IOWA SOYBEAN Association

DRIVEN TO DELIVER

November 10, 2020

Acting Chief
Transportation Fuels Branch
Industrial Strategies Division
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Accounting for Updated Science and Crediting Current and Enhanced Farming Practices that Reduce Carbon Emissions

Dear Sir or Madam:

We write today in response to the request for feedback following the public workshop held by California Air Resources Board (CARB) staff on October 14-15, 2020. At that workshop, CARB staff presented concepts for improvements to the Low Carbon Fuels Standard (LCFS), provided an opportunity for stakeholders to make presentations, and previewed a process for near-term program enhancements and longer term, post-2030 target setting.

Accordingly, we encourage CARB staff to update the LCFS carbon intensity calculations to reflect the latest science on soybean farming practices and to establish mechanisms that will provide a direct LCFS market signal to soybean farmers that recognize their already sustainable operations and will encourage further improvements that achieve additional carbon reductions and sequestration. We are aware of the comments submitted by the Midwestern Clean Fuels Policy Initiative, which we agree with in general principles, but wish to submit our own comments to highlight the unique features of soybean farming and production and how those would inform the changes we are requesting.

Iowa Soybean Association Background and Context

Founded in 1964 and governed by a board of 22 farmers, the Iowa Soybean Association (ISA) is committed to enhancing the long-term competitiveness and sustainability of the soybean industry and Iowa's 40,000 soybean producers. With Iowa leading the nation in biodiesel production and ranking second nationally in soybean production, the ISA is driven to deliver increased soybean demand while actively working with farmers to develop production systems and practices that maximize their overall operation and profitability. Through farmer investment, collaboration and research, the ISA is not only strengthening demand for soybean oil used for biomass-based diesel production, but also carving out and stacking opportunities for farmers to receive financial incentives for environmental outcomes through conservation practices.

Altogether, farmers are already taking significant steps toward producing a more sustainable crop and helping green the U.S. transportation system. By stacking the multiple benefits of these best management practices and soybean demand drivers, farmers can help achieve regulatory and environmental outcomes and help California meets its long-term energy strategies and goals.

- Biomass-based diesel (BMBD) has been a key success story in the LCFS programs in California and Oregon
- BMBD provides nearly half of the carbon reductions in both programs (45% in CA, 47% in OR in 2019)

- BMBD has grown so successfully under these carbon policies that it now comprises nearly 22% of each gallon of diesel fuel in CA and 10% in OR in 2019)
- BMBD also has substantial environmental benefits beyond GHG reductions – 30-50% reduction in particulate matter, 10% reduction in carbon monoxide, and significant reductions in other noxious compounds; those benefits are provided immediately upon its use as a replacement for petroleum diesel in and around the disproportionately impacted poor and minority communities around California
- Soybean farmers and BMBD producers will stand ready to be stronger partners in CA's efforts to address climate change
- The need for all BMBD feedstocks, including crop-based feedstocks, will continue to grow as California pushes for further reductions in its use of fossil fuels, increases its energy security, increases air pollution protections for disadvantaged communities, and decarbonizes its transportation fuel
- Recognizing carbon reductions provided by soybean farming and facilitating additional enhancements in farming practices are consistent with California's objectives toward achieving carbon neutrality by reducing agricultural carbon emissions and further improving soil carbon uptake in natural and working lands

Updating Scientific Data in Current Modeling Tools

We are encouraging CARB staff to update the datasets underpinning the modeling tools CARB uses for scoring indirect land use and direct carbon emissions from the production of biofuels, including soy biodiesel. It has been over five years since CARB last updated this data and significant advances, based on scientific observation, have been made to update the underlying database. Updating the database used by CARB would demonstrate CARB's commitment to using the most up-to-date and robust scientific data. We are asking for an update of those data, not the modeling tools themselves, to ensure the LCFS continues to reflect the latest scientific developments and data generated over recent years.

Recognizing Sustainable Farming Practices that Reduce Carbon Emissions and Increase Carbon Sequestration

As structured, the LCFS sends a weak signal to soybean farmers that currently employ sustainable farming practices and can further improve upon those practices. We believe U.S. soybean farming is already among the most sustainable in the world, substantially reducing carbon emissions and increasing soil carbon sequestration relative to other regions or crops. Our carbon reductions have not been recognized to date, and farming operations that employ such sustainable practices should be credited for those reductions. Further, the LCFS should also be structured to send a clearer, stronger market signal that goes directly to farmers to incentivize more reductions through enhanced farming practices for those operations with the ability to makes such changes.

The production and conversion of soybean oil to biomass-based diesel can differ significantly from corn to ethanol production. Corn to ethanol relies heavily on direct sales of corn from farmers to ethanol producers; this allows for easier transfer of additional environmental value to the farmer from the credit generating fuel producer. By contrast, soybean farmers do not sell their beans directly to a biodiesel plant; rather, they sell them to a soybean processing (crush) facility which produces soybean meal and soybean oil. Soybean oil, which is a byproduct of crushing, may then be sold or traded before being converted to a renewable fuel. Given the intermediate organizations between the farmer and the biofuel producer, we believe it is critical that the farmer be the primary party responsible for generating any incremental agricultural credit. This gives the farmer the ability to market their credit, independent of their grain, to the highest and best value market.

While the presentation by Farmers Business Network and POET did not specifically address emission reductions associated with soil organic carbon (SOC), it was mentioned by several parties during the two-day workshop. We recognize the soil health and climate benefits that the adoption of certain agricultural practices can have. We

also recognize that rate of SOC sequestration and the permanency of storage is influenced by a wide variety of factors including soil type, climate, and crop rotation. To that end, if CARB staff wishes to entertain these calculations, we strongly encourage you to work with the wider agricultural community to ensure the LCFS

concepts you explore incentivize the adoption of these practices in a way that is practical for the agricultural community.

As previously highlighted, soybean farmers stand ready to be a strong partner as these concepts are explored. The ISA has made a commitment to helping farmers use and apply new technology, practices and approaches designed to improve productivity, increase efficiency of operations, and positively impact natural resource and environmental outcomes. Our programs work to support continuous improvement and are driven to engage more farmers across more acres to progressively aggregate larger, positive impacts.

The Soil & Water Outcomes fund is a new initiative launched in 2020 managed by ISA and Quantified Ventures. Our motivation in designing this initiative was to bring additional revenue to farmers for producing environmental outcomes such as carbon sequestration and water quality improvement. These outcomes are produced from the same acres, and are quantified, aggregated, and sold to beneficiary customers. In 2021, the Fund will work across Iowa, Illinois, Ohio, and other areas to produce environmental outcomes. To date, outcome beneficiary customers include corporations and municipal, state and federal governments. We are actively working to expand our outcome customer base to generate additional environmental outcomes and potentially impact millions of acres across the U.S. In the future, we are optimistic that demand driven policy linked with production systems will support the scaling up of this important work. As an active participant in the ecosystem market space, we are uniquely qualified to help design policy innovations to stack climate, water and other outcomes, quantify environmental outcomes, and most importantly, interact with farmers to produce these valued outcomes.

The importance of crediting SOC for the farm community and the climate cannot be understated. This is an issue that will impact corn and soy farmers for generations to come. Since farmers often grown these crops in rotation, and practices in one growing season may influence carbon sequestration in the next growing season, it is critical that regulators design any market with the rotation in mind, not just a single crop.

Conclusions

We look forward to working with you and your colleagues to achieve a better understanding of these unique market dynamics and partner with you on innovative ways to provide that clearer market signal to farmers in our sector. We would welcome the opportunity to collaborate with the California Air Resources Board to discuss the best available science and work through concepts for sending a more direct market signal to farmers that would recognize the significant contributions soybean farming already makes in addressing climate change and incentivize the higher levels of carbon reductions California needs to achieve its climate and air quality goals.

Sincerely,

Kirk A. Leeds
Chief Executive Officer
Iowa Soybean Association