November 5, 2020

Mr. Richard Corey
Executive Officer

Ms. Rajinder Sahota
Division Chief, Industrial Strategies Division

Mr. Arpit Soni
Manager, Alternative Fuels Section

California Air Resources Board
1001 I Street
Sacramento, CA 95812

RE: Consideration of inclusion of agriculture greenhouse gas (GHG) emission reductions in lifecycle accounting for biofuels as part of the next Low Carbon Fuel Standard (LCFS) regulation revisions

Dear Mr. Corey, Ms. Sahota, and Mr. Soni:

In response to the request for feedback following the California Air Resources Board (ARB) public workshop on October 14-15, 2020, the National Corn Growers Association (NCGA) writes to share our interest in ARB considering incorporation of GHG emission reductions resulting from agriculture production in the next regulatory revisions for the state's LCFS. On behalf of NCGA's 40,000 dues-paying corn farmers nationwide and the more than 300,000 corn growers who contribute to corn checkoff programs in their states, we appreciate the opportunity to provide input.

As the producers of the primary feedstock for ethanol, a low carbon fuel, corn farmers have demonstrated continuous improvements in farming practices and widespread adoption of production technologies that improve soil heath and reduce GHG emissions, supporting lower carbon intensity of biofuels. We encourage ARB to recognize and incorporate these voluntary emission reductions from agriculture production that contribute to reduced carbon intensity of fuels.

As a photo-synthetically superior C4 plant, corn has an extraordinary ability to sequester carbon and move fertilizer nutrients back to the surface for plant growth. Corn's extensive, deep root system makes it one of the few plants with this important capability to make crop production more sustainable. High-yield corn—combined with the steady adoption of best practices such as reductions in tillage intensity—is sequestering carbon from the atmosphere into the soil. This sequestration is increasing soil carbon levels and reducing atmospheric carbon. According to the Journal of Soil and Water Conservation, the potential to sequester atmospheric carbon in soil is greatest on lands currently used for annual crops where there is potential to sequester carbon in the soil at an annual growth rate of 0.4 percent each year. The results of tracking soil organic carbon advancements on select U.S. Department of Agriculture-specified agricultural land areas is estimated to have sequestered an estimated 309 metric tons of CO_2-equivalent emissions in less than a decade.

WWW.NCGA.COM
NATIONAL OFFICE
632 Cepi Drive
Chesterfield, MO 63005
(636) 733-9004
WASHINGTON, DC OFFICE
20 F Street NW, Suite 900
Washington, DC 20001
(202) 628-7001

Emission reductions from agriculture are a crucial element of a comprehensive decarbonization strategy. Potential emissions reductions directly related to biofuel feedstock production include enhanced soil organic carbon storage, reduced nitrous oxide emissions related to fertilizer application, reduced energy use on the farm, and upstream emissions reductions related to manufacturing of fertilizer and other agricultural chemical inputs. Research from the Argonne National Laboratory and funded by ARPA-E estimates a farm emissions factor for "highest emitting practices" of 33.3 gCO2e/MJ of ethanol and -15.9 gCO2e/MJ for "lowest emitting practices," revealing significant potential to lower ethanol carbon intensity through sustainable tillage, cover crops, improved nitrogen management, and reduced on-farm energy consumption.

NCGA's flagship sustainability program, the Soil Health Partnership (SHP), is a farmer-led initiative that fosters transformation in agriculture through improved soil health, benefiting both farmer profitability and the environment. The SHP uses science and data to work alongside farmers in adopting practical agricultural practices that improve the economic and environmental sustainability on the farm. Our partnership has more than 220 working farms enrolled in 15 states and is actively working to help farmers enhance their use of conservation tillage systems as well as investigating how and when to best use cover crops in their systems.

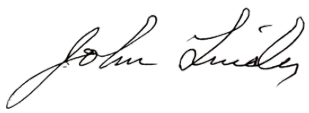
NCGA welcomes efforts to devise market-based systems, such as ecosystem services, to quantify the value of farmer's efforts to adopt conservation and nutrient management practices and compensate growers through the marketplace for the value they are creating. A protocol to support farmers' progress toward enhanced GHG reduction practices through the LCFS and crediting has the potential to support increased adoption of voluntary practices, resulting in additional GHG emissions reductions and economic benefits to farmers. Getting the details right and developing viable protocols could represent a large environmental and economic opportunity.

NCGA has contributed to the Midwestern Clean Fuels Policy Initiative, a coalition of stakeholders exploring clean fuels policy as a market-driven approach for achieving economic and energy security and climate, environmental and public health goals. The white paper, *A Clean Fuels Policy for the Midwest,* recommends that a clean fuels policy, "reinforce and complement existing efforts by the agricultural sector to increase the adoption of practices that improve soil health and water quality and have the potential to lower the carbon intensity of biofuel production by storing more soil organic carbon and reducing nitrous oxide emissions related to farming," and, "recognize emissions reductions at the farm level that contribute to the reduced carbon intensity of fuels."

NCGA recognizes that developing a protocol that is trusted by all relevant stakeholders and incorporates all relevant science will require time and engagement. Although NCGA continues to evaluate these considerations, we do not have a specific protocol recommendation currently. However, corn growers would welcome the opportunity to collaborate with ARB to discuss the best available science and work through the protocol considerations to recognize and account for GHG emissions reductions benefits from agriculture production.

Thank you for considering our input and the inclusion of agriculture GHG emission reductions in lifecycle accounting for biofuels as part of the next LCFS regulation revisions.

Sincerely,



John Linder, President
National Corn Growers Association