

Twelve Benefit Corporation (Ira Dassa)

Please find attached the written public comments of Twelve Benefit Corporation.



September 20, 2025

Submitted electronically at <https://nmed.commentinput.com/?id=Q7EpmKPeC>

EIB Administrator
New Mexico Environment Department
Harold Runnels Building
P.O. Box 5469
Santa Fe, NM 87502

Re: Comments on Proposed New Rule 20.2.92 NMAC – Clean Transportation Fuel Program (EIB 25-23(R))

Dear Sir/Madam:

Twelve™ Benefit Corporation (Twelve) appreciates the opportunity to provide comments to the Environmental Improvement Board (EIB) on the above-referenced proposed new rule of the New Mexico Environment Department (NMED), and in particular, on the regulatory language contained in NMED Exhibit 1, i.e., the Revised Proposed New Rule, which NMED filed on September 2, 2025.¹

By way of background, Twelve is the carbon transformation™ company. Founded in 2015 and based in Berkeley, California, we have developed and are now commercializing our proprietary electrochemical technology, which takes waste carbon dioxide (e.g., CO₂ captured from an industrial point source like an ethanol fermentation plant or directly from the air) and, using only water and renewable electricity, transforms it into synthesis gas (syngas), a combination of carbon monoxide and hydrogen. Once formed, the syngas is routed through an integrated Fischer-Tropsch reactor and the resulting liquids are then upgraded via hydrocracking and fractionation, ultimately resulting in our E-Jet® fuel – sustainable aviation fuel (or as NMED refers to it in the Revised Proposed New Rule, alternative jet fuel) that is produced through the power-to-liquid (PtL) process and meets the specifications in Annex A1 of ASTM International's D7566 Standard (*Standard Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons*) – as well as our PtL naphtha, which we refer to as E-Naphtha™. We expect our E-Jet, which has been tested and validated under a grant from the U.S. Air Force,² to reduce lifecycle greenhouse gas (GHG) emissions by up to 90% in comparison to conventional, petroleum-based jet fuel.³

¹ Posted at <https://www.env.nm.gov/opf/wp-content/uploads/sites/13/2025/09/1-3H.pdf>.

² See <https://www.af.mil/News/Article-Display/Article/2819999/the-air-force-partners-with-twelve-proves-its-possible-to-make-jet-fuel-out-of/>.

³ For more on Twelve, carbon transformation, and our products, please visit our website at <https://www.twelve.co/>. Our previous comments on NMED's December 19, 2024, Discussion Draft Rule

In mid-2023, we began constructing our first plant, a demonstration-scale facility, in Moses Lake, Washington. We are now in the final stages of construction, and anticipate beginning regular production of E-Jet (and E-Naphtha) by the end of this year or early next, once the AirPlant™ has completed commissioning. That important step is slated to start very shortly. Over the coming years, we intend to develop commercial-scale AirPlants at various locations around the country, and to supply our products to the global airline industry and other customers.

As we indicated in our January 17, 2025, comments on the NMED Discussion Draft Rule, our interest in the Clean Transportation Fuel Program (CTFP) rule stems from the fact that the Moses Lake AirPlant and our future AirPlants will all have the ability to produce E-Jet and E-Naphtha (the latter of which may be sold as a gasoline blendstock) for import into and eventual uploading to aircraft/use in New Mexico. Our ability to generate credits under the CTFP for our ultra-low carbon fuel products will be a key factor in whether this actually happens.

With the above background in mind, we offer the following comments on the Revised Proposed New Rule.

I. Definitions

We support the definitions in sections 20.2.92.7(B)(12) (“Book-and-Claim”), (R)(11) (“Renewable naphtha”), and (S)(5) (“Synthetic fuel”).

II. Alternative Jet Fuel

We support the inclusion in section 20.2.92.101(C)(4) of “alternative jet fuel” (AJF) as an opt-in transportation fuel, meaning it would be creditable under the CTFP on a voluntary, opt-in basis.

With respect to the definition in section 20.2.92.7(A)(5), we observe that to qualify as AJF, a particular jet fuel must have a lower carbon intensity (CI) score than the annual CI benchmark shown in Table 3 of section 20.2.92.701, which provides yearly CI values (and percentage reductions) specific to AJF. Those CI values are considerably lower than the respective values set forth in Table 2 for diesel and diesel substitutes. We reiterate our prior comment on this particular issue and urge the EIB and NMED to strive for alignment with the existing Low Carbon Fuel Standard and Clean Fuel Programs in California, Oregon, and Washington, all of which now effectively measure AJF for credit generation purposes against the same annual CI benchmark that applies to diesel and diesel substitutes.⁴ Hence, we recommend that the EIB and NMED reference Table 2 in the final rule’s AJF definition and simultaneously eliminate Table 3 from section 20.2.92.701. (Alternatively, NMED and EIB can retain the reference to Table 3 but revise the annual CI values set forth in it by making them identical to those shown in Table 2.) A corresponding revision should also be made to section 20.2.92.101(D).

for the Clean Transportation Fuel Program can be found on pp. 461-65 of the compendium posted at <https://service.web.env.nm.gov/urls/FQMuNeq4>.

⁴ See 17 CCR 95484(e)-(f), available at https://ww2.arb.ca.gov/sites/default/files/2025-08/2025_lcfs_fro_oal-approved_unofficial_08112025.pdf; OAR 340-253-8010, Tables 2-3, available at <https://ormswd2.synergycds.com/HPRMWebDrawer/Record/6864923/File/document>; WAC 173-424-110(8) and 173-424-900, Table 2, available at <https://app.leg.wa.gov/WAC/default.aspx?cite=173-424>.

We take this opportunity to point out as well that the CI presumption language for AJF in the introductory provision of section 20.2.92.101(C) makes little sense in our view given that, as noted above, jet fuel must have a lower CI than the relevant annual CI benchmark to qualify as AJF in the first place. Put another way, the presumption is meaningless inasmuch as a lower CI score is a prerequisite for an aviation fuel to be considered AJF.

III. Use of Book-and-Claim Accounting

In the second sentence of the introductory language in section 20.2.92.201(C), we believe the reference to “process fuel” on line 26 is mistaken. Consistent with paragraph (4) on line 39, which refers to “process energy,” we believe the reference on line 26 should instead be to “process energy,” so that the full second sentence reads as follows:

To use a fuel pathway associated with a non-fossil gaseous transportation fuel or liquid transportation fuel through book-and-claim accounting, including process energy used to produce a transportation fuel, the fuel reporting entity shall:

Specifically with respect to paragraph (4) of section 20.2.92.201(C), we discuss this language in Part IV immediately below.

IV. Offsite Renewable Electricity

We strongly support the offsite renewable electricity language in section 20.2.92.206(E), and in particular the ability for a clean transportation fuel producer to use such electricity “through book-and-claim accounting . . . to lower the average [CI] of electricity used to produce transportation fuel.” That said, we suggest that line 32 of the introductory sentence in subsection (E) be revised by deleting the phrase “may be used” at the very end, so as to make the allowance of book-and-claim accounting in this scenario unmistakably clear.

Regarding the restrictive process energy/renewable energy certificate (REC) provisions in sections 20.2.92.201(C)(4) and 20.2.92.206(E)(1)(f), Twelve agrees with the direct technical testimony set forth in Part VI of Infinium Exhibit 2.⁵ As written, these restrictive provisions are problematic in that they would effectively prevent Twelve and other fuel producers from stacking CTFP credit with credits or incentives that similarly allow the use of RECs and are available under other programs for the same gallon of fuel (e.g., the Clean Fuel Production Credit under section 45Z of the federal tax code). In addition to other credits or incentives, these provisions would also force a choice between the CTFP and programs such as the International Civil Aviation Organization’s Carbon Offsetting and Reduction Scheme for International Aviation and sustainability certification schemes. We respectfully request that these provisions be removed from the final rule.⁶

⁵ Posted at <https://www.env.nm.gov/opf/wp-content/uploads/sites/13/2025/09/Infinium-Exhibits-1-6.pdf>.

⁶ Should the EIB and NMED nevertheless retain either or both of these provisions, Twelve suggests that the phrase “New Mexico or other state” be inserted immediately before the term “program” on line 40 of section 20.2.92.201(C)(4) and line 42 of section 20.2.92.206(E)(1)(f).

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Thank you for your consideration of our comments. Please do not hesitate to contact me or my colleague, Ira Dassa (ira.dassa@twelve.co), if you have any questions about them.

Sincerely yours,

Andrew Stevenson

Andy Stevenson
Vice President of Commercial
Twelve Benefit Corporation
andy.stevenson@twelve.co