[ORAL ARGUMENT NOT SCHEDULED]

No. 16-1128

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

COMPETITIVE ENTERPRISE INSTITUTE,
THE CONSUMER ADVOCATES FOR SMOKE-FREE ALTERNATIVES ASSOCIATION, and GORDON CUMMINGS,

Petitioners,

v.

UNITED STATES DEPARTMENT OF TRANSPORTATION, and ANTHONY FOXX, in his official capacity
as Secretary of the U.S. Department of Transportation,

Respondents.

On Petition for Review of a Final Rule
of the Department of Transportation

BRIEF FOR RESPONDENTS

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to D.C. Circuit Rule 28(a)(1), the undersigned counsel certifies as follows:

A. Parties and Amici

Petitioners are Competitive Enterprise Institute; The Consumer Advocates for Smoke-Free Alternatives Association; and Gordon Cummings. Respondents are the United States Department of Transportation and Anthony Foxx, in his official capacity as Secretary of the United States Department of Transportation. The Court has not granted any motions to intervene or to participate in this case as amicus curiae, nor have any motions been filed.

B. Rulings Under Review

This is a petition for direct review of a final rule of the United States Department of Transportation, entitled Use of Electronic Cigarettes on Aircraft. This rule is published in the Federal Register at 81 Fed. Reg. 11,415 (Mar. 4, 2016).

C. Related Cases

Counsel for the government is unaware of any related cases within the meaning of D.C. Circuit Rule 28(a)(1)(C).

s/ Tara S. Morrissey
Tara S. Morrissey

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GLOSSARY

Cmt.	Comment
FAA	Federal Aviation Administration
JA	Joint Appendix
OSHA	Occupational Safety and Health Act
Pet'rs	Petitioners
Petr's' Br.	Petitioners' Opening Brief

INTRODUCTION

Electronic cigarettes (e-cigarettes) are modern smoking devices that have become increasingly popular in recent years. These devices heat a liquid solution, which contains nicotine or other chemicals, to produce a cloud of chemicals commonly referred to as aerosol or vapor. E-cigarette users inhale the aerosol and then exhale, as if they were smoking traditional tobacco cigarettes. Studies reveal that e-cigarette aerosol contains chemicals that may cause respiratory irritation and other adverse health effects. As a result, researchers have called for further study into the health risks of secondhand exposure to e-cigarette aerosol.

The final rule at issue here protects airline passengers—including children, the elderly, and pregnant women—and crewmembers from secondhand exposure to e-cigarette aerosol in the confined environment of an aircraft cabin. The Secretary of Transportation (the Secretary) reasonably concluded that e-cigarettes fall within the statutory ban on "smoking" in aircraft. 49 U.S.C. § 41706. That conclusion is entitled to deference. "Smoking" is an undefined statutory term, and it is sufficiently broad to encompass modern smoking technologies such as e-cigarettes. The Secretary's regulatory definition, which includes e-cigarettes within the meaning of "smoking," furthers the statutory purpose of preserving cabin air quality, avoiding passenger and crew discomfort, and reducing crewmembers' exposure to potential health hazards.

The final rule is also a reasonable exercise of the Secretary's independent authority to ensure "safe and adequate" air transportation under 49 U.S.C. § 41702,

which allows the Secretary to regulate quality of service and to ensure passenger comfort aboard aircraft. Acting pursuant to this authority, the Secretary rationally concluded, based on ample record evidence, that allowing e-cigarettes on aircraft would cause passenger discomfort due to respiratory irritation and concerns about the health effects of inhaling unknown quantities of harmful chemicals. In confined aircraft cabins, passengers have no way to avoid secondhand exposure to these chemicals throughout the duration of their flights.

This Court should uphold the Secretary's reasonable decision to protect passengers and crewmembers from secondhand exposure to e-cigarette aerosol. Prohibiting e-cigarettes on aircraft fits squarely within the text and purposes of the statutory ban on "smoking" in aircraft and ensures that passengers receive "safe and adequate" air transportation.

STATEMENT OF JURISDICTION

The Department of Transportation (the Department) issued the final rule at issue on March 4, 2016. Petitioners filed timely petitions for review on April 28, 2016. This Court has jurisdiction under 49 U.S.C. § 46110(a).

STATEMENT OF THE ISSUES

Petitioners challenge a final rule of the Department of Transportation that protects airline passengers and crewmembers from secondhand exposure to e-cigarettes by prohibiting the use of e-cigarettes on aircraft. The issues presented are:

1. Whether the Department reasonably interpreted the statutory prohibition on "smoking" in aircraft to apply to modern smoking technologies, including e-cigarettes.

2. Whether, in the alternative, the rule is a reasonable exercise of the Department's authority to ensure "safe and adequate" air transportation. 49 U.S.C. § 41702.

PERTINENT STATUTES AND REGULATIONS

Pertinent statutes and regulations are reproduced in the addendum to this brief.

STATEMENT OF THE CASE

In the final rule at issue here, the Department clarified that the statutory and regulatory prohibitions on "smoking" in aircraft apply to modern smoking technologies such as e-cigarettes. The Department relies on two sources of authority for the rule: (1) the statutory prohibition on "smoking" in aircraft, 49 U.S.C. § 41706, and (2) the requirement that air carriers "provide safe and adequate interstate air transportation," *id.* § 41702.[1] Both statutory provisions have played an important role in the history of federal regulation of smoking in aircraft.

[1] The final rule also relied on a third source of authority under 49 U.S.C. § 41712, which governs "[u]nfair and deceptive practices." *See* Use of Electronic Cigarettes on Aircraft, 81 Fed. Reg. 11,415, 11,416, 11,421 (Mar. 4, 2016). In light of the procedural issue identified by Petitioners (Br. 51-52), the Department no longer relies on section 41712 as a basis of authority for the final rule. Therefore, this Court need not address Petitioners' arguments concerning the reach of section 41712.

A. "Safe And Adequate" Air Transportation And Early Smoking Regulations

Federal agencies have regulated smoking on airplanes for over 40 years. When the Civil Aeronautics Board (the Board)—whose authority was later transferred to the Department of Transportation—began regulating smoking, there was no statutory prohibition on smoking in aircraft. Instead, the Board relied on a statutory mandate that air carriers "provide safe and adequate" service—a requirement that has existed since the 1930s, and that continues to apply to domestic flights today. *See, e.g.*, Civil Aeronautics Act of 1938, Pub. L. No. 75-706, § 404(a), 52 Stat. 973, 993 ("It shall be the duty of every air carrier . . . to provide safe and adequate service . . . ."); 49 U.S.C. § 41702 ("An air carrier shall provide safe and adequate interstate air transportation."). Congress has delegated broad authority to the agency to ensure that air carriers fulfill this mandate. *See* 49 U.S.C. § 40113(a) (granting the Secretary authority to take action that "the Secretary, . . . as appropriate, considers necessary to carry out" provisions relating to air commerce and safety); *Action on Smoking & Health v. Civil Aeronautics Bd.*, 699 F.2d 1209, 1213-15 (D.C. Cir. 1983) (describing Board's broad authority to enforce this provision).

The Board's first smoking regulations were promulgated in 1973, when it required air carriers to establish no-smoking sections. 38 Fed. Reg. 12,207, 12,208-09 (May 10, 1973). At the time, research had not conclusively established the dangers of secondhand tobacco smoke; indeed, a government study had "concluded that the low

levels of contaminants . . . do not represent a health hazard to the nonsmoking passengers on aircraft." *Id.* at 12,207; *see also* Use of Electronic Cigarettes on Aircraft, 81 Fed. Reg. 11,415, 11,420-21 (Mar. 4, 2016). The Board focused on "the extent and depth of passenger discomfort and annoyance" caused by aircraft smoking and concluded that protecting passengers from such discomfort and annoyance would ensure "adequate service." 38 Fed. Reg. at 12,209. Two courts of appeals, including this Court, upheld the Board's authority to regulate smoking to ensure "safe and adequate" service. *Action on Smoking & Health*, 699 F.2d at 1213-15; *Diefenthal v. Civil Aeronautics Bd.*, 681 F.2d 1039, 1043-48 (5th Cir. 1982).

In subsequent years, the Board continued to regulate smoking and provided additional protections to nonsmokers. *See* Smoking Aboard Aircraft, 65 Fed. Reg. 36,772, 36,772 (June 9, 2000) (discussing history of smoking regulations). The Board's authority was transferred to the Department in 1985. *See id.*

B. The Statutory Prohibition On "Smoking" In Aircraft

In 1984, Congress directed the Department to commission an independent study regarding air cabin conditions and pollutants, including tobacco smoke. *See* H.R. Rep. No. 101-212, at 2 (1989) (describing history of smoking prohibition); *see also* Pub. L. No. 98-466, 98 Stat. 1825 (1984). The National Academy of Sciences conducted the study and made 21 recommendations, including a smoking ban on all domestic commercial flights. *See* H.R. Rep. No. 101-212, at 2. In its own report to Congress, the Department acknowledged that exposure to secondhand smoke "could

be viewed as a problem by some crew passengers," but advised that "further study is needed before the Department can propose a definitive response to this recommendation." *Id.* at 3.

Congress responded by enacting a two-year prohibition on smoking on domestic flights that last two hours or less. Pub. L. No. 100-202, tit. 3, § 328, 101 Stat. 1329, 1329-382 (1987) (codified at 49 U.S.C. § 1374(d)(1)(A) (1988)). Two years later, while the Department's study was still pending, Congress expanded the prohibition: It made the temporary ban a permanent one, and it prohibited smoking on all domestic flights, with an exception for certain flights over six hours. Pub. L. No. 101-164, § 335, 103 Stat. 1069, 1098 (1989); H.R. Rep. No. 101-212, at 3; *see also* Pub. L. No. 103-272, 108 Stat. 745, 745, 1141 (1994) (recodifying prohibition without substantive change at 49 U.S.C. § 41706). More recently, Congress eliminated the exception for flights over six hours and extended the prohibition to international flights. Pub. L. No. 106-181, § 708, 114 Stat. 61, 159 (2000). In 2012, while the notice of proposed rulemaking at issue in this case was pending, Congress extended the prohibition to charter flights. Pub. L. No. 112-95, § 401, 126 Stat. 11, 83.

In its current form, the aircraft smoking prohibition states that "[a]n individual may not smoke" aboard aircraft on domestic flights, 49 U.S.C. § 41706(a), and it directs the Secretary of Transportation to "require all air carriers and foreign air carriers to prohibit smoking" on aircraft in foreign air transportation, *id.* § 41706(b). The prohibition applies to scheduled passenger flights as well as nonscheduled

passenger flights (*i.e.*, charter flights) in which a flight attendant is a required crewmember of the aircraft. *Id.* § 41706(a)-(b). The current version, like its predecessors, does not define "smoking" or "smoke." Section 41706 includes a specific grant of authority to the Secretary to "prescribe such regulations as are necessary to carry out" the statutory smoking prohibition. *Id.* § 41706(d); *see also id.* § 40113(a) (general grant of authority to Secretary to carry out statutory provisions regarding air commerce and safety).

C. The Department's Recent Smoking Regulations, Which Apply To E-Cigarettes

After Congress enacted the aircraft smoking prohibition, the Department amended its regulations to implement the prohibition. *See, e.g.*, Smoking Aboard Aircraft, 55 Fed. Reg. 4991, 4993 (Feb. 13, 1990); 65 Fed. Reg. at 36,772. Prior to the final rule at issue here, the Department's regulations provided that "[a]ir carriers shall prohibit smoking on all scheduled passenger flights." 14 C.F.R. § 252.3 (2015); *see also* 65 Fed. Reg. at 36,775. The rule did not define "smoking," but it specified that the prohibition applied to the "smoking of tobacco products," including "the smoking of cigars and pipes." 14 C.F.R. §§ 252.1, 252.15 (2015). In connection with a 2010 Senate committee hearing, the Department clarified that the relevant statutes and regulations "already banned" the "[s]moking of electronic cigarettes" and stated the Department's intention to formalize this view. *The Financial State of the Airline Industry and the Implications of Consolidation: Hearing Before the S. Comm. on Commerce, Sci., &*

Transp., 111th Cong. 80 (2010) (response of Susan L. Kurland, Ass't Sec'y for Aviation & Int'l Affairs, U.S. Dep't of Transp., to written questions)[2]; *see also* U.S. Dep't of Transp., *DOT Policy on E-Cigarettes*.[3]

In 2011, the Department proposed to amend its rule to clarify that the smoking prohibition applies to e-cigarettes, which are "designed to deliver nicotine or other substances to a user in the form of a vapor," or aerosol. Smoking of Electronic Cigarettes on Aircraft, 76 Fed. Reg. 57,008, 57,009 (Sept. 15, 2011).[4] The Department explained that e-cigarette aerosol "may contain harmful substances or respiratory irritants," noting that "[t]he quantity and toxicity of exhaled vapors have not been studied." *Id.* It thus was concerned that e-cigarette aerosol may pose a "risk of adverse health effects on passengers and crewmembers," may "negatively impact the air quality within the aircraft," and may affect passenger comfort. *Id.* at 57,008-09. The Department described e-cigarettes as consisting of three parts: a cartridge that contains liquid nicotine or other chemicals, an atomizer or heating element, and a battery and electronics to power the atomizer. *Id.* at 57,009. When the user inhales, the atomizer or heating element is activated, heating the e-cigarette liquid solution

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[2] *Available at* https://www.gpo.gov/fdsys/pkg/CHRG-111shrg68174/pdf/CHRG-111shrg68174.pdf.

[3] https://www.transportation.gov/sites/dot.gov/files/docs/PolicyOnECigarettes_0.pdf (last visited Oct. 5, 2016).

[4] Consistent with the final rule, this brief refers to e-cigarette "aerosol," rather than to "vapor," which is the term used in the notice of proposed rulemaking. 81 Fed. Reg. at 11,415 n.2. Both terms are common, and the distinction does not impact the parties' arguments.

until it becomes an aerosol. *Id.* at 57,009-10. E-cigarette users inhale the aerosol and then exhale, as if they were smoking a traditional tobacco cigarette. *Id.* at 57,009. E-cigarettes are often designed to look like traditional tobacco cigarettes, but they produce aerosol without combustion. *Id.* at 57,010.

In its notice of proposed rulemaking, the Department relied on the aircraft smoking prohibition in section 41706, explaining that it viewed the statutory and "regulatory ban on smoking to be sufficiently broad to include the use of electronic cigarettes," as well as on section 41702's requirement that air carriers provide "safe and adequate interstate air transportation." 76 Fed. Reg. at 57,009. The Department aimed to protect passengers from potentially harmful chemicals in the closed environment of an aircraft cabin, and it cited numerous studies underscoring the potential health risks of e-cigarette and the need for further research. *Id.* at 57,009-10.

The final rule amends the Department's regulations to explicitly define "smoking" to include the use of modern smoking technologies such as e-cigarettes:

> *Smoking* means the use of a tobacco product, electronic cigarettes whether or not they are a tobacco product, or similar products that produce a smoke, mist, vapor, or aerosol, with the exception of products (other than electronic cigarettes) which meet the definition of a medical device in section 201(h) of the Federal Food, Drug and Cosmetic Act, such as nebulizers.

81 Fed. Reg. at 11,427 (to be codified at 14 C.F.R. § 252.3). The Department relied on three independent rationales.

First, the Department concluded that e-cigarettes were properly encompassed within the statutory ban on "smoking" in aircraft. The Department explained that, "[l]ike traditional smoking, e-cigarette use introduces a cloud of chemicals into the air that may be harmful." 81 Fed. Reg. at 11,420. The Department emphasized that exposing passengers to these chemicals "in a confined space, especially when those who are at higher risk are present, is contrary to the statutory ban on smoking aboard aircraft" and warrants a "precautionary approach." *Id.* Therefore, the Department determined that the final rule furthered the purposes of the smoking ban to improve cabin air quality, reduce the adverse health effects on passengers and crewmembers, and enhance passenger comfort. *Id.*; *see also* H.R. Rep. No. 101-212, at 2-5.

Second, the Department concluded that prohibiting the use of e-cigarettes was a reasonable exercise of the agency's responsibility to ensure that airlines provide "safe and adequate" transportation. It explained that the e-cigarette rule "ensure[s] 'adequate' service by reducing . . . passenger discomfort" from exposure to e-cigarette aerosol in two ways. 81 Fed. Reg. at 11,421. First, passengers "may feel the direct effects of inhaling the aerosol," which "has been shown to contain respiratory irritants." *Id.* In addition, passengers "may reasonably be concerned that they are inhaling unknown quantities of harmful chemicals, and that they will not be able to avoid the exposure for the duration of the flight." *Id.* The Department relied on numerous studies indicating the potential harm of e-cigarettes and the need for

further research, together with comments submitted by individuals and a broad range of organizations. *Id.* at 11,417-21.

Third, the agency concluded that the statutory requirement that the Secretary prevent "unfair or deceptive practices" also provided support for the rule. 49 U.S.C. § 41712; *see also* 81 Fed. Reg. at 11,421. As noted above, *supra* p. 3 n.1, the agency no longer relies on this rationale.

In addition to the Department, the Federal Aviation Administration (FAA) regulates smoking on airplanes for safety reasons. *See* 14 C.F.R. §§ 121.317, 129.29, 135.127.[5] FAA smoking regulations incorporate the Department's definition of "smoking," and thus FAA regulations apply to the use of e-cigarettes. *See, e.g.*, 14 C.F.R. § 121.317(c), (g) (requiring lighted "No Smoking" signs or placards on flights "*on which smoking is prohibited by part 252 of this title*," which refers to the Department's smoking regulations, and prohibiting persons from smoking while the "No Smoking" sign is lighted or placards are posted) (emphasis added); *id.* § 135.127(a)-(b) (same). Individuals who violate FAA smoking regulations are subject to civil penalties of up to $1,414. 49 U.S.C. § 46301(a)(1)(A)-(B); *see also* 14 C.F.R. § 13.301(c) (inflation

[5] FAA is a component of the Department and issues its own regulations beyond those issued by the Department. FAA's regulations are codified in 14 C.F.R. Chapter I, entitled, "Federal Aviation Administration, Department of Transportation"; that chapter encompasses Parts 1-199 of the C.F.R. By contrast, the Department regulations at issue here are codified within 14 C.F.R. Chapter II, which encompasses Parts 200-399 and is entitled, "Office of the Secretary, Department of Transportation (Aviation Proceedings)."

adjustment). Air carriers that violate Department or FAA smoking regulations are subject to penalties of up to $1,414 if they are "small business concerns," and up to $32,140 if they are not small business concerns. 49 U.S.C. § 46301(a)(1)(A)-(B); *see also* 14 C.F.R. §§ 13.301(c), 383.2 (inflation adjustments).[6]

SUMMARY OF ARGUMENT

To protect airline passengers from secondhand exposure to e-cigarette aerosol, the final rule clarifies that the use of e-cigarettes on aircraft constitutes "smoking" within the meaning of the statutory ban on smoking on aircraft. The final rule is a reasonable exercise of the Secretary's broad authority to prohibit "smoking" in aircraft, 49 U.S.C. § 41706, and to ensure "safe and adequate" service, which includes considerations of passenger comfort, *id.* § 41702.

The statutory prohibition on aircraft "smoking" includes a broad delegation of authority to the Secretary to "prescribe such regulations as are necessary to carry out" the prohibition. 49 U.S.C. § 41706(d). Congress did not define "smoking," nor did it specify the types of smoking devices to which the statute applies, leaving a gap for the Secretary to fill. In the final rule, the Secretary reasonably filled this statutory gap by defining "smoking" to encompass both traditional tobacco products and modern smoking technologies, including e-cigarettes. 81 Fed. Reg. at 11,427 (to be codified at

[6] The civil-penalty provision incorporates the Small Business Act's definition of "small business concern." 49 U.S.C. § 46301(i); *see* 15 U.S.C. § 632(a) (defining "small business concern").

14 C.F.R. § 252.3). As the Department explained in the final rule, secondhand exposure to e-cigarettes may be potentially harmful in the confined environment of an aircraft, particularly for high-risk passengers, and thus a "precautionary approach" is warranted. Use of Electronic Cigarettes on Aircraft, 81 Fed. Reg. 11,415, 11,420 (Mar. 4, 2016). By including the use of e-cigarettes in the definition of "smoking," the final rule furthers the statutory purpose of the aircraft smoking prohibition to preserve cabin air quality, avoid passenger and crew discomfort, and reduce crewmembers' exposure to "potential health hazards." H.R. Rep. No. 101-212, at 2-5 (1989); *see also* 81 Fed. Reg. at 11,420.

Contrary to Petitioners' argument, the plain meaning of the term "smoking" does not unambiguously refer to the combustion of tobacco products. Dictionary definitions support a broad meaning of the term "smoking" as inhaling and exhaling the smoke or fumes of a device, and there is no reason to exclude e-cigarettes or other modern smoking technologies. Indeed, state statutory definitions and industry usage confirm that "smoking" is a broad and ambiguous term that accurately describes the use of e-cigarettes. Therefore, this Court should reject Petitioners' argument that the agency is not entitled to deference and uphold the final rule as a reasonable exercise of the Secretary's authority to prohibit "smoking" on aircraft.

In addition, the Secretary's authority to ensure that air carriers provide "safe and adequate" transportation provides an independent source of authority for the rule. 49 U.S.C. § 41702. There is no dispute that this provision allows the Secretary

to regulate quality of service and to ensure passenger comfort aboard aircraft. Acting pursuant to this authority, the agency rationally concluded, based on ample record evidence, that allowing e-cigarettes on aircraft would cause passenger discomfort due to respiratory irritation and concerns about the health effects of secondhand exposure. The Department cited numerous studies demonstrating the potential health risks of e-cigarettes and the need for further research.

Contrary to Petitioners' arguments, the final rule properly relied on studies published after the close of the comment period to "expand[] on and confirm[]" the proposed rule's conclusion that secondhand exposure to e-cigarette aerosol is potentially harmful. *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (per curiam). This Court should reject Petitioners' efforts to invalidate the rule on this basis, as well as their attempts to second-guess the Secretary's policy decisions as an arbitrary and capricious exercise of authority. In light of the potential harms of e-cigarettes and the need for further research, the Secretary rationally concluded that prohibiting e-cigarettes on airplanes would ensure "safe and adequate" transportation by protecting passengers from discomfort due to secondhand exposure.

STANDARD OF REVIEW

A court must uphold agency action unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). The agency's interpretation of the statute it is charged with administering is entitled to deference under *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837

(1984). When determining whether agency action is "arbitrary and capricious[,] . . . a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

ARGUMENT

I. THE SECRETARY REASONABLY INTERPRETED THE AIRCRAFT SMOKING PROHIBITION TO APPLY TO E-CIGARETTES

When Congress established statutory "[p]rohibitions against smoking on passenger flights," 49 U.S.C. § 41706, it directed the Secretary of Transportation to "prescribe such regulations as are necessary to carry out" these smoking prohibitions, *id.* § 41706(d). Congress did not define "smoking," nor did it specify the types of smoking devices to which the statute applies. This undefined term is sufficiently broad to include a range of smoking technologies, from traditional tobacco products to smoking devices that Congress may not have foreseen. In the rule at issue here, the Secretary reasonably filled this statutory gap by defining "smoking" to include "the use of a tobacco product, electronic cigarettes whether or not they are a tobacco product, or similar products that produce a smoke, mist, vapor, or aerosol." 81 Fed. Reg. at 11,427 (to be codified at 14 C.F.R. § 252.3). Contrary to Petitioners' argument, the statutory smoking ban is not unambiguously limited to "the burning of tobacco products," nor does it clearly exempt e-cigarettes. Br. 11.

A. Congress Delegated Authority To The Secretary To Define "Smoking"

At *Chevron* Step One, a court asks whether Congress's intent is clear with respect to the statutory provision in question. *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984). In this case, Congress has not spoken directly to the precise question at issue because it has declined to define the contours of the smoking prohibitions in 49 U.S.C. § 41706. Therefore, Congress left a gap for the agency to fill.

Section 41706, titled "[p]rohibitions against smoking on passenger flights," generally bans "smoking" on domestic and foreign passenger flights. 49 U.S.C. § 41706. It provides that "[a]n individual may not smoke in an aircraft" in interstate or intrastate air transportation, *id.* § 41706(a), and directs the Secretary to "require all air carriers and foreign air carriers to prohibit smoking" in foreign air transportation, *id.* § 41706(b). Section 41706 does not define "smoking," nor does it enumerate the various technologies to which the term applies. Nothing in the statutory scheme limits the Secretary's authority to define smoking. To the contrary, section 41706 directs the Secretary to "prescribe such regulations as are necessary to carry out" the aircraft smoking ban. *Id.* § 41706(d).

This express delegation of authority, together with Congress's silence regarding the scope of the term "smoking," amount to a congressional grant of authority to the Secretary to define this term and to specify the devices to which it applies. *See United*

States v. Mead Corp., 533 U.S. 218, 227 (2001); *see also National Mining Ass'n v. Kempthorne*, 512 F.3d 702, 709 (D.C. Cir. 2008) (noting that Congress's "decision to leave 'a gap for an agency to fill . . . is a delegation of authority to the agency to give meaning to a specific provision of the statute by regulation'") (quoting *Michigan v. EPA*, 268 F.3d 1075, 1082 (D.C. Cir. 2001)). As the Secretary has explained, "section 41706 as a whole . . . vest[s] the Department with the authority to define the term 'smoking,' and to refine that definition as necessary to effectuate the purpose of the statute while adapting to new technologies and passenger behavior." Use of Electronic Cigarettes on Aircraft, 81 Fed. Reg. 11,415, 11,419 (Mar. 4, 2016).

Pursuant to this congressionally delegated authority, the Secretary properly exercised his authority to define "smoking." *See National Mining Ass'n*, 512 F.3d at 709. The Secretary's definition has evolved over time to reflect modern developments in smoking technologies. Regulations previously described "smoking" as including the "smoking of tobacco products," including "the smoking of cigars and pipes." 14 C.F.R. §§ 252.1, 252.15 (2015). In 2010, the Department explained that this prohibition on "smoking . . . tobacco products" includes the "[s]moking of electronic cigarettes." U.S. Dep't of Transp., *DOT Policy on E-Cigarettes*[7]; *see also Sottera, Inc. v.*

[7] https://www.transportation.gov/sites/dot.gov/files/docs/PolicyOnECigarettes_0.pdf (last visited Oct.5, 2016); *see also The Financial State of the Airline Industry and the Implications of Consolidation: Hearing Before the S. Comm. on Commerce, Sci., & Transp.*, 111th Cong. 80 (2010) (response of Susan L. Kurland, Ass't Sec'y for Aviation & Int'l Affairs, U.S. Dep't of Transp., to written questions), *available at*

FDA, 627 F.3d 891, 892, 897 (D.C. Cir. 2010) (holding that the Food and Drug Administration may regulate e-cigarettes as "tobacco products" under the Family Smoking Prevention and Tobacco Control Act of 2009). The final rule clarified that "smoking" is not limited to traditional tobacco products, but also encompasses modern smoking technologies, by defining "smoking" as "the use of a tobacco product, electronic cigarettes whether or not they are a tobacco product, or similar products that produce a smoke, mist, vapor, or aerosol." 81 Fed. Reg. at 11,427 (to be codified at 14 C.F.R. § 252.3).

As this Court has made clear, agencies may apply federal statutes to new industry developments, even if Congress could not have foreseen the developments. Agencies are not limited to the "specific manifestations of the problem that prompted Congress to legislate in the first place." *Cablevision Sys. Corp. v. FCC*, 649 F.3d 695, 707 (D.C. Cir. 2011) (upholding regulation of programming that Congress "may not have foreseen"). For example, in *Sabre, Inc. v. DOT*, 429 F.3d 1113 (D.C. Cir. 2005), this Court upheld a Department rule interpreting the statutory term "ticket agent" to include independent computer reservation systems (*i.e.*, systems that are not owned by air carriers). *Id.* at 1115. Historically, computer reservation systems were owned and controlled by air carriers, but over time they became independent of air carriers. *Id.* at 1124. This Court rejected petitioners' argument that Congress intended to regulate

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https://www.gpo.gov/fdsys/pkg/CHRG-111shrg68174/pdf/CHRG-111shrg68174.pdf.

only "ticket agents" that were controlled by air carriers, explaining that "[t]he fact that Congress may not have foreseen current developments in the . . . industry" does not render the rule invalid. *Id.* at 1122. Relying on the statute's "broad delegation of authority" and its "broad" definition of "ticket agent," this Court explained that "the historical circumstances that led to enactment do not limit the permissible interpretations of the statutory language." *Id.* at 1124-25.

Here, as in *Sabre*, the Department properly exercised its "broad delegation of authority" to apply a broad statutory term to a new industry development. 429 F.3d at 1124. Indeed, the delegation of authority is even broader in this case; whereas Congress had defined the statutory term at issue in *Sabre*, it provided no definition of "smoking" in section 41706, thus delegating that task to the Department. Therefore, even assuming that Congress enacted the smoking prohibitions to target "the burning of tobacco products," Pet'rs' Br. 11, the Department is not limited by "the historical circumstances that led to enactment" of these provisions, *Sabre*, 429 F.3d at 1125. This is especially true where, as here, the Secretary's interpretation fulfills the purposes of the statute to address concerns about cabin air quality, passenger and crew discomfort, and potential health hazards. H.R. Rep. No. 101-212, at 2-5 (1989); 81 Fed. Reg. at 11,420; *see New York v. FERC,* 535 U.S. 1, 23 (2002) (upholding agency's assertion of jurisdiction over a new industry practice, explaining that "there is no evidence that if Congress had foreseen the developments to which [the agency] has responded, Congress would have objected to [the agency's] interpretation"). It is well

within the Department's discretion to interpret the broad term "smoking" to include modern developments such as "electronic cigarettes whether or not they are a tobacco product, or similar products that produce a smoke, mist, vapor, or aerosol." 81 Fed. Reg. at 11,427 (to be codified at 14 C.F.R. § 252.3); *see also Sabre*, 429 F.3d at 1122, 1125.

Petitioners argue that the Department's definition of "smoking" is inconsistent with the clear and unambiguous meaning of the term. In their view, "smoking" refers narrowly to "the burning of tobacco products" and must "involve combustion," and thus unambiguously excludes nontraditional smoking technologies such as e-cigarettes. Br. 11. They rely on the "conventional sense" of smoking, citing a dictionary definition of "smoke" as "to 'breathe smoke into the mouth or lungs from burning tobacco.'" *Id.* at 12 (quoting Cambridge English Dictionary's online definition of "smoke"). But dictionary definitions, as well as state statutory definitions and industry usage, confirm that "smoking" is a broad and ambiguous term that does not clearly exclude nontraditional smoking technologies such as e-cigarettes.

Petitioners' narrow dictionary-definition argument is contradicted by other, broader definitions of "smoking" that are not limited to "burning tobacco" or "combustion," but rather focus on the process of inhaling and exhaling the smoke or fumes of a device. As a verb, to "smoke" means to "draw in and exhale smoke from a cigarette, cigar, or pipe," *Webster's II New Riverside University Dictionary* 1098 (1994), or

"[t]o inhale (and expel again) the fumes of tobacco, or other suitable substance, from a pipe, cigar, or cigarette," 15 *Oxford English Dictionary* 802 (2d ed. 1989). These definitions hinge on the process of inhaling and exhaling "smoke" or "fumes"—actions that aptly describe the use of e-cigarettes, which "requires an inhalation and exhalation" of aerosol or vapor. 81 Fed. Reg. at 11,415; *see also Sottera*, 627 F.3d at 893 (describing e-cigarette use). E-cigarettes consist of a cartridge containing liquid nicotine or other chemicals, an atomizer or heating element, and a battery and electronics to power the atomizer. *See* Smoking of Electronic Cigarettes on Aircraft, 76 Fed. Reg. 57,008, 57,009 (Sept. 15, 2011). When the user inhales, the atomizer or heating element is activated, heating the e-cigarette liquid solution until it becomes an aerosol. *Id.* at 57,010. E-cigarette users inhale the aerosol and then exhale, as if they were smoking a traditional tobacco cigarette. *Id.* at 57,090-10. Thus, while one possible definition of "smoking" involves "burning" and "combustion," the statute does not clearly and unambiguously limit its reach to the narrow definition that Petitioners propose. *See National R.R. Passenger Corp. v. Boston & Maine Corp.*, 503 U.S. 407, 418 (1992) ("The existence of alternative dictionary definitions . . . each making some sense under the statute, itself indicates that the statute is open to interpretation.").

Petitioners further suggest (Br. 12) that e-cigarette aerosol is not "smoke." As an initial matter, the term "smoking" need not involve the inhaling of *smoke* at all; it is sufficient that the user "inhale (and expel again) *fumes* of tobacco, or other suitable

substance" from a smoking device. 15 *Oxford English Dictionary* 802 (emphasis added); *see also Webster's II New Riverside University Dictionary* 511 (defining "fume" as "a usu[ally] irritating or disagreeable exhalation, as of smoke, vapor, or gas"). In any event, the aerosol emitted by e-cigarettes fits squarely within dictionary definitions of "smoke" as a noun, which is defined to include "a suspension of solid or liquid particles in a gas" and a "fume or vapor often resulting from the action of heat on moisture." *Webster's Third New International Dictionary* 2152 (Philip B. Gove ed. 1993); *see also* 15 *Oxford English Dictionary* 802. E-cigarette aerosol is "a suspension of fine particles . . . in a gas," Tianrong Cheng, *Chemical Evaluation of Electronic Cigarettes*, 23 Tobacco Control (Supp. 2) ii11-17, ii11 (2014)[8], and it also may be described as a "fume or vapor" produced by "the action of heat on moisture," *Webster's Third New International Dictionary* 2152; *see also* 76 Fed. Reg. at 57,009-10 (explaining that the e-cigarette's atomizer or heating element heats a liquid solution, converting it to a vapor).

Nor is it significant, as petitioners contend (Br. 12), that the Department has sometimes distinguished between e-cigarette aerosol and the "smoke" emitted by traditional tobacco products. 76 Fed. Reg. at 57,009 (describing e-cigarettes as emitting "a vapor, rather than smoke"); 81 Fed. Reg. at 11,424 (noting that e-cigarettes produce "aerosol which can be mistaken for smoke"). When the

[8] *Available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3995255/pdf/tobaccocontrol-2013-051482.pdf.

Department's statements are read in their proper context, it is clear that the Department was distinguishing between e-cigarette vapor or aerosol, on the one hand, and "smoke produced by burning conventional tobacco products," on the other. 76 Fed. Reg. at 57,010. Indeed, the Department refers to the potential harms of "second hand *smoke*" from e-cigarettes. *Id.* (emphasis added). Similarly, the Department's decision to use the overlapping terms "smoke, mist, vapor, or aerosol," reflects its efforts to reach all types of smoking devices and to adapt to changing technology. 81 Fed. Reg. at 11,417, 11,427. These statements are consistent with classifying e-cigarette aerosol as a form of "smoke" under a broad dictionary definition of the term.

State statutory definitions confirm that the ordinary meaning of "smoking" accurately describes the use of e-cigarettes. Laws in numerous states include the use of e-cigarettes in their definition of "smoking." *See, e.g.*, Cal. Bus. & Prof. Code § 22950.5(c) ("'Smoking' includes the use of an electronic smoking device that creates an aerosol or vapor, in any manner or in any form . . . ."); Del. Code Ann. tit. 16, § 2902(12) (defining smoking to include use of an electronic smoking device); Haw. Rev. Stat. § 328J-1 (same); N.J. Stat. Ann. § 26:3D-57 (same).

Petitioners cite (Br. 13-14) attorney general opinions from several states concluding that the use of e-cigarettes does not constitute "smoking." But far from establishing a general rule that "smoking" does not encompass e-cigarettes, all but one of those opinions rely on narrow statutory definitions of "smoking" that are nothing

like the undefined term in section 41706. These definitions refer specifically to "lighted" or "burning" products, and thus by their terms exclude e-cigarettes. *See*, *e.g.*, Ariz. Op. Att'y Gen. No. I14-004 (July 30, 2014) (smoking prohibitions do not apply to electronic cigarette use where smoking is statutorily defined as "inhaling, exhaling, burning, or carrying or possessing any *lighted tobacco product*, including cigars, cigarettes, pipe tobacco, and any other lighted tobacco product") (emphasis added)); Kan. Op. Att'y Gen. No. 2011-015 (Oct. 31, 2011) (smoking prohibitions do not apply to electronic cigarette use where "smoking" is defined as "possession of a *lighted* cigarette, cigar, pipe or *burning* tobacco in any other form or device designed for the use of tobacco") (emphases altered). Petitioners cite only one opinion of a State Attorney General that excludes e-cigarettes from the term "smoke" or "smoking," despite a statutory definition that is sufficiently broad to include e-cigarettes. *See* Va. Op. Att'y Gen. No. 10-029 (Apr. 27, 2010) (concluding that e-cigarette use does not fall within the definition of "smoke" or smoking" where statute defines "smoking" as "the carrying or holding of any lighted pipe, cigar, or cigarette of any kind, or any other lighted smoking equipment, or the lighting, inhaling, or exhaling of smoke from a pipe, cigar, or cigarette of any kind"). This lone interpretation of a State statute does not render unambiguous an undefined federal statutory term.

Even the e-cigarette industry has, at times, described the use of e-cigarettes as "smoking." Some e-cigarette companies and retailers market and label their products "for 'smoking pleasure,'" *Sottera*, 627 F.3d at 893 (describing e-cigarette company

claims), inviting users to try a new "smoking experience," *General Questions*, South Beach Smoke Electronic Cigarettes,[9] and to "join [the] 'revolution' in the future of smoking," *Welcome to Smoke-Light*, Smoke-Light.com Electronic Cigarette.[10] One company describes e-cigarettes as "smoking devices" that are "designed to allow smokers greater freedom and enable them to smoke in public." *Id.* *But see* blu eCigs, *Ultimate Guide to Vaping* (distinguishing between "smoking" and "vaping").[11] Some e-cigarette companies market their products with names like "Smokstik," "Green Smoke," and "South Beach Smoke."[12] This industry usage of "smoking" confirms that the plain meaning of the term is broad enough to include the use of e-cigarettes.

In sum, Congress delegated broad authority to the Secretary to define "smoking," which encompasses a range of smoking technologies. Contrary to Petitioners' argument, "smoking" is not unambiguously limited to burning or combustion of traditional tobacco products, nor does it clearly exclude e-cigarettes from its reach. The Secretary acted well within his congressionally delegated authority by defining "smoking" to encompass the use of e-cigarettes.

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[9] https://www.southbeachsmoke.com/why-us/faq.html#faq (last visited Oct. 6, 2016).

[10] http://www.smoke-light.com/ (last visited Oct. 6, 2016).

[11] https://www.blu.com/en/US/ultimate-guide-to-vaping/vaping.html (last visited Oct. 6, 2016).

[12] *See* Green Smoke E-Vapor, https://www.greensmoke.com (last visited Oct. 6, 2016); Smoke Stik Alternative Smoking, http://www.smokestik.com (last visited Oct. 6, 2016); South Beach Smoke Electronic Cigarettes, https://www.southbeachsmoke.com (last visited Oct. 6, 2016).

B. The Secretary's Definition Is Reasonable

Petitioners make no argument under *Chevron*'s second step, which requires only that an "agency's interpretation of [a] statute is reasonable." *Illinois Pub. Telecomms. Ass'n v. FCC*, 752 F.3d 1018, 1023 (D.C. Cir. 2014); *see also Texas v. United States*, 798 F.3d 1108, 1115 (D.C. Cir. 2015) (appellant forfeits arguments not raised in opening brief). The Secretary's definition of smoking, which applies to e-cigarettes, is a reasonable interpretation of the aircraft smoking prohibition, and therefore *Chevron* deference applies.

As discussed above, the use of e-cigarettes fits comfortably with the meaning of the term "smoking." The Department's decision to apply the statutory smoking prohibition to e-cigarettes was a reasonable exercise of its authority "to define the term 'smoking,' and to refine that definition as necessary to effectuate the purpose of the statute while adapting to new technologies and passenger behavior." 81 Fed. Reg. at 11,419. It reasonably determined that the "in-cabin dynamics of e-cigarette use [were] similar enough to traditional smoking to necessitate including e-cigarette use within the definition of 'smoking'" and explained that "[l]ike traditional smoking, e-cigarette use introduces a cloud of chemicals into the air that may be harmful." *Id.* at 11,420. The Department's conclusions were based on studies that detected toxic chemicals, known carcinogens, and other respiratory irritants in e-cigarette aerosols, as well as comments from medical associations and other organizations expressing concerns about the health consequences of secondhand exposure to e-cigarette

aerosol. *See id.* at 11,417, 11,420; *see also infra* pp. 29-35 (discussing research conclusions).

As the agency explained, its decision furthered the statutory purpose of the smoking ban, which was intended to improve cabin air quality, reduce the adverse health effects on passengers and crewmembers, and enhance passenger comfort. 81 Fed. Reg. at 11,420; *see also* H.R. Rep. No. 101-212, at 2-5. It concluded that exposing passengers to an aerosol that "may contain harmful substances or respiratory irritants in a confined space, especially when those who are at a higher risk are present, is contrary to the statutory ban on smoking aboard aircraft." 81 Fed. Reg. at 11,420. Given the potential for harm and the "closed environment of an aircraft," the Department reasonably applied a "precautionary approach" to protect passengers from secondhand exposure. *Id.* This Court should thus apply *Chevron* deference to uphold the final rule under section 41706's aircraft smoking prohibition.

II. THE E-CIGARETTE BAN REASONABLY ENSURES "SAFE AND ADEQUATE" AIR TRANSPORTATION

The e-cigarette rule also should be upheld for the independent reason that it is a reasonable exercise of the Department's duty to ensure that "air carrier[s] shall provide safe and adequate interstate air transportation." 49 U.S.C. § 41702. There is no dispute that the "safe and adequate" mandate allows the Department to regulate quality of service and to ensure passenger comfort aboard aircraft. Pursuant to this mandate, the Department rationally concluded, based on ample record evidence, that

allowing e-cigarettes to be used on aircraft would cause passenger discomfort due to respiratory irritation and concerns about the health effects of secondhand exposure. Petitioners argue that the rule is invalid under section 41702, but they cannot overcome the deferential "arbitrary and capricious" standard. This Court should reject Petitioners' invitation to "second guess the [Department's] policy judgment." *WorldCom, Inc. v. FCC*, 238 F.3d 449, 457 (D.C. Cir. 2001); *see also Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42-43 (1983).

A. The Rule Is A Reasonable Exercise Of The Department's Authority To Ensure "Safe And Adequate" Air Transportation And Has Ample Support In The Record

It is well settled—and Petitioners do not dispute—that the "safe and adequate" mandate grants authority to the Department to ensure passenger comfort, including by regulating smoking aboard aircraft. In *Action on Smoking & Health v. Civil Aeronautics Bd.*, 699 F.2d 1209 (D.C. Cir. 1983), this Court upheld the Civil Aeronautics Board's authority to regulate aircraft smoking under an earlier version of the statute, which required air carriers to "provide safe and adequate service." *Id.* at 1211. This Court held that the "adequate" service requirement grants the Board "authority to regulate [the] *quality* of service" and thus rejected the petitioner's argument that the Board could not regulate the "details of passenger comfort." *Id.* at 1213-15 (emphasis added); *accord Diefenthal v. Civil Aeronautics Bd.*, 681 F.2d 1039, 1048 (5th Cir. 1982) (holding that "adequate" service requirement allows Board to "regulate[] the quality of service" in connection with aircraft smoking regulations).

As the Department explained in the final rule, the e-cigarette rule "ensure[s] 'adequate' service by reducing . . . passenger discomfort" from exposure to e-cigarette aerosol. 81 Fed. Reg. at 11,421. The Department noted that passenger discomfort may arise in two ways. First, passengers "may feel the direct effects of inhaling the aerosol," which "has been shown to contain respiratory irritants." *Id.* Second, passengers "may reasonably be concerned that they are inhaling unknown quantities of harmful chemicals, and that they will not be able to avoid the exposure for the duration of the flight." *Id.* These conclusions have ample support in the record, and this Court should reject Petitioners' arguments to the contrary.

1. The Department's conclusion that passengers "may feel the direct effects of inhaling the aerosol," which "has been shown to contain respiratory irritants," is reasonable and fully supported by evidence in the record. 81 Fed. Reg. at 11,421. The Department initially raised the concern about potential respiratory irritants in its notice of proposed rulemaking. 76 Fed. Reg. at 57,010. It explained that propylene glycol is "[t]he principal liquid ingredient" in e-cigarettes and cautioned that this chemical, while widely used for other purposes, may be harmful when inhaled as a mist. *Id.* As the Department noted, "the safety of inhaling" propylene glycol "has not been studied in humans." *Id.* (quoting Nathan K. Cobb & David B. Abrams, *E-Cigarette or Drug-Delivery Device? Regulating Novel Nicotine Products*, 365 New Eng. J. Med. 193, 194 (2011) [JA416]). One study, which used a smoke generator to emit propylene glycol mist in an aircraft simulator, showed that propylene glycol mist "may

cause acute ocular and upper airway irritation" in non-asthmatic individuals. 76 Fed. Reg. at 57,010 (discussing G. Wieslander et al., *Experimental Exposure to Propylene Glycol Mist in Aviation Emergency Training: Acute Ocular and Respiratory Effects*, 58 Occupational & Envtl. Med. 649, 653-54 (2001) [JA402-03]).

In the final rule, the Department responded to comments that e-cigarette aerosol is not harmful by citing recent research that the aerosol may contain additional respiratory irritants. 81 Fed. Reg. at 11,419-20. One study found formaldehyde, acetaldehyde, and acrolein in e-cigarette aerosol, and it noted that acrolein "can cause irritation to the nasal cavity and damage to the lining of the lungs." *Id.* at 11,420 (discussing Maciej Goniewicz et al., *Levels of Selected Carcinogens and Toxicants in Vapour from Electronic Cigarettes*, 23 Tobacco Control 133, 137-38 (2014) (Goniewicz, *Levels in Vapour*) [JA426-27]). Another study identified 22 chemicals in e-cigarette aerosol, three of which—lead, nickel, and chromium—appear on the FDA's list of harmful and potentially harmful chemicals. *Id.* (discussing Monique Williams et al., *Metal and Silicate Particles Including Nanoparticles are Present in Electronic Cigarette Cartomizer Fluid and Aerosol*, 8 Pub. Libr. Sci. One e57987, at 5 (2013) [JA431]). As the Department explained, these chemicals "can cause adverse health effects in the respiratory and nervous systems." *Id.*

The comments of medical associations and other organizations confirm the potential for e-cigarette aerosol to subject passengers to respiratory irritants. The American Academy of Pediatrics warned that there is no data demonstrating that it is

safe for children in aircraft to be in close proximity to exhaled vapors, citing FDA data demonstrating that e-cigarette vapor contains "irritants of the respiratory tract," among other carcinogens and known toxicants. 81 Fed. Reg. at 11,417 (discussing Cmt. of Am. Acad. of Pediatrics [JA381]). In addition, air carrier and airline associations expressed concern that the ingredients found in e-cigarettes "could possibly cause airway irritation for users and others nearby." *Id.* (discussing Cmt. of Air Transp. Ass'n of Am., Inc., et al. [JA365-68]). In light of all of this evidence, the Department reasonably concluded that a prohibition on e-cigarettes would reduce respiratory irritation and discomfort caused by secondhand exposure. *Id.* at 11,421.

2. The Department also correctly concluded that passengers may suffer discomfort based on their "reasonabl[e] . . . concern[] that they are inhaling unknown quantities of harmful chemicals, and that they will not be able to avoid the exposure for the duration of the flight." 81 Fed. Reg. at 11,421. That conclusion is supported by numerous comments, including a passenger survey, demonstrating that allowing e-cigarettes would cause passenger discomfort. Many individuals "voiced concern over the air quality aboard aircraft" and advocated that "the rights and public health concerns of passengers who are not e-cigarette users should be protected, as these people do not have the option of leaving the space." *Id.* at 11,419.[13] Commenters

[13] *See, e.g.*, Cmt. of Judith Tillson [JA187] (passenger expressing concern regarding unknown ingredients in e-cigarette vapor); Cmt. of D. Manders [JA188] (urging prohibition of e-cigarettes to protect passengers from exposure to

further observed that "potentially vulnerable passengers, such as children, the elderly, and people with asthma should be protected from the effects of e-cigarette vapor." *Id.* And FlyersRights.org, a non-profit airline consumer organization, submitted the results of a member survey, which revealed that 81.4% of survey respondents favored a ban on e-cigarettes in aircraft, "generally based on the grounds of public health or cabin comfort." *Id.* at 11,418 (discussing Cmt. of FlyersRights.org [JA207-10]). These comments "sufficiently support the intuitive conclusion" that passengers are likely to suffer discomfort as a result of being exposed to potentially harmful vapors in an aircraft cabin. *Spirit Airlines, Inc. v. DOT*, 687 F.3d 403, 410-11 (D.C. Cir. 2012) (holding that comments adequately supported Department's "intuitive conclusion" that customers are likely to be deceived by certain airline pricing practices). Contrary

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carcinogens); Cmt. of Charles Acolatse [JA198] (expressing concern regarding passenger exposure to respiratory irritants, harmful substances, and cancer-causing compounds); Cmt. of Travis Burkett [JA199] (arguing that e-cigarettes should be prohibited for passenger comfort, noting that "most people do not enjoy smoking around them, and the same can certainly be said for the exhaling of vapors and mist"); Cmt. of Tyler Carson Haskell [JA197] (emphasizing passenger discomfort and inability to escape the aircraft); Cmt. of Heather Robertson [JA214] (mother urging the Department to protect the rights of travelers, including her children, to breathe clean air); Cmt. of Barbara Renee Kistler [JA189] ("I have asthma and I should not be subjected to breathing any nicotine mist that could further complicate my condition."); Cmt. of Esther Schiller [JA185] (asthmatic explaining that she was "immediately affected" by previous exposure to e-cigarette aerosol and "became hoarse").

to Petitioners' argument, this conclusion is based on record evidence, not "speculation." Br. 50.[14]

Moreover, as the Department explained, passenger health concerns are "reasonabl[e]" in light of the available evidence regarding e-cigarettes. 81 Fed. Reg. at 11,421. The Department cited multiple studies concluding that electronic cigarettes are potentially harmful and calling for further study. *See, e.g.*, 76 Fed. Reg. at 57,010 (discussing University of California, Riverside, study's conclusion "that electronic cigarettes are potentially harmful and should be removed from the market until their safety can be adequately evaluated")[15]; *id.* (quoting researcher's statement that "nothing is known about the toxicity of the vapors generated by these e-cigarettes")[16]; 81 Fed. Reg. at 11,420 (summarizing study's conclusion "that using e-cigarettes in indoor environments may involuntarily expose non-users to nicotine, and that more research is needed to evaluate the health consequences of secondhand exposure to nicotine")[17]; *id.* (detailing studies that detected numerous harmful chemicals in e-

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[14] Petitioners cannot reasonably expect the Department to "cite any actual incident of a passenger experiencing discomfort due to e-cigarettes," Br. 49, given that airlines currently prohibit the use of e-cigarettes, *see id.* at 48-50.

[15] *See* Anna Trtchounian & Prue Talbot, *Electronic Nicotine Delivery Systems: Is There a Need for Regulation?*, 20 Tobacco Control 47, 51-52 (2010) [JA410-11].

[16] *See* ScienceDaily.com, *Electronic Cigarettes Are Unsafe and Pose Health Risks, Study Finds,* https://www.sciencedaily.com/releases/2010/12/101203141932.htm (last visited Oct. 6, 2016) [JA405-06].

[17] *See* Jan Czogala et al., *Secondhand Exposure to Vapors From Electronic Cigarettes*, 16 Nicotine & Tobacco Res. 655, 660-61 (2014) [JA437-38].

cigarette aerosol)[18]; *id.* (discussing third hand exposure to "persistent residual nicotine on indoor surfaces").[19] The Department also "f[ou]nd it significant" that three medical associations (the American Academy of Pediatrics, the American Thoracic Society, and the Oncology Nursing Society) concluded that "the unknown health risks of exposure to e-cigarette aerosol in a confined space" provided "reason for concern." 81 Fed. Reg. at 11,417, 11,420 (discussing Cmt. of Am. Acad. of Pediatrics [JA381], Cmt. of Am. Thoracic Soc'y [JA200-02], Cmt. of Oncology Nursing Soc'y [JA382-83]). Given all of this evidence, Petitioners cannot credibly claim that passenger concerns are based on "confusion" or "mistaken fears." Br. 17.

Moreover, other individuals and organizations echoed these passenger concerns. Professional associations of pilots and flight attendants emphasized the importance of protecting "air quality onboard aircraft" and advocated for "a healthy environment" for airline employees. 81 Fed. Reg. at 11,417 (discussing Cmt. of Air Line Pilots Ass'n Int'l [JA215-16], Cmt. of Ass'n of Flight Attendants [JA362-64],

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[18] Czogala, *supra* pp. 660-61 [JA437-38]; Goniewicz, *Levels in Vapour*, *supra* pp. 137-38 [JA426-27]; Williams, *supra* p. 5 [JA431]; Wolfgang Schober, *Use of Electronic Cigarettes (E-cigarettes) Impairs Indoor Air Quality and Increases FeNO levels of E-Cigarette Consumers*, 217 Int'l J. Hygiene & Envtl. Health 628, 635-36 (2014) [JA443-44]; T. Schripp et al., *Does E-Cigarette Consumption Cause Passive Vaping?*, 23 Indoor Air 25, 26, 31 (2012) [JA419, 424].

[19] Maciej Goniewicz, *Electronic Cigarettes Are a Source of Thirdhand Exposure to Nicotine*, 17 Nicotine & Tobacco Res. 256, 257-58 (2015) (Goniewicz, *Thirdhand Exposure*) [JA433-34]; Ware Kuschner et al., *Electronic Cigarettes and Thirdhand Tobacco Smoke: Two Emerging Health Care Challenges For the Primary Care Provider*, 4 Int'l J. Gen. Med. 115, 118 (2011) [JA414].

Cmt. of Ass'n of Professional Flight Attendants [JA195-96]). Professional health organizations, including the American Cancer Society, the American Heart Association, and the American Lung Association, "cit[ed] public health concerns" based on "unknown" ingredients and health effects of e-cigarettes. *Id.* at 11,418, 11,420 (discussing Cmt. of Am. Cancer Soc'y et al. [JA355-59]). Local governments raised similar concerns. *See id.* at 11,417-18 (discussing comments of the New York City Department of Health and Mental Hygiene [JA361], and Seattle and King County, Washington [JA369-70]). And as the Department noted, some airlines ban e-cigarettes for the express reason that they are a "nuisance item" or produce aerosol that "may contain levels of nicotine that are unacceptable to other passengers." *Id.* at 11,423 (Ex. A.1). On this record, the Department reasonably concluded that allowing e-cigarettes aboard aircraft would cause passenger discomfort.

3. Petitioners all but concede that e-cigarette aerosol is potentially harmful. They acknowledge that the Department's studies "show that e-cigarette vapor *might introduce into indoor air certain chemicals*, some of which, if present in high concentrations, *might pose a health risk*." Br. 34 (emphases added). Nevertheless, they raise several attacks against the Department's conclusion that secondhand exposure to e-cigarettes is potentially harmful and irritating to airline passengers. They argue that the evidence does not support a finding of potential harm to passengers on aircraft, that the Department failed to consider Petitioners' studies, and that the Department must

show "significant" harm or interference with passenger comfort before it may act. Petitioners are incorrect on all fronts.

Petitioners argue that the evidence does not support the Department's conclusions regarding the potential harm of e-cigarettes to airline passengers. Despite recognizing that the Department's studies show that the chemicals in e-cigarette aerosol "might pose a health risk," Pet'rs' Br. 34, Petitioners argue that the Department improperly relied on these studies because they do not involve the precise circumstances of passenger exposure to exhaled e-cigarette aerosol in an aircraft cabin. *See, e.g.*, *id.* at 20-21, 23-28, 31-32. But Petitioners cannot satisfy their burden to show that there is no "rational connection between the facts found and the choice made." *State Farm*, 463 U.S. at 43. The facts showed that e-cigarettes are at least potentially harmful and irritating, and that further research is required to develop a "definitive catalog" of hazards. 81 Fed. Reg. at 11,420. As the Department properly observed, "the potential for harm to consumers from second hand aerosol is *even greater* in the closed environment of an aircraft." *Id.* (emphasis added). In light of these facts, it was entirely rational for the Department to conclude that "a precautionary approach is warranted." *Id.*

In any event, the Department's authority to regulate under section 41702 is based on passenger discomfort, which does not turn on definitive evidence of harm. Indeed, the Civil Aeronautics Board first regulated smoking on aircraft to ensure passenger comfort, despite conflicting evidence regarding the dangers of secondhand

tobacco smoke—including a government report concluding that the "low levels of contaminants" presented no health hazard to passengers. 81 Fed. Reg. at 11,420; *see also Action on Smoking & Health*, 699 F.2d at 1212-15 (upholding Board's ability to regulate smoking on airplanes). Petitioners' evidentiary attacks reflect the mistaken view that the agency cannot regulate the "adequacy" of cabin conditions unless it can definitively prove that passengers would be harmed. *See Stilwell v. Office of Thrift Supervision*, 569 F.3d 514, 519 (D.C. Cir. 2009) ("An agency need not suffer the flood before building the levee."). That is not what the statute requires. *See Action on Smoking & Health*, 699 F.2d at 1212-15.

Petitioners seek to undermine the Department's conclusions by citing their own studies, but they are unable to identify a study specifically demonstrating the safety of e-cigarettes to non-users in an aircraft cabin. Indeed, one of Petitioners' leading studies recognizes the potential harm of e-cigarettes, warning that "electronic cigarettes cannot be considered safe, as there is no threshold for carcinogenesis." Zachary Cahn & Michael Siegel, *Electronic Cigarettes as a Harm Reduction Strategy for Tobacco Control: A Step Forward or a Repeat of Past Mistakes?*, 32 J. Pub. Health Pol'y 16, 26 (2011) [JA232]. To the extent that the evidence is conflicting or unsettled, it is for the agency to examine "available data" and "exercise its judgment in moving from the facts and probabilities on the record to a policy conclusion." *State Farm*, 463 U.S. at 52. The relevant question "is not whether record evidence supports [the petitioner's] version of events, but whether it supports [the agency's]." *Florida Mun. Power Agency v.*

FERC, 315 F.3d 362, 368 (D.C. Cir. 2003) (upholding agency decision despite "some contradictory evidence"). Here, it most certainly does. *See supra* pp. 29-35.

Petitioners incorrectly argue (Br. 38-39) that the Department failed to respond to studies cited in their comments. But the Department was not required to "directly address every study" with specificity. *National Ass'n of Mfrs. v. EPA*, 750 F.3d 921, 924-25 (D.C. Cir. 2014) (concluding that agency "acted within its discretion . . . in addressing the more significant comments" and explaining that this Court's "precedents do not require" agencies to "directly address every study that petitioners cite[]"). Here, the Department adequately addressed Petitioners' comments and their studies' findings. After carefully summarizing Petitioners' comments, *see* 81 Fed. Reg. at 11,418-19, the Department addressed the studies' conclusions (*see* Pet'rs' Br. 39-40) that e-cigarettes are less harmful than traditional cigarettes and that e-cigarette aerosol is harmless after it is exhaled. "[A] precautionary approach is warranted," the Department responded, because "studies do indicate that both nicotine and other toxicants are found in the exhaled aerosol," and "the potential for harm . . . is even greater in the closed environment of an aircraft." 81 Fed. Reg. at 11,420. In addition, the Department responded to studies concluding that propylene glycol is not harmful (*see* Pet'rs' Br. 40-43) by citing additional studies regarding potentially harmful chemicals, and by explaining that while "the specific hazards of e-cigarette aerosol have not yet been fully identified," it would "not be appropriate to exempt e-cigarettes from the ban . . . pending a more definitive catalog of" the hazards. 81 Fed. Reg. at

11,420. These explanations demonstrate "that [the Department] considered and rejected petitioners' arguments," and that "is all that the Administrative Procedure Act requires." *Covad Commc'ns Co. v. FCC*, 450 F.3d 528, 550 (D.C. Cir. 2006) (alterations omitted); *see also National Ass'n of Mfrs.*, 750 F.3d at 924-25.

Persisting in their argument that the evidence does not support the Department's decision to prohibit e-cigarettes under section 41702, Petitioners urge this Court to require a heightened showing of harm. They claim that the Department's authority to ensure "safe and adequate" service permits regulation of only "significant" health risks or interferences with passenger comfort. Br. 15. But the statute does not contain such a requirement. It does not define the phrase "safe and adequate," thus leaving a gap for the agency to fill. *National Mining Ass'n*, 512 F.3d at 709. Moreover, in interpreting the Board's authority to ensure "adequate service," this Court emphasized the agency's "broad power to regulate both the quality and quantity of service" and made no suggestion of a heightened showing. *Action on Smoking & Health*, 699 F.2d at 1213.

Petitioners' contention (Br. 14) that courts have "consistently interpreted such 'safe' and 'adequate' language . . . to allow agencies to ban only 'significant' health risks, not to create 'risk-free' environments," is based on statutes that involve entirely different language and that focus on safety. These statutes have nothing to do with "adequate service," quality of service, or passenger comfort.

In *Industrial Union Dep't, AFL-CIO v. American Petroleum Inst.*, 448 U.S. 607 (1980) (plurality op.), for instance, the court interpreted provisions of the Occupational Safety and Health Act (OSHA) requiring the agency to set a health and safety standard that "is reasonably necessary and appropriate to provide safe or healthful employment" and that "most adequately assures, to the extent feasible . . . that no employee will suffer material impairment of health or functional capacity." *Id.* at 639. Unlike the statute here, OSHA used the term "adequate" as a mere modifier for a safety requirement, and it included qualifiers such as "to the extent feasible." *See id.* The Court relied on the unique language, structure, and legislative history of the statute to conclude that OSHA was intended to eliminate, "as far as feasible," only "significant" safety risks. *Id.* at 641. Similarly, this Court's decision in *Carstens v. Nuclear Regulatory Comm'n*, 742 F.2d 1546 (D.C. Cir. 1984), interpreted the Atomic Energy Act, which also used "adequate" as a modifier for a safety requirement in directing the agency to "provide adequate protection to the health and safety of the public." *Id.* at 1557. This Court relied on the *agency's* "long accepted" interpretation of its statutory mandate, *id.*, which is the opposite of what Petitioners ask of this Court. Therefore, these cases have no bearing on the agency's reasonable interpretation of the statute in this case.

B. The Final Rule Properly Relied On Additional Studies That "Expanded On And Confirmed" The Proposed Rule's Conclusions

Petitioners erroneously assert (Br. 17-19) that the Department cannot rely on section 41702 because the final rule cited scientific studies published after the close of the comment period. Although an agency generally must "identify and make available technical studies and data" that form the basis of a proposed rule, the agency's final rule may rely on additional studies that "expand[] on and confirm[] information contained in the proposed rulemaking" if no prejudice is shown. *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991) (per curiam). And while an agency may not base a rule on information "that, [in] critical degree, is known only to the agency," this Court has observed that "obviously not every cited document is 'critical' " to an agency's final rule. *Time Warner Entm't Co. v. FCC*, 240 F.3d 1126, 1140 (D.C. Cir. 2001) (quoting *Community Nutrition Inst. v. Block*, 749 F.2d 50, 58 (D.C. Cir. 1984)).

Applying these principles, this Court has repeatedly upheld agencies' reliance on additional studies after the close of the comment period. For example, in *International Fabricare Institute v. EPA*, 972 F.2d 384 (D.C. Cir. 1992), this Court held that EPA permissibly relied on additional studies that confirmed its proposed method of measuring chemical concentrations. *Id.* at 399. In response to petitioners' comments regarding "the lack of evidence of reliability" of the proposed method, EPA reviewed additional studies that "confirmed [its] reliability." *Id.* This Court held that EPA permissibly relied on the additional studies to "provide support for the same

decision it had proposed to take." *Id.* The "core of [the] issue" was the reliability of the proposed method, and petitioners "had and took the opportunity to criticize" that method. *Id.*; *see also, e.g.*, *Community Nutrition Inst.*, 749 F.2d at 58 (rejecting challenge to agency's reliance on two scientific studies completed after the close of the comment period, where those studies merely "confirmed the earlier studies' conclusion" regarding potential health risks).

Similarly, the new studies cited by the Department "did no more than provide support for the same decision it had proposed to take," *International Fabricare Inst.*, 972 F.2d at 399, and they did not "provide entirely new information 'critical' to the Secretary's determination," *Community Nutrition Inst.*, 749 F.2d at 58. The critical point of the studies in the proposed rule was that e-cigarettes are potentially harmful, and that further research is necessary to assess their health impact on passengers and crewmembers. *See, e.g.*, 76 Fed. Reg. at 57,010 (noting that a University of California, Riverside, study concluded that "electronic cigarettes are potentially harmful" and that "they should be removed from the market until their safety can be adequately evaluated") (discussing Trtchounian, *supra* pp. 51-52 [JA410-11]). This theme was reiterated throughout the notice of proposed rulemaking. *See, e.g.*, *id.* at 57,009 ("We are unaware of sufficient studies on the health impact on third parties from these vapors . . . ."); *id.* at 57,010 ("There is a lack of scientific data and knowledge with respect to the ingredients in electronic cigarettes. The quantity and toxicity of exhaled vapors have not been studied."). In addition, the Department relied on a study to

show that e-cigarettes may contain chemicals, such as propylene glycol, that are not safe for human inhalation and may cause respiratory irritation, noting that "the safety of inhaling propylene glycol has not been studied in humans." *Id.* (discussing Wieslander, *supra* pp. 653-54 [JA402-03] and Cobb, *supra* p. 194 [JA416]).

The Department requested comments, and Petitioners had ample opportunity to comment on the potential harm of e-cigarettes; in fact, they commented that inhaling propylene glycol "poses no risk" and that e-cigarettes are harmless to bystanders. Cmt. of Pet'rs [JA219-20]; *International Fabricare Inst.*, 972 F.2d at 399 (noting that petitioners had "full opportunity to comment on[] the issue actually decided"). Numerous organizations and individuals submitted similar comments. *See* 81 Fed. Reg. at 11,418-19.

The final rule cited additional studies that merely "expanded on and confirmed" the potential harm of e-cigarettes and the need for further research. *Community Nutrition Inst.*, 749 F.2d at 58. For example, the Czogala study confirmed that e-cigarettes may cause secondhand exposure to nicotine and "that more research is needed to evaluate the health consequences" of such exposure. 81 Fed. Reg. at 11,420 (citing Czogala, *supra* pp. 660-61 [JA437-38]). New studies regarding third-hand exposure confirmed the potential for non-users to be exposed to nicotine on surfaces—a risk that was previously identified in the notice of proposed rulemaking. *Compare* 76 Fed. Reg. at 75,010 (noting potential for e-cigarettes to leak and expose nicotine to "children, adults, and the environment"); Trtchounian, *supra* p. 51 [JA410],

with 81 Fed. Reg. at 11,420 & n.8 (discussing research findings "that persistent residual nicotine on indoor surfaces from e-cigarettes can lead to third hand exposure through the skin, inhalation, and ingestion long after the air itself has cleared"); Goniewicz, *Thirdhand Exposure*, *supra* pp. 257-58 [JA433-34]; Kuschner, *supra* p. 118 [JA414]. Moreover, these third-hand exposure studies directly responded to Petitioners' comments that e-cigarette aerosol "dissipates quickly without leaving any residue on surfaces." Cmt. of Pet'rs [JA219]; *see also International Fabricare Inst.*, 972 F.2d at 399-400 (holding that EPA permissibly relied on new studies to respond to criticism in comments).

Finally, four new studies "expanded on and confirmed" the possibility that e-cigarettes contain respiratory irritants and chemicals that may cause adverse health effects. 81 Fed. Reg. at 11,420 & nn. 9-13; *see also* Goniewicz, *Levels*, *supra* pp. 137-38 [JA426-27]; Williams, *supra* p. 5 [JA431]; Schober, *supra* pp. 635-36 [JA443-44]; Schripp, *supra* p. 31 [JA424]. The Department introduced these studies as "research [that] *continues* to undermine claims that the use of e-cigarettes would have no adverse health implications on users or others who are nearby." 81 Fed. Reg. at 11,420 (emphasis added). The studies identified additional chemicals that are released through e-cigarette aerosol, which further confirms the potential for e-cigarettes to cause respiratory irritation and adverse health effects. These studies were particularly relevant in light of Petitioners' comments that e-cigarette aerosol does not contain any of the "50 priority-listed cigarette smoke toxicants" and that exposure to propylene

glycol poses no risk. Cmt. of Pet'rs [JA219]; *see also* 81 Fed. Reg. at 11,418-19 (discussing Petitioners' comments that "there is no research indicating that e-cigarette vapor, with or without nicotine, is harmful to users or bystanders" and that a Health New Zealand report showed the absence of 50 cigarette smoke toxicants in e-cigarette aerosol). The additional studies directly responded to Petitioners' criticisms and "did no more than provide further support" for the conclusion that e-cigarettes are potentially harmful. *International Fabricare Inst.*, 972 F.2d at 399; *see also Community Nutrition Inst.*, 749 F.2d at 58 (explaining that "supplementary studies were specifically addressed to" petitioners' criticisms). In these circumstances, the agency need not "subject each and every study to notice and comment." *International Fabricare Inst.*, 972 F.2d at 399.

This case is nothing like *Chamber of Commerce of the U.S. v. SEC*, 443 F.3d 890 (D.C. Cir. 2006), cited by Petitioners. There, the agency used "extra-record materials" as "the only source of information" relating to three basic assumptions to determine the cost of its rule. *Id.* at 902. The data was "primary, rather than supplementary," because it was "essential to the Commission's cost estimate." *Id.* at 903. Here, by contrast, the final rule cited additional studies to expand on and confirm the same conclusion it reached in the notice of proposed rulemaking—that e-cigarettes are potentially harmful and that there is a need for further study. *See, e.g.*, 81 Fed. Reg. at 11,420 (noting that "the specific hazards of e-cigarette aerosol have not yet been fully identified"). Petitioners "had fair notice of, and full opportunity to comment on, the

issue actually decided by" the Department, and the final rule is a "logical outgrowth" of the proposed rule. *International Fabricare Inst.*, 972 F.2d at 399. This Court does not require "the sort of interminable back-and-forth" that Petitioners apparently seek. *Id.*

C. Petitioners' Remaining Arguments Are Without Merit

In addition to challenging the Department's basis for concluding that e-cigarettes present a sufficient risk of harm, Petitioners argue that the rule is arbitrary and capricious for three reasons: (1) the Department failed to consider the countervailing benefits of allowing e-cigarettes; (2) the Department regulated e-cigarettes but not other risks; and (3) airlines already prohibit e-cigarettes. Each argument is meritless and improperly attempts to second-guess the Department's policy decisions.

First, Petitioners assert that the Department failed to consider their comments that allowing e-cigarettes would produce certain benefits, including reductions in "air rage, withdrawal symptoms, and road-related mortality," and thus failed to account for relevant costs of the final rule. Br. 44. But the Department expressly considered the costs of the rule to smokers, explaining that "[d]ue to the involuntary nature of the risk of secondhand exposure," it was "prudent to give greater weight to the potential benefits of the rule than to the inconvenience costs incurred by smoking passengers." 81 Fed. Reg. at 11,426; *see also id.* at 11,425 (acknowledging the "burden to smoking patrons" but noting that "benefits will accrue to nearby passengers and crew who no longer are exposed to secondhand aerosol"). The Department

acknowledged that e-cigarette users who place primary importance on "the ability to smoke" "will need to choose another transportation mode such as driving to their destination" or may not travel at all. *Id.* at 11,425-26. The Department thus acknowledged that e-cigarette smokers may drive instead of fly and, without specifically discussing driving-related fatalities, noted that any reduction in smoker travel "may, to some extent, be offset by increased demand from non-smokers." *Id.* at 11,426. Additionally, by suggesting that e-cigarette users "might choose alternate nicotine delivery systems, such as patches and gum," *id.*, the Department responded to Petitioners' concerns regarding withdrawal symptoms and air rage. Therefore, the Department "respond[ed] in a reasoned manner" to Petitioners' comments, and nothing more is required. *See Sprint Corp. v. FCC*, 331 F.3d 952, 960 (D.C. Cir. 2003) (noting that agency "need not address every comment, but need only respond in a reasoned manner to those [comments] that raise significant problems") (alteration in original).

Next, Petitioners argue that it is arbitrary and capricious to prohibit e-cigarettes while allowing other risks, including alcohol and air contaminants. They argue that alcohol "poses greater risks" and that the "disparate treatment" of alcohol and e-cigarettes "is arbitrary and capricious." Br. 30-31. Even assuming that alcohol poses similar risks, this Court has rejected the notion that regulations are "arbitrary just because they fail to regulate everything that could be thought to pose any sort of problem." *Personal Watercraft Indus. Ass'n v. Department of Commerce*, 48 F.3d 540, 544

(D.C. Cir. 1995) (rejecting "disparate treatment" argument with respect to agency decision to regulate personal watercraft, but not other types of vessels); *see also Mobil Oil Exploration & Producing Se., Inc. v. United Distrib. Cos.*, 498 U.S. 211, 230 (1991) ("An agency enjoys broad discretion in determining how best to handle related, yet discrete, issues in terms of procedures and priorities.") (internal citations omitted). In any event, Petitioners did not raise this argument in their comments to the proposed rule, and the individual comments cited by Petitioners provide no basis for the Department to meaningfully evaluate their claim that alcohol "poses greater risks" than e-cigarettes. *See Center for Sustainable Econ. v. Jewell*, 779 F.3d 588, 601-03 (D.C. Cir. 2015) (holding that arguments were not preserved where comments did not adequately present them to agency); *U.S. AirWaves, Inc. v. FCC*, 232 F.3d 227, 236 (D.C. Cir. 2000) (same).

Petitioners' argument (Br. 35-38) that it is arbitrary and capricious for the government to protect passengers from exposure to the toxins present in e-cigarette aerosol, but not to comparable levels of ozone and other air contaminants, is based on the same flawed premise that an agency must "regulate everything that could be thought to pose any sort of problem." *Personal Watercraft Indus.*, 48 F.3d at 544 (rejecting this argument); *see* Pet'rs' Br. 35, 38 (arguing that FAA has found "pre-existing levels of contaminants in air cabins" but "did not propose any regulations based on trace quantities of such chemicals"). And there is no basis for Petitioners' related suggestion that the rule is arbitrary and capricious because e-cigarette

contaminants are "minute compared to pre-existing levels of contaminants in air cabins." Br. 35. Petitioners offer no legal support for their theory that the presence of existing contaminants forecloses the Department from guarding against additional contamination. In any event, Petitioners did not raise these arguments in their comments, nor do they cite any comment that brought these issues to the Department's attention. *See Center for Sustainable Econ.*, 779 F.3d at 601-03; *U.S. AirWaves*, 232 F.3d at 236.

Finally, Petitioners argue that the e-cigarette rule is invalid because it is unnecessary, given that airlines "[a]lready [r]estrict [v]aping." Br. 48. This argument is puzzling, especially given Petitioners' basis for asserting standing in this case. Petitioners assert injury-in-fact on the ground that, absent the Department's rule, e-cigarette users could violate airline policies and effectively get away with it. *See* Br. at 9-10; Decl. of Cummings at 1-2; Decl. of Woessner at 2-3; Decl. of Keller at 2-3. That argument underscores the utility of the Department's rule. *See* 81 Fed. Reg. at 11,421 (explaining that "some passengers have attempted to use e-cigarettes onboard aircraft" and that "[i]n the absence of regulation, e-cigarette users may believe that an airline's policy banning e-cigarettes is merely a preference"). Moreover, absent a federal prohibition on e-cigarettes, nothing prevents airlines from changing their policies in the future. *See id.* ("[W]ithout a clear, uniform regulation, some carriers may feel free to adopt policies that allow the use of e-cigarettes onboard aircraft."); *id.*

at 11,425 (acknowledging that "some carriers might lift their prohibitions" absent federal regulation).

In sum, this Court should reject Petitioners' invitation to second-guess the Department's conclusions regarding the potential effects of allowing e-cigarettes aboard aircraft. The final rule is a rational exercise of the Department's authority to ensure "safe and adequate" service by protecting passengers from secondhand exposure to e-cigarette aerosol.

CONCLUSION

For the foregoing reasons, the petition for review should be denied.

Respectfully submitted,

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November 2016

CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the requirements of Federal Rule of Appellate Procedure 32(a). This brief contains 12,386 words.

s/ Tara S. Morrissey
Tara S. Morrissey

CERTIFICATE OF SERVICE

I hereby certify that on November 28, 2016, I electronically filed the foregoing brief with the Clerk of the Court for the United States Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system. Participants in the case are registered CM/ECF users, and service will be accomplished by the appellate CM/ECF system.

s/ Tara S. Morrissey
Tara S. Morrissey

ADDENDUM

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49 U.S.C. § 40113

§ 40113. Administrative

(a) General authority.—The Secretary of Transportation (or the Under Secretary of Transportation for Security with respect to security duties and powers designated to be carried out by the Under Secretary or the Administrator of the Federal Aviation Administration with respect to aviation safety duties and powers designated to be carried out by the Administrator) may take action the Secretary, Under Secretary, or Administrator, as appropriate, considers necessary to carry out this part, including conducting investigations, prescribing regulations, standards, and procedures, and issuing orders.

49 U.S.C. § 41702

§ 41702. Interstate air transportation

An air carrier shall provide safe and adequate interstate air transportation.

49 U.S.C. § 41706

§ 41706. Prohibitions against smoking on passenger flights

(a) Smoking prohibition in interstate and intrastate air transportation.—An individual may not smoke—

(1) in an aircraft in scheduled passenger interstate or intrastate air transportation; or

(2) in an aircraft in nonscheduled passenger interstate or intrastate air transportation, if a flight attendant is a required crewmember on the aircraft (as determined by the Administrator of the Federal Aviation Administration).

(b) Smoking prohibition in foreign air transportation.—The Secretary of Transportation shall require all air carriers and foreign air carriers to prohibit smoking—

(1) in an aircraft in scheduled passenger foreign air transportation; and

(2) in an aircraft in nonscheduled passenger foreign air transportation, if a flight attendant is a required crewmember on the aircraft (as determined by the Administrator or a foreign government).

(c) Limitation on applicability.—

(1) In general.—If a foreign government objects to the application of subsection (b) on the basis that subsection (b) provides for an extraterritorial application of the laws of the United States, the Secretary shall waive the application of subsection (b) to a foreign air carrier licensed by that foreign government at such time as an alternative prohibition negotiated under paragraph (2) becomes effective and is enforced by the Secretary.

(2) Alternative prohibition.—If, pursuant to paragraph (1), a foreign government objects to the prohibition under subsection (b), the Secretary shall enter into bilateral negotiations with the objecting foreign government to provide for an alternative smoking prohibition.

(d) Regulations.—The Secretary shall prescribe such regulations as are necessary to carry out this section.

14 C.F.R. Part 252 (as amended by 81 Fed. Reg. 11,415)

§ 252.1 Purpose.

This part implements a ban on smoking as defined in § 252.3, including the use of electronic cigarettes and certain other devices, on flights by air carriers and foreign air carriers.

§ 252.2 Applicability.

This part applies to operations of air carriers engaged in interstate, intrastate and foreign air transportation and to foreign air carriers engaged in foreign air transportation.

§ 252.3 Definitions.

As used in this part:

Air carrier means a carrier that is a citizen of the United States undertaking to provide air transportation as defined in 49 U.S.C. 40102.

Foreign air carrier means a carrier that is not a citizen of the United States undertaking to provide foreign air transportation as defined in 49 U.S.C. 40102.

Smoking means the use of a tobacco product, electronic cigarettes whether or not they are a tobacco product, or similar products that produce a smoke, mist, vapor, or aerosol, with the exception of products (other than electronic cigarettes) which meet the definition of a medical device in section 201(h) of the Federal Food, Drug and Cosmetic Act, such as nebulizers.

§ 252.4 Smoking ban: air carriers.

Air carriers shall prohibit smoking on the following flights:

(a) Scheduled passenger flights.

(b) Nonscheduled passenger flights, except for the following flights where a flight attendant is not a required crewmember on the aircraft as determined by the Administrator of the Federal Aviation Administration:

(1) Single entity charters.

(2) On-demand services of air taxi operators.

(c) Nothing in this section shall be deemed to require air carriers to permit smoking aboard aircraft.

§ 252.5 Smoking ban: foreign air carriers.

(a)(1) Foreign air carriers shall prohibit smoking on flight segments that occur between points in the United States, and between the United States and any foreign point, in the following types of operations:

(i) Scheduled passenger foreign air transportation.

(ii) Nonscheduled passenger foreign air transportation, if a flight attendant is a required crewmember on the aircraft as determined by the Administrator of the Federal Aviation Administration or a foreign carrier's government.

(2) Nothing in this section shall be deemed to require foreign air carriers to permit smoking aboard aircraft.

(b) A foreign government objecting to the application of paragraph (a) of this section on the basis that paragraph (a) provides for extraterritorial application of the laws of the United States may request and obtain a waiver of paragraph (a) from the Assistant Secretary for Aviation and International Affairs, provided that an alternative smoking prohibition resulting from bilateral negotiations is in effect.

§ 252.8 Extent of smoking restrictions.

The restrictions on smoking described in §§ 252.4 and 252.5 shall apply to all locations within the aircraft.

§ 252.9 Ventilation systems.

Air carriers shall prohibit smoking whenever the ventilation system is not fully functioning. Fully functioning for this purpose means operating so as to provide the level and quality of ventilation specified and designed by the manufacturer for the number of persons currently in the passenger compartment.

§ 252.11 Aircraft on the ground.

(a) Air carriers shall prohibit smoking whenever the aircraft is on the ground.

(b) With respect to the restrictions on smoking described in § 252.5, foreign air carriers shall prohibit smoking from the time an aircraft begins enplaning passengers until the time passengers complete deplaning.

§ 252.17 Enforcement.

Air carriers and foreign air carriers shall take such action as is necessary to ensure that smoking by passengers or crew is not permitted where smoking is prohibited by this part, including but not limited to aircraft lavatories.