



4201 Wilson Blvd. • Suite 700 • Arlington, VA 22203

T 202.457.0825 • F 202.463.0474 • [www.aradc.org](http://www.aradc.org)

July 25, 2024

Via Electronic Submission

William Hohenstein, Director  
Office of Energy and Environmental Policy  
U.S. Department of Agriculture  
1400 Independence Ave SW  
Washington, DC 20250

**RE: Procedures for Quantification, Reporting, and Verification of Greenhouse Gas Emissions Associated with the Production of Domestic Agricultural Commodities Used as Biofuel Feedstocks (Docket No. USDA-2024-0003)**

Dear Director Hohenstein:

These comments are submitted on behalf of the Agricultural Retailers Association (ARA). ARA is the recognized unified national voice and trusted resource for agricultural retailers and distributors. ARA unites its members and their interests to advocate and educate on their behalf, provide services to improve their businesses, and preserve their freedom to operate and innovate, ensuring a safe and plentiful food supply for all. ARA members are scattered throughout all 50 states and range in size from small family-held businesses, farmer cooperatives, and large companies with multiple outlets.

ARA appreciates the opportunity to comment and commends the work being done by the United State Department of Agriculture (USDA) to aid in establishing procedures for quantification, reporting and verification of greenhouse gas (GHG) emissions associated with the production of domestic agricultural commodities used as biofuel feedstocks. As you know, the business community, including agricultural retailers, are critical stakeholders and integral to the adoption of any emission reduction practices. We appreciate the USDA's outreach and inclusion in this process.

We value the USDA's initiative to seek input from the agricultural sector through this request for information (RFI), recognizing its crucial role in shaping future policy decisions, particularly regarding eligibility for the Clean Fuel Production Credit (45Z) and other potential policies aimed at promoting innovation in biofuel production and utilization.

ARA fully supports USDA's efforts to promote climate-smart agricultural practices in growing crops used to produce biofuels. To that end, we suggest broadening the practices USDA considers for the sustainable feedstock production of biofuels. Farmers incorporating any number of practices should be rewarded for using practices that work best for their land, cropping systems, and available tools. Including more practices like the use of enhanced efficiency fertilizers (EEFs), nitrogen management practices (4Rs), and others should count in the quantification of GHG emissions reductions. We very much support an all-of-the-above approach when looking at strategy and practice inclusion based on what the farmer and agricultural retailer see as best for adoption at a farm-specific level. We would advocate for 45Z to incentivize incremental improvement, similar to 40b. In 40b, producers could obtain \$0.01 cent per gallon for every incremental 1% reduction. We support a continuation of this policy.

In the interest of brevity, we have chosen to answer each question in order as listed on the RFI. Please find our answers in bold below:

(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?

**While we encourage USDA to include those crops listed above in the interest of our grower customers across the country, we urge the focus to remain on proven feedstocks in the short term. This approach will allow for quicker procedure adoption now with the ultimate goal of including as many crops as possible in the future, based on what truly works best for the grower.**

(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?

**Any practice listed above—such as 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 be considered. Additionally, we suggest the following be included for consideration: biological and biostimulant use, enhanced rock weathering (ERW), integrated pest management (IPM), lower carbon forms of nitrogen such as green ammonia and blue ammonia, the use of low carbon fuels by farmers, etc. We support being as inclusive as possible in this process and rewarding every attempt to lower emissions. This approach encourages more buy-in from farmers while allowing them to make decisions based on what is best for their crop, cropping system, and geography.**

**Practices that reduce water consumption should be considered. The energy used to transport water will likely affect emissions quantification so it makes sense to consider some of the options covered in the Environmental Protection Agency’s (EPA) herbicide strategy: such as reservoir tillage, elevated field parameters, irrigation management and other methods.**

(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 use Natural Resources Conservation Service (NRCS) definitions when possible, maintaining consistency. The GHG reduction for biofuels must reflect realistic production conditions in the U.S. and a science-backed and process-based modeling approach in addition to the Greenhouse gases Reporting and Emissions and Energy use in Transportation (GREET) model designed by Argonne National Laboratory .If the emissions reduction credit does not adequately compensate biofuel producers and farmers for their efforts within the year the practice is adopted, producers may seek alternative methods for lifecycle emissions reduction. This could result in minimal credit being passed to farmers, insufficiently compensating them for the required practice changes and recordkeeping, and ultimately reducing farmer participation. Such a scenario would limit access to an important market and diminish the environmental impact within the agricultural sector.**

(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?

**This depends on a number of factors including crop, practice, geographic region, weather events, etc. Practices that require the least amount of emissions will likely score higher. It is in the interest of adoption that USDA be consistent in scoring based on what is most effective in each grower region, which is why a process-based model**

**would be most effective. Scoring by crop reporting region may be a good way to segment regions and determine implementation strategies based on each climate-smart agricultural practice.**

### **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?

**We recommend USDA use analyses and methodologies that already exist in the agriculture industry. There are a number of existing certification programs across the full value chain that provide data, information, and analysis for various farm inputs' inclusion in the program. For low-carbon nitrogen fertilizer products, Well-to-Gate emissions should follow the Verified Ammonia Carbon Intensity Certification Program (VACI), being developed by The Fertilizer Institute (TFI). For low carbon natural gas inputs to produce farm inputs, certificates from programs like MiQ and Trustwell by Project Canary should be acceptable. Calculations for the impact of the climate smart practices that a farmer chooses to implement should be done in an established tool like the Cool Farm Tool, the Field Print Calculator, or the GREET Feedstocks calculator.**

(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?

**In terms of calculating individual farm benefits, field and farm level data will help ensure proper compensation and remain consistent with voluntary carbon markets by accounting for different production and emissions.**

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

**GHG emissions and soil carbon fluxes can be modeled using established modeling pathways in the Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Feedstocks model, Carbon Management and Evaluation Tool (COMET) Farm model, and Field Print Calculator.**

(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?

**See above.**

(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?

**We believe that GHG emissions should be attributed to the specified crop. Practices such as cover cropping and tillage changes must be implemented before establishing the target crop to ensure a lower carbon intensity score for that crop.**

(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?

**USDA should allow producers to choose from approved practices rather than mandating a specific set or requiring them to meet a threshold of practices. This flexibility allows farmers to select practices suitable for their crop and geographic location. It also enables biofuel producers to create incentive structures based on the emissions reduction of each practice, determining their value and offering appropriate incentives. This approach encourages maximum practice adoption, enhances environmental impact, ensures farmers are fairly compensated, and allows for future innovation to be considered as an eligible practice.**

(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?

**All 4Rs should be included, not just rate and the use of enhanced efficiency fertilizers. The 4R Research Fund has information and resources that USDA can use. Field to Market can also assist with data on the impact of 4R practices at basic, intermediate or advanced levels for reducing GHG emissions. USDA should work collaboratively with growers, retailers, and research organizations to obtain data to aid in adoption.**

### **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?

**No comment.**

(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?

**While we understand the benefit of practice permanence, adoption levels will be hindered by mandates to show long-term practice implementation records. Any guidance should clearly specify the ongoing monitoring or verification required to prove the longevity of practices, the duration of this monitoring, and any penalties for changing practices. We also emphasize the need to provide flexibility to growers based on weather events and pest pressures.**

(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?

**No comment.**

**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).

**USDA should seek to utilize existing data capture systems and infrastructure whenever possible, such as those in place with ag retailers. Unfortunately, the 40B tax credit guidance required direct contracting between commodity growers and SAF producers, which failed to recognize the structure of the ag commodity supply chain and excluded ag retailers from serving their producers. As established, trusted production partners, ag retailers understand the importance of record keeping and keeping appropriate documentation that protects sensitive identifying information and privacy rights.**

**While recordkeeping and documentation are integral parts of verification, adoption may be hindered by stringent requirements. The guidance should ensure that farmer and intermediary information collected for certification and verification purposes is protected from public release. It should provide liability protection and the following safeguards for all purposes outside of compliance monitoring: (a) Designation as Commercial, Financial, and Proprietary Information, (b) Exemption from Disclosure under FOIA, (c) No Waiver of Privilege or Legal Protection, and (d) an Ex Parte Communications Waiver. Additionally, it should create an evidentiary and discovery bar, preventing such records and related communications or documents from being**

**used in any trial, hearing, or proceeding, except as directly related to program compliance. Federal or state agencies should also be prohibited from using information obtained solely through these records as the basis for any unrelated regulatory or enforcement actions.**

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

**In order to promote efficiency and scalability, recordkeeping and verification requirements should anticipate and explore the possibility of remote sensing for confirming practice implementation. Satellites, aerial imaging, sensors, and artificial intelligence are all tools that can be leveraged. These precision services should be used in all available cases, allowing for data to be collected. Data processing and analysis can be offloaded from the producer to encourage adoption and standardize data.**

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

**No comment.**

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

**Remote sensing remains the most accurate method without hindering adoption, as seen with on-site auditing. Such auditing should be reserved to verify outlying reports inconsistent with probable findings and used as a last resort, when possible. We also support the use of agricultural retailers as third-party verifiers. Their trusted adviser role in partnering with growers could be beneficial to enhance practice adoption and grower education.**

(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?

**The initial step in the sampling methodology involves dividing by geographical clusters. Biofuel producers may prioritize feedstock from farms near their operations based on contracting requirements, thereby forming these geographic clusters naturally. Within each cluster, farms and fields can be stratified by practice type, with random samples taken from each type.**

(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?

**Views on this vary by company and their position in the value chain.**

**Most of our members support mass balance as the preferred system. However, some do support book and claim. Growers, their agricultural retailers, and advisers should be able to choose the system that works best for them. By allowing farmers to choose what works best for their operation, you increase competition, promote adoption and allow for more market determination.**

**There is agreement that an identity preservation (IP) traceability system would be unworkable for the commercial grain industry and farmers/growers due to the storage and infrastructure investments required.**

### **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?

**Third-party verifiers will be essential in the process, and those currently approved for carbon program verification could likely be used to help bolster practice adoption. The use of technical service providers (TSPs) and Certified Crop Advisers (CCAs) makes sense to aid USDA in the verification process.**

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

**The requirement for third-party verifiers to have TSP and/or Certified Crop Adviser (CCA) certifications would remain consistent with current guidance and regulation. This will improve efficiency while maintaining existing relationships. The trust that growers have with known entities will be a huge benefit to practice adoption.**

(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?

**See above.**

(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?



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**USDA likely already has many procedures in place to oversee verifiers. Those procedures should be applied here as well.**

(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?

**See above.**

(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?

**See above.**

#### Conclusion

We commend USDA for seeking input from the agricultural sector through this RFI, which is vital for shaping future policies like the Clean Fuel Production Credit (45Z) and advancing biofuel innovation. ARA supports USDA's efforts to promote climate-smart practices in biofuel feedstock production and recommends expanding the range of practices considered. Farmers should be rewarded for adopting practices suited to their specific conditions, such as enhanced efficiency fertilizers and nitrogen management practices. We advocate for an inclusive approach that allows flexibility based on farm-specific needs and local expertise.

Thank you for the opportunity to submit comments and your continued commitment to supporting America's agriculture industry.

Respectfully Submitted,



Hunter Carpenter  
Senior Director of Public Policy  
Agricultural Retailers Association