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Testimony for HB 1312 – Water Pollution Control – Discharge Permits – Industrial Poultry Operations

Bill Sponsor: Delegate Stewart

Committee: Environment and Transportation

Organization Submitting: Environmental Integrity Project

Person Submitting: Mariah Lamm

Position: FAVORABLE

Thank you Chairman Barve and the Committee, for the opportunity to provide testimony in support of HB 1312.

According to EPA’s Chesapeake Bay Model, industrial poultry operations in the Bay Watershed emit thousands of tons of ammonia each year. Much of that ammonia settles on land and water near the source of emissions, where it quickly becomes a water pollution issue. A significant fraction of the nitrogen pollution that continues to impair the Chesapeake Bay comes from atmospheric ammonia. The largest single source of ammonia in Maryland is the state’s industrial broiler chicken industry on the Eastern Shore. Maryland does not limit ammonia emissions from industrial poultry operations.

According to the U.S. EPA’s Total Maximum Daily Load (TMDL) for the Chesapeake Bay, “[a]ir sources contribute about a third of the total nitrogen loads delivered to the [] Bay.” Specifically, using the models they had in 2010, EPA estimated that atmospheric deposition was responsible for 31-36% of the total nitrogen load. Of that, the majority (78-81%) was deposited on land or non-tidal waterways and then transported to the Bay.¹ Although nitrogen deposition was dominated by nitrogen oxides in the late 20th Century, EPA estimated that by 2020, ammonia would be responsible for more than half of total nitrogen deposition.²

In short, according to EPA, atmospheric ammonia deposition is the source of 10-20% of the Chesapeake Bay’s nitrogen load. Most of the ammonia in the air comes from agriculture. According

¹ U.S. EPA, Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment, Appendix L, page L-2 (Dec. 29, 2010).

² Id. at page L-16, Table L-3.

to the most recent reliable national emissions inventory (from 2011),³74 percent of Maryland's ammonia emissions come from livestock waste. Livestock waste emissions in the National Emissions Inventory are not broken down by animal type, but a 2002 EPA report estimated that 59 percent of Maryland's livestock waste emissions were from industrial broiler chickens.⁴ Using EPA's emissions assumptions, broilers are responsible for roughly half of Maryland's ammonia emissions.

However, EIP's research indicates that EPA's ammonia emissions assumptions for industrial poultry operations are much too low. EPA's ammonia emissions assumptions are based on outdated data from European broiler operations. Peer reviewed studies of ammonia emissions from US poultry operations show that emissions are higher because of the highly-concentrated and industrialized way our poultry industry raises chickens and because of differences in climate.

Using the more relevant U.S. monitoring studies, a typical Eastern Shore broiler operation emits between 19 and 24 tons of ammonia each year. Emissions also come from manure storage and manure spreading on cropland. Overall, the runoff and ammonia pollution from poultry operations in the Chesapeake Bay watershed add an estimated 23 million pounds of nitrogen to the Chesapeake Bay each year.

I urge you to consider the environmental impact of industrial poultry operations and the amount of work that will be required to mitigate the impact of this growing source of nitrogen pollution. I also urge you to consider what the Eastern Shore would look like, and smell like, in 10 years if we don't take bold steps to make chicken farming more sustainable in Maryland. Allowing further industrialization is not the answer.

For these reasons, we respectfully request a FAVORABLE report on HB 1312.

For more information, please contact Mariah Lamm, Research Analyst, Environmental Integrity Project, (202)-263-4454, or mlamm@environmentalintegrity.org.

³ <https://www.epa.gov/air-emissions-inventories/2011-national-emissions-inventory-nei-data>. A more recent inventory from 2014 contained significant errors and omissions related to broiler emissions.

⁴ U.S. EPA, National Emission Inventory—Ammonia Emissions from Animal Husbandry Operations, Draft Report, Table 4-2 (Jan. 30, 2004), https://www3.epa.gov/ttnchie1/ap42/ch09/related/nh3inventorydraft_jan2004.pdf