Filed on behalf of Maryland Clean Agriculture Coalition partners:

Date: January 24, 2018

MARYLAND CLEAN AGRICULTURE COALITION

Committee: Senate Education, Health and Environmental Affairs
Legislation: Senate Bill 133 Community Healthy Air Act
Position **SUPPORT**

Dear Chairwoman Carter-Conway:

The Maryland Clean Agriculture Coalition members signed above **SUPPORT** SB 133 and request a **FAVORABLE** report by this committee.

SB 133 would require the Maryland Department of the Environment (MDE) to conduct a one-time study that identifies air pollutants emitted by large animal feeding operations (AFOs) and assesses any potential public health risks. This information is needed to protect Maryland communities and our efforts to restore local waters and the Chesapeake Bay.

The bill simply seeks to provide information that is currently lacking; it does not regulate poultry operations or farmers in any way.

Thousands of animal feeding operations in our state emit harmful air pollutants – including ammonia, particulate matter, volatile organic compounds and endotoxins (see Table 1). But no one monitors these air emissions, so we don't know how much this pollution is affecting the health of neighboring communities.

These air emissions can disproportionately harm low-income communities and communities of color. For example, Wicomico County is poised to approve its largest ever industrial chicken operation in a community that is 80 percent African American. Somerset County, home to a high concentration of industrial poultry operations, is 43 percent African American and has the lowest average household income of any county in Maryland. It also has some of the poorest health outcomes in the state, including some of the highest cancer rates, along with many other Eastern Shore counties.

Water quality is also a concern. Ammonia emissions contain nitrogen, which ends up in the water and is a major pollutant of the Chesapeake Bay and local rivers and streams. Taking a closer look at ammonia emissions is important for restoring the Chesapeake Bay, which is showing signs of improvement. By 2020, the Chesapeake Bay Program Partnership estimates ammonia will be responsible for more than half of total nitrogen deposition to lands on Maryland's Eastern Shore (See Figure 2).

Just as MDE monitors air emissions from many different pollution sources across the state (including a new monitoring station in Pasadena, Md. set up at the request of local officials), they should monitor air emissions from animal feeding operations. MDE has the expertise to conduct a reputable monitoring program for animal feeding operations and should bring that expertise to bear in order to ensure Marylanders that live near these facilities have safe and healthy air to breathe.

For all these reasons, we respectfully request a **FAVORABLE** report on SB 133.

For more information, contact: Dawn Stoltzfus, coordinator, Maryland Clean Agriculture Coalition, at 410-990-0284 or dawn@thehatchergroup.com

Table 1: Emission sources and health effects of key pollutants from AFOs

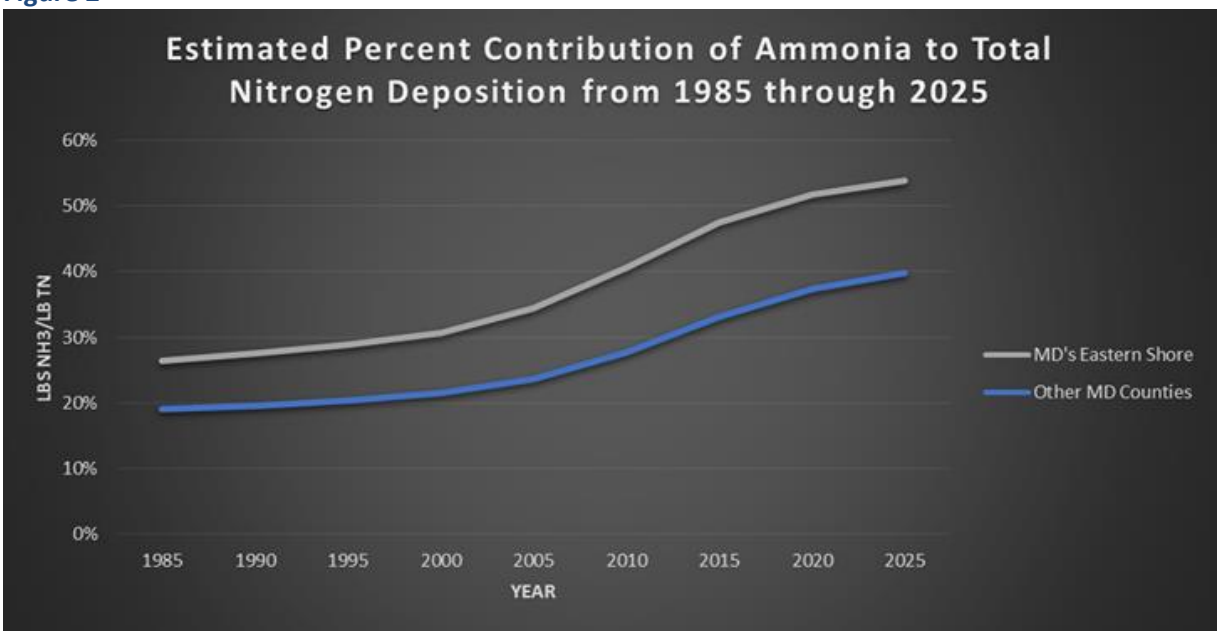
Pollutant	Common emission sources	Health and air quality effects
Ammonia (NH_3)	Decomposition of animal manure.	Can cause severe cough and chronic lung disease. It also contributes directly to the formation of $PM_{2.5}$, and deposition can impact sensitive ecosystems.
Volatile organic compounds (VOCs)	Animal feed and waste.	Can cause eye, nose and throat irritation; damage to liver, kidney and central nervous system; and cancer. VOCs also contribute to the formation of ground-level ozone.
Particulate matter (PM)*	Dry manure, bedding and feed materials, and dirt feed lots.	Exposure is linked to a variety of problems, including decreased lung function, increased respiratory symptoms, and premature death in people with heart or lung disease.
Hydrogen Sulfide (H_2S)	Decomposition of animal manure stored in wet conditions such as lagoons.	Can cause eye and respiratory irritation at lower concentrations. At higher concentrations, paralysis of the respiratory center can lead to rapid death. Excess emissions can contribute to the formation of $PM_{2.5}$ and acid rain.

Source: EPA Office of Inspector General (OIG) analysis.

* PM includes both fine particles ($PM_{2.5}$,) and coarser particles (PM_{10}).

Source: U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF INSPECTOR GENERAL REPORT: *Eleven Years After Agreement, EPA Has Not Developed Reliable Emission Estimation Methods to Determine Whether Animal Feeding Operations Comply With Clean Air Act and Other Statutes Report No. 17-P-0396,* September 19, 2017

Figure 2



Source: Chesapeake Bay Program Partnership http://cast.chesapeakebay.net/