Testimony re: **HB 387: Pesticide Regulation – Transfer to Department of the Environment**
Submitted to: The House Environment and Transportation Committee
Submitted by: The Maryland Pesticide Education Network and the Smart on Pesticides Coalition
Position: **In Support**

February 9, 2022

Dear Chair Barve, Vice Chair Stein, and Members of the Committee,

The Maryland Pesticide Education Network and its Smart on Pesticides Coalition composed of 109 organizations and businesses that address the adverse impacts of hazardous pesticides and promote safer alternatives, support passage of HB387 moving authority to regulate pesticides to the Maryland Department of the Environment (MDE), the state agency charged with oversight of toxics.

MD Dept of Agriculture (MDA) was given oversight for pesticides at a time when pesticide toxicity and the far-reaching damage of many pesticides was little-understood. MDA's primary mission is to promote and protect our state's agriculture industry—a truly important duty that they are well equipped to carry out, especially during these difficult times. When it comes to pesticides, MDA has expert staff with knowledge on managing a diverse range of pests, plant diseases, crop, and land care issues.

However, **MDA has no public or environmental health expertise, which is needed to assess the risks of over 14,000 pesticides which are annually registered for use in the state.** According to FIFRA, as documented in the University of Maryland Law Clinic's report (also submitted to the committee), **states have the authority to go beyond federal regulation of pesticides. This is common practice in** other states noted below and in the UMD Law Clinic testimony and report.

Millions of pounds of pesticides are used in Maryland annually. According to MDA's last voluntary pesticide use survey conducted in 2015 regarding 2014 usage, 4.9 million pounds of pesticides were used, but only 7% of farmers and 15% of certified applicators responded to its survey. If that sampling is representative**,** pesticide use in 2014 was potentially in the neighborhood of 70 million pounds. MDA has yet to conduct another survey as required by law.

To date, regulation of the more than 14,000 pesticides is solely the decision of MDA's chemist. MDA collects an annual fee from the manufacturers for every pesticide the chemist registers for sale and use, providing income for the agency.

Pesticides are not just used in agriculture. They are used in schools, daycare centers, hospitals, nursing homes, office buildings, and other public locations and are in thousands of consumer products. Pesticides are also broadly used in land care, including parks, golf courses and athletic fields.

Pesticide oversight needs to be conducted by the Maryland Dept. of the Environment (MDE), the agency uniquely qualified to handle regulation of hazardous substances. The agency was created to protect and preserve the state's air, water, and land resources and safeguard the environmental health of

Maryland's citizens. Its duties also encompass enforcement of environmental laws and regulations, long-term planning, and research. The agency is charged with overseeing and regulating hazardous chemicals and, therefore, has the needed expertise to assess the level of safety and risks of pesticides and their impacts on the health of people, wildlife, and waterways. The agency already does so for hazardous substances including lead in homes, radiation in hospitals, and hazardous waste.

MDE's regulatory function occurs through a coordinated effort with both internal, as well as external reviews performed. The agency's review process includes input from stakeholders, other agencies, the general public, and other units affected by the agency's regulations—a much-needed protocol for regulating pesticides[1]. **MDE already provides advice on hazardous pesticides** (Things You Can Do For The Environment) recommending the public consider alternatives to chemical pesticides, including biological, mechanical and cultural methods of control. **The missing aspect is the agency's ability to assess pesticides submitted by manufacturers for their potential adverse impacts**

A fully staffed, totally operational future MDE, as the agency has been in the past, has the expertise needed and a wider view of the environment and public health and can properly focus on enforcement.

Pesticides have been linked to:

- Harming public health: Some, such as the organophosphates and carbamates, affect the nervous system. Some pesticides may be carcinogens. Others may affect the endocrine (hormonal) system in the body. – *US Environmental Protection Agency.*
    - Endocrine disrupting pesticides damage our chromosomes, making our future generations more likely to develop cancer.
    - Hurting our children: "Extensive epidemiologic studies associate pesticide exposure with adverse birth and developmental outcomes, including preterm birth, low birth weight, congenital abnormalities, pediatric cancers, neurobehavioral and cognitive deficits, and asthma. The evidence is especially strong linking certain pesticide exposure with pediatric cancers and permanent neurological damage." *– American Academy of Pediatrics, former President Fernando Stein*
- Threatening pollinators: Maryland's critical pollinators are harmed by pesticide use, threatening 1/3 of our food supply. Stunningly, Maryland lost 52% of its honeybees in 2020-21*; pesticides are a key driver of these losses. Other pollinators including wild bees, insects and birds are also in serious decline due to pesticide impacts. Honeybee losses above 10% annually are considered unsustainable, threatening the production of fruits and vegetables. **Bee Informed Partnership* annual national honeybee survey
- Impairing the Bay: More than three-quarters of the Chesapeake Bay's tidal waters are impaired by chemical contaminants. From the insecticides put on farm fields to the cleaners we use to disinfect our homes and hospitals, contaminants enter the Bay and its tributaries and harm the health of both humans and wildlife. – *EPA Chesapeake Bay Program*
- **Farm families and people living in areas near farms, as well as nursery owners and workers *also* suffer from pesticide-related acute and long-term impacts, as is noted by the Agricultural Health Study** conducted since 1993. The study is a collaborative project of the National Cancer Institute, the National Institute of Environmental Health Sciences, the U.S. Environmental Protection Agency and the National Institute for Occupational Safety and Health. This population also deserves to be protected from unnecessary exposure to highly toxic pesticides shown to have serious and even life-threatening impacts.

[1] https://mde.maryland.gov/programs/Regulations/Pages/index.aspx

MDA has opposed health-based pesticide-restricting bills including Md's first-in-the-nation laws like the Integrated Pest Management in Schools law, passed in 1998, to protect the health of school children and staff with common sense measures. MDA opposed a 2016 law banning sales of a pollinator harming pesticide, and most recently, despite MDA's initial opposition, the Maryland General Assembly got the state to ban brain-harming chlorpyrifos.

Increasingly, states are going beyond EPA registrations in restricting pesticides based on their own states' expert assessments to protect their state's residents and environment. Oversight in these states is under the charge of a similar agency to our MDE--*including New York, New Jersey, Connecticut, Rhode Island, S. Carolina and California and Alaska*

We urge a favorable report on HB387 which shifts the authority to regulate pesticides from MDA to the Maryland Dept. of the Environment—the agency with scientific expertise charged with the oversight of toxic substances—with advice and counsel from MDA and the Maryland Dept. of Health. Our communities and children will be healthier, and our pollinators, Bay ecosystem, and the environment will be better protected.

REGULATION OF TOXIC PESTICIDES NEEDS ENVIRONMENTAL AND PUBLIC HEALTH EXPERTISE

Pass (HB387/SB268) to move the authority to regulate pesticides to the Maryland Dept. of the Environment

Pesticides are toxic to humans and the environment, but in Maryland, **millions of pounds of pesticides are used annually[1] without needed environmental and public health oversight.** The regulation of more than 14,000 pesticide products is solely the charge of the Maryland Dept. of Agriculture (MDA), an agency that lacks scientific expertise on toxics, the environment, and health.

Passing the Maryland Pesticide Regulation – Transfer to Dept. of the Environment Bill will shift the authority to regulate pesticides from MDA to the Maryland Dept. of the Environment—the agency with scientific expertise charged with the oversight of toxic substances—with advice and counsel from MDA and the Maryland Dept. of Health.

MARYLAND DEPT. OF THE ENVIRONMENT NEEDS TO LEAD THE CHARGE ON PESTICIDE REGULATION BECAUSE:

MARYLAND DEPT. OF THE ENVIRONMENT IS UNIQUELY QUALIFIED TO HANDLE REGULATION OF HAZARDOUS SUBSTANCES.

The agency was created to protect and preserve the state's air, water, and land resources and safeguard the environmental health of Maryland's citizens. The department already oversees and regulates hazardous chemicals, including lead in homes and radiation in hospitals, giving them the needed expertise to assess the level of safety and risks of pesticides.

PESTICIDE REGULATION OVERBURDENS MDA.

The Maryland Dept. of Agriculture needs to be focused on their prime directive: the protection and promotion of farmers during these tough times. They are currently the sole decisionmaker on pesticides, but their agency lacks the advantage of public and environmental health experts needed to assess the risks of 14,000 pesticides being registered for sales and use in Maryland.

PESTICIDES HAVE DANGEROUS IMPACTS.

Studies have linked pesticides to health risks, including cancer, reproductive disorders, as well as nervous and hormonal system disruption.[2] Pesticide exposure is also linked to adverse birth and developmental outcomes, including preterm birth, low birth weight, congenital abnormalities, pediatric cancers, neurobehavioral and cognitive deficits, and asthma.[3] Pesticides are harming our food supply as a key cause of pollinator loss.[4] They damage ecosystems, with more than three-quarters of the Chesapeake Bay's tidal waters impaired by chemical contaminants.[5]

PESTICIDES ARE NOT ONLY FOUND IN AGRICULTURE.

They are used throughout communities in schools, daycare centers, hospitals, nursing homes, office buildings, parks, golf courses, athletic fields, other public locations, and contained in thousands of consumer products.[6] Pesticides are in our food, air, and run off into the Bay impacting the fish we eat and the greater ecosystem.[7] Pesticides go beyond the scope of the Maryland Dept. of Agriculture. Other states already understand the need for pesticide registration oversight by experts in public health and the environment including New Jersey, New York, Connecticut, Rhode Island, Vermont, Maine, South Carolina, Wyoming, and California.

WHAT WILL THE BILL DO?

We need to protect the interests of everyone in our state. With appropriate oversight led by the Maryland Dept. of the Environment, pesticide regulations will include all voices and expertise at the table, rather than overwhelming one agency that lacks the needed critical expertise to accomplish the task.

By making the Dept. of the Environment the lead agency on pesticides oversight, with input from the Depts. of Health and Agriculture, Maryland can finally have appropriate oversight of these toxic chemicals. Our communities and children will be healthier, and our pollinators, Bay ecosystem, and the environment will be better protected.

Maryland Dept. of the Environment brings staff with scientific expertise to assess and regulate toxic chemicals and their impacts on the health of people, wildlife, and waterways.

WITH ADVICE AND COUNSEL FROM:

Maryland Dept. of Health for expertise on public health and safety; and Maryland Dept. of Agriculture for expertise on the effectiveness of pesticides to kill the target pest or weed.

TAKE ACTION TODAY TO BRING EXPERTISE INTO DECISION-MAKING

Ask your state elected officials and Governor Hogan to vote YES on (HB387/SB268) this session to transfer pesticide oversight to Maryland Dept. of the Environment—the agency charged with the oversight of toxics—with advice and counsel from the Maryland Depts. of Health and Agriculture.

BIT.LY/MPENSOPC
(https://mdpestnet.org/take-action/smart-on-pesticides-maryland/)

#PESTICIDEOVERSIGHTINMD

VOTE YES ON HB387/SB268

SMART on PESTICIDES maryland
For Safe Water & Healthy Kids

[1]https://mda.maryland.gov/plants-pests/Documents/MarylandPesticideSurveyPub.pdf
[2]https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/human-health-issues-related-pesticides#What
[3]https://www.nytimes.com/2017/11/01/opinion/pesticide-epa.html
[4]https://beeinformed.org/citizen-science/loss-and-management-survey/
[5]https://www.chesapeakebay.net/issues/chemical_contaminants
[6]https://nchh.org/information-and-evidence/learn-about-healthy-housing/health-hazards-prevention-and-solutions/pesticides/
[7]https://www.chesapeakebay.net/issues/chemical_contaminants

MARYLAND PESTICIDE REGULATION – TRANSFER TO DEPT. OF THE ENVIRONMENT BILL

#PesticideOversightInMD

WE NEED BETTER OVERSIGHT OF TOXICS!

Pass SB268 / HB378

Other States Regulate Pesticides through Environmental Departments

Pesticides go beyond the scope of the Maryland Dept. of Agriculture. Pesticides are used in communities, schools, daycare centers, hospitals, athletic fields, other public locations, and are in thousands of consumer products. They're in our food, air, and run off into the Bay impacting the fish we eat, wildlife, and the greater ecosystem. Maryland Dept. of the Environment's toxic and scientific oversight is needed to address the impacts of these substances and their effects on human health and environment.

States that recognize the need for pesticide registration oversight by experts in public health and the environment include: **Alaska, California, Connecticut, Maine, New Jersey, New York, Rhode Island**, and **South Carolina.**

State	Primary Pesticide Regulatory Agency	Restricts Beyond Federal Registration (FIFRA)
Alaska	Department of Environmental Conservation	Considers threat to human health, safety, welfare of animals and the environment; uses applicable findings of a local, state or federal agency; protects waters of the state from pesticide contamination
Connecticut	Department of Environmental Conservation	Considers unreasonable adverse effects on the environment, as well as injury to the applicator and the hazard of dermal and inhalation toxicity, in designating a pesticide to be restricted use in the state i.e. in restricting neonicotinoids.
New Jersey	Department of Environmental Protection	Considers toxicity, chronic health effects (like carcinogenicity or reproductive health effects) environmental impact, pesticide use patterns, and regulatory history. NJ has 381 state-restricted pesticides.
New York	Department of Environmental Conservation	The list of New York-restricted pesticides, in excess of federal requirements, is over 20 pages long and contains dozens of pesticides listed by name and specific restrictive use language, i.e. county-specific limitations.
Rhode Island	Department of Environmental Management	Determines whether pesticides are highly toxic to humans and carries out a program of monitoring pesticides in the environment. Results of the program are reviewed at least annually and their pesticide board provides advice on least hazardous means of controlling pests and on possible health hazards posed by certain pesticides.
South Carolina	Clemson University Division of Regulatory and Public Service Programs, Department of Pesticide Regulation (DPR)	The DPR has an investigation and inspection program, and Pesticide Advisory Committee. Together, they consider dangers relating to the use and application of pesticides. May include pest control problems, environmental or health problems related to pesticide use, review needed legislation, regulations and agency programs.

Pass SB268 / HB387 to move the authority to regulate pesticides to the Maryland Dept. of the Environment

Supported by Maryland Smart on Pesticides Coalition of 109 organizations and businesses. www.SmartOnPesticides.org

Maryland Pesticide Education Network

EVALUATING HEALTH & ENVIRONMENTAL SCIENCE

A Guide for Legislators

Scientific evidence is the underpinning for policy decisions regarding health. This checklist offers guidance for legislators listening to and assessing scientific testimony and scientific arguments on these often difficult questions, as well as help in questioning witnesses during a hearing.

1. What is the purpose, and what is the source of the research being presented?

The goal of a study may influence the outcomes. For instance, studies that a manufacturer must undertake to submit a chemical or drug for federal registration are different from studies performed by independent scientists seeking to understand impacts of chemicals on humans, animals, or the ecosystem.

What you need to know: Are government findings based on industry-provided research? Are they based on a review of all available sources?

Example: In the debate of e-cigarette / vapor product regulation, research reports by the FDA's Division of Pharmaceutical Research was very credible because it reflected totally independent testing.

2. Have the studies been peer-reviewed?

Independent scientific research is subject to review by a panel of "peers"; these are other scientists with no stake in the findings and no conflicts of interest. Peer review ensures accuracy in methodology and statistical significance, as well as proper interpretation of the results. When a study passes peer review, it is usually published in a scientific journal, such as Environmental Health Perspectives or the Journal of the American Medical Association. This is a transparent process, ensuring that rigorous standards are upheld.

What you need to know: Are the studies being cited peer reviewed? If not, consider the source. Blogs and newspaper articles are not peer-reviewed materials, but may link back to a peer-reviewed source.

Peer Reviewed

A panel of independent experts in the same scientific field, who have no connection to the study and no conflicts of interest, have reviewed it and judged it to be valid and worthy of publication.

3. How certain is "certain enough" to act?

Scientists examine facts and complex information and then look for a preponderance of evidence. While scientists routinely disclose elements of uncertainty in their research, they form their conclusions based on the weight of the evidence.

What you need to know: Is there sufficient evidence regarding possible harms that warrants taking action? Is there sufficient evidence of safety to justify inaction?

Example: Based on the preponderance of evidence of likely harm, we passed seat belt laws and prevented children from drinking alcohol.

4. Are the scientists being too cautious?

Scientists are conservative regarding "certainty." They use a "95% confidence test" in order to conclude that two observations that happen together are more than accidental and probably causal. When it comes to taking action,

however, public and environmental health experts recommend action based on sufficient scientific evidence to warrant concern and not on a specific percentage.

What you need to know: What are the risks and what could be the harm if we wait for more research to be conducted before taking action?

Example: Laws limiting human exposure to DDT, lead, tobacco and alcohol were all passed long before a 95% confidence test was met. These laws were based on a preponderance of evidence rather than 95% certainty.

Weight of the Evidence

This term refers to a judgment in the scientific community that most studies to date confirm a particular conclusion. Scientists are always open to new findings, so they may avoid using terms like "certainty", "100%" or "we are sure."

5. Are the findings influenced by funding source, trade secrets, or suppression of data?

The design of a scientific study may be influenced by the source of its funding. This has been well documented by independent observers. It is therefore reasonable and prudent for legislators to ask all scientists and those who cite scientific research about their sources of funding.

What you need to know: What are the sources of funding for the work being cited? Were any data omitted due to trade secret protections or similar reasons?

Example: 1) The source of funding for a study can influence important findings or cause contrary results to be omitted from the study's report. 2) Important data that an industry provides to a federal agency before marketing will not be in the public domain and may not have been subjected to peer review.

6. Has anyone addressed the economic harm associated with inaction?

Policy-makers must weigh not only the cost of taking action but also the cost of inaction. Science offers insight into the costs of inaction.

What You Need to Know: What public and private costs may be incurred if we do not take action on this proposed policy?

Example: A 2015 peer reviewed study estimated the costs to the EU of human exposure to endocrine disruptors at $209 billion annually in medical care and lost productivity. *(Trasande et al J Clin Endocrinol Metab. 2015 Apr; 100(4): 1245–1255.)*

Note: The fiscal note on a bill will not typically assess the costs of inaction. It addresses only the costs of adopting the policy, and usually only the costs to government.

7. Have long term effects been assessed?

Early life exposures can create high risks in later life. An example is the link between lead poisoning and long-term harms to children, or between tobacco and cancer. Over time, human exposures to multiple chemicals will have interactive effects that may be quite different from the effects of a single chemical.

What you need to know: Does the science presented also address the long-term effects of exposure? If not, is that because the research does not exist?

Note: Federal agency review does not establish absolute safety. The US EPA registers chemicals based on "reasonable certainty of no harm" and has yet to address the synergistic effects of chemicals in real life, such as interactions with other chemicals in the environment, medications, and illness.