

**ORAL ARGUMENT NOT YET SCHEDULED**

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

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No. 06-1023

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STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS  
and ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

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Petition for Review of Final Action of the  
United States Environmental Protection Agency

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**INITIAL OPENING BRIEF OF PETITIONERS STATE AND TERRITORIAL  
AIR POLLUTION PROGRAM ADMINISTRATORS AND ASSOCIATION OF  
LOCAL AIR POLLUTION CONTROL OFFICIALS**

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Pollution Program Administrators, and the  
Association of Local Air Pollution Control  
Officials

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|--------------------------------|---|--------------------|
| STATE AND TERRITORIAL AIR      | ) |                    |
| POLLUTION PROGRAM              | ) |                    |
| ADMINISTRATORS and ASSOCIATION | ) |                    |
| OF LOCAL AIR POLLUTION CONTROL | ) |                    |
| OFFICIALS,                     | ) | Docket No. 06-1023 |
|                                | ) |                    |
| Petitioners,                   | ) |                    |
|                                | ) |                    |
| v.                             | ) |                    |
|                                | ) |                    |
| UNITED STATES ENVIRONMENTAL    | ) |                    |
| PROTECTION AGENCY,             | ) |                    |
|                                | ) |                    |
| Respondent.                    | ) |                    |

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**CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES**

**A. Parties and Amici**

Petitioners are State and Territorial Air Pollution Program Administrators (“STAPPA”) and Association of Local Air Pollution Control Officials (“ALAPCO”). The United States Environmental Protection Agency (“EPA”) is the respondent. Amici curiae in support of respondent are the Aerospace Industries Association and the Air Transport Association of America, Inc.

**B. Rulings Under Review**

Petitioners seek review of the following EPA action: Control of Air Pollution From Aircraft and Aircraft Engines; Emission Standards and Test Procedures, 70 Fed. Reg. 69664 (Nov. 17, 2005) (codified at 40 C.F.R. Pt. 87).

**C. Related Cases**

Insofar as petitioners are aware, there are no related cases to this petition for review.

Dated July 28, 2006

Respectfully submitted,

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| OFFICIALS,                     | ) |                    |
|                                | ) | Docket No. 06-1023 |
| Petitioners,                   | ) |                    |
|                                | ) |                    |
| v.                             | ) |                    |
|                                | ) |                    |
| UNITED STATES ENVIRONMENTAL    | ) |                    |
| PROTECTION AGENCY,             | ) |                    |
|                                | ) |                    |
| Respondent.                    | ) |                    |
|                                | ) |                    |

**DISCLOSURE STATEMENT PURSUANT TO CIRCUIT RULE 26.1**

The State and Territorial Air Pollution Program Administrators (“STAPPA”) and the Association of Local Air Pollution Control Officials (“ALAPCO”) are national trade associations that represent state and local governmental officials responsible for achieving and sustaining clean air across the United States. STAPPA and ALAPCO do not have parent corporations and no other entity owns any percentage of these associations.

Dated July 28, 2006

Respectfully submitted,

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## GLOSSARY

|                   |   |
|-------------------|---|
| ALAPCO            | Association of Local Air Pollution Control Officials  |
| CAA               | Clean Air Act   |
| CAEP              | Committee on Aviation Environmental Protection  |
| CAEP/4            | a meeting held by the Committee on Aviation Environmental Protection in April 1998 that produced the CAEP/4 aircraft engine emission standards    |
| CAEP/6            | a meeting held by the Committee on Aviation Environmental Protection in February 2004 that produced the CAEP/6 aircraft engine emission standards |
| CCAP              | Center for Clean Air Policy   |
| EPA               | United States Environmental Protection Agency   |
| GAO               | United States General Accounting Office   |
| ICAO              | International Civil Aviation Organization   |
| NAAQS             | national ambient air quality standards  |
| NO <sub>x</sub>   | oxides of nitrogen  |
| PM                | particulate matter  |
| PM <sub>2.5</sub> | “fine” particulate matter ( <u>i.e.</u> , PM less than 2.5 micrometers in diameter)   |
| SIP               | state implementation plan   |
| STAPPA            | State and Territorial Air Pollution Program Administrators  |

## **INTRODUCTION**

Emissions of oxides of nitrogen (“NO<sub>x</sub>”) from aircraft engines are hazardous to public health, public welfare, and the environment and are a growing problem in the United States. The Clean Air Act (“CAA” or “Act”) gives the United States Environmental Protection Agency (“EPA”) exclusive authority to set aircraft engine emission standards for pollutants, including NO<sub>x</sub>, and to issue standards that adequately protect public health and welfare. In the rule challenged in this petition, EPA acknowledged the detrimental effects of NO<sub>x</sub> emissions from aircraft engines, yet promulgated a rule that will result in minimal air quality benefits. Rather than using its authority to abate the growing problem of NO<sub>x</sub> emissions, the agency promulgated a rule that merely adopts the minimum international standards for aircraft engine emissions and does that two years after those standards went into effect. For these and other reasons, the challenged rule is not in accordance with the CAA, is arbitrary and capricious, and, therefore, must be vacated.

## **JURISDICTIONAL STATEMENT**

**(A). Agency.** Respondent EPA has jurisdiction to issue aircraft engine emission standards. CAA § 231(a)(2)(A), 42 U.S.C. § 7571(a)(2)(A).

**(B). Court of Appeals.** This Court has exclusive jurisdiction to review the final EPA action challenged in this proceeding. CAA § 307(b)(1), 42 U.S.C. § 7607(b)(1).

**(C). Timeliness.** The petition for review was timely filed on January 13, 2006, within sixty days of November 17, 2005, when EPA published the challenged rule. Control of Air Pollution From Aircraft and Aircraft Engines; Emission Standards and Test Procedures, 70 Fed. Reg. 69664 (Nov. 17, 2005) (codified at 40 C.F.R. Pt. 87).

**(D). Final Action.** The Aircraft Engine Emission Standards rule is a final agency action.  
70 Fed. Reg. 69664.

### **STATUTES AND REGULATIONS**

The relevant provision of the Act is CAA § 231, 42 U.S.C. § 7571. The challenged rule went into effect on December 19, 2005, and is published at 40 C.F.R. Part 87. The text of section 231 and the final rule are contained in an addendum to this brief.

### **STATEMENT OF ISSUES**

1. Whether EPA acted unlawfully by issuing aircraft engine emission standards that do not adequately promote public health and welfare and conflict with the overall statutory scheme.
2. Whether EPA acted arbitrarily and capriciously by blaming its failure to adopt more stringent standards on insufficient time given EPA's lengthy delay in promulgating the rule.
3. Whether EPA acted unlawfully, and arbitrarily and capriciously, by placing undue emphasis on speculative safety concerns.
4. Whether EPA acted arbitrarily and capriciously by issuing a rule that does not include a production cut-off date for already-certified, newly manufactured aircraft engines.
5. Whether EPA acted arbitrarily and capriciously by issuing a "near-term rule" without establishing a timeline for a follow-up rulemaking.

## STATEMENT OF THE CASE

### I. Nature of the Case, Course of the Proceedings, and Disposition in the Agency

This petition seeks review of EPA's final rule for aircraft engine emission standards, promulgated under CAA section 231, 42 U.S.C. § 7571, and establishing new NO<sub>x</sub> emission standards for newly certified commercial aircraft gas turbine engines with a rated thrust greater than 26.7 kilonewtons.

The State and Territorial Air Pollution Program Administrators ("STAPPA") and the Association of Local Air Pollution Control Officials ("ALAPCO") represent air pollution control agencies in fifty-four states and territories and 165 major metropolitan areas across the United States, respectively. The associations serve to encourage the exchange of information among air pollution control officials, to enhance communication and cooperation among federal, state, and local regulatory agencies, and to promote good management of air resources.

EPA published the proposed rule on September 30, 2003. Control of Air Pollution From Aircraft and Aircraft Engines; Emission Standards and Test Procedures, 68 Fed. Reg. 56226 (proposed Sept. 30, 2003). Representatives from STAPPA and ALAPCO testified at the public hearing and also filed written comments. OAR-2002-0030-0096 [JA\_\_\_] and OAR-2002-0030-0116 [JA\_\_\_], respectively. On November 17, 2005, EPA published the final rule in the Federal Register. 70 Fed. Reg. 69664. Subsequently, STAPPA and ALAPCO filed a petition for review in this Court on January 13, 2006.

## II. Statement of Facts

### A. The Clean Air Act, NO<sub>x</sub> Emissions, Ozone, and Particulate Matter

The Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, enacted in 1970 and amended, among other times, in 1977 and 1990, establishes a comprehensive program for protecting and enhancing the nation's air quality through federal, state, and local regulatory programs. See General Motors Corp. v. United States, 496 U.S. 530, 532 (1990) (describing the CAA as “a comprehensive national program that made the States and the Federal Government partners in the struggle against air pollution”). Under the CAA, EPA must establish national ambient air quality standards (“NAAQS”) for pollutants that endanger public health and welfare, CAA §§ 108-109, 42 U.S.C. §§ 7408-7409, while states are given primary responsibility for implementing NAAQS through state implementation plans (“SIPs”), CAA § 107(a), 42 U.S.C. § 7407(a). EPA, however, has *exclusive* authority to set aircraft engine emission standards for pollutants that endanger public health and welfare. CAA § 233, 42 U.S.C. § 7573 (“No State or political subdivision thereof may adopt or attempt to enforce any standard respecting emissions of any air pollutant from any aircraft or engine thereof unless such standard is identical to a standard applicable to such aircraft under this part.”).

Section 231 of the CAA requires that the Administrator of EPA “shall, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.” CAA § 231(a)(2)(A), 42 U.S.C. § 7571(a)(2)(A). NO<sub>x</sub> is a principal component of aircraft engine exhaust. 70 Fed. Reg. at 69668. NO<sub>x</sub> emissions from

aircraft engines contribute significantly to the pollution levels in areas containing or adjacent to airports, and aircraft's contribution to NO<sub>x</sub> levels is expected to grow in the future. Id. at 69668-69. EPA's study of NO<sub>x</sub> emissions from aircraft engines in ten cities<sup>1</sup> with "significant commercial jet aircraft activity" revealed that "commercial aircraft's contribution is expected to increase from about 2 percent of regional total NO<sub>x</sub> emissions in 1990 to about 5 percent in 2010." Id.

NO<sub>x</sub> emissions from aircraft engines are harmful because they lead to adverse health effects, as well as contribute heavily to regional haze, acid rain, eutrophication of water bodies, and reduced crop yield. Id. at 69670-73. Most significantly, NO<sub>x</sub> leads to the formation of ozone and particulate matter ("PM"), id. at 69670, two pollutants EPA has designated as criteria pollutants requiring regulation in the form of NAAQS, CAA § 108(a), 42 U.S.C. § 7408(a); 40 C.F.R. §§ 50.9, 50.10 (ozone); 40 C.F.R. § 50.7 (PM). NO<sub>x</sub> contributes to the formation of ground-level ozone (commonly known as smog) when it reacts with volatile organic compounds in the presence of heat and sunlight, 70 Fed. Reg. at 69670, and NO<sub>x</sub> emitted by aircraft engines can react with other chemicals in the atmosphere to form fine particulate matter that is less than 2.5 micrometers in diameter ("PM<sub>2.5</sub>"), id. at 69670-71.

Exposure to ozone can cause respiratory symptoms (such as coughing, chest pain, and sore throat), aggravate asthma, and result in increased susceptibility to respiratory infection and illness. Id. at 69670; EPA, EPA 454-k-02-001, Latest Findings of National Air Quality: 2001 Status and Trends (Sept. 2002) at 7 (OAR-2002-0030-0004) [JA\_\_\_\_] [hereinafter 2001 Status and Trends]; EPA, EPA454-R-03-005, National Air Quality and

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<sup>1</sup> The urban areas studied were Atlanta, Boston-Lawrence-Worcester, Charlotte-Gastonia, Chicago-Gary-Lake County, Houston-Galveston-Brazoria, New York-New Jersey-Long Island, Philadelphia, Phoenix, Los Angeles Air Basin and Washington, D.C.

Emissions Trends Report - 2003 Special Studies Edition, at 22 (Sept. 2003) (OAR-2002-0030-0227) [JA\_\_\_\_], [hereinafter 2003 Special Studies Edition]. Additionally, ambient ozone has been linked to increased hospital and emergency room visits for respiratory conditions and to respiratory illness-related school absences. 70 Fed. Reg. at 69670; 2001 Status and Trends, supra, at 7 (OAR-2002-0030-0004) [JA\_\_\_\_]. Studies have also demonstrated adverse health effects associated with exposure to PM; even short-term elevations in PM levels are associated with increased heart disease, heart failure, and various respiratory ailments. 70 Fed. Reg. at 69672; 2003 Special Studies Edition, supra, at 34 (OAR-2002-0030-0227) [JA\_\_\_\_]. Increased levels of PM are particularly worrisome because PM exposure has been associated with premature mortality. 70 Fed. Reg. at 69672; 2003 Special Studies Edition, supra, at 34 (OAR-2002-0030-0227) [JA\_\_\_\_].

EPA has addressed the harmful effects of ozone by adopting stringent NAAQS for ambient ozone. 70 Fed. Reg. at 69671; see National Ambient Air Quality Standards for Ozone, 62 Fed. Reg. 38856 (July 18, 1997) (codified at 40 C.F.R. § 50.10). The revised ozone NAAQS, known as the 8-hour ozone standard, could have significant implications for urban areas with major airports. In June 2004, EPA designated 126 areas, including all or part of 474 counties, as 8-hour ozone nonattainment areas. 70 Fed. Reg. at 69671 (citing Memorandum on 8-hour ozone nonattainment areas, PM<sub>2.5</sub> nonattainment areas (OAR-2002-0030-0209) [JA\_\_\_\_])). The counties designated as nonattainment areas “are spread over wide geographic areas, including most of the nation’s major population centers.” Id. According to the United States General Accounting Office (“GAO”), “26 major commercial airports are located in nonattainment

areas for ozone . . . [and] the agency estimates that under the 8-hour standard, areas containing 12 additional airports could be designated as nonattainment areas.” GAO, Aviation and the Environment – Strategic Framework Needed to Address Challenges Posed by Aircraft Emissions, GAO-03-252 at 18 (February 2003) (OAR-2002-0030-0005) [JA\_\_\_\_] [hereinafter GAO Report].

EPA has also established NAAQS for PM<sub>2.5</sub>, National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38652 (July 18, 1997) (codified at 40 C.F.R. § 50.7), and designated 208 full and partial counties and thirty-nine areas as currently being in nonattainment of these standards, 70 Fed. Reg. at 69672 (citing Memorandum on 8-hour ozone nonattainment areas, PM<sub>2.5</sub> nonattainment areas (OAR-2002-0030-0209) [JA\_\_\_\_]). As EPA noted in the challenged rule’s preamble, because PM<sub>2.5</sub> “can remain in the atmosphere for days to weeks and travel through the atmosphere hundreds to thousands of kilometers,” NO<sub>x</sub> emissions from aircraft that react in the atmosphere to form PM<sub>2.5</sub> “could affect nonattainment areas far from their source.” Id. at 69671.

States must submit SIPs that detail strategies to attain and maintain the 8-hour ozone standard and the PM<sub>2.5</sub> standard in accordance with deadlines set by EPA. Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 1, 69 Fed. Reg. 23951 (April 30, 2004); Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2, 70 Fed. Reg. 71612 (Nov. 29, 2005); Proposed Rule To Implement the Fine Particle National Ambient Air Quality Standards, 70 Fed. Reg. 65984 (proposed Nov. 1, 2005). States that are unable to develop and submit SIPs by EPA’s deadline face stiff sanctions, including denial of federal grants for

highway construction or increased emission offset requirements for new or modified sources, CAA § 179(b), 42 U.S.C. § 7509(b), and their SIPs become subject to any additional measures that the “Administrator may reasonably prescribe,” CAA § 179(d), 42 U.S.C. § 7509(d).

B. The International Civil Aviation Organization

EPA’s challenged rule adopted aircraft engine emission standards equivalent to the 1999 International Civil Aviation Organization (“ICAO”) emission standards. ICAO was established by the United Nations and is responsible for “developing aircraft technical and operating standards, recommending practices, and generally fostering the growth of international aviation.” 70 Fed. Reg. at 69666. The ICAO Council’s Committee on Aviation Environmental Protection (“CAEP”) is responsible for “evaluating, researching, and recommending measures . . . that will address the environmental impact of international civil aviation,” including the adoption of aircraft engine emission standards for NO<sub>x</sub> and other pollutants. Id. at 69667.

ICAO routinely issues minimum aircraft engine emission standards, which its member states, including the United States, must “meet or exceed.” Id. In fact, ICAO “expect[s] that [ICAO member] States will adopt their own airworthiness standards, and it is anticipated that some States may adopt standards that are more stringent than those agreed upon by ICAO.” Id. In April 1998, at a meeting known as CAEP/4, CAEP issued a proposal calling for a 16-percent reduction in NO<sub>x</sub> emissions from aircraft engines, which was adopted by ICAO in February 1999 and became effective on December 31, 2003. Id.

In March 2005, months before EPA's adoption of the CAEP/4 standards became final, ICAO had already adopted the next round of international standards (the CAEP/6 standards), which were proposed at CAEP's February 2004 meeting. Id. at 69677 n.78-79. The CAEP/6 standards for NO<sub>x</sub> are 12 percent more stringent than the CAEP/4 standards and will go into effect after December 31, 2007. Id.

C. The Aircraft Engine Emission Standards Rule

On September 30, 2003, EPA initiated a rulemaking, "Control of Air Pollution From Aircraft and Aircraft Engines; Emission Standards and Test Procedures," in which it proposed to adopt ICAO's CAEP/4 NO<sub>x</sub> emission standards ("CAEP/4 standards"). 68 Fed. Reg. 56226. EPA requested comments on its proposal, noting that the proposed rule would establish consistency with international standards and achieve "minimal . . . air quality benefits." Id. at 56247. After receiving numerous comments emphasizing the need for aircraft engine emission standards more stringent than the minimum ICAO standards, EPA set standards equivalent to the CAEP/4 standards. 70 Fed. Reg. at 69674. The EPA standards will apply to gas turbine engines of commercial aircrafts that are "newly certified (and newly designed) after the effective dates of the regulations." Id. at 69680. EPA's final standards for mid- and high-thrust engines represent a 16-percent reduction in NO<sub>x</sub> emissions from the existing standard, and an 8-percent reduction in NO<sub>x</sub> emissions for low-thrust engines. Id. at 69674-75. EPA adopted the rule as "near-term" standards to assure that progress in emission reductions is "not reduced in the future." Id. at 69675. EPA noted its intent to adopt the more stringent ICAO CAEP/6 standards in a future rulemaking. Id. at 69677.

During the comment period, state and local governments, environmental groups, and other nongovernmental organizations, including STAPPA and ALAPCO, expressed concern that NO<sub>x</sub> emissions from aircraft will continue to increase under the CAEP/4 standards and may increase under the CAEP/6 standards as well. See Testimony of Amy Royden, Senior Staff Associate of STAPPA and ALAPCO at 2 (OAR-2002-0030-0095) [JA\_\_\_\_] [hereinafter STAPPA and ALAPCO Testimony]. Increased aircraft activity and the engine designs of newer aircraft models are contributing to the problem of increased NO<sub>x</sub> emissions. As the Center for Clean Air Policy (“CCAP”) noted in its comments, the projected growth of aircraft activity is likely to outpace the improvement in NO<sub>x</sub> emission reductions by individual aircraft engines. CCAP Testimony at 2 (OAR-2002-0030-0098) [JA\_\_\_\_]; see also EPA, EPA420-R-99-013, Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft, at 2-5 to 2-7, 3-1 to 3-2 (April 1999) (OAR-2002-0030-0002) [JA\_\_\_\_] (projecting significant growth in aircraft activity, and therefore NO<sub>x</sub> emissions, in various regions). In addition, GAO reported that newer aircraft engine models, designed to improve fuel efficiency and reduce carbon dioxide and hydrocarbon emissions, have actually demonstrated an *increase* in NO<sub>x</sub> emissions. GAO Report, supra, at 21 (OAR-2002-0030-0005) [JA\_\_\_\_] (“[T]he newest generation of aircraft engines, while meeting international standards, can produce considerably more nitrogen oxides emissions than older versions they are replacing.”).

At the time of EPA’s proposal, 94 percent of all engine models already met the proposed standards,<sup>2</sup> and the proposed rule required no technological improvement.

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<sup>2</sup> As aircraft that travel internationally to any of ICAO’s participating nations must comply with the current ICAO standards, 70 Fed. Reg. at 69667, market forces compelled the airline industry to comply with the CAEP/4 standards once they were adopted in 1999, well before EPA initiated this rulemaking. Testimony

Thus, many commentators, including STAPPA and ALAPCO, requested a technology-forcing standard that would require “a performance level that is beyond what sources are currently achieving.” 70 Fed. Reg. at 69675; STAPPA and ALAPCO Testimony, supra, at 3 (OAR-2002-0030-0095) [JA\_\_\_\_]. State and local governments expressed concern about implementing the NAAQS for ozone and PM<sub>2.5</sub>, as many areas are currently in nonattainment and face air quality challenges; they urged EPA to do its part in reducing NO<sub>x</sub> emissions that are outside of their regulatory authority. See 70 Fed. Reg. at 69675; STAPPA and ALAPCO Testimony at 1 (OAR-2002-0030-0095) [JA\_\_\_\_]; Comments submitted by Ronald Methier, Chief, Air Protection Branch, Georgia Environmental Protection Division (OAR-2002-0030-0112) [JA\_\_\_\_] [hereinafter Georgia Comments]; Comment submitted by David J. Shaw, Acting Director, Division of Air Resources, New York State Department of Environmental Conservation (OAR-2002-0030-0115) [JA\_\_\_\_] [hereinafter New York Comments]; Comments submitted by Margaret Hoffman, Executive Director, Texas Commission on Environmental Quality (OAR-2002-0030-0120) [JA\_\_\_\_] [hereinafter Texas Comments]; Comment submitted by Alan C. Lloyd, Ph.D., Chairman, The California Air Resources Board (ARB) (OAR-2002-0030-0123) [JA\_\_\_\_] [hereinafter California Comments].

EPA acknowledged these problems, stating that “[m]ore stringent standards . . . will likely be necessary and appropriate in the future.” 70 Fed. Reg. at 69676. However, EPA declined to issue more stringent standards that would require technological development, stating that, because the CAEP/4 implementation date had already occurred when the challenged rule went into effect, there was “not sufficient lead time.” Id. at

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of Nancy Young, Managing Director, Env. Prog. Air Transport Assoc. of America, Inc. (OAR-2002-0030-0100) [JA\_\_\_\_].

69675. EPA also stated that the agency must give “greater weight to considerations of safety.” Id. at 69676.

EPA requested comments on whether to include a production cut-off date, meaning that all engines built after a certain date would have to comply with the proposed NO<sub>x</sub> standards. 68 Fed. Reg at 56244. Without a production cut-off date in place, engine models that were certified for production before the effective date of the regulations, but manufactured afterwards, will not have to comply with the emission standards set out in this rule. 70 Fed. Reg. at 69674. As GAO noted in its report, “[g]iven the long lifespan of aircraft, even if the technologies are developed, it could be decades before enough airplanes are replaced to have a measurable effect on reducing nitrogen oxides.” GAO Report, supra, at 21 (OAR-2002-0030-0005) [JA\_\_\_]. Although EPA has established a production cut-off date in all prior rules implementing aircraft engine emission standards, it declined to do so here, justifying its decision on the basis of insufficient time to examine manufacturers’ cost of compliance with such a provision. 70 Fed. Reg. at 69680-81. EPA also stated that a production cut-off date would likely result in only a minimal environmental benefit. Id. at 69680.

Throughout the preamble to the challenged rule, EPA referred to a lack of sufficient time to issue aircraft engine emission standards more stringent than the CAEP/4 standards, while simultaneously expressing a sense of urgency in adopting the international standards as quickly as possible. Yet, EPA published its Notice of Proposed Rulemaking more than four years following ICAO’s adoption of the CAEP/4 standards and issued its final Aircraft Engine Emission Standards rule nearly two years after the

implementation of the CAEP/4 standards and several months after ICAO adopted the *next* round of international standards—the CAEP/6 standards. *Id.* at 69667, 69677.

### **SUMMARY OF ARGUMENT**

EPA’s decision to adopt the CAEP/4 minimum international standards, rather than more stringent aircraft engine emission standards, was unlawful and arbitrary and capricious. In adopting these emission standards, the agency acted inconsistently with the Act’s purpose of protecting public health and welfare, thwarted the overall statutory scheme of promoting the reduction of air pollution via cooperation between the federal government and the states as well as via encouragement of technological advancement, and placed undue emphasis on alignment with international standards, a purpose not prescribed under the CAA. The Aircraft Engine Emission Standards rule is also arbitrary and capricious because EPA did not offer a reasoned explanation for failing to issue more stringent standards. Throughout the preamble, EPA repeatedly asserted that insufficient time was responsible for the weakness of the aircraft engine emission standards, even though the delay was entirely its fault. EPA also justified the rule by claiming, without explanation, that safety concerns prevented it from adopting more stringent emission standards. Furthermore, EPA did not adequately explain its failure to establish a production cut-off date. Finally, EPA acted arbitrarily and capriciously by failing to establish a firm timeline for issuing more stringent standards in the future.

### **STANDING**

Petitioners STAPPA and ALAPCO have Article III standing to challenge EPA’s final rule on aircraft engine emission standards on behalf of their members. They have met the requirements for associational standing because at least one of their members

would have Article III standing to sue in its own right, the interests that STAPPA and ALAPCO seek to protect are germane to their purpose, and neither the claim asserted nor the relief requested requires that an individual member of the associations participate in bringing this petition for review. Sierra Club v. EPA, 292 F.3d 895, 898 (D.C. Cir. 2002).

Petitioners meet the first element of associational standing because the state and local government agencies that STAPPA and ALAPCO represent have Article III standing to bring this case in their own right. STAPPA's members are state air pollution control agencies that must establish SIPs that will attain and maintain the NAAQS for all criteria pollutants; ALAPCO's members are municipal and county air pollution control agencies responsible for ensuring that local emissions of pollutants comply with the provisions in their respective states' SIPs. Decl. S. William Becker ¶ 5, 6.<sup>3</sup> STAPPA and ALAPCO's members submitted comments on the proposed Aircraft Engine Emission Standards rule urging EPA to regulate NO<sub>x</sub> emissions from aircraft more stringently in order for state and local governments to reduce pollution levels in their areas pursuant to the NAAQS. Decl. S. William Becker ¶ 7-13. See, e.g., Texas Comments, supra (OAR-2002-0030-0120) [JA\_\_\_\_]; Comment submitted by Barry R. Wallerstein, D. Env., Executive Officer, South Coast Air Quality Management District (SCAQMD) (OAR-2002-0030-0104) [JA\_\_\_\_] [hereinafter SCAQMD comments]. The individual Article III prong of associational standing is satisfied here because EPA's final Aircraft Engine Emission Standards rule will hinder the efforts of the states, and the localities within them, to comply with the NAAQS. See West Virginia v. EPA, 362 F.3d 861, 868 (D.C. Cir. 2004) (holding states have standing when an EPA rule makes devising a SIP more

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<sup>3</sup> The declaration in support of STAPPA and ALAPCO's standing is included in an Addendum to this brief.

burdensome, in part because cities would have standing in similar instance); see also New York v. EPA, 443 F.3d 880 (D.C. Cir. 2006) (finding in favor of state petitioners in a challenge to an EPA rule under the CAA with no discussion of whether petitioners had standing to bring claim).

Additionally, the interests that STAPPA and ALAPCO seek to protect in this petition for review are germane to the organizations' stated purpose of enhancing cooperation among federal, state, and local regulatory agencies, and of promoting good management of air resources. Decl. S. William Becker ¶ 4, 7. As STAPPA and ALAPCO noted in their comments during the rulemaking, state and local government agencies depend on EPA's leadership in regulating emissions from aircraft engines. Comment submitted by Nancy L. Seidman, STAPPA Chair, and Eric P. Skelton, ALAPCO Chair, Mobile Sources and Fuels Committee at 1 (OAR-2002-0030-0116) [JA\_\_\_\_]. Petitioners seek a more stringent emission standard from EPA so that the government agencies they represent will be able to control NO<sub>x</sub> emissions more effectively. Id.

Finally, the claims asserted in this petition do not require the participation of the organizations' individual members, as the claims do not require the government agencies to present individualized proof that the rule is arbitrary, capricious, or unlawful. Hunt v. Wash. State Apple Adver. Comm'n, 432 U.S. 333, 344 (1977). Also, as the petition seeks injunctive relief on behalf of its members rather than damages, individual participation is not necessary for the relief requested. United Food & Commercial Workers Union Local 751 v. Brown Group, Inc., 517 U.S. 544, 554 (1996).

## ARGUMENT

### I. Standard of Review

This Court must vacate EPA regulations adopted under the CAA that are “arbitrary, capricious, . . . or otherwise not in accordance with law.” CAA § 307(d)(9)(A), 42 U.S.C. § 7607(d)(9)(A). The standard articulated in Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842-43 (1984), governs whether EPA acted in accordance with law. Under Chevron, courts first ask whether Congress has “directly spoken to the precise question at issue,” and, if so, an agency must give effect to Congress’s unambiguously expressed intent. Chevron, 467 U.S. at 842-43; AFL-CIO v. Fed. Election Comm’n, 333 F.3d 168, 172 (D.C. Cir. 2003). Here, Congress’s intent is ambiguous because it delegated to EPA the authority to issue aircraft engine emission standards, but did not explicitly define what the standards should be. Thus, this Court should proceed to Chevron’s second step, which requires that the Court determine whether the issuance of the rule constitutes “a permissible construction of the statute.” AFL-CIO, 333 F.3d at 175 (quoting Chevron, 467 U.S. at 843). Under Chevron Step II, a court may defer to the agency’s interpretation only if the rule is “reasonable and consistent with the statutory purpose and legislative history.” Hill v. Norton, 275 F.3d 98, 105 (D.C. Cir. 2001) (citing Bell Atl. Tel. Cos. v. FCC, 131 F.3d 1044, 1049 (D.C. Cir. 1997)).

This Court may also reverse EPA’s promulgation of aircraft engine emission standards, if the agency has acted arbitrarily and capriciously. A rule is arbitrary and capricious if the agency does not “articulate a satisfactory explanation” for its decision, Motor Vehicle Mfrs. Ass’n, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43

(1983), or provide a “rational connection between the facts found and the choice made,” Burlington Truck Lines v. United States, 371 U.S. 156, 168 (1962). Furthermore, courts must deem a rule arbitrary and capricious if the agency “relied on factors which Congress has not intended it to consider” or did not base its decision “on a consideration of the relevant factors.” State Farm, 463 U.S. at 43 (internal quotation omitted).

## **II. EPA Issued Aircraft Engine Emission Standards That Are Not in Accordance with the CAA**

This Court should vacate EPA’s aircraft engine emission standards because they are not based on a reasonable interpretation of section 231 of the CAA and are inconsistent with the Act and its legislative history. See Hill, 275 F.3d at 105. Section 231 directs the Administrator to regulate the emission of all pollutants from aircraft engines that “in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.” CAA § 231(a)(2)(A), 42 U.S.C. § 7571(a)(2)(A). The emission standards issued here, however, are not consistent with this statutory purpose because they will not reduce emissions and, therefore, will not adequately protect public health or welfare. This rule is also inconsistent with the overall statutory scheme because it interferes with the states’ individual obligations under the CAA, further jeopardizing public health, particularly in large urban areas with heavy aircraft traffic. In addition, EPA acted inconsistently with the public health and welfare purpose of section 231 by placing undue emphasis on the importance of aligning the United States’ aircraft engine emission standards with international standards. Finally, EPA’s decision to issue emission standards for aircraft engines that merely codify current practices is not a reasonable interpretation of the forward-looking language in CAA section 231 and is inconsistent with the Act’s overall purpose and legislative history.

EPA's failure to issue more stringent emission standards is not reasonable and is inconsistent with the CAA's overall purpose "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." CAA § 101(b)(1), 42 U.S.C. § 7401(b)(1). Congress reiterated this purpose in section 231. CAA § 231(a)(2)(A), 42 U.S.C. § 7571(a)(2)(A). In the preamble to the Aircraft Engine Emission Standards rule, EPA acknowledged the adverse health and welfare effects associated with NO<sub>x</sub> emissions and the subsequent formation of ozone and PM<sub>2.5</sub>. 70 Fed. Reg. at 69670-73. In particular, EPA noted increased levels of asthma and other kinds of respiratory illnesses, in addition to the creation of regional haze, acid rain, and other adverse environmental effects, as consequences of increased NO<sub>x</sub> emissions. Id. EPA further explained that the contribution of aircraft engine emissions to nationwide NO<sub>x</sub> levels, as well as NO<sub>x</sub> levels in areas adjacent to airports, is growing substantially. Id. at 69668-69.

Despite the extensive evidence supporting the need to reduce aircraft engine emissions, EPA adopted emission standards that it acknowledged were already met by "94 percent of all engine models" and will "result[] in no actual emissions reduction." Id. at 69675-76. By acknowledging aircraft emissions' harmful impact on public health and welfare and then refusing to address the problem, EPA's issuance of the emission standards was not reasonable or consistent with the purpose of section 231, let alone the CAA as a whole.

Moreover, the weakness of the emission standards in this rule threatens to interfere with the states' ability to comply with their CAA obligations, id. at 69676, rendering EPA's interpretation of section 231 unreasonable and inconsistent "with the

underlying statutory scheme,” Rettig v. Pension Benefit Guar. Corp., 744 F.2d 133, 151 (D.C. Cir. 1984). The CAA requires states to submit SIPs to EPA providing for “implementation, maintenance, and enforcement” of the NAAQS promulgated by EPA, CAA § 110(a), 42 U.S.C. § 7410(a), as a part of the Act’s comprehensive scheme to achieve the overall goal of protecting public health and welfare through the reduction of harmful air pollutants, see H.R. Rep. No. 95-294, at 1-3 (1977), reprinted in 1977 U.S.C.C.A.N. 1077, 1078-80. EPA must set NAAQS for criteria pollutants, including ozone and PM<sub>2.5</sub>, at a level that will protect public health, CAA § 109(b)(1), 42 U.S.C. § 7409(b)(1), and SIPs are an important part of implementing those standards, CAA § 110, 42 U.S.C. § 7410. Indeed, Congress designed the CAA to ensure that the federal government would not hinder a state’s ability to comply with its SIP, and the Act bars federal agencies from engaging in any activity that does not conform to an approved SIP. CAA § 176(c)(1), 42 U.S.C. § 7506(c)(1).

EPA has issued an 8-hour NAAQS that is a health-based standard for ozone, as well as short-term and long-term standards for PM<sub>2.5</sub>, both important regulations for curbing these pollutants’ harmful effects on public health and welfare, and on the environment. In their comments on the proposed rule, many state and local governments expressed concerns about achieving these standards efficiently and effectively without the help of more stringent regulation of NO<sub>x</sub> emissions from aircraft engines. 70 Fed. Reg. at 69675; STAPPA and ALAPCO Testimony, supra, at 1 (OAR-2002-0030-0095) [JA\_\_\_]; Georgia Comments, supra (OAR-2002-0030-0112) [JA\_\_\_]; New York Comments, supra (OAR-2002-0030-0115) [JA\_\_\_]; Texas Comments, supra (OAR-2002-0030-0120) [JA\_\_\_]; California Comments, supra (OAR-2002-0030-0123)

[JA\_\_\_]; SCAQMD comments, supra (OAR-2002-0030-0104) [JA\_\_\_]. Indeed, EPA conceded in the preamble that it is “aware that many states face air quality challenges in light of the new ozone NAAQS, and since section 233 of the CAA vests authority only in EPA to set aircraft emissions standards, [the agency] understand[s] their perspective regarding the importance of setting more stringent NO<sub>x</sub> standards in the future.” 70 Fed. Reg. at 69676. EPA also noted that many states will have difficulties attaining the PM<sub>2.5</sub> standard as well, “based on the severity of the air quality problem and the availability and feasibility of control measures.” Id. at 69672. Nonetheless, EPA issued aircraft emission standards that, by its own admission, are at odds with the overall scheme of the CAA. See id. at 69676 (noting that EPA’s rule on aircraft emissions may make it difficult for states to meet the NAAQS).

Meeting SIP requirements has often proved challenging for states in the past. S. Rep. No. 101-228, at 10-12 (1989), reprinted in 1990 U.S.C.C.A.N. 3385, 3395-98. If states are unable to absorb the emissions increases resulting from EPA’s failure to regulate NO<sub>x</sub> emissions from aircraft engines adequately, then public health will suffer and the air quality goals of the Act will go unmet. States may be forced to cut back on other sources of pollution in order to implement SIPs designed to attain and maintain the NAAQS for ozone and PM<sub>2.5</sub> or face severe penalties, CAA § 179, 42 U.S.C. § 7509(b). See, e.g., Georgia Comments, supra, at 1(OAR-2002-0030-0112) [JA\_\_\_]; Texas Comments, supra, at 1 (OAR-2002-0030-0120) [JA\_\_\_]. Illustrating how dire the states’ problems are, officials from thirteen states in nonattainment areas reported to GAO that “available control measures for other air pollution sources have been nearly exhausted.” GAO Report, supra, at 29 (OAR-2002-0030-0005) [JA\_\_\_]. Tightening emission

controls on local industry and commerce often imposes significant costs and job losses. These costs may be for naught, if states are still unable to achieve and maintain the NAAQS because of EPA's lax aircraft emission standards. Because the challenged rule threatens to impair the ability of states to comply with NAAQS, it is not a reasonable interpretation of section 231 and is inconsistent with the overall statutory scheme.

EPA's decision to issue a rule that merely adopted the minimum aircraft engine emission standards set by ICAO is also not a reasonable interpretation of section 231 or consistent with the Act's purpose.<sup>4</sup> See Hill, 275 F.3d at 105. Rather than evaluating on its own the level of stringency of aircraft engine emission standards necessary for the protection of public health and welfare, EPA focused on "establish[ing] consistency between U.S. and international standards, requirements, and test procedures," and the associated commercial benefits of consistency with international standards. 70 Fed. Reg. at 69664.

However, establishing consistency with international standards is not the purpose of the CAA. Section 231 is silent on the need for consistency with international standards or achieving associated commercial benefits. CAA § 231, 42 U.S.C. § 7571. Had Congress intended for section 231 to ensure the alignment of U.S. and international aircraft engine emission standards, rather than prevent air pollution that endangers public health or welfare, it would have written that requirement into the statute. See California v. Watt, 668 F.2d 1290, 1304 (D.C. Cir. 1981) (noting that the language of the statute is "the most important manifestation of Congressional intent") (quoting Lawrence v. Staats,

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<sup>4</sup> EPA's decision to follow the minimum international standards for aircraft engine emissions does not appear to be limited to this rule. Although EPA promised throughout the preamble to issue more stringent emissions standards in the future, it stated that it "expect[ed] to adopt standards developed through the CAEP process in ICAO." 70 Fed. Reg. at 69676.

640 F.2d 427, 436 (D.C. Cir. 1981) (MacKinnon, J., concurring)). EPA's disregard of the statutory directive to protect public health and welfare and its focus on international consistency and commercial benefits, factors that are not mentioned in section 231 and are not relevant to the purpose of the CAA, are not a reasonable interpretation of section 231; nor is EPA's action consistent with the CAA's statutory purpose.

EPA's decision to adopt a rule that simply "codifies current practices," rather than pushing for the adoption of technology that is better able to reduce emissions, is also unreasonable and inconsistent with the CAA's statutory purpose and legislative history. EPA acknowledged that section 231 is "forward-looking," but declined to issue a standard that would achieve "a performance level . . . beyond what sources are currently achieving." 70 Fed. Reg. at 69675-76. EPA's decision not to employ pollution control technology in setting emission standards for aircraft engines is unreasonable because it renders meaningless the statutory language "development and application of requisite technology." See Alaska Dep't of Env'tl. Conservation v. EPA, 540 U.S. 461, 489 n.13 (2004) (noting the fundamental principle of statutory construction that statutes should be construed so that "no clause, sentence, or word is superfluous, void, or insignificant") (internal quotation omitted).

Furthermore, the Aircraft Engine Emission Standards rule is inconsistent with congressional intent, as EPA sought only to prevent the reversal of manufacturers' voluntary technological progress, rather than issue a rule that promotes technological improvement. As this Court has noted, Congress "'expected [the CAA] to press for the development and application of improved technology rather than be limited by that which exists today.'" Natural Res. Def. Council, Inc. v. EPA, 655 F.2d 318, 328 (D.C. Cir.

1981) (quoting S. Rep. No. 1196, 91st Cong., 2d Sess. 24 (1970)). Thus, EPA's decision to adopt emission standards that did not involve the development and application of technology--like its decision to adopt standards that are not sufficiently protective of public health and welfare, interfere with the ability of states to meet NAAQS, and are overly reliant on a weak international standard--is an unreasonable interpretation of CAA section 231 and inconsistent with the Act's purpose and legislative history.

### **III. EPA Acted Arbitrarily and Capriciously by Blaming Its Failure to Adopt More Stringent Standards on Insufficient Time Given Its Lengthy Delay in Promulgating the Rule**

EPA's repeated assertion that there was "not sufficient lead time to require more stringent emission standards," 70 Fed. Reg. at 69675, renders this rule arbitrary and capricious. EPA's own delay, which was unreasonable and which EPA did not explain, is responsible for the lack of sufficient lead time for manufacturers "to develop and implement requisite technology." *Id.* at 69676. Indeed, EPA admitted "that it would have been preferable to adopt standards sooner." EPA, EPA420-R-05-004, Emission Standards and Test Procedures for Aircraft and Aircraft Engines - Summary and Analysis of Comments, at 6 (Nov. 2005) (OAR-2002-0030-0290) [JA\_\_\_] [hereinafter Summary and Analysis of Comments].

Petitioners do not assert that EPA acted unreasonably by failing to adopt the international standards sooner. Rather, petitioners assert that EPA cannot argue that it would have issued more stringent standards if it only had more time, when EPA had complete discretion over the timing of the rule. Although section 231 grants the agency significant discretion as to *when* it ought to issue emission standards, Natural Res. Def. Council, Inc. v. Thomas, 885 F.2d 1067, 1075 (2d Cir.1989); Am. Canoe Ass'n, Inc. v.

EPA, 30 F. Supp.2d 908, 923 (E.D. Va. 1998), EPA must adequately explain its actions, State Farm, 463 U.S. at 43. It did not do so here.

Although EPA said it was important to “establish consistency between U.S. and international standards, requirements, and test procedures” for its aircraft engine emission standards, 70 Fed. Reg. at 69664, and to promulgate the rule quickly, id. at 69681, it did not initiate the rulemaking until nearly four years after ICAO adopted the CAEP/4 standards, and only three months prior to their effective date. EPA’s analysis and discussion of the Aircraft Engine Emission Standards rule in the preamble to the rule did nothing to resolve this apparent inconsistency. Thus, the agency did not “articulate a satisfactory explanation” for issuing these standards, State Farm, 463 U.S. at 43, and failed to demonstrate a “rational connection between the facts found and the choice made,” Burlington Truck Lines, 371 U.S. at 168. EPA’s reason for adopting the emission standards it did, when it did, makes little sense. Therefore, this rule is arbitrary and capricious.

#### **IV. EPA Acted Unlawfully, and Arbitrarily and Capriciously, by Placing Undue Emphasis on Speculative Safety Concerns**

EPA’s reliance on speculative safety concerns as a reason for not issuing more stringent standards is not in accordance with law. Furthermore, EPA’s analysis on this point is arbitrary and capricious because the agency did not provide support and explanation for its assertion that safety concerns prevented the issuance of more stringent standards.

EPA’s overemphasis of safety considerations when determining whether to issue a standard requiring the application and development of technology is not “reasonable and consistent with the statutory purpose” of the CAA. Hill, 275 F.3d at 105. While it is

true that section 231 directs EPA to refrain from issuing emission standards that would “adversely affect safety,” CAA § 231(a)(2)(B)(ii), 42 U.S.C. § 7571(a)(2)(B)(ii), the primary focus of the section is on protecting public health and welfare. EPA’s interpretation is unreasonable because it concluded that, unlike other CAA sections that require a reasonable balance of emissions reduction and other factors,<sup>5</sup> EPA did not have to give “subordinate status” to factors such as safety because section 231 did not require it to achieve a “technology-forcing” result.<sup>6</sup> 70 Fed. Reg. at 69676.

Regardless of whether section 231 contains a “technology-forcing” provision, this Court’s reasoning in Husqvarna AB v. EPA, 254 F.3d 195 (D.C. Cir. 2001), which was cited by EPA, 70 Fed. Reg. at 69676, is pertinent here. This Court stated unambiguously that “[t]he overriding goal of [the section governing emissions from nonroad vehicles] is air quality and the other listed considerations, while significant, are subordinate to that goal.” 254 F.3d at 201. Analogous to the nonroad vehicle emissions section,<sup>7</sup> while section 231 intends for aircraft engine emission standards to account for safety, safety is not “the overriding goal” of the section. EPA’s determination that safety considerations were as important as the overall goal of promoting public health and welfare is inconsistent with the Act and an unreasonable interpretation of section 231. See Hill, 275 F.3d at 105.

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<sup>5</sup> In this discussion, EPA compared section 231 to CAA § 202, 42 U.S.C. § 7521 (emission standards for new motor vehicles or new motor vehicle engines) and CAA § 213, 42 U.S.C. § 7547 (non-road engines and vehicles). 70 Fed. Reg. at 69676.

<sup>6</sup> The Aircraft Engine Emission Standards rule defines technology forcing as “a performance level that is beyond what sources are currently achieving. 70 Fed. Reg. at 69675.

<sup>7</sup> CAA section 213 governs regulation of nonroad engines and vehicles and provides that the Administrator shall regulate emissions that may “endanger the public health or welfare” while “giving appropriate consideration” to “cost . . . noise, energy, and safety factors associated with the application of such technology.” CAA § 213(1), (3), 42 U.S.C. § 7547(1), (3).

Furthermore, EPA’s failure to provide any supporting analysis for its conclusion that safety considerations prevented the agency from employing pollution control technology in setting these standards renders the rule arbitrary and capricious. EPA offered only a blanket statement that “it is reasonable . . . to give greater weight to considerations of safety.” 70 Fed. Reg. at 69676 (citing CAA § 231(a)(2)(B)(ii), 42 U.S.C. § 7571 (a)(2)(B)(ii) (“The Administrator shall not change the aircraft engine emission standards if such change would . . . adversely affect safety.”), and CAA § 231(c), 42 U.S.C. § 7571(c) (“Any regulations in effect under this section . . . shall not apply if disapproved by the President . . . on the basis of a finding by the Secretary of Transportation that any such regulation would create a hazard to aircraft safety.”)). EPA did not “examine the relevant data and articulate a satisfactory explanation” for its determination regarding safety concerns and did not provide “a rational connection between the facts found and the choice made.” State Farm, 463 U.S. at 43 (internal quotation marks and citation omitted). Rather, EPA’s abrupt conclusion regarding safety concerns is akin to the impermissible “I know it when I see it” approach prohibited by this Circuit. See Pearson v. Shalala, 164 F.3d 650, 660 (D.C. Cir. 1999) (quoting Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) (Stewart, J., concurring)).

When stating its rationale and responding to public comment, EPA never explained *why* safety considerations prevented it from issuing a standard that would require the development and application of technology. Rather, the agency seemed to defer, without any explanation, to the airline industry’s unspecified concern that safety might be implicated by requiring the development of technology. See 70 Fed. Reg. at 69676 (“[The airlines] suggested that a technology-forcing NO<sub>x</sub> standard *could* adversely

affect noise and safety.”) (emphasis added). The industry groups did not specify in their comments *how* the development of technology for more stringent emission standards would adversely impact safety. Summary and Analysis of Comments, supra, at 2-3 (OAR-2002-0030-0290) [JA\_\_\_\_]. EPA’s overemphasis of safety concerns as a rationale for not issuing more stringent emission standards is unlawful, and its unexplained reliance on safety concerns as an excuse not to use technology in its establishment of emission standards is arbitrary and capricious.

#### **V. EPA Acted Arbitrarily and Capriciously Because the Rule Does Not Include a Production Cut-off Date for Already-Certified, Newly Manufactured Aircraft Engines**

EPA did not adequately explain why it did not establish a production cut-off date and allowed grandfathering of already-certified engine models manufactured after the effective date of these emission standards. Nor did EPA explain its departure from previous aircraft engine emission standards, which did contain production cut-off provisions, and, in addition, EPA again blamed its failure to do something on insufficient time to solicit public comments and develop the record.

EPA’s failure to give a reasoned explanation for its abrupt departure from the practice of establishing production cut-off dates is arbitrary and capricious. See Wis. Valley Improvement v. Fed. Energy Regulatory Comm’n, 236 F.3d 738, 748 (D.C. Cir. 2001) (“In particular, an agency acts arbitrarily and capriciously when it abruptly departs from a position it previously held without satisfactorily explaining its reason for doing so.”); see also State Farm, 463 U.S. at 42 (“[A]n agency changing its course . . . is obligated to supply a reasoned analysis for the change . . .”). The emission standards that EPA issued here will apply only to newly certified engines. 70 Fed. Reg. at 69673-

74. This is contrary to EPA's prior practice of establishing production cut-off dates not only for aircraft engine emission standards, but also for all other CAA mobile source emission standards. 68 Fed Reg. at 56244-45. Its failure to provide a reasoned explanation for this omission renders this decision arbitrary and capricious.

In addition to not explaining its abrupt departure from past practices, EPA did not adequately explain, in the context of these particular emission standards, why a production cut-off provision is not necessary in light of EPA's stated goal of ensuring that manufacturers' progress in reducing NO<sub>x</sub> emissions "is not reversed in the future." See 70 Fed. Reg. at 69675. Based on ICAO's finding that only a few in-use engine models will not meet the CAEP/4 standards, EPA concluded that the NO<sub>x</sub> emissions benefits of a production cut-off date would be very small. *Id.* at 69679. The chart that EPA offered in support of its conclusion, Figure III.B-1, has no relevance to the question of whether the newly manufactured engines will result in an increase in NO<sub>x</sub> emissions.<sup>8</sup> It does not contain information about the impact of the continued use of these engines on NO<sub>x</sub> emissions, or otherwise support EPA's conclusion that the emission reduction benefits of establishing a production cut-off date would be insignificant. Therefore, EPA's analysis is unsatisfactory because it does not "examine the relevant data" or consider "the relevant factors." *State Farm*, 463 U.S. at 43.

EPA also justified its decision to omit a production cut-off date by again using the excuse of insufficient time. In the preamble, EPA stated that promulgating a production cut-off provision "at this late date . . . could be disruptive to the production planning of engine manufacturers," and that "the lateness of the rule may not provide manufacturers

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<sup>8</sup> Figure III.B-1 charts whether various in-production aircraft engines exceed the CAEP/4 standards. 70 Fed. Reg. at 69680.

enough lead time for such planning.” 70 Fed. Reg. at 69680-81. EPA does not, however, explain *why* lead time is necessary for implementation of a production cut-off date.

While issuing a technology-forcing rule would require lead-time for manufacturers to develop the “requisite technology” and for the agency to consult with the Secretary of Transportation on issues of safety, *id.* at 69676, simply phasing out the use of noncompliant designs should not require lead time because engine designs that do comply with the new standards already exist. In fact, EPA’s contention is somewhat paradoxical in that production cut-off dates typically come after the effective date of new emission standards, necessarily giving manufacturers advance planning time. *See, e.g.*, 68 Fed. Reg. at 56244 (“EPA promulgated a [hydrocarbon] standard in 1982 that applied to newly manufactured [aircraft] engines beginning in 1984.”). Therefore, establishing a future production cut-off date for newly manufactured engines would not be prohibited by EPA’s “tardy” adoption of the CAEP/4 standards; nor would it interfere with EPA’s desire to implement the international standards as quickly as possible. EPA’s failure to state “a rational connection” between the timing of this rule and the manufacturers’ need to adequately plan for a production cut-off renders this rule arbitrary and capricious.

State Farm, 463 U.S. at 43

EPA further inappropriately justified its failure to include a production cut-off provision by asserting it did not have sufficient time to “develop a record that fully analyzes the emissions benefits (if any) and the implementation *costs*.” 70 Fed. Reg. at 69681 (emphasis added). In doing so, EPA placed more emphasis on cost than the statute contemplates, rendering the rule arbitrary and capricious by “rel[ying] on factors which Congress has not intended it to consider.” State Farm, 463 U.S. at 43.

Section 231 provides that regulations “shall take effect after such period . . . necessary . . . to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.” CAA § 231(b), 42 U.S.C. § 7571(b). The phrase “cost of compliance” is used narrowly here; the language appears under the heading “Effective date of regulations” and modifies the time period necessary to develop and implement requisite technology. United States v. Pritchett, 470 F.2d 455, 459 (D.C. Cir. 1972) (“Ordinarily, qualifying phrases are to be applied to the words or phrase immediately preceding and are not to be construed as extending to others more remote.”). The statutory language does not require consideration of cost of compliance in the setting of emission standards generally, but only standards that would require development of requisite technology, which EPA has pointedly elected not to do here. Therefore, the cost of compliance is not a relevant factor in EPA’s analysis of a production cut-off date because such a provision would not require the “development and application” of technology, but merely the gradual replacement of older engine designs. Because cost is not a relevant factor to this analysis, EPA’s excuse that it did not have sufficient time to develop the record on this issue is unpersuasive.

EPA’s reliance on cost considerations as a reason for not including a production cut-off date, as well as its failure to explain its abrupt departure from prior practice and its continued reliance on its own dilatory behavior, renders the rule arbitrary and capricious.

## **VI. EPA Acted Arbitrarily and Capriciously by Issuing a “Near-Term Rule” Without Establishing a Timeline for a Follow-up Rulemaking**

The aircraft engine emission standards rule is arbitrary and capricious because EPA issued the rule as “a near-term approach” without firmly committing to future action. EPA merely stated a general intent “to address more stringent emissions standards requiring more lead time in a future rulemaking.” 70 Fed. Reg. at 69674.

Under this Court’s ruling in Bluewater Network v. EPA, 372 F.3d 404 (D.C. Cir. 2004), the rule is arbitrary and capricious because it fails to establish a clear timeline for the adoption of more stringent emission standards. In Bluewater, this Court addressed a near-term rule under the section governing nonroad vehicle emissions, which was similarly issued in order to align CAA standards with international standards.<sup>9</sup> 372 F.3d at 408-09. There, EPA issued a “near-term” rule, which adopted the international standards in a short time frame, and committed to issuing a second rulemaking within three years, which would “consider the state of technology that may permit deeper emission reductions and the status of international action for more stringent standards.”<sup>10</sup> Id. at 408 (internal quotations omitted). Petitioner Bluewater challenged the rule on the basis that the near-term rule was “simply an iteration of the status quo and [would] effect no reduction in emissions.” Id. at 410. This Court upheld the rule and rejected Bluewater’s challenge because, “most importantly, the EPA has committed to . . . stricter emissions standards in the 2007 rulemaking.” Id. at 412.

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<sup>9</sup> Like the section at issue here, section 213 requires that EPA revise the emissions standards for non-road engines, including marine vessels, “from time to time.” CAA § 213, 42 U.S.C. § 7547(a)(3).

<sup>10</sup> In Bluewater, EPA adopted a rule as a near-term approach due to similar concerns as in the instant case: the need for manufacturers to have sufficient lead time to develop and implement technology. 372 F.3d at 409 (“Postponing the adoption of specific, and stricter, standards . . . allowed the industry and the EPA to obtain important additional information on the use of these advanced technologies.”) (internal quotation omitted). However, unlike the case here, in Bluewater, EPA had set a firm deadline for itself to issue a more stringent rule once it had additional information. Id.

Here, however, EPA did not firmly commit to issuing a subsequent, more stringent rule. The evidence EPA presented in support of its Aircraft Engine Emission Standards rule overwhelmingly shows that stricter emission standards are necessary to protect the public health and welfare, as required by the CAA generally and section 231 specifically. EPA avoided issuing the necessary standards now by stating its intent to issue more stringent standards in the future. But the agency did not, as GAO recommended, develop a strategic framework for reducing emissions, including “goals and time frames for achieving any needed emission reductions.” GAO Report, supra, at 31-32 (OAR-2002-0030-0005) [JA\_\_\_\_]. Furthermore, EPA stated that, rather than planning to set its own stricter emission standards that squarely address public health and welfare concerns in the United States, it expected again to “adopt standards developed through the CAEP process in ICAO.” 70 Fed. Reg. at 69676. Because EPA did not firmly establish that it will adopt more stringent long-term standards—based on the purposes and goals of the CAA—by a particular deadline, this rule is arbitrary and capricious.

## CONCLUSION

For the foregoing reasons, petitioners respectfully request that this Court vacate the Aircraft Engine Emission Standards rule and order EPA to promulgate more stringent standards for aircraft engine emissions.

Respectfully Submitted,

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## **CERTIFICATE OF COMPLIANCE WITH WORD VOLUME LIMITATIONS**

I hereby certify that the foregoing brief of Petitioners complies with Fed. R. App. P 32(a)(7). The word count function of the word processing system used to prepare this brief indicates that it contains 9,059 words (inclusive of footnotes, headings, and citations, but exclusive as to certificates as to parties, rulings and related cases, tables of contents and authorities, glossary, attorney's certificates, and addenda).

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Emma E. Garrison

## CERTIFICATE OF SERVICE

I hereby certify that on this 28<sup>th</sup> day of July 2006, I caused a true copy of the foregoing “Initial Opening Brief of Petitioners State and Territorial Air Pollution Program Administrators, and Association of Local Air Pollution Control Officials” and its accompanying addenda to be served, postage pre-paid, via the U.S. Postal Service, on Steven E. Rusak, Counsel for Respondent, at the United States Department of Justice, Environment and Natural Resources Division, 1961 Stout Street, 8th Floor, Denver, CO 80294; Thomas Richichi, Counsel for amici curiae Aerospace Industries Association and Air Transport Association of America, Inc., Beveridge and Diamond, P.C., 1350 I Street, N.W., Suite 700, Washington, D.C. 20005-3311; and Mac. S. Dunaway, Counsel for amicus curiae Aerospace Industries Association, Dunaway & Cross, 1100 Connecticut Ave., N.W., Suite 410, Washington, D.C. 20036.

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**ADDENDUM OF STATUTES  
AND REGULATIONS**

## **ADDENDUM**

### **Statutes and Regulations**

#### **Clean Air Act**

CAA § 231, 42 U.S.C. § 7571.

#### **Final Rule**

Control of Air Pollution From Aircraft and Aircraft Engines; Emission Standards and Test Procedures, 70 Fed. Reg. 69664 (Nov. 17, 2005).

# **ADDENDUM OF DECLARATIONS**

## **ADDENDUM**

### **Declarations in Support of Standing**

Declaration of S. William Becker