Dear CARB Personnel,

Thank you for providing an ongoing forum allowing public comments on Tier 2 pathway applications. I also want to thank Neste Oyj for providing such a thorough application, with useful documentation instead of endless pages of redacted “CBI”.

I found this set of applications interesting and unique due to the redistillation pathways, especially those for the Texmark facility given its US location. While I realize Neste is under no obligation to disclose motives for any of these pathways, the redistillation and separation of product streams for the Texmark and Koole pathways add additional emissions and increase the carbon intensity of the resultant products vs just delivering the Porvoo RD itself. Redistillation does allow for some segregation of the original RD into SAF vs remaining heavier RD, allowing more market flexibility and opportunity for Neste and any partners. Redistillation at Texmark also offers the potential to reclassify the lighter SAF and heavier RD cuts as domestic US production, as opposed to non-US production for the Porvoo RD or Koole products. As such, Texmark products will qualify for CFPC/45Z credits from year 2025 onwards given their pathways CI scores are all <50. Porvoo and Koole will not, obviously.

I will assume the Galena Park products will be classified as domestic US production. Given the modeled transportation to California is by “ocean tanker”, may I ask what emission factor (EF) for the “ocean tanker” Neste is using to calculate emissions during the voyage from Galena Park to a presumed LA/Long Beach destination? I ask this because Argonne’s Greet model has a default tanker size of 90,000 dwt for product transport, whereas CA-GREET3.0 uses a tanker size of 22,500 dwt. Ignore for the moment these two sizes are not standard, and perhaps both models could be improved upon by establishing new baseline tanker sizes and EF’s conforming to real-world tonnage. Getting to the point, if the SAF and heavy RD cuts being produced at Galena Park are classified as US domestic production, they will require Jones Act-compliant tanker transport to California (or anywhere in the US). The largest Jones Act-compliant tankers for clean product transport are MR-size, 45-50,000 dwt vessels. I will get to ATBs below. The emission factor for this vessel size will be different from the default vessel sizes used in either of the two GREET calculators. CA-GREET3.0 offers the option of choosing a user-defined tanker size and EF, after the applicant obtains CARB permission. May I ask what tanker size and corresponding EF Neste has chosen to use for their application, if not using the default? Given there is only one option that meets Jones Act compliance, a 45-50,000 dwt MR tanker, I am hoping the EF used by Neste is not considered “CBI” given this EF should be *exactly the same for all* PADD3 RD production transported to California, and therefore not information considered proprietary or unique to Neste. The odd exception to an MR would be the occasional large ATB that could be used (and has been on a few occasions). The ATB should have a higher EF given the increased fuel consumption compared to a similar capacity MR tanker. However, given CARB Commercial Harbor Craft regulations that went into effect this year, it will become increasingly difficult, if not impossible, for ATBs to operate in California Regulated Waters over the ensuing few years. Therefore I exclude ATBs from consideration for Texmark SAF/RD transport even though they have very occasionally performed this transport in the past.

To conclude, I again want to express thanks to CARB for allowing public comments on these pathways. I also want to express thanks to Neste for the thoroughness of their application. My inquiries above are not meant to be anything other than curiosity on my part as a California resident. I have previously communicated with both CARB and Argonne personnel responsible for the two GREET models, and both parties have expressed interest in improving the accuracy of their models wherever feasible. For transport of finished RD, or any other biofuel transported by “ocean tanker”, there are well-defined tanker sizes utilized in such transport. For international/non-Jones Act transport there are LR2, LR1, and MR tankers, largely. For feedstock transport to the production facility, maritime options will be more diverse, with a plethora of tank barges of many sizes, and smaller tankers all utilized for this transport. For Jones Act-compliant vessel transport, however, also assuming ATBs will not be allowed to operate, the 45-50,000 dwt MR tanker is the *only* maritime transport option. As such, it should be relatively easy to update CA-GREET to reflect this solitary option and make it the default for maritime transport. Should CARB require documentation of fuel consumption figures for these vessels, this information should be obtainable from either the vessel owners/operators, or vessel charterers. Thank you to CARB and Neste Oyj personnel for their time.

Sincerely,

Josh Kehoe