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March 4, 2020

The Hon. Kumar Barve, Chairman The Hon. Dana Stein, Vice Chairman Environment and Transportation Committee Maryland House of Delegates Room 251 House Office Building Annapolis, MD 21401

> Testimony in Support of House Bill 1438 Presented by Dr. Kristi Shaw, CleanBay Renewables

Mr. Chairman and Members of the Committee:

I am here today in support of Delegate Jacobs' bill creating a new subtitle in the Maryland Agriculture Article for Alternative Use of poultry litter. I am the Director of Environmental and Regulatory Compliance at CleanBay Renewables, a resource recovery company bringing environmental, economic and energy generation benefits to our state and the region. I am a native of Maryland's Eastern Shore and the fifth generation of a Dorchester County farming family. Protecting the environment and our agricultural industry are both very important to me. I hold multiple degrees, including a doctorate, from Maryland institutions in environmental science and public health. I intimately understand the challenges that our community and environment are facing as we race to meet our needs for both food and energy independence.

The poultry industry in Maryland is a champion for meeting the demand to feed our evergrowing world population. As we meet our community's nutritional demands, we are challenged with finding ways to sustainably process agricultural waste by-products. Farmers across the U.S. need an economical way to recycle agricultural waste, while also improving soil health for improved harvest production. Communities need the economic boost of new, sustainable industries, particularly in the rural counties of Maryland. Utilizing agricultural byproducts as feedstock for renewable energy meets the critical U.S. demand for energy independence.

Through our anaerobic digestion and nutrient recovery technologies, CleanBay recycles chicken litter to create renewable energy at utility scale. Our process helps to significantly remove and stabilize elements like phosphorous and nitrogen from the litter which lead to algal blooms that pollute our waterways and create dead zones.



We are proud to be harnessing science, technology and economics to tilt the balance back in favor of nature, while protecting the agricultural sector that provides a vital service to us all. In addition to generating renewable energy from the litter, the remaining solid material is further refined to create a slow, controlled-release fertilizer product. The fertilizer is then available for local farmers and their suppliers to use as a natural additive for their fields. It provides the same micronutrient and soil bulking properties as other products but without the oversupply of nutrients.

The benefits of our process are quantifiable. CleanBay has calculated the amount of carbon that is sequestered by taking 150,000 tons of poultry litter into our closed loop anaerobic digestors rather than sitting open in the atmosphere. It is important from an environmental and also business perspective to measure avoided greenhouse gases and air pollution in addition to having health and ecosystem benefits. Each CleanBay facility takes the equivalent carbon dioxide (CO2) emissions from 57,444 passenger vehicles off the road, out of the air annually by recycling chicken litter waste.

We support House Bill 1438 and urge Committee Members to vote in favor of this bill.

Sincerely,

Dr. Kristi Shaw Director of Environmental and Regulatory Compliance CleanBay Renewables kristi@cleanbayrenewables.com