

November 5, 2025

Submitted electronically at https://sea.ecology.commentinput.com/?id=8pM3Hf7QK

Clean Energy Coordination Department of Ecology P.O. Box 47709 Olympia, WA 98504-7709

> Re: Comments on Ecology's Scoping Document for Programmatic Environmental Impact Statement on Sustainable Aviation Fuel Production Pathways, Including Blending and Distribution Infrastructure, in Washington State

Dear Sir/Madam:

Twelve[™] Benefit Corporation (Twelve) appreciates the opportunity to provide these brief comments on the above-referenced *Scoping Document* pertaining to sustainable aviation fuel (SAF), which the Department of Ecology (Ecology) issued on October 6, 2025, pursuant to the legislative direction in section 112(2) of Senate Bill 5161.¹

Among other things, Ecology "seek[s] input on [the] SAF production pathways, including types of feedstocks, to be evaluated" in the programmatic environmental impact statement (PEIS).² Particularly as Twelve's Moses Lake AirPlant™, our commercial demonstration facility that is now undergoing commissioning, is described on page 22 of the *Scoping Document* and will be the very first SAF production plant in Washington State – indeed, the very first Power-to-Liquid (PtL) SAF production plant in the entire country – we strongly encourage Ecology to ensure that the PEIS includes carbon dioxide (CO₂), whether captured from an industrial point source or directly from the air, and both the Fischer-Tropsch (FT) and PtL production pathways as part of the analysis. In this regard, we note that while the description on page 22 correctly characterizes AirPlant One as a "power to liquid production facility," the PtL SAF we will be producing there – what we refer to as our E-Jet® fuel – will meet the specifications in Annex A1 of ASTM International's D7566 Standard (*Standard Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons*).³ In other words, our E-Jet will be considered FT Synthetic Paraffinic Kerosene (FT-SPK) since it will be made from synthesis gas, a combination of carbon monoxide and hydrogen, using the FT process.

¹ See https://lawfilesext.leg.wa.gov/biennium/2025-26/Pdf/Bills/Session%20Laws/Senate/5161-5.SL.pdf#page=1.

² Scoping Document at 23.

³ See https://www.af.mil/News/Article-Display/Article/2819999/the-air-force-partners-with-twelve-proves-its-possible-to-make-iet-fuel-out-of/.

For this reason, we respectfully take issue with Ecology's statement on page 22 that "th[e] [PtL] process is not yet ASTM International approved" This statement may very well be true of the PtL SAF to be produced by other companies in the PtL fuels space, but it certainly is not the case for Twelve's E-Jet, which again, will meet the requirements in Annex A1 of ASTM D7566.

In a similar vein, we question the commercial readiness timeline for both FT SAF and PtL SAF as depicted in Figure 3 on page 21 of the *Scoping Document*. More specifically, we maintain that successful demonstrations will be completed and deployment on a commercial scale will occur much sooner than as shown in the figure. As indicated above, Twelve's commercial demonstration plant in Moses Lake is currently being commissioned, and we expect to begin FT/PtL SAF production at the facility by the end of this year or early next year, while another company, Infinium, is now constructing a "large scale" PtL SAF facility in Pecos, Texas.⁴

Finally, in the FT-SPK row in Table 1 on page 19, either waste CO₂ or gaseous carbon oxides should be added to the listed feedstocks, and we recommend that the third column be revised to read as follows (underscore indicates additions): "Converts feedstock to syngas using gasification or another chemical process, then a Fischer-Tropsch synthesis reaction converts the syngas to jet fuel." Consistent with these additions, we suggest similar changes to the first paragraph under the FT heading on page 22. In our view, the reference to "any carbon containing material" does not necessarily encompass waste CO₂ or gaseous carbon oxides.

* * *

Thank you again for the opportunity to provide these brief comments on the scoping exercise. Please do not hesitate to contact me or Ira Dassa (<u>ira.dassa@twelve.co</u>) if you have any questions or wish to discuss them.

Sincerely yours,

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⁴ See https://americanairlines.gcs-web.com/news-releases/