



JOHNS HOPKINS

BLOOMBERG SCHOOL
of PUBLIC HEALTH

DEPARTMENT OF ENVIRONMENTAL HEALTH AND ENGINEERING

Submitted to: **Education, Energy and the Environment Committee**
on: **SB0732: Sewage Sludge Utilization Permits - Per- and Polyfluoroalkyl Substances
- Concentration Limits**
Position: **Favorable**
Submitted by: Ana María Rule, PhD, Board member, Maryland Pesticide Education Network
Hearing Date: February 18, 2024

My name is Dr. Ana Rule and I am Assistant Professor at the Johns Hopkins Bloomberg School of Public Health (JHBSPH) in the Department of Environmental Health and Engineering. The opinions expressed here are my own and do not necessarily reflect the views of The Johns Hopkins University. I am submitting this written testimony **in support of SB0732**. The impacts of PFAS on public health have been one of my professional concerns. Recent findings that Biosolids applied to Maryland farm fields contain high levels of PFAS have increased my concern.

Since 1999, the CDC, through the National Health and Nutrition Examination Survey (NHANES) has measured PFAS in blood of the U.S. population. **This effort found that in 2020 about 97% of U.S. people have PFAS in their blood**, even though companies stopped manufacturing PFOS in 2002 and PFOA in 2015. Furthermore, the NHANES study has found that PFOA and PFOS in blood are declining, which is evidence that limiting introduction of PFAS in the environment, **as this bill SB0732 is proposing**, is the right approach. However, in a recent pilot study that I am leading, we found PFOA and PFOS in every one of the 41 Maryland residents that were tested, and 85% have PFAS levels in their blood at concentrations that trigger special screening by clinicians, including for breast, liver and testicular cancer.

As an example of how people are exposed, the shared waterway between the upstream rural and downstream urban areas of the Monocacy River (a tributary of the Potomac river) have been found to be contaminated with PFAS. **Contamination appears to be primarily due to the application of biosolids on upstream rural farmlands**. Unfortunately, because of this, PFAS contamination is now in well water supplies in local public schools and in groundwater where downstream urban communities frequently recreate. The Maryland Department of the Environment (MDE) has identified PFAS contamination in fish samples high enough to warrant a fish consumption advisory in and around the City of Frederick.

Because of their persistence both in the environment and our bodies, every exposure to a PFAS chemical can have long-term impacts. Given that these pesticides are widely used, we are experiencing ongoing, even if intermittent, exposures that increase our toxic body burden. **There are healthcare and environmental costs of not taking action to prevent unnecessary, accumulating PFAS pollution, and SB0732 takes important action steps by requiring biosolids to be tested 14 days prior to being applied to farmland and establishing a limit of 1 ppb for PFOS and PFOA in biosolids.**

To summarize, PFAS leads to concerning health risks. By passing **SB0732**, this committee can protect the health of Maryland residents and the environment from avoidable ongoing PFAS contamination. We need to stop unnecessarily adding to the already huge PFAS burden of our environment.

I urge you to give **SB0732a** favorable vote. Thank you for your consideration.

A handwritten signature in black ink that reads "Ana Ma. Rule". The signature is written in a cursive style with a horizontal line underneath.

Ana Maria Rule, PhD, MHS

Assistant Professor

Johns Hopkins Bloomberg School of Public Health

Board Member, MD Pesticide Education Network