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RE: Docket No. USDA–2024–0003

Request for Information on Procedures for Quantification, Reporting, and Verification of Greenhouse Gas Emissions Associated with the Production of Domestic Agricultural Commodities Used as Biofuel Feedstocks

The U.S. Canola Association (USCA) appreciates the opportunity to respond to this Request for Information on Procedures for Quantification, Reporting, and Verification of Greenhouse Gas Emissions Associated with the Production of Domestic Agricultural Commodities Used as Biofuel Feedstocks. The USCA appreciates the effort by the U.S. Department of Agriculture (USDA) to establish mechanisms to credit agricultural producers with practices that improve the emissions profile of crops and the subsequent carbon intensity of crop-based biofuels. It is important to note that the carbon intensity scores for crop-based biofuels are unfairly penalized by flawed application of indirect emissions from induced land use change. While induced land use change analysis is gradually being corrected by research and data, it remains riddled by faulty assumptions, inaccuracies and uncertainties. Crediting crop-based biofuels with the benefits derived from Climate-Smart Agriculture (CSA) practices can and should improve their carbon intensity scores, however, correcting the flawed indirect emissions analysis should be a top priority.

The U.S. Canola Association (USCA) is a non-profit commodity organization whose mission is to increase domestic canola production and promote the establishment and maintenance of conditions favorable to growing, marketing, processing and using U.S. canola. Canola has multiple uses and markets and is one of numerous feedstocks used to produce clean burning biomass-based diesel (BBD), which includes biodiesel and renewable diesel. Canola is also a potential feedstock for Sustainable Aviation Fuel (SAF). The biofuels market provides a valuable outlet for surplus canola oil not utilized for food production and canola oil use for biofuels exceeded 3.3 billion pounds in 2023.¹

¹ U.S. Energy Information Monthly Biofuels Capacity and Feedstocks Update

Biofuels from canola provide significant benefits to our national energy security, the environment, and the economy. The EPA has approved canola renewable fuels as Advanced Biofuels under the Renewable Fuel Standard (RFS) and their analysis conservatively showed greenhouse gas emissions reductions up to 78 percent relative to petroleum diesel and a mean of 67 percent emissions reductions. Canola biofuels contribute to the expansion and diversification of U.S. fuel and energy production, reduces emissions and improves air quality, and provides jobs and additional economic benefits, especially in rural communities.

Canola acres in the U.S. have more than doubled over the past 25 years, a growth trend that pre-dates demand from biofuels. This growth demonstrates canola's economic performance for U.S. agricultural producers and the agronomic fit in their crop rotations. Increasing demand for oilseeds over the past few years has spurred investments in expanding oilseed processing capacity, and some of these facilities and expansions will include the ability to process canola and other soft seeds. During the 2023 to 2025 timeframe, more than 20% of the new crush capacity planned in the U.S. will have soft seed capabilities.

Canola acreage and yields in the primary growing region in North Dakota continue to trend upward. There is significant potential for expansion of canola production as a winter crop in regions such as the Pacific Northwest, the Great Plains, and the Southeast. Winter canola provides an opportunity for double cropping in which the grower produces three crops in two years or five crops in three years on the same acreage. The USDA is expanding risk management tools to support growers that employ double cropping and industry investments are occurring to provide the processing capacity to accommodate increased winter canola production in those regions.

Following are USCA's comments and responses to some of the specific questions posed in the Request for Information on Procedures for Quantification, Reporting, and Verification of Greenhouse Gas Emissions Associated with the Production of Domestic Agricultural Commodities Used as Biofuel Feedstocks.

Qualifying Practices

(1) Which domestic biofuel feedstocks should USDA consider including in its analysis to quantify the GHG emissions associated with climate smart farming practices? USDA is considering corn, soybeans, sorghum, and spring canola as these are the dominant biofuel feedstock crops in the United States. USDA is also considering winter oilseed crops (brassica carinata, camelina, pennycress, and winter canola). Are there other potential biofuel feedstocks, including crops, crop residues and biomaterials, that USDA should analyze?

Canola, both spring and winter, should be included as biofuel feedstocks by USDA in their analysis to quantify the GHG emissions associated with climate smart farming practices. Canola has an approved fuel pathway under the RFS program. With the goal of increasing domestic biofuel feedstocks, USDA must recognize that you cannot be inclusive of winter canola, or other winter oilseed crops, while also requiring the bundling of climate smart farming practices that includes cover crops. Requiring the use of cover crops in the rotation would eliminate the ability to adopt winter canola or other winter oilseed crops into existing crop rotations.

(2) Which farming practices should USDA consider including in its analysis to quantify the GHG emissions outcomes for biofuel feedstocks? Practices that can reduce the greenhouse gas emissions associated with specific feedstocks and/or increase soil carbon sequestration may include, but are not limited to: conservation tillage, no-till, planting of cover crops, incorporation of buffer strips, and nitrogen management (e.g., applying fertilizer in the right source, rate, place and time, including using enhanced efficiency fertilizers, biological fertilizers or amendments, or manure). Should practices (and crops) that reduce water consumption be considered, taking into account the energy needed to transport water for irrigation? Should the farming practices under consideration vary by feedstock and/or by location? If so, how and why?

USDA should expand the list of practices as evidence of the climate benefits of current or emerging farming practices evolves. We recommended including the following practices: crop rotation; nutrient management, including products such as enhanced efficiency fertilizer, nitrogen and urease inhibitors, nitrogen stabilizers, and manure and biological fertilizers as well as practices such as variable rate application and reduced application (right source, rate, place, and time); cover cropping; no-till, reduced-till and conservation tillage; conservation cover, contour buffer strips, field borders, filter strip, grassed waterway; soil carbon amendment; mulching; irrigation water management; and reduced fuel consumption from various precision agriculture practices.

It is essential to include an exhaustive and evolving list of CSA practices and allow farmers to adopt them individually, without a "bundling" requirement. The limitation of practices and the bundling requirement under the 40B SAF tax credit creates an unnecessary barrier to adoption of CSA practices and prevents farmers in some parts of the country from participating in the CSA program.

For example, cover crop adoption poses significant challenges in North Dakota where the majority of U.S. canola production occurs. Moisture levels are sometimes insufficient and existing planting date requirements for cover crops are often not feasible in North Dakota and northern regions given the timeframes for harvesting primary crops.

In addition, bundling requirements will put farmers in some regions in a position of having to choose between implementing practices to get credit in the CSA program or producing a harvestable winter canola crop, because the winter canola would need to be planted during the same period as a traditional cover crop. A farmer could not meet both the bundling requirement and plant a harvestable winter canola, because current USDA practice standards prohibit cover crops from being harvested.

Planting winter canola as part of a multi-year rotation that includes double-cropping provides many benefits. The plants sequester carbon and lock in valuable nutrients to improve soil health and hydrology while providing additional feedstock for domestic renewable fuel production and creating a new source of income for farmers. Additionally, canola in rotations with soy and winter wheat can improve yields by suppressing and breaking pest and disease cycles. Unique multi-year rotations in winter canola regions have been developed in the last 10 to 15 years that sequester carbon and optimize the utilization of soil nutrients.

USCA recently engaged the Global Trade Analysis Project (GTAP) in modeling induced land-use change (ILUC) associated with conventional spring canola and winter canola. The results show a lower ILUC value for traditional canola than was included in 40BSAF-GREET, and the ILUC value associated with fully traceable winter canola was calculated to be less than zero.

Winter canola presents an exciting opportunity for farmers in the Great Plains, Southeast and Pacific Northwest, where USCA member companies have made investments to introduce winter canola and build processing capacity in those regions. Any bundling requirement for CSA would send the wrong signal to farmers, processors, and fuel producers and jeopardize the future of this promising segment of feedstock.

(3) For practices identified in question 2, how should these practices be defined? What parameters should USDA specify so that the GHG outcomes (as opposed to other environmental and economic benefits) resulting from the practices can be quantified, reported, and verified?

USDA should define practices following the Natural Resources Conservation (NRCS) Conservation Practice Standard list.

(4) For practices identified in question 2, to what extent do variations in practice implementation affect the overall GHG benefits of the practice (e.g., the date at which cover crops are harvested or terminated)? What implementation strategies maximize the GHG benefits of these climate-smart agriculture practices?

The USDA/NRCS Conservation Practice Standard requirements are state-specific to promote successful implementation and should serve as the basis for determining implementation strategies.

Quantification

(5) What scientific data, information, and analysis should USDA consider when quantifying the greenhouse gas emissions outcomes of climate-smart agricultural practices and conventional farming practices? What additional analysis should USDA prioritize to improve the accuracy and reliability of the GHG estimates? How should USDA account for uncertainty in scientific data? How should USDA analysis be updated over time?

(6) Given the degree of geographic variability associated with each practice, on what geographic scale should USDA quantify the GHG net emissions of each practice (e.g., farm-level, county-level, state, regional, national)? What are the pros and cons of each scale? How should differences in local and regional conditions be addressed?

USDA must balance the costs and benefits of the geographical scale. Quantification and tracking of farm-level data seems impractical for purposes of biofuels policies. Given the degree of geographic variability across the United States, an approach ranging from the county-level up to a regional level should be considered to account for differences in soil types, cropping systems and climate.

(7) How should USDA estimate the GHG emissions and soil carbon fluxes of baseline crop production?

(8) Where models can be used to quantify changes in greenhouse gas emissions and sinks associated with climate smart agricultural practices, which model(s) are most appropriate for quantifying the greenhouse gas effects of these practices? What are the tradeoffs of different modeling approaches for accurately representing carbon, methane, and nitrous oxide fluxes under climate smart agricultural practices?

(9) How should net greenhouse gas emissions, including soil carbon sequestration, be attributed among crops produced in a rotation, for example crops grown in rotation with one or multiple cover crops?

(10) To what extent do interactions between practices either enhance or reduce the GHG emissions outcomes of each practice? Where multiple practices are implemented in combination, should the impacts of these practices be measured individually or collectively?

Climate smart practices should be credited in an additive manner for biofuel feedstocks.

(11) How should the GHG emissions of nutrient management practices (*e.g.*, applying fertilizer according to the “4Rs” of nutrient management—right place, right source, right time, and right rate; variable rate technology; enhanced efficiency fertilizer application; manure application) be quantified? What empirical data exist to inform the quantification? What factors should USDA consider when quantifying the GHG emissions outcomes of these practices?

Soil Carbon

(12) How should the GHG outcomes of soil management practices that can increase carbon sequestration or reduce carbon dioxide emissions (*e.g.*, no-till, cover crops) be quantified? What empirical data exist to inform the quantification? Over what time scale should practices that sequester soil carbon be implemented to achieve measurable and durable GHG benefits?

(13) For practices that can increase soil carbon sequestration or reduce carbon dioxide emissions, how should the duration and any interruptions of practice (*e.g.*, length of time practice is continued, whether the practice is put in place continually or with interruptions) be considered when assessing the effects on soil carbon sequestration?

The multi-year effects of practices should be considered and accommodated. Factors such as crop rotations, best management practices and weather may require practices to vary. The assessment of CSA should provide producers with flexibility to respond to conditions.

(14) How should the baseline rates of change in soil carbon and uncertainty around the greenhouse gas benefits of these practices be characterized? Does this uncertainty and variability depend on the type or longevity/permanence of the practice?

Verification and Recordkeeping

(15) What records, documentation, and data are necessary to provide sufficient evidence to verify practice adoption and maintenance? What records are typically maintained, why, and by whom? Where possible, please be specific to recommended practices (*e.g.*, refer to practices identified in question two).

USCA supports a simple form for growers to attest that the claimed practices were implemented. This attestation could be subject to reasonable, cost-effective auditing. USDA/NRCS worksheets for farm practices provide an example for establishing recordkeeping and verification

requirements. Farmers typically maintain records of certain practices such as fertilizer application rates through precision agriculture technology platforms. There are multiple systems available in the marketplace to record field and application information. This allows the farmer the ability to provide information that products or practices were implemented within that year or certain periods.

(16) How can market participants leverage remote sensing and/or other emergent technologies as an option to verify practice adoption and maintenance?

USCA supports utilizing a streamlined auditing approach for verification purposes.

(17) Are there existing reporting structures that can potentially be leveraged?

Existing reporting structures through USDA (NRCS and FSA) should be leveraged as well as existing crop advisors and technical service providers that farmers currently use and trust.

(18) Should on-site audits be used to verify practice adoption and maintenance and if so, to what extent, and on what frequency?

Audits should be kept to a reasonable, cost-effective minimum that effectively deters fraud and abuse. The program should employ an inherent assumption of compliance with respect to the attestation or certification form used to document the practices that were implemented. On-site audits should be limited to a representative sample of participants in any given year to verify practice adoption and maintenance.

(19) If only a sample of farm/fields are audited on-site, what sampling methodology should be used to determine the sample of farms selected for an on-site audit, and how can the sampling methodology ensure that selected farms are representative across geographies, crops, and other factors?

If site visits are deemed necessary, a subset of farms should be audited annually based on risk assessment criteria. This would reduce the audit burden on the farmer, requiring each farmer to undergo an audit every few years, depending on the guidelines established.

(20) What system(s) should be used to trace feedstocks throughout biofuel feedstock supply chains (e.g., mass balance, book and claim, identity preservation, geolocation of fields where practices are adopted)? What data do these tracking systems need to collect? What are the pros and cons of these traceability systems? How should this information be verified?

To trace feedstock across the supply chain, from producer to elevator to processor to renewable fuel refiner, the use of a mass balance or book and claim system should be considered. Mass balance systems prevent the need for creating new supply chains, while minimizing the risk of fraud and abuse. Mass balance systems already exist and are employed in the United States for domestic feedstock to meet voluntary sustainability certifications. A book and claim system accomplishes the desired result and allows supply chains to operate efficiently. An identity preservation system would require significant investment and be overly burdensome to the supply chain, driving up costs and inefficiencies and reducing demand.

Verifier Qualifications/Accreditation Requirements

(21) How could USDA best utilize independent third-parties (*i.e.*, unrelated party certifiers) to bolster verification of practice adoption and maintenance and/or supply chain traceability? What standards or processes should be in place to prevent conflicts of interest between verifiers and the entities they oversee?

Accredited or certified third parties should be used within the program to help verify practice adoption, traceability and data accuracy.

(22) What qualifications should independent third-party verifiers of practice adoption and/or supply chain traceability possess?

(23) What independent third-party verification systems currently exist that may be relevant for use in the context of verifying climate-smart agricultural practices (as identified under questions 1 and 2) and/or biofuel supply chains?

(24) How should oversight of verifiers be performed? What procedures should be in place if an independent third-party verifier fails to conform to verification and audit requirements, or otherwise conducts verification inappropriately?

(25) What procedures should be in place to prevent potential inaccurate or fraudulent claims regarding feedstock production practices or chain of custody claims, how should monitoring occur to identify such inaccurate claims, and what should the remedy be when such inaccurate claims are discovered?

Verification processes are the best means to prevent fraudulent claims. Audits of submitted verification reports can identify and address inaccuracies.

(26) What preemptive measures are appropriate to guard program integrity against both potential intentional fraud and inadvertent reversal or nonaccrual of credited GHG emissions benefits?

Thank you again for the opportunity to provide these comments.

Respectfully,



Tim Mickelson
President