

December 20, 2021

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: 2022 Scoping Plan Update

Dear Air Resources Board Staff,

Thank you for the opportunity to provide input on the 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 LLC, the California subsidiary of CleanBay Renewables Inc., develops and owns bio-conversion facilities to provide the sustainable processing and conversion of chicken and other 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 bio-conversion facilities specifically designed to process poultry litter. The processing of poultry litter into RNG and organic fertilizer will significantly abate nitrous oxide emissions.

Poultry litter and traditional fertilizers emit significant amounts of nitrous oxide (N₂O), which is a short-lived climate pollutant that is 300 times more potent than carbon dioxide. Additionally, N₂O is one of the more stable major greenhouse gasses and as a result, it has the potential to perform significant long-term damage to the atmosphere - and is the only major greenhouse gas that also destroys the ozone layer. Compared to the 12-year life of methane, the atmospheric lifetime of N₂O is estimated to be about 150 years, which contributes to a global warming potential nearly 300 times that of CO₂ before it is degraded back to N₂.

Excessive use of traditional fertilizers leads to defined areas of extreme nitrogen pollution and N₂O emissions. To accurately address and account for this issue, there are now regionally differentiated emission factors that allows for precise accounting of avoided N₂O from the use of their controlled-release fertilizers. Application of this unique fertilizer, combined with extensive data and best available science, guarantees an efficacious strategy for tracking and reducing N₂O emissions from the agricultural sector. **We, therefore, respectfully request including N₂O as a climate pollutant and a strategy to reduce emissions within the Natural and Working Lands component of the 2022 Scoping Plan Update to help the State achieve its emission reduction goals.**

California is the leader in agricultural production, including poultry, and has a long history of supporting sustainable strategies and technologies to reduce greenhouse gas emissions, improve resiliency and provide economic benefits. AgLand is helping resolve environmental and energy challenges facing California food and agricultural producers by providing alternative waste

reduction solutions that reduce GHG emissions, provide soil and water quality benefits, and drive economic development in disadvantaged communities in the Central Valley.

AgLand plans to establish two bio-conversion facilities in the Central Valley, the home of California's vast poultry production industry, over the next five years. The projects will provide much needed economic investment in the Central Valley with more than \$500M in direct investment per facility, hundreds of prevailing wage construction jobs, and dozens of new high-paying, full-time jobs. The projects will provide a long-term, sustainable source of renewable transportation fuels and organic fertilizers that will provide a substantial reduction in climate pollutants and improve soil health in California.

To date, the agricultural sector has played a significant role in contributing towards the LCFS program. **There is an opportunity now to recognize and include the avoided N₂O emissions, leveraging the methane avoidance pathway, as a strategy to further reduce emissions within the LCFS program.** Including N₂O avoidance would create a more thorough and auspicious strategy for reaching the State's AB 32 emission reduction goals.

Including avoided N₂O within the LCFS will help drive significant improvements in on-farm efficiency and productivity, as well as reduce GHG emissions from both the displacement of transport fuels with poultry manure-derived biogas and reduced N₂O resulting from the use of controlled-release fertilizers. It will also help improve water quality and provide jobs and economic investment within disadvantaged communities in the Central Valley.

AgLand respectfully requests the recognition and inclusion of N₂O Avoidance within the 2022 Scoping Plan, as N₂O emissions are 300 times more harmful than CO₂. To recognize the carbon intensity reduction of transportation fuel from Nitrous Oxide Avoidance, there is a need to amend the LCFS program to 1) account for N₂O emissions from animal manures and synthetic fertilizers and (2) allow the displacement of N₂O emissions, irrespective of the feedstock used in anaerobic digestion, to be included in the carbon intensity for RNG, Hydrogen, EV Charging, and other transportation fuels. This would provide an additional avenue and strategy to reduce emissions and help achieve carbon neutrality for California.

Thank you for the opportunity to provide comments on the 2022 Scoping Plan Update. We look forward to working with staff as the plan is further developed.

Sincerely,



Thomas M. Spangler III
President
AgLand Renewables LLC