Airlines for America®
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August 31, 2022

Submitted electronically at: https://aq.ecology.commentinput.com/?id=KTPeV

Rachel Assink
Washington Department of Ecology
Air Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: Airlines for America® Comments on the Clean Fuels Program Proposed Rule

Dear Ms. Assink:

Airlines for America® (A4A), the trade association for the leading U.S. passenger and cargo airlines,[1] appreciates the opportunity to comment on the Washington Department of Ecology's (Ecology) Clean Fuels Program (CFP) Proposed Rule (Proposed Rule), which Ecology published on July 18, 2022.[2]

A4A supports the Proposed Rule. Before elaborating on our support in Part II below, we first provide background on A4A's longstanding commitment to environmental sustainability and the development and deployment of sustainable aviation fuel (SAF), or what Ecology refers to in the Proposed Rule as alternative jet fuel (AJF).

I. Background

The U.S. airline industry has a strong climate record and a continuing commitment to further reduce its climate impact. Between 1978 and 2021, the U.S. airlines improved their fuel efficiency by more than 135 percent, saving over 5.5 billion metric tons of carbon dioxide (CO_2) – equivalent to taking more than 28 million cars off the road on average *in each of those years*.[3] Similarly, since 1975, even as we quintupled the number of passengers served in the U.S., we have reduced the number of people exposed to significant levels of aircraft noise by 94 percent. The U.S. airlines have continually demonstrated their ability to contribute to the nation's economic productivity, while improving their environmental performance.

This environmental record is not happenstance, but the result of a relentless commitment to driving and deploying technology, operations, infrastructure, and SAF advances to provide safe

[1] A4A's members are Alaska Airlines, Inc.; American Airlines Group Inc.; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawaiian Airlines, Inc.; JetBlue Airways Corp.; Southwest Airlines Co.; United Airlines Holdings, Inc.; and United Parcel Service Co. Air Canada, Inc. is an associate member.

[2] Available at https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-424-455?utm_medium=email&utm_source=govdelivery.

[3] Data from the Bureau of Transportation Statistics confirm that U.S. airlines improved their fuel- and CO_2-emissions efficiency by 40 percent from 2000 to 2021.

and vital air transport as efficiently as possible within the constraints of the air traffic management system. Indeed, for the past several decades, airlines have dramatically improved their fuel efficiency and reduced their CO_2 and other emissions by investing billions in fuel-saving aircraft and engines, innovative technologies like winglets (which improve aerodynamics), and cutting-edge route-optimization software.

We are committed to addressing and further reducing our industry's greenhouse gas (GHG) emissions. On March 30, 2021, A4A, together with our member carriers, pledged to work across the aviation industry and with government leaders in a positive partnership to achieve net-zero carbon emissions by 2050 (2050 NZC Goal).[4] This pledge continues our longstanding commitment to embracing our responsibility to address climate change and reduce commercial aviation's GHG emissions footprint.[5]

Achieving the 2050 NZC Goal will require continuing the pursuit of an "all of the above" strategy that includes realizing improvements in the efficiency of our operations (including through improvements to the nation's air traffic control system) and in technology, especially aircraft and aircraft engines. Most importantly, however, consistent analyses show that reaching our 2050 NZC Goal will require access to tremendous quantities of SAF. Put simply, net-zero carbon emissions cannot be achieved unless the production and availability of SAF grows exponentially. Thus, at the same time that A4A and our carriers adopted the 2050 NZC Goal, we also pledged to work with governments and other stakeholders toward a rapid expansion of the production and deployment of commercially viable SAF to make 2 billion gallons available to U.S. aircraft operators in 2030. On September 9, 2021, as a complement to the federal government's announcement of actions to foster a sustainable aviation industry, including the SAF Grand Challenge and other steps to "ensure cleaner air in and around airports,"[6] A4A and our members increased the A4A SAF "challenge goal" by an additional 50 percent, calling for 3 billion gallons of cost-competitive SAF to be available to U.S aircraft operators in 2030.[7]

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[4] *See* https://www.airlines.org/news/major-u-s-airlines-commit-to-net-zero-carbon-emissions-by-2050/. In announcing our members' commitment to net-zero carbon emissions by 2050, we made clear that the commitment extended not only to emissions from our aircraft while in flight, but also to emissions associated with our activities and operations on the ground. *See A4A Climate Change Commitment and Flight Path – Innovative Industry and Government Action to Achieve Net-Zero Carbon Emissions*, at 5 (Mar. 30, 2021), available at https://www.airlines.org/wp-content/uploads/2021/05/A4A-Climate-Change-Commitment-Flight-Path-to-Net-Zero-FINAL-3-30-21.pdf. On October 4, 2021, the International Air Transport Association and its member airlines followed suit by also committing to achieve net-zero carbon emissions by 2050. *See* https://www.iata.org/en/pressroom/2021-releases/2021-10-04-03/.

[5] Since 2009, A4A and our members have been active participants in a global aviation coalition. Prior to strengthening our commitment in 2021, we had committed to 1.5 percent annual average fuel efficiency improvements through 2020, with goals to achieve carbon-neutral growth beginning in 2020 and a 50 percent net reduction in CO_2 emissions in 2050, relative to 2005 levels.

[6] *See* https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/fact-sheet-biden-administration-advances-the-future-of-sustainable-fuels-in-american-aviation/ and https://www.energy.gov/eere/bioenergy/sustainable-aviation-fuel-grand-challenge.

[7] *See* https://www.airlines.org/news/u-s-airlines-announce-3-billion-gallon-sustainable-aviation-fuel-production-goal/.

Notably, this SAF challenge goal and the 2050 NZC Goal represent collective minimums, and some A4A members have established even more ambitious goals.

Our airlines' efforts to address GHG emissions are designed to reduce their fuel consumption, GHG contribution, and potential climate change impacts responsibly and effectively, while allowing commercial aviation to continue to serve as a key contributor to the U.S., global, Washington, and local economies. At the same time, we continue to build upon our strong record of reducing conventional air pollutant emissions. Our airlines' primary focus is realizing further fuel efficiency and emissions savings through increasing levels of SAF deployment, modernization and optimization of the air traffic management system, public-private research and development partnerships, and a vast array of additional operational and infrastructure initiatives being undertaken in collaboration with regulators, airports, manufacturers, and other aviation stakeholders.

A4A and our members have been particularly focused on developing low-carbon, sustainable liquid fuel alternatives, understanding that rapid, exponential growth in the deployment of SAF is imperative for the successful decarbonization of commercial aviation. As drop-in fuel made from non-petroleum feedstocks that currently reduces lifecycle GHG emissions by up to 80 percent compared to conventional, petroleum-based jet fuel while also helping to improve local air quality (with even greater GHG emissions reductions possible in the future[8]), SAF is vital to our sector. Unlike the on-road transportation sector (cars, trucks, buses, etc.), energy alternatives like electricity and hydrogen will not be sufficiently advanced in the near- or mid-term to make a meaningful contribution to the decarbonization of the aviation sector by 2050, meaning that commercial aviation will remain reliant on high energy density liquid fuels for years to come.[9]

Fortunately, we are in a position to succeed because we are not just getting started now. A4A and our members have been working diligently for many years to lay the groundwork for the establishment of a commercially viable SAF industry. In 2006, A4A was instrumental in co-founding with the Federal Aviation Administration (FAA) and other aviation organizations the Commercial Aviation Alternative Fuels Initiative (CAAFI®), which seeks to facilitate the development and deployment of SAF.[10] CAAFI has been integral in obtaining the certification of the seven SAF pathways that are recognized under the ASTM International specification for aviation turbine fuel from alternative, non-petroleum sources (i.e., ASTM D7566) as well as the two co-processing pathways recognized under the ASTM D1655 jet fuel specification. Nearly all A4A member carriers, moreover, have entered into offtake agreements over the past decade with SAF producers in a concerted effort to spur the SAF industry and utilize the fuel. More recently, various A4A airlines have entered into SAF arrangements with corporate and cargo customers as another way to help grow the SAF market.

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[8] Coupled with other technologies or practices, SAF may one day be emissions-negative on a lifecycle basis, meaning that for each gallon of SAF used in an aircraft, CO_2 is removed from the atmosphere.

[9] *See* Federal Aviation Administration, *United States 2021 Aviation Climate Action Plan*, at 18-19 (Nov. 2021) (*U.S. 2021 Aviation CAP*) ("there is no realistic option that could replace liquid fuels in the commercial aircraft fleet in the coming decades"), available at https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation_Climate_Action_Plan.pdf.

[10] *See* https://caafi.org/.

It bears noting, too, that A4A was a strong supporter of the provisions in House Bill 1091 (now codified in Chapter 70A.535 of the Revised Code of Washington (RCW)) that are designed to help further the SAF industry in Washington, as well as an original proponent and a key supporter of the addition of AJF as a credit-generating fuel under the California Air Resources Board's (CARB) Low Carbon Fuel Standard (LCFS) Program and the Oregon Department of Environmental Quality's (ODEQ) CFP on a voluntary, opt-in basis. In sum, A4A and our members have been and remain deeply committed to the development of a commercially viable SAF industry – in Washington, in the broader Pacific Northwest region, throughout the country, and throughout the world.

We also have long supported improvements to airport infrastructure and modernization of the country's air traffic management system on a business-case basis. For example, electrification of aircraft gates and installation of ground power units and pre-conditioned air units provide access to a clean central heating and cooling system for aircraft while at parking positions. This allows airlines to run aircraft systems on electricity provided to the airport rather than relying on jet fuel-powered aircraft auxiliary power units. In addition, airports may install charging stations that serve electric-powered ground support equipment (eGSE). Improvements to airport power grids ensure the reliability of electric power needed to take advantage of these systems, but even without those improvements, our member carriers have invested millions to replace their traditional, petroleum-fueled GSE with eGSE. An important source of funding for such improvements is the FAA's Voluntary Aviation Low Emissions Program, which makes funds generated by the aviation industry available to airports to support projects that achieve reductions in regulated air pollutants. Moreover, when necessary to improve the efficiency of their operations, airlines also support major infrastructure projects such as upgrades to or reconfigurations of terminals and runway and taxi systems. We also have been supportive for many years of the federal government's effort to upgrade the nation's air traffic management system, known as NextGen, which is comprised of a suite of technologies and procedures to improve efficiencies in managing air traffic and reducing emissions. A4A and its members continue to work cooperatively with the FAA to implement elements of the plan that are supported by a sound business case.

II. Comments on the Proposed Rule

With the above background in mind, A4A, which participated in the informal, rule development phase of this rulemaking (i.e., various stakeholder meetings), expresses its support for the Proposed Rule.[11]

[11] Our previous comment letters can be found at https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid100/did1008/pid_202037/assets/merged/8g0wikp_document.pdf?v=WPC9MRF7T and https://scs-public.s3-us-gov-west-1.amazonaws.com/env_production/oid100/did1008/pid_202037/assets/merged/ow0ki9t_document.pdf?v=S8MQHVY42.

A. A4A Supports the Proposed Definition of AJF

For all of the reasons set forth in our earlier comment letters, A4A is fully supportive of proposed WAC 173-424-110(8), which would (i) define the term "alternative jet fuel" to mean "a fuel made from petroleum or nonpetroleum sources that can be blended and used with conventional petroleum jet fuels without the need to modify aircraft engines and existing fuel distribution infrastructure," (ii) specify that for credit generation purposes, AJF is measured against the annual carbon intensity (CI) standard in Table 2 of proposed WAC 173-424-900 (i.e., the CI benchmark for diesel and diesel substitutes), and (iii) explicitly include "those jet fuels derived from co-processed feedstocks at a conventional petroleum refinery."

We applaud Ecology for proposing to establish from the outset of the CFP a level playing field between AJF and renewable diesel by using the same CI benchmark for both alternative fuels. Not only will this ensure credit parity between the two fuels (assuming the same CI score, as is the case under the California LCFS Program for World Energy's coproduced fuels), but as we explained in our previous letters, it will create alignment between the CFP and the LCFS Program, under which there will be credit parity between AJF and renewable diesel starting in 2023,[12] and eventually also with the Oregon CFP, under which the CI benchmarks for AJF and diesel substitutes will effectively converge in 2024.[13]

B. A4A Supports the Proposed Applicability and Exemption Provisions for Aviation Fuels

For the reasons set forth in our prior comment letters, A4A also supports the applicability language in proposed WAC 173-424-120(3)(b)(v), which would designate AJF as a creditable fuel on a voluntary, opt-in basis, and the broad exemption language in proposed WAC 173-424-130(2)(a)(i), which would exempt from the CFP "[t]ransportation fuels supplied for use in . . . [a]ircrafts," including "conventional jet fuel or aviation gasoline, and [AJF]." Importantly, these provisions comport with the clear statutory direction that the Washington State Legislature provided Ecology in RCW 70A.535.030(5) and RCW 70A.535.040(1)(b).[14]

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[12] *See* 17 California Code of Regulations 95484(c)-(d), available at https://govt.westlaw.com/calregs/Document/I88413CAE13FD4ADB86012CCE34231DE3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default).

[13] *See* Oregon Administrative Rule (OAR) 340-253-8010, Tables 2-3, available at https://secure.sos.state.or.us/oard/viewAttachment.action?ruleVrsnRsn=277343; *see also* ODEQ, Notice of Proposed Rulemaking (June 29, 2022), at pages 184-87 (Tables 2-3) (proposing identical CI values for diesel substitutes and AJF for 2026 and all years thereafter), available at https://www.oregon.gov/deq/rulemaking/Documents/cfp2022pnp.pdf. Note that A4A has encouraged ODEQ to move up to 2023 the point in time at which credit parity would exist under the Oregon CFP, which would create full alignment among all three West Coast states with regard to the treatment of AJF and renewable diesel – credit parity between the two alternative fuels beginning in 2023.

[14] A4A likewise supports the exclusionary language in proposed WAC 173-424-200(2)(a)(iii), which specifies that "[c]onventional jet fuel is not subject to the CFP and need not be reported" by fuel reporting entities, as well as the AJF reporting provision in proposed WAC 173-424-520(5), which stipulates that AJF must be "loaded into [an] airplane[] in Washington" in order for credit to be generated.

C. *Ecology Should Add an Energy Economy Ratio to Effectuate the Proposed Regulatory Provisions on eGSE*

In addition, we support the language in proposed WAC 173-424-110(57), which would define the term "electric ground support equipment" to include, but not be limited to, pushbacks, belt loaders, and baggage tractors. With respect to proposed WAC 173-424-220(9), which would designate the charging station owner as the credit generator for electricity used to charge eGSE, our understanding is that the charging equipment owner – usually the airport – would have the ability to share those credits with the eGSE owner via a contractual or other revenue-sharing arrangement (e.g., a provision in a lease between the airport and airline). Even so, to best incentivize airlines' uptake of eGSE, we encourage Ecology to add flexibility to the proposed provision by also enabling the eGSE owner to be the credit generator. This can be accomplished by inserting the following italicized language:

> (9) **Electric ground support equipment.** *Either* the owner of the charging equipment for *electric* ground support equipment *or the owner of the electric ground support equipment* is eligible to generate credits.

Notwithstanding the above, we observe that for these two regulatory provisions to be meaningful, which is to say for the acquisition and deployment of eGSE to actually be incentivized in Washington, Ecology needs to include in Table 4 of proposed WAC 173-424-900 an energy economy ratio (EER) for eGSE, as it has proposed, for example, for electric forklifts and electric cargo handling equipment. Noting that all of the EER values put forth by Ecology in Table 4 are identical to the EER values that already exist for the same fuel/vehicle combinations in Oregon,[15] A4A encourages Ecology to include in Table 4 the same EER for eGSE that ODEQ has proposed for purposes of the Oregon CFP, 3.2.[16]

D. *Ecology Should Reconsider the Tier 2 Application Start Date of July 1, 2025, and Correct a Mistaken Reference in Proposed WAC 173-424-600(5)(b)*

Finally, while A4A and our members appreciate that Ecology has proposed in subsection (4) of WAC 173-424-600 to effectively grandfather into the CFP "established fuel pathways" and the associated CI values "that CARB or OR-DEQ certified for use in the California LCFS or Oregon CFP programs," we nevertheless are disappointed that Ecology has proposed in subsection 5(b) "not [to] start accepting Tier 2 [fuel pathway] applications until July 1, 2025." Prior to this date, it is entirely possible that a SAF producer would want to obtain a certified CI in Washington for an entirely new alternative jet fuel pathway (or at least a pathway that has yet to be certified in California or Oregon) before seeking a certified value in California or Oregon. Subsection (5)(b), though, would effectively force producers to go to those states first, thereby encouraging them to ship their fuels to California and Oregon rather than keeping them in or shipping them to Washington. Thus, as we stated in our April 25, 2022, comment letter,

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[15] *See* OAR 340-253-8010, Table 7, available at https://secure.sos.state.or.us/oard/viewAttachment.action?ruleVrsnRsn=277343.

[16] *Id.* at 193 (proposed 340-253-8010, Table 7). This EER value is based on data generated by the Port of Portland and the California Airports Council; the data are posted at https://www.oregon.gov/deq/rulemaking/Pages/cfp2022.aspx under the "Electricity Workshop, Thursday, Feb. 10, 2022" link.

subsection 5(b) could have the undesirable effect of delaying the deployment of AJF in Washington. We urge Ecology to reconsider this provision and change the Tier 2 application start date to no later than July 1, 2023.

Irrespective of the above, A4A believes the introductory clause in subsection 5(b) mistakenly references "subsection (3) of this section." As the CARB and OR-DEQ certified fuel pathways are addressed in subsection (4), not subsection (3), we request that Ecology correct subsection (5)(b) so that it reads instead as follows: "Except CARB or OR-DEQ certified fuel pathways as provided in subsection (4) of this section . . . ."

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Thank you for your consideration of our comments. Please do not hesitate to contact us if you have any questions.

Sincerely yours,

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