NYCRR) tit. 6, Part 242. RGGI sets an overall cap on collective carbon dioxide (CO_2) emissions from subject power plants. In addition to its participation in RGGI, DEC has also promulgated regulations that establish CO_2 emission rate limits on individual power plants. 6 NYCRR Part 251 (Part 251).

11. DEC is also developing State-specific methane emission reduction requirements on sources in the oil and natural gas sector in the State, particularly in light of the requirements established by the CLCPA.

ROLE OF FEDERAL GHG EMISSION REDUCTION PROGRAMS AND REGULATION UNDER SECTION 111 OF THE ACT

12. Regardless of the State's own actions to reduce GHG emissions, including methane emissions, DEC and the State have long sought federal regulation of GHG emissions. This includes longstanding support for EPA's authority to regulate GHG emissions pursuant to its

authority under Section 111 of the Act, which DEC and the State have documented on numerous occasions such as through the submittal of comments on the record for various EPA regulatory proposals.

13. Most notably, DEC and the State supported EPA's adoption and implementation of the Clean Power Plan, which regulated for the first time under the Act CO_2 emissions from power plants. Part of the reason for DEC's support of the Clean Power Plan in particular, and EPA's authority to regulate GHG emissions under Section 111 of the Act in general, is the fact that it would require GHG emission reductions nationally. This includes ensuring some level of GHG emission reductions from power plants in states other than New York and other states that participate in RGGI or similar programs.

14. Given the magnitude of the climate change challenge, GHG emission reductions are necessary in all states across the country, and not just in New York and other states that impose state-specific GHG emission reduction requirements on significant sources of such emissions, such as power plants and oil and natural gas facilities. Absent the implementation of meaningful emission reduction requirements pursuant to EPA's authority to regulate GHG emissions under Section

111 of the Act, there would be increases in GHG emissions nationally, or at least a lesser amount of national GHG emission reductions.

15. Moreover, federal requirements to reduce GHG emissions, including by EPA pursuant to its authority under Section 111 of the Act, help to both ensure a level playing field and minimize the possibility of emissions leakage. Without nationwide requirements to meaningfully reduce GHG emissions, businesses exposed to higher costs resulting from in-state regulation may seek to move to states that do not impose any GHG emission reduction requirements. That could lead to increased GHG emissions leakage, which is an increase in GHG emissions outside of the State that offsets GHG emission reductions within the State.

16. This increased likelihood of GHG emissions leakage is harmful to the State and directly counter to the State statutory requirements set forth in the CLCPA, including for DEC to incorporate measures to minimize leakage in its regulatory actions to ensure compliance with the Statewide GHG emission limits. ECL §§ 75-0101(13), 75-0107.

UNREGULATED METHANE EMISSIONS NATIONWIDE WILL HARM NEW YORK STATE

17. The Rule increases the likelihood that New York State will continue to experience worsening harms associated with global climate change. Under EPA's own analysis, the Rule will directly cause increases in nationwide methane emissions, as well as emissions of VOCs and hazardous air pollutants, by removing the transmission and storage segments of the oil and natural gas sector from the regulated source category. The Rule will also result in the continued emission of millions of tons of avoidable methane emissions because EPA takes the position that the Rule removes its obligation to promulgate guidelines under Section 111(d) of the Act for controlling such emissions from existing oil and natural gas sources, which account for the majority of methane emissions in the oil and natural gas sector. The impact of additional methane emissions on the climate will continue to increase risks to the public and to the New York State economy and environment.

18. Even if, as discussed above, New York State takes its own regulatory actions to achieve additional State-specific methane emission reductions, New York State will still be harmed by the avoidable

emissions of methane from across the United States that will arise as a result of the Rule.

19. According to the United States government[1] and the Intergovernmental Panel on Climate Change,[2] anthropogenic GHG emissions are the primary driver of global climate change. Additionally, the magnitude of future climate change impacts will be primarily determined by the level of continued emissions of well-mixed GHGs, including methane emitted from the oil and natural gas sources implicated by the Rule.

20. New York State is already experiencing the effects of global climate change, and the harms that are already being experienced illustrate the types of harm that New York State will continue to experience as a result of increased nationwide methane emissions attributable to the Rule and EPA's failure to properly utilize its authority

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[1] U.S. Global Change Research Program, *Climate Science Special Report: Fourth National Climate Assessment (NCA4), Vol. I* (2017), *available at* https://science2017.globalchange.gov./chapter/executive-summary/.

[2] Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2015), *available at* https://www.ipcc.ch/report/ar5/wg1/.

to regulate oil and gas methane emissions under Section 111(d) of the Act. The New York State ClimAID assessment[3] provides an overview of the numerous direct impacts that have already been observed in New York State and that are expected through 2100.

21. First, warming ocean water has the potential to strengthen the most powerful storms and contribute to sea level rise. Together, these phenomena are leading to more frequent and extensive coastal flooding. New York State's tidal shoreline, including barrier islands, coastal wetlands, and bays, is expected to be particularly adversely affected by increased sea levels. Sea level in the coastal waters of New York State and up the Hudson River has been steadily rising over the 20th century. Tide-gauge observations in New York indicate that rates of relative sea level rise were significantly greater than the global mean, ranging from 0.9 to 1.5 inches per decade. New York State has approximately 1,850

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[3] Cynthia Rosenzweig et al., *Responding to Climate Change in New York State: The ClimAID Integrated Assessment for Effective Climate Change Adaptation in New York State; Final Report* (2011), *available at* https://www.dos.ny.gov/opd/sser/pdf/ClimAID_Full%20Report.pdf; Radley Horton et al., *Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information Supplement to NYSERDA Report* 11–18 *(Responding to Climate Change in New York State)* (2014), *available at* http://www.nyserda.ny.gov/climaid.

miles of tidal coastline, and the State owns dozens of state parks within the New York State coastal boundary. Tidal shoreline property in the State held by private landowners is similarly at risk.

22. As an example of the extent of harm caused by warming ocean waters and sea level rise, the twelve inches of sea level rise the New York City area has experienced in the past century exacerbated the flooding caused by Hurricane Sandy by about twenty-five square miles, damaging the homes of an additional eighty thousand people in the New York City area alone.[4] That flooding devastated areas of New York, including the Brooklyn-Queens Waterfront, the East and South Shores of Staten Island, South Queens, Southern Manhattan, and Southern Brooklyn, which in some areas lost power and other critical services for extended periods. Overall, Hurricane Sandy caused fifty-three deaths and the estimated costs of damage and loss in New York State exceeded thirty billion dollars.[5] In the aftermath of Hurricane Sandy, the Federal

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[4] New York Academy of Sciences, *Building the Knowledge Base for Climate Resiliency: New York City Panel on Climate Change 2015 Report* (2015), *available at* https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.12593.

[5] FEMA expenditures in New York State totaled 16.9 billion dollars. *See* FEMA, *FEMA Aid Reaches $16.9 Billion for New York's Hurricane*

Emergency Management Agency (FEMA) made 4,127 Public Assistance grants totaling nearly ten billion dollars to State and local governments for facilities damaged by the storm, including parks, beaches, marinas, water treatment plants, hospitals, schools, public housing, and other public buildings. While FEMA grants to New York State covered 90 percent of the eligible costs of such projects, the State was left responsible for covering the remaining 10 percent.[6]

23. New York State has established official state sea level rise projections (6 NYCRR Part 490, Projected Sea-level Rise) based on peer-

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Sandy Recovery (Oct. 21, 2015), *available at* https://www.fema.gov/news-release/2015/10/21/fema-aid-reaches-169-billion-new-yorks-hurricane-sandy-recovery. U.S. Department of Housing and Urban Development ("HUD") expenditures totaled 7 billion dollars. *See* HUD Archives News Release No. 13-153 (Oct. 28, 2013), *available at* https://archives.hud.gov/news/2013/pr13-153.cfm. Total insurance payments in New York State totaled 8.3 billion dollars, including National Flood Insurance Program payments and private automobile, homeowner, and commercial property insurance. *See* HUD, *Hurricane Sandy Rebuilding Strategy* (2013), *available at* https://www.hud.gov/sites/documents/hsrebuildingstrategy.pdf.

[6] *See* FEMA, *FEMA Aid Reaches $16.9 Billion for New York's Hurricane Sandy Recovery* (Oct. 21, 2015), *available at* https://www.fema.gov/news-release/2015/10/21/fema-aid-reaches-169-billion-new-yorks-hurricane-sandy-recovery.

reviewed scientific research and which include high projections of seventy-five inches of sea level rise by the year 2100.[7]

24. Climate change is also expected to exacerbate additional harms from both coastal and inland flooding. Increasing flood risk is another impact of climate change that is requiring an increased commitment of State emergency response resources to protect lives and property. Rising air temperatures associated with climate change intensify the water cycle by driving increased evaporation and precipitation. The resulting altered patterns of precipitation include more rain falling in heavy events, often with longer dry periods in between. The United States government has indicated that these risks are particularly likely in the Northeastern United States.[8] Heavy downpours have increased in New York State over the past 50 years. By the end of the 21st century, coastal flood levels currently associated with a 100-year flood could occur approximately four times as often under

[7] Horton et al. at 10.

[8] U.S. Global Change Research Program, *2014 National Climate Assessment* (2014), *available at https://nca2014.globalchange.gov/report/our-changing-climate/heavy-downpours-increasing*.

conservative sea level rise scenarios.[9] This trend will increase localized flash flooding in urban areas and hilly regions.

25. For example, swift-water or air-rescue teams rescued over one thousand state residents during the flooding caused by Hurricane Irene and Tropical Storm Lee. New York State committed extensive emergency resources in response to these storms, including deploying 1,700 State Police and 3,200 National Guard members, opening 200 shelters to house 18,000 citizens, and staffing 74 Disaster Recovery Centers to assist citizens during the recovery period. The storms closed 400 road segments and bridges and required repairs at 945 locations on the State highway system.[10]

26. New York State is likely to see widespread shifts in species composition in the State's forests and other natural landscapes within the next several decades due to climate change. Losses of spruce-fir forests, alpine tundra and boreal plant communities are expected. Climate change favors the expansion of some invasive species into New

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[9] Rosenzweig et al. at 35.

[10] *See generally* New York State, *New York State Responds: Hurricane Irene and Tropical Storm Lee: One Year Later* (Aug. 2012), *available at* https://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/Irene-Lee-One-Year-Report.pdf.

York State, such as the aggressive weed kudzu and the insect pest hemlock woolly adelgid. Increased CO_2 in the atmosphere due to climate change is likely to preferentially increase the growth rate of fast-growing species, which are often weeds and other invasives. Lakes, streams, inland wetlands and associated aquatic species will be highly vulnerable to changes in the timing, supply, and intensity of rainfall and snowmelt, groundwater recharge, and duration of ice cover. Increasing water temperatures will negatively affect brook trout and other native cold-water fish.[11]

27. Climate change is expected to hurt agriculture in New York State. Increased summer heat stress will negatively affect cool-season crops, requiring farmers to take adaptive measures such as shifting to more heat-tolerant crop varieties and eventually resulting in a different crop mix for New York State's farmers. The loss of long cold winters could limit the productivity of apples and potatoes because these crops require longer cold dormant periods. New York State's maple syrup industry also requires specific temperature conditions in order for the sugar maples to produce sap. Sugar maple trees will likely be displaced to the north as

[11] Rosenzweig et al. at 165–217.

the climate changes and temperatures increase. Greater weed and pest pressure associated with longer growing seasons and warmer winters will be an increasingly important challenge. Water management will be a more serious challenge for New York State farmers in the future due to the increased frequency of heavy rainfall events and more frequent and intense summer water deficits by mid- to late-century.[12]

28. Dairy farmers will also be impacted by warmer air temperatures associated with climate change. Milk production is maximized under cool conditions ranging from 41°F to 68°F.[13] New York State is the third-largest producer of milk in the United States, behind California and Wisconsin.[14] In 2016, New York State reported approximately $2.5 billion dollars of cash receipts from its dairy industry.[15] A loss of milk production efficiency from heat effects could

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[12] *Id.*

[13] Alvaro Garcia, *Dealing with Heat Stress in Dairy Cows* (2002), *available at* https://www.sdstate.edu/sites/default/files/abe/wri/water-quality/upload/EXEX4024.pdf.

[14] U.S. Department of Agriculture, National Agricultural Statistics Service, *Milk Production, Disposition, and Income: 2017 Summary* (Apr. 2018), *available at* http://usda.mannlib.cornell.edu/usda/current/MilkProdDi/MilkProdDi-04-26-2018.pdf.

[15] *Id.*

result in the loss of hundreds of millions of dollars annually for New York State's dairy industry.

29. New York State's forests and the economy that depends on them also have the potential to be harmed by the increasing emissions of GHGs. Climate change will affect the forest mix in New York State, which could change from the current mixed forest to a temperate deciduous forest. The habitat for existing tree species will decrease as suitable climate conditions shift northward. New York State's Adirondack Park is the largest forested area east of the Mississippi and consists of six million acres including 2.6 million acres of State-owned forest preserve. The Adirondack Park, one the most significant hardwood ecosystems in the world, is likely to be threatened by these changes. These changes will also further impact plant and wildlife species in the Adirondack Park and throughout the State, as the forest composition changes.[16]

30. Demand for health services and the need for public health surveillance and monitoring will increase as the climate continues to change. Heat-related illness and death are projected to increase, while

[16] Rosenzweig et al. at 165-217.

cold-related deaths are projected to decrease. Increases in heat-related death, however, are projected to outweigh reductions in cold-related death. Increased coastal and riverine flooding resulting from intense precipitation could lead to increased stress and mental health impacts, impaired ability to deliver public health and medical services, increased respiratory diseases such as asthma, and increased outbreaks of gastrointestinal diseases.[17] Vector-borne diseases, such as those spread by mosquitoes and ticks (e.g., West Nile virus and Lyme disease), may expand or their distribution patterns may change, either of which may adversely affect additional populations. Water and food-borne diseases are likely to increase without mitigation and adaptation intervention.[18]

31. Finally, climate change is also already exacerbating the direct health impacts of air pollution. New York State has a significant ozone problem largely caused by emissions from sources in upwind states, and climate change is likely to worsen the harms New York State is already suffering from ozone. As the United States government points out, the hottest days in the Northeastern states are associated with high

[17] *Id.* at 421.
[18] *Id.* at 403.

concentrations of ground-level ozone and other pollutants.[19] Exposure to ozone has also been linked to premature mortality and a variety of health problems,[20] including chest pain, coughing, throat irritation, airway inflammation, reduced lung function, and damaged lung tissue. Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical costs.

32. Each of these and other harms to New York State from climate change will be exacerbated by the Rule, including by EPA's position that the Rule removes its obligation to promulgate guidelines for regulating methane emissions from existing sources in the oil and natural gas sector under Section 111(d) of the Act. These harms result from the increases in nationwide methane emissions that will result from the Rule, the increased need for and cost of State actions to further reduce GHG emissions and achieve its statutory requirements under the CLCPA, and the likelihood of increased GHG emissions leakage.

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[19] U.S. Global Change Research Program, *2014 National Climate Assessment* (2014), *available at* https://nca2014.globalchange.gov/report/regions/northeast#narrative-page-16959.

[20] *See* EPA, Climate Adaptation: Ground-Level Ozone and Health, https://www.epa.gov/arc-x/climate-adaptation-ground-level-ozone-and-health (last accessed Nov. 7, 2018).

I declare under penalty of perjury that the foregoing is true and correct.

Executed in Albany, New York on November 20, 2020.

Jared Snyder
Deputy Commissioner for Climate Change, Air and Energy
New York State Department of Environmental Conservation

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, *et al.*, *Petitioners*, v. ANDREW WHEELER, ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*, *Respondents.*	No. 20-1357 (and consolidated cases)

DECLARATION OF ERICA FLEISHMAN

I, Erica Fleishman, declare as follows:

1. I serve as director of the Oregon Climate Change Research Institute (OCCRI), which is housed at the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University.

2. I submit this declaration in support of the State Petitioners' standing to challenge the final action of the United States Environmental Protection Agency, "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review," published at 85 Fed. Reg. 57,018 (September 14, 2020) (Rescission Rule). I make this declaration on the basis of my own personal knowledge, unless otherwise indicated.

3. Methane is a major contributor to anthropogenic climate change. Evidence summarized by the Intergovernmental Panel on Climate Change suggests that the atmospheric concentration of methane has more than doubled since the Industrial Revolution as a result of human activity. Regulations reducing methane emissions from new and existing sources likely would contribute to mitigating many of the effects of climate change discussed below.

PERSONAL BACKGROUND AND QUALIFICATIONS

4. I received a BS and MS in Biological Sciences from Stanford University in 1991 and 1992, respectively, and a PhD in Ecology, Evolution, and Conservation Biology from University of Nevada, Reno in 1997. I have 30 years of experience in assessing the effects of climate and other types of environmental variability, extremes, and change on natural and human-dominated ecosystems in the western United States. Since 2012 I have served as a co-principal investigator of the Southwest Climate Adaptation Science Center, one of eight such regional centers across the United States. These centers develop data and tools to address the climate change-related information needs of managers of species, ecosystems, and the human communities they support.

5. OCCRI was created in 2007 by the Oregon State Legislature under House Bill 3543. Among OCCRI's charges from the Legislature is "assess[ment of]… the state of climate change science, including biological, physical and social science, as it relates to Oregon and the likely effects of climate change on the state." The *Fourth Oregon Climate Assessment Report* (http://www.occri.net/publications-and-reports/fourth-oregon-climate-assessment-report-2019/), which was authored by OCCRI scientists and collaborators, was released in January 2019. OCCRI scientists also contributed to the Northwest chapter of the Fourth National Climate Assessment (https://nca2018.globalchange.gov/chapter/24/) and produced

the Oregon Climate Change Effects, Likelihood, and Consequences Workshop report (2019; http://www.occri.net/publications-and-reports/oregon-climate-change-risk-workshop/). These and previous Oregon Climate Assessment reports, other publications in the peer-reviewed literature, and a limited amount of personal communication from agencies of the State of Oregon form the basis for this declaration.

6. I am making this declaration in my personal capacity on the basis of my expertise, experience, and training, and not on behalf of Oregon State University.

CLIMATE CHANGE IN OREGON AND ASSOCIATED RISKS

7. Global increases in concentrations of greenhouse gases are changing climate worldwide. Not only are average values of annual temperature and, in some cases, precipitation and wind changing; but the incidence of extreme temperature, precipitation, and other forms of extreme climate is increasing; and climate is becoming less predictable. Oregon's residents may benefit from some of these changes, but many of the changes also directly or indirectly threaten their physical and mental health and economic and social well-being. Disasters may result not only from isolated events but from recurrent events that individually are not extreme, but degrade a community's infrastructure (Field et al. 2012[1]).

8. The Pacific Northwest has warmed by about 2°F since 1900. Average temperatures in Oregon are projected to increase by another 2–7°F by 2100, depending on the global level of greenhouse gas emissions. Hot days and warm nights are likely to become more frequent. Extreme heat poses risk to human health, especially among those who work or

[1] Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Medgley, editors. 2012. Managing the risks of extreme events and disasters to advance climate change adaptation. A special report of Working Groups I and II of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom.

live outdoors, the elderly, those with underlying health conditions, and economically disadvantaged communities, and can stress local emergency healthcare systems. As noted below, there also is evidence that the incidence of some infectious diseases, such as Lyme disease, West Nile virus, and salmonella, increase as average temperatures increase or during heat waves.

9. Oregon's annual snowpack is decreasing as the proportion of precipitation falling as rain increases and snowmelt occurs earlier. As a result, autumn and winter runoff is projected to increase across Oregon, increasing the probability of seasonal flooding and landslides that can threaten human lives, private property, and infrastructure such as roads and other transportation corridors (see below). Additionally, the runoff associated with extreme precipitation may introduce human-made or naturally occurring toxins into the domestic water supply. Spring and summer runoff are likely to decrease, and vulnerability to water shortages to increase, in western and northeastern Oregon. Decreases in water availability may decrease the quality and quantity of water available for domestic consumption and use, including but not limited to drinking, cooking, washing, and bathing.

10. Projected changes in climate in both the short term and the long term contribute to changes in fire dynamics in Oregon and beyond. Across the United States, changes in fire dynamics are leading to losses of human life and property, and to substantial financial costs. In California, for example, the damages associated with wildfires in 2018 alone exceeded $20 billion (Smith 2019[2]). Nationwide, the damages associated with wildfires in 2017 and 2018 were greater than $40 billion (Smith 2019). Shifts in fire dynamics often reflect interactions

[2] Smith, A.B. 2019. 2018's billion dollar disasters in context. https://www.climate.gov/news-features/blogs/beyond-data/2018s-billion-dollar-disasters-context, accessed December 2019.

among historic fire suppression; changes in vegetation structure and composition, including the introduction of non-native invasive grasses that are highly flammable (Brooks et al. 2004[3], Fusco et al. 2019[4]); the increasing role of humans in igniting wildfires (Balch et al. 2017[5]); and changes in climate and fire weather.

11. The human costs of wildfires are considerable. For example, high levels of fine particulate matter are associated with respiratory illness in humans and other animals, especially in individuals with compromised respiratory systems, and with reductions in outdoor exercise (Evans 2019[6]). To illustrate, on a peak smoke day during the 2017 Eagle Creek fire, the Oregon Health Authority reported a 20% increase in emergency room visits for respiratory symptoms in the Portland metropolitan region (OHA 2017[7]). Short-term exposure to fine particulate matter from smoke also has been linked to increases in violent crime, especially assaults (Burkhardt et al. 2019[8]). The number of days on which the air quality index (AQI) was poor for all groups (AQI categories unhealthy, very unhealthy, or hazardous) in many Oregon municipalities as a result of wildfire smoke increased considerably in recent years (DEQ 2018)[9]. For example, the AQI in Medford was poor due to wildfire smoke for a total

[3] Brooks, M.L., C.M. D'Antonio, D.M. Richardson, J.B. Grace, J.E. Keeley, J.M. DiTomaso, R.J. Hobbs, M. Pellant, and D. Pyke. 2004. Effects of invasive alien plants on fire regimes. BioScience 54:677–688.

[4] Fusco, E.J., J.T. Finn, J.K. Balch, R.C. Nagy, and B.A. Bradley. 2019. Invasive grasses increase fire occurrence and frequency across US ecoregions. Proceedings of the National Academy of Sciences of the United States 116:23594–23599.

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of 28 days from 1985–2014, primarily in 1987 (16 days). By contrast, from 2015–2018, Medford's AQI was poor due to wildfire smoke for a total of 46 days: 7 in 2015, 14 in 2017, and 25 in 2018. Portland's AQI was not affected by wildfire smoke from 1985–2014, but smoke resulted in a poor AQI in the city on five days from 2015–2018. Similarly, during extreme wildfires in September 2020, the AQI in Portland, Oregon, reached levels higher (indicating high risks to human health) than those in any other major city worldwide (IQAir 2020)[10]. The AQI in Portland was considered hazardous for three consecutive days, and unhealthy for seven consecutive days (IQAIR 2020)[11]. During that period, levels of fine particulate matter in smaller cities in Oregon, such as Applegate Valley and Cave Junction, sometimes exceeded those in Portland (AirNow 2020)[11]. Moreover, smoke-driven reductions in air quality in Oregon are affecting regional economies. For example, *The New York Times* reported that in 2018, the Oregon Shakespeare Festival in Ashland estimated losses of $2 million as a result of cancelled performances and reduced attendance due to wildfire smoke[12].

12. The Oregon Health Authority (OHA), drawing on data on air quality, emergency department visits, and hospitalizations in areas affected by wildfire smoke, can estimate certain health care costs for diseases and conditions known to be caused or exacerbated by exposure to particulate matter.

13. The OHA estimates that smoke from the Chetco Bar Fire and other wildfires that affected central and southwestern Oregon (1.1 million residents) during two months in late summer

[10] https://www.iqair.com/us/blog/wildfires/washington-oregon-fires-choke-northwest
[11] https://www.airnow.gov/state/?name=oregon
[12] The New York Times. 24 August 2018. Wildfire smoke disrupts Oregon Shakespeare Festival. https://www.nytimes.com/2018/08/24/theater/oregon-shakespeare-festival-wildfire-smoke.html

2017 resulted in 207 excess emergency department visits and 18 excess hospitalizations for asthma, at a cost of $556,000.

14. The OHA estimates that smoke from the 2017 Eagle Creek Fire in the Columbia River Gorge (2 million residents in seven counties) resulted in 96 excess emergency department visits and 9 excess hospitalizations for asthma, at a cost of $529,000.

15. Climate change, including the effects of wildfires that are driven in part by climate change, is expected to have continuing negative effects on the health of Oregonians. The cost of those negative effects, in turn, will increase burdens on the state's budget. The OHA, relying primarily on the Oregon All Payer Claims Database, estimates that about 13% of all Oregon health care costs are borne by the state. In addition to the health effects of wildfire smoke and extreme heat, climate change may increase Oregonians' exposure to vector-borne diseases. For example, above-average temperatures were associated with expansion of West Nile virus from the eastern to the western United States (Reisen et al. 2006)[13]. As summer becomes longer and warmer, the incidence of West Nile virus, and other viral infections that cause brain inflammation, may increase (Bethel et al. 2013)[14]. Additionally, as water temperatures in oceans and estuaries in the Northwest increase, so may the incidence of *Vibrio parahaemolyticus* infections, which are caused by consuming raw oysters or other shellfish that are infected with the bacterium (Bethel et al. 2013)[12]. Exposure to and incidence of other water-borne diseases, especially cryptosporidosis, may increase as precipitation and flooding in Oregon increase (Bethel et al. 2013)[12]. High flows can carry

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cattle feces into recreational waters and sources of drinking water, resulting in cryptosporidosis and other gastrointestinal illnesses in humans.

16. Climate change is likely to reduce some Oregonians' access to sufficient and nutritious food[12], which in turn poses risks to physical and mental health, maternal health, and child development (Schnitter and Berry 2019)[15]. Mechanisms by which food security may be affected include droughts and floods within or beyond the region; both can affect agricultural production, and floods and landslides can affect the infrastructure used to transport food. Individuals, populations, and communities that have low incomes, are relatively isolated, or are in poor health may be especially vulnerable to climate change-induced food insecurity. Given the role that certain foods play in tribal communities in Oregon and elsewhere, not only health but cultural values and identity are threatened by some elements of climate change and related food access (Quaempts et al. 2018)[16].

17. Mental health of Oregonians also is likely to be adversely affected by climate change. For example, extreme events that are caused in part by climate change, such as wildfires or floods, can displace people from their homes either temporarily or permanently and degrade social and economic infrastructure (Bethel et al. 2013)[12]. Similar effects on social and economic systems may result from recurrent events even if the individual events are not extreme (Field et al. 2012)[17]. Heat waves have been associated with increases in violent

[15] Schnitter, R., and P. Berry. 2019. The climate change, food security, and human health nexus in Canada: a framework to protect population health. International Journal of Environmental Research and Public Health 16:2531. doi:10.3390/ijerph16142531.

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criminal activity during the following week in jurisdictions across the United States (Jacob et al. 2007)[18], and increases in larceny and violent crime are projected to increase as maximum monthly temperatures increase (Ranson 2014)[19].

18. As climate, fuel loads, and associated fire dynamics change, the cost of fire suppression in Oregon is increasing. The average number of acres that burned in Oregon increased from 11,600 from 1990–1999 to 41,700 from 2010–2019 (GCWR 2019[20]). The direct costs of fire suppression on lands protected by the Oregon Department of Forestry increased from an average of $9.7 million per year from 2006–2012 to $62.4 million from 2013–2019. (GCWR 2019). Across the western United States, including the Pacific Northwest, the duration of the fire season is increasing. In the Pacific Northwest, the duration of the fire season more than quadrupled, from an average of 23 days to an average of 116 days, from the 1970s to the 2000s. Across the western United States, roughly half of the observed increase in fuel aridity and more than 16,000 square miles of burned area from 1984–2015 were attributed to human-caused climate change.

19. Rising sea levels, coastal erosion, ocean acidification, and an increase in the frequency of harmful algal blooms will continue to threaten private property and subsistence, recreational, and commercial fisheries, including but not limited to shellfish fisheries, in Oregon. Sea level rise could drive saltwater intrusion into coastal aquifers from which water for domestic and agricultural uses is derived. Additionally, extreme winter storms increase storm surge, erosion, and the likelihood of flooding in coastal communities.

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20. Transportation systems in Oregon are threatened by extreme precipitation and temperatures, sea level rise, and wildfires, all of which damage roads to the point that closures are necessary (OLIS 2019[21]). Current levels of funding are not sufficient for the Oregon Department of Transportation to proactively clear drainages (reducing the risk of flood), reshape slopes (reducing the risk of landslides), and maintain roadside vegetation (reducing the risk of flood and fire) (OLIS 2019). Additional funding also is necessary to ensure rapid responses to natural disasters and to upgrade transportation infrastructure.

21. Native American tribes both on and off reservations generally are among the communities most strongly and adversely affected by climate change. Climate change affects the lands, identity, economies, physical and mental health, and culture of Native American tribes in addition to tribal fisheries and other sources of traditional foods, including but not limited to salmon, shellfish, and berries. In 2015, 15 tribes in the Columbia River Basin and three intertribal organizations identified protection of water quality and quantity; fishes, their habitats, and connectivity among them; preparation for wildfires in forests; and wildlife and their habitat among their highest priorities for climate action plans[22].

[21] Oregon State Legislature, Oregon Legislative Information (OLIS). 2019. An adaptation menu of investment options: potential transportation investments to adapt to climate change impacts. Committee meeting document. https://olis.leg.state.or.us/liz/2019R1/Downloads/CommitteeMeetingDocument/165202.

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I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed in Corvallis, Oregon on November 30, 2020.

Erica Fleishman

Erica Fleishman

Director, Oregon Climate Change Research Institute

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF CALIFORNIA, *et al.*, *Petitioners*, v. ANDREW R. WHEELER, in his official capacity as Administrator, United States Environmental Protection Agency, *et al.*, *Respondents.*	No. 20-1357 (and consolidated cases)

DECLARATION OF KATHY TAYLOR

I, Kathy Taylor, state and declare as follows:

1. I submit this declaration in support of the State Petitioners' standing to challenge the final action of the United States Environmental Protection Agency (EPA) entitled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review," published at 85 Fed. Reg. 57,018 (September 14, 2020) (Rescission Rule). I make this declaration of my own personal knowledge, unless otherwise indicated.

2. I serve as the Program Manager for the Air Quality Program at the Washington State Department of Ecology. I have worked for the State of

Washington for twenty years. I have served as Manager of the Air Quality Program for one year. Prior to serving as Air Quality Program Manager, I served as the Deputy Program Manager of the Air Quality Program for approximately 3 years.

3. In my role as Manager of the Air Quality Program, I oversee the development of rules, regulations, and programs for meeting state and federal requirements related to air quality, including air quality monitoring, permitting and compliance. I am responsible for coordinating the Air Quality Program's efforts to develop strategies to reduce emissions of greenhouse gases and combat climate change, including implementing recent state legislation addressing hydrofluorocarbons and the Clean Energy Transformation Act.

4. The State of Washington and its residents will be harmed by the Rescission Rule, which weakens emission standards for new, reconstructed, and modified sources in the oil and natural gas sector. Specifically, EPA's final action excludes regulation of methane emissions from these sources, which is one of the most potent greenhouse gases and known to contribute to, and exacerbate, the impacts of climate change.

5. As explained in the following paragraphs, the State of Washington will be harmed by the climate and health effects of this significant increase in greenhouse gas emissions.

Climate Change in Washington and Associated Risks

4. Washington is a coastal state, a mountain state, and a forest state. Reports prepared by the University of Washington Climate Impacts Group show that climate change will significantly adversely affect each of these signature resources of the State of Washington. In addition to these impacts, climate change will cause significant harm to public health.

5. Approximately 4 million of Washington's over 7 million people live in the area around Puget Sound. Sixty-eight percent of Washington's population live in coastal counties. Climate change will cause the sea level to rise and permanently inundate low-lying areas in the Puget Sound region. Under a high greenhouse gas scenario, sea level is projected to rise in Seattle by as much as 1.5 feet by 2050, and 5.1 feet by 2100, relative to 1991-2009 sea levels. Sea level rise will also increase the frequency of coastal flood events. For example, the current 1-in-100 year flood in Seattle will become a 1-in-10 year flood with 1 foot of sea level rise, and will become an annual event with 2 feet of sea level rise. Sea level rise will also cause coastal bluffs (the location of many family homes in Puget Sound) to recede by as much as 75-100 feet by 2100 relative to 2000. This would be a doubling, on average, of the current rate of recession, and would cause significant damage to state properties, tourism, and public infrastructure, and increased demands for emergency services. The impacted areas include diverse ecosystems (e.g., sandy beaches, islands, estuaries, and salt marshes) that offer

significant recreational, cultural, and aesthetic value to residents and visitors to the State of Washington, as well as provide crucial ecological functions that support wildlife and aquatic habitats. Sea level rise will also result in reduced harvest for commercial fishing and shellfish operations.

6. Climate change is also causing ocean acidification, through the absorption in the ocean of excess carbon dioxide from the atmosphere. Ocean waters on the outer coast of Washington and the Puget Sound have become about 10-40% more acidic since 1800. This increased acidity is already affecting some shellfish species. Washington has the largest shellfish industry on the west coast, contributing $184 million to Washington's economy in 2010 and employing 2710 workers. Under a business as usual greenhouse gas scenario, ocean waters are expected to become at least 100% more acidic by 2100 relative to 1986-2005. The predicted level of ocean acidification is expected to cause a 34% decline in shellfish survival by 2100, impacting the state economy, as well as state revenues.

7. Washington depends on yearly winter mountain snow pack for drinking water, as well as water for irrigation, hydropower, and salmon. Washington's winter mountain snowpack is decreasing because climate change is causing more precipitation to fall as rain rather than snow. Snow pack decreased in Washington's Cascade Mountains by about 30% between the mid-20th century and 2016. By the 2050s, snow pack is predicted to decrease 38-46%, and by the 2080s

snow pack is expected to decline 56%-70% relative to 1970-1999. This loss of snow pack will cause a 50% increase in the number of years in which water is not available for irrigation, as well as a 20% decrease in summer hydropower production. In addition, the decrease in summer stream flows combined with higher stream temperatures will result in stream temperatures too high to support adult salmon.

8. Climate change is also impacting Washington's forests. Of Washington's total area (42.5 million acres), a little more than half (22 million acres) is forested. Washington's forest products industry generates a gross income of about $48 billion per year, provides more than 100,000 jobs, and contributes approximately $4.9 billion in annual wages. Climate change is threatening this industry in a number of ways. For example, Douglas fir accounts for almost half the timber harvested in Washington. Under a moderate greenhouse gas scenario, Douglas fir habitat is expected to decline 32% by the 2060s relative to 1961-1990. In addition, the area of Washington forest where tree growth is severely limited by water availability is projected to increase (relative to 1970-1999) by about 32% in the 2020s, with an additional 12% increase in the 2040s and another 12% increase in the 2080s. Wildland fires pose another threat to Washington's forests. Under a business as usual greenhouse gas scenario, decreases in summer precipitation, increases in summer temperatures and earlier snow melt are predicted to result in

up to a 300% increase in the area in eastern Washington burned annually by forest fires and up to a 1000% increase in area burned annually on the west side of the state (typically, the wet side). Between 2010 and 2019, the Washington Department of Natural Resources expended over $600 million in fire suppression efforts, with $114 million expended in 2019 alone. These costs will only continue to climb as the frequency and intensity of climate-change-fueled wildfires increase throughout Washington State.

9. By far the highest costs to the state, however, are expected to come from harm to public health. More frequent heat waves and more frequent and intense flooding are likely to increase hospitalizations, deaths, and demand for emergency services. Warming may also exacerbate health risks from poor air quality and allergens, including increases in ground-level ozone, which are expected to lead to increased deaths. Risks are often greatest for the elderly, children, those with existing chronic health conditions, individuals with greater exposure to outside conditions, and those with limited access to health resources.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on November 30, 2020 in Lacey, Washington.

KATHY TAYLOR

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