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California Air Resources Board
1001 I Street
Sacramento, CA 95815

Re: Draft 2022 Scoping Plan Update – Achieving Carbon Neutrality by 2045

Dear California Air Resources Board (ARB) and Staff,

Thank you for the opportunity to provide input on the Draft 2022 Scoping Plan Update. AgLand Renewables is a strong supporter of ARB's efforts to achieve carbon neutrality by 2045 and the strategies outlined in the plan, including the Low Carbon Fuel Standard (LCFS) program and efforts to reduce the carbon intensity of fuels. AgLand Renewables strongly supports the inclusion of nitrous oxide (N_2O) avoidance within the 2022 Scoping Plan, and we respectfully request acknowledging the LCFS program as a tool to help reduce N_2O emissions that have significant air quality and health impacts.

AgLand Renewables LLC, the California subsidiary of CleanBay Renewables Inc., owns and develops bioconversion facilities to provide the sustainable processing and conversion of poultry litter into renewable natural gas (RNG) and organic controlled-release fertilizer, with potential to create green hydrogen and support electric vehicle (EV) charging as an alternative transportation fuel. Our process combines field-proven Anaerobic Digestion (AD) and Nutrient Recovery (NR) technologies into community scale bioconversion facilities specifically designed to process poultry litter. Unlike most AD projects, these bioconversion facilities are fully enclosed, closed-loop systems, meaning that all water and liquids are reused in the AD process and are not released into the environment. The processing of poultry litter into RNG and organic controlled-release fertilizer will significantly reduce N_2O emissions, which are 300 times more potent than carbon dioxide and 10-15 times more potent than methane.

We commend ARB for the inclusion of N_2O emissions as a serious climate threat within the Draft 2022 Scoping Plan, which signals an important shift toward developing more effective and broader strategies to fight climate change. Long-term monitoring and reduction of N_2O emissions is paramount to reaching California's goals to achieve carbon neutrality by 2045. ARB's attention to the often-overlooked N_2O emissions in the Draft 2022 Scoping Plan, in addition to addressing threats from carbon dioxide, methane gasses, and natural and working lands (NWLs), sets a global precedent to increase focus on N_2O emissions in climate plans and policies moving forward.

As ARB moves forward to finalize the 2022 Scoping Plan, we recommend including the following:

- AgLand respectfully requests including language within the 2022 Scoping Plan Fuels Section (page 152) to recognize the LCFS program as a tool to help reduce N_2O emissions and help further decarbonize transportation fuel. Developing a N_2O avoidance pathway provides the opportunity for a market-driven approach to address critically important N_2O emissions, without additional regulatory pressure on California's agriculture sector.
- We support the inclusion of climate smart agricultural practices to help improve farming efficiency and sustainability in the Natural and Working Lands section on Croplands. Within the "Strategies for Achieving Success" Section (pages 208-209), we respectfully request the addition of support for alternative, climate-friendly fertilizers, including controlled-release, which can significantly reduce N_2O emissions and nitrate ground water pollution as compared to conventional fertilizers.

- With respect to the NWLs "Strategies" outlined on pages 208-209, we request the inclusion of a strategy identifying the need to develop a science-based modeling framework that provides (1) a regionalized quantification of nitrogen use efficiency and (2) a methodology to enable the calculation and verification of N_2O avoidance on a regional basis.

In partnership with the Climate Action Reserve and ICF International, AgLand has developed a methodology and approach to calculating nitrous oxide emissions based on fertilizer pollution. We have identified methods for quantification, monitoring, reporting, and verification of avoided nitrous oxide impacts using controlled-released fertilizers. Using best practices in greenhouse gas accounting and the U.S. Department of Energy's Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) model methodology, our approach utilizes regionalized emission factors rather than international or national scale emission factors to calculate fertilizer emissions and emission reductions more accurately. We look forward to the opportunity to continue to work with ARB and the LCFS program staff to develop an appropriate carbon intensity (CI) score for avoided N_2O emissions associated with feedstocks used in anaerobic digestion for RNG, green hydrogen, or EV charging for transportation use.

Thank you for the opportunity to provide comments on the 2022 Scoping Plan and for ARB's leadership to reduce harmful climate pollutants. We strongly support the inclusion of N_2O avoidance within the 2022 Scoping Plan and respectfully request the recognition of the LCFS program as a tool to help reduce N_2O emissions that are causing significant air quality and health impacts in California and beyond.

Sincerely,

Thomas M. Spangler III
President
AgLand Renewables LLC