

COMMENTS OF  
THE CONSUMER ADVOCATES FOR SMOKE-FREE ALTERNATIVES ASSOCIATION  
AND THE COMPETITIVE ENTERPRISE INSTITUTE  
TO THE U.S. DEPARTMENT OF TRANSPORTATION ON ITS PROPOSAL  
REGARDING SMOKING OF ELECTRONIC CIGARETTES ON AIRCRAFT,  
76 FR 57,008 (Sept. 15, 2011)

For the reasons set forth below, the Consumer Advocates for Smoke-Free Alternatives Association (CASAA) and the Competitive Enterprise Institute (CEI) hereby urge DOT to withdraw its proposal to ban the use of e-cigarettes on aircraft.

Introduction

CASAA is a non-profit organization of approximately 2,000 grassroots members that works to ensure the availability of reduced harm alternatives to smoking and to provide smokers and non-smokers alike with truthful information about such alternatives. It attempts to increase public awareness and education; to encourage the testing and development of products to comply with achievable acceptable safety standards and reasonable regulation; and to promote the benefits of reduced harm alternatives. CASAA participated as an amicus in *Sottera, Inc. v. FDA*, 627 F.3d 891 (D.C. Cir. 2010), which overturned FDA's attempt to stringently regulate e-cigarettes (see amicus brief of Smokefree Pennsylvania *et al.*, filed July 8, 2010).

CEI is a non-profit organization that focuses on regulatory issues, especially on raising public understanding of the often-hidden costs of overregulation. In the case of CAFE, DOT's fuel economy standards, CEI's litigation against this agency demonstrated that overregulation can, in some cases, have literally lethal effects. *CEI and Consumer Alert v. National Highway Traffic Safety Administration (NHTSA)*, 901 F.2d 111 (D.C. Cir. 1990); 956 F.2d 321 (D.C. Cir. 1992); 45 F.3d 481 (D.C. Cir. 1995).

*1. The Congressional Ban on In-Flight Smoking Simply Does Not Extend to Smoke-free Products*

It is clear that "an agency may not issue regulations covering 'an area in which it has no jurisdiction.'" *Kelley v. E.P.A.*, 15 F.3d 1100, 1104 (D.C. Cir. 1994) (internal citation omitted). And "[a]n agency may not bootstrap itself into an area in which it has no jurisdiction" by stretching the language of a statute. *Adams Fruit Co. v. Barrett*, 494 U.S. 638, 650 (1990) (quoting *Federal Maritime Comm'n v. Seatrain Lines, Inc.*, 411 U.S. 726, 745 (1973)). Similarly, agency interpretation "may not be used to overturn the plain language of a statute." *C.I.R. v. Schleier*, 515 U.S. 323, 336 n.8 (1995). Administrative attempts to do so are not entitled to the judicial deference that agencies normally receive, because "no deference is due to agency interpretations at odds with the plain language of the statute itself. Even contemporaneous and longstanding agency interpretations must fall to the extent they conflict with statutory language." *Public Employees Retirement System of Ohio v. Betts*, 492 U.S. 158 (1989).

Yet in basing its proposal on 49 USC 41706, DOT is engaging in exactly this sort of unwarranted jurisdictional expansionism. That law states, “An individual may not smoke in an aircraft.” DOT claims that this definition is sufficiently broad to include a prohibition on the use of e-cigarettes. This is simply not true.

Statutes should be construed under their ordinary and plain meaning. Merriam-Webster defines smoke as “the gaseous products of burning materials especially of organic origin made visible by the presence of small particles of carbon.” <http://www.merriam-webster.com/dictionary/smoke> An e-cigarette produces no smoke and no combustion is involved in its operation. As the D.C. Circuit panel noted in *Sottera*, e-cigarettes “are battery-powered products that allow users to inhale nicotine vapor *without fire, smoke, ash, or carbon monoxide.*” 627 F.3d at 893 (emphasis added). DOT’s arguments that the use of e-cigarettes *resembles* smoking have nothing to do with the fact that their use does not *involve* smoking. For example, the fact that this use involves “an inhalation and exhalation similar to smoking cigarettes” (76 FR 57,009) means nothing. Blowing air through a straw (such as the hollow plastic coffee stirrers handed out by flight attendants, which passengers occasionally play with in this manner) also involves inhaling and exhaling, but it hardly constitutes smoking.

## 2. *Contrary to DOT’s Claims, E-Cigarettes Pose No Safety Issue*

DOT also cites 49 U.S.C. 41702 (“An air carrier shall provide safe and adequate interstate air transportation”) as an additional justification for its proposed ban. Given that Congress specifically addressed the issue of in-flight smoking in section 41706, DOT’s reliance on section 41702 is highly questionable, to say the least. More importantly, contrary to DOT’s claim, there is no research indicating that e-cigarette vapor—with or without nicotine—is harmful either to users or bystanders. In the words of the *Sottera* decision,

“Regarding harm to third parties and to the public interest, the district court observed that the FDA had cited no evidence to show that electronic cigarettes harmed anyone.”

627 F.3d at 898.

This conclusion is fully supported by numerous studies. For example, Cahn and Siegel reviewed 16 studies of e-cigarette liquid and vapor and concluded that they were comparable in toxicity to conventional nicotine replacement products. [Appendix A]

### a) Traditional Cigarettes and E-cigarettes Are Totally Different

DOT states that it sees “no reason to treat electronic cigarettes any differently than traditional cigarettes.” 76 FR 57009. If so, it is because DOT has its eyes tightly shut. Traditional cigarettes generate smoke; e-cigarettes, on the other hand, generate a vapor that visually may resemble smoke but that in fact is totally different. Cigarette smoke is created by the process of combustion, generating elements that cause lung disease, cardiovascular disease, and cancer. These include tar, carbon monoxide and other poisonous gasses, particulates, and thousands of chemicals created by the process of combustion. E-cigarette vapor is created by heating a liquid to 54°C. Vapor does not contain any of the elements of combustion.

Health New Zealand reported on testing conducted by seven independent laboratories. E-cigarette mist was tested for over 50 priority-listed cigarette smoke toxicants. No such toxicant was found. [Appendix B]

The tar in cigarette smoke leaves behind a sticky yellow film that clings to surfaces. E-cigarette vapor contains no tar and dissipates quickly without leaving any residue on surfaces. A burning cigarette always produces a pungent, easily recognized odor. E-cigarettes, on the other hand, do not produce vapor until the user inhales, and the exhaled vapor may be completely odorless.

Traditional cigarettes must be set on fire, which may create a potential danger of fires or burns. E-cigarettes are battery-operated and present no more danger of fire or burns than a flashlight.

Traditional cigarette smokers leave behind ashes and cigarette butts. E-cigarettes users do not leave any trash behind.

#### b) DOT's Reliance on a Study of Commercial Smoke Generators Is Baseless

DOT cites a study that showed some eye and airway irritation caused by 20 minutes exposure to vapor from a commercial artificial smoke generator used in aviation emergency training. These machines produce a tremendous volume of vapor in 20 minutes—enough to obscure visibility in an aircraft cabin. The solutions used in these machines contain chemicals not found in e-cigarette liquid. “The glycol solutions currently used to generate smoke effects consist of mixtures of 1,3-butylene glycol, diethylene glycol, propylene glycol, and triethylene glycol.” [See Appendix C at II-3]

Propylene glycol inhalation poses no risk. As the Environmental Protection Agency stated: “Upon reviewing the available toxicity information, the Agency has concluded that there are no endpoints of concern for oral, dermal, or inhalation exposure to propylene glycol and dipropylene glycol.” EPA. Reregistration Eligibility Decision for Propylene Glycol and Dipropylene Glycol. [Appendix D at 10 (internal numbering)]

Health New Zealand reports that when inhaled, e-cigarette vapor delivers only 0.7 mg of propylene glycol (PG). PG is largely absorbed in the lungs of the user. Little is exhaled. [Appendix E]

#### c) The Minimal Health Effects of E-cigarette Use on Users Means that Any Impacts on Bystanders Are Totally Insignificant.

Vansickel et al. compared two brands of e-cigarettes containing nicotine against smokers' own brand of tobacco cigarettes and “sham smoking” (placebo condition) and found, “Under these acute testing conditions, neither of the electronic cigarettes exposed users to measurable levels of nicotine or CO, although both suppressed nicotine/tobacco abstinence symptom ratings.” [Appendix F]

Japanese researchers reported in the Journal of Urban Living and Health Association regarding research on e-cigarettes containing no nicotine “Following the treatment, no abnormal changes in blood pressure, hematological data, or blood chemistry and no severe adverse events were observed.” See Appendix G]

Heavner, et al. surveyed 303 e-cigarette users. “The majority of respondents reported that their general health (91%), smoker’s cough (97%), ability to exercise (84%), and sense of smell (80%) and taste (73%) were better since using e-cigarettes and none reported that these were worse.” [Appendix H at 2 (internal numbering)]

If e-cigarette users, who directly inhale the vapor are not only not being harmed but also experiencing health improvements, it defies belief that the exhaled vapor, having been filtered through the lungs of the users, could possibly present any threat whatsoever to the health of bystanders.

### *3) DOT Has Failed To Demonstrate Any Benefits of Its Proposed Ban, and Has Ignored the Clear Benefits of Permitting E-Cigarette Use on Flights*

President Obama's Executive Order 13563 states that agencies should, "propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify)." DOT has not shown that the ban would have any benefits at all. In fact, DOT has wholly failed to undergo any cost-benefit analysis. Moreover, the agency has not considered the cost and benefits of alternatives to this regulation.

Most importantly, DOT is ignoring the clear benefits of permitting the in-flight use of e-cigarettes. First, as the Vansickel study and other reports indicate, e-cigarettes can alleviate the tobacco withdrawal symptoms faced by smokers on flights. According to one travel website, “it has recently been recognized that a common cause of air rage is nicotine withdrawal in heavy smokers on long-distance 'no smoking' flights ....” *The Travel Doctor*, <http://www.traveldoctor.co.uk/flights.htm>. But the growing popularity of e-cigarettes indicates that many smokers prefer them to other non-combustion nicotine delivery systems. Allowing their in-flight use would make many smokers far more comfortable on flights.

Secondly, many smokers do not fly precisely because they find the prospect of flying uncomfortable due to their inability to smoke on those flights (which may well involve long airport waits and connecting flights as well). See, for example, “Smokers: No Butts, It's A Drag Smokers Are Coping With No-smoking Bans On Some Domestic Flights: They Drive, Schedule Layovers Or Stay Home”, Orlando Sentinel (Feb. 7, 1993), [http://articles.orlandosentinel.com/1993-02-07/travel/9302030027\\_1\\_smoking-layover-airport](http://articles.orlandosentinel.com/1993-02-07/travel/9302030027_1_smoking-layover-airport)

The possibility of inflight e-cigarette use may well induce them to fly when they otherwise would have driven. Given that commercial flights are far safer than driving, especially over long distances, this increase in flying by such smokers could well save lives. (On the basis of deaths per passenger mile travelled, air travel is at nearly 200 times safer than car travel. <http://www.airlinereporter.com/2010/09/flying-is-safe-and-i-am-going-to-prove-it/> )

4) *DOT's Penalties Do Not Fit the "Crime"*

Passengers who violate 14 CFR Part 252 by smoking traditional cigarettes on aircraft are subject to fines of up to \$3,300. Such fines may be justified by the fact that smoke impairs air quality in the aircraft. It may be further justified due to costs incurred by airlines for cleaning to remove smoky film and odor and for repairs due to burned seats and/or carpeting. However, e-cigarette users do not impair air quality, do not create reason for extra cleaning, and do not represent any damage to seats and carpeting. There is no justification for this level of punishment for e-cigarette use.

Conclusion

For the above reasons, we urge DOT to withdraw its proposed ban on the in-flight use of e-cigarette use.

Respectfully submitted,

Elaine D. Keller, President  
The Consumer Advocates for Smoke-free Alternatives Association  
8094 Rolling Rd, Suite 200  
Springfield, VA 22153  
202-241-9117  
[ekeller@casaa.org](mailto:ekeller@casaa.org)

Sam Kazman, General Counsel  
Hans Bader, Special Counsel  
Competitive Enterprise Institute  
1899 L St. NW, 12<sup>th</sup> floor  
Washington DC 20026  
202-331-2265  
[skazman@cei.org](mailto:skazman@cei.org)

November 14, 2011