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California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Low Carbon Fuel Standard – Public Workshop to Discuss Potential Changes to the Low Carbon Fuel Standard

Dear Air Resources Board Staff.

Thank you for the opportunity to provide comments on Potential Future Changes to the LCFS Program. AgLand Renewables is a strong supporter of the program's efforts to reduce the carbon intensity of fuels as well as the state's goals to achieve carbon neutrality.

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. AgLand's 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 nitrous oxide (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.

Within the LCFS program, there is an opportunity now to include the avoided N_2O emissions to reduce emissions within to help the State meet the goals in the 2022 Scoping Plan, help further decarbonize transportation fuel, and accelerate substantial reduction of pesticide and fertilizer use and enhance sustainable farming practices. In addition, developing a N_2O avoidance pathway provides the opportunity for market-driven approach to address critically important N_2O emission, without additional regulatory pressure on California's agriculture sector.

California is a leader in agricultural production, including poultry, and has a long history of supporting sustainable pollution prevention techniques and technologies to reduce emissions, improve resiliency, and provide economic benefits. AgLand is helping resolve pressing environmental and energy challenges facing California food and agricultural producers and providing low-carbon fuel and waste reduction solutions that substantially reduce greenhouse gas emissions, provide soil, and water quality benefits, and drive economic development in disadvantaged communities in the Central Valley. AgLand plans to install two bioconversion facilities in the Central Valley—home of California's vast poultry production industry—within the next five years. The state-of-the-art facilities will provide a long-term, sustainable source of renewable

transportation fuels and controlled-release organic fertilizers that substantially reduce climate pollutants and improve soil health in California.

California is in the top 10 of poultry production in the United States (egg layers and broilers) and generates approximately 700,000 tons of poultry litter annually from over 288 million broiler chickens. Each bioconversion facility would generate 2,250,000 MMBtu's of RNG each year, which would avoid approximately 1,00,000 tons Carbon Dioxide equivalent (CO2e) emissions annually. In addition to generating millions of MMBtus of RNG each year, the two California bioconversion facilities would create 250,000 tons of organic, controlled-release fertilizer each year, which will double the amount of land that California's organic poultry litter can serve organic fertilizers to and avoid harmful, conventional, non-organic chemical fertilizers.

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, including proposed methods for quantification, monitoring, reporting, and verification of avoided nitrous oxide impacts using controlled released fertilizers. Using best practices in GHG accounting, the approach utilizes geographically differentiated emission factors as compared to international or national scale emission factors to calculate the emissions and emission reductions more accurately.

We look forward to the opportunity to work with ARB to establish an N_2O avoidance pathway within the LCFS program and develop an appropriate carbon intensity (CI) score for avoided N_2O emissions associated with feedstocks used in anaerobic digestion for RNG.

Thank you for the opportunity to provide comments on potential changes to the LCFS program. We will be reaching out to schedule a meeting in the coming weeks to share the proposed N2O avoidance pathway in greater detail and continue our work together to support the LCFS program and California's climate goals.

Sincerely,

Thomas Spangler
Executive Chairman
CleanBay Renewables