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Via electronic submission

Re: Chapter 173-424 WAC, CR-102, Clean Fuels Program Rule

To Whom it May Concern:

Thank you for the opportunity to comment in response to CR-102, proposed changes to the Clean Fuels Program.

In Part I, we provide background on how Bunge's sustainability focus informs our comments. In Part II, Bunge recommends that the Department of Ecology differentiate spring canola and winter canola grown in North America, so each crop is considered a distinct feedstock for the purposes of the Clean Fuels Program's Table 5 – Washington Land Use Change CI Values for Biofuels CI Determination. Additionally, as a member of the National Oilseed Processors Association (NOPA), Bunge also associates itself with NOPA's comments on the CTFP discussion draft.

I. Bunge Sustainability Background

Bunge is a leading oilseed processor. Bunge buys and processes agricultural commodities, then turns them into products used in the food industry, animal feed, and renewable diesel. Bunge is also a leader in sustainability, embracing climate-focused decision making and setting ambitious goals. For instance, we are well on our way to meeting our commitment to eliminate deforestation and native vegetation conversion from our supply chains in 2025. Bunge's robust traceability and monitoring systems give us significant insight into our supply chains. In addition, we are using technology and data to scale our efforts in geographies where deforestation is a higher risk. As described in our 2024 Global Sustainability report, and thanks to these systems, we have already achieved 100 percent traceability in our direct supply of soy in priority areas in South America. We achieved 97.7 percent traceability in our indirect supply of soy in Brazil's high-risk areas in 2023. Bunge is also working with farmers in North America to incentivize sustainable practices, including through adoption of winter canola as an additive crop to their existing rotation. Winter canola is a cover crop that is specifically bred for cultivation over the winter, and as such it is generally grown on land that would otherwise be fallow. Winter canola, almost by definition, has less land-conversion risk than spring canola. Additionally, it brings significant environmental and sustainability benefits as a cover crop. Including winter canola in a crop rotation can help balance nutrient uptake, replenish soil fertility, reduce erosion, improve water retention, and reduce the need for fertilizers and pesticides. Bunge is deeply committed to the development of new and novel crops like winter canola, which will allow us to increase the supply of renewable fuel feedstocks to meet growing global oil demand while creating economic opportunities for farmers.

II. The Clean Fuels Program Should Consider Spring Canola and Winter Canola Grown in North America as Distinct Feedstocks

A. Background on Winter Canola

The differences between spring canola and winter canola are particularly apparent when it comes to induced or indirect land use change (ILUC). Spring canola is a cash crop, planted in the spring and harvested in the fall. Winter canola is a cover crop that is specifically bred for cultivation over the winter. It is planted in the fall and harvested in the spring. As such, winter canola is generally grown on land that would otherwise be fallow. Thus, winter canola, almost by definition, has less land-conversion risk than spring canola. It is grown on land *already* cultivated for another purpose (for instance, growing a food crop) during the summer. While farmland-expansion pressure may be associated with demand for spring canola, that pressure is minimized for a feedstock like winter canola.

In recent years, researchers have emphasized that "double-cropping" with a cover crop such as winter canola can promote crop diversity, add environmental benefits, and make "a dedicated energy crop economically attractive."[1] Planting winter canola or another cover crop can also alleviate concerns about biofuel crops replacing food crops, because both can be grown on the same land in one season.[2] Further, oilseed cover crops like winter canola can "eliminate the side effect of ILUCs for biofuel production because they come in rotation with the major crops with some savings in demand for new cropland."[3] Researchers are interested in crops such as winter canola for the same reason that winter canola should not be treated as identical to spring canola: winter canola has markedly lower land-conversion risks, and thus lower ILUC values.

A May 2024 analysis of winter canola provides data to support the lower-risk ILUC profile of winter canola compared to spring canola.[4] Researchers examined the ILUC of the entire canola market and concluded that "using winter rapeseed oil [i.e., winter canola oil] as the feed stock has a significant effect and decreases the corresponding ILUC emissions to about half of spring rapeseed [i.e., canola] ILUC values."[5] Additional scenarios examined by the researchers suggest winter canola has a zero, or even negative, ILUC factor, when examined as a stand-alone crop from spring canola. The analysis used the GTAP-BIO model accepted by the Carbon Offsetting and Reduction Scheme in International Aviation ("CORSIA") representing double cropping and unused land. This modeling reinforces that winter canola and spring canola should be distinguished under the Clean Fuels Program.

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[1] *See* R.W. Gesch & W.D. Archer, *Double-Cropping with Winter Camelina in the Northern Corn Belt to Produce Fuel and Food*, 44 INDUSTRIAL CROPS & PRODUCTS 718, 719 (2013).

[2] *Id*. (internal citation omitted).

[3] *See, e.g.*, Farzad Taheripour et al., *Oilseed Cover Crops for Sustainable Aviation Fuels Production and Reduction in Greenhouse Gas Emissions Through Land Use Savings*, 9 FRONTIERS IN ENERGY RESEARCH 1 (Jan. 20, 2022).

[4] *See generally* Farzad Taheripour & Ehsanreza Sajedinia, Purdue University, Induced Land Use Change: Case of Winter Rapeseed Biodiesel (May 2024).

[5] *Id*. at 4.

B. Proposed Changes to the Proposed Rule Language

Bunge is concerned that the Table 5-Washington Land Use Change CI Values for Biofuels CI Determination may be susceptible to an interpretation that would discourage the market for winter canola. Table 5 could be interpreted to require a higher ILUC value for winter canola than is justified by scientific research. The proposed rule language does not make clear how winter canola would be treated for the purposes of LUC accounting under *WAC 173-424-610 Obtaining a Carbon Intensity* and Table 5. Table 5 includes ILUC values for six feedstock/fuel combinations, including "canola biodiesel or renewable diesel." Although that ILUC value reflects 2015 modeling of North America spring canola, Table 5 does not specify this is the case. As a result, there is a risk that Table 5 could be read to mean the same "canola biodiesel or renewable diesel" ILUC value applies to North American winter canola, even though its cropping practices justify a lower value.

In its Life Cycle Analysis of Greenhouse Gas Emissions of Clean Fuels with the R&D GREET 2024 Model[6], the U.S. Department of Energy's (DOE) Argonne National Lab for the first time qualified the canola represented in its R&D GREET model as "spring canola," with values for winter oilseeds similar to winter canola represented as "winter carinata," "winter camelina," and "winter pennycress." The DOE's recognition and differentiation of spring canola and winter oilseeds similar to winter canola is significant and sets a precedent the Department of Ecology could follow as it finalizes the rule language.

As such, Bunge encourages the Department of Ecology to clarify that winter canola will not be considered as spring canola for the purposes of the Table 5 values. Accordingly, we recommend adopting the proposed regulatory language.

First, we recommend amending definition 97 by qualifying the canola listed in the definition as "spring" canola:

(97)…Indirect land use change for fuel made from sugarcane, corn, sorghum, soybean, ***spring canola****, and palm feedstocks is calculated using the protocol developed by the California air resources board.*

Second, we recommend making clear that the canola LUC value in Table 5 applies only to spring canola by revising "Canola biodiesel or Renewable Diesel" to read "Spring Canola Biodiesel or Renewable Diesel."

Third, we recommend making clear that second crop and cover crop feedstocks, such as winter canola, are considered novel to Washington's Clean Fuels Program and clearly outline a process by which an applicant may apply for a certified fuel-specific carbon intensity that includes an ILUC value that is not contained in Table 5.

III. Conclusion

Bunge appreciates Washington's commitment to implementing the Clean Fuels Program. We hope our comments help enhance the program in its final version.

In particular, Bunge encourages the Department of Ecology to clarify that winter canola will be considered separate from spring canola under the program. As explained in Part II above, winter canola and spring canola are distinct in key respects. Most notably, there are significant differences between their ILUC risk profiles and their respective roles in crop rotation. In light of these differences, the proposed Table 5

[6] https://greet.anl.gov/publication-lca_ghg_clean_fuels_2024

canola value should not apply to winter canola and the Department of Ecology should outline a clear process by which an applicant may apply for a certified fuel-specific carbon intensity for winter canola that includes an ILUC value not contained in Table 5.

We appreciate the opportunity to share Bunge's perspective and to advance our common goal of a cleaner, sustainable fuel supply.

Sincerely,

Jared W. Hill
Vice President, Government and Industry Affairs, North America