

## WRITTEN TESTIMONY

OF

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**FIELD HEARING ON**

**“Improving Interagency and Intergovernmental Coordination on PFAS for  
Michigan Communities”**

**Committee on Homeland Security and Governmental Affairs  
U.S. Senate**

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Thank you, Chairman Peters, for inviting Michigan to provide testimony regarding the ongoing work of our Michigan PFAS Action Response Team (MPART) to address Per and Polyfluoroalkyl Substances (PFAS) issues across our state. My name is Abigail Hendershott, and I am the Executive Director of the Michigan PFAS Action Response Team, or MPART. I am pleased to share with you the Michigan perspective on the need for a more coordinated federal response to PFAS contamination and explore interagency and intergovernmental policy solutions that holistically address PFAS risk, remediation, and research.

### **PFAS Coordination in Michigan**

The Michigan PFAS Action Response Team was created in 2017, as a temporary body by executive directive, to investigate sources and locations of PFAS and protect drinking water and public health. On February 4, 2019, Governor Gretchen Whitmer signed [Executive Order 2019-3](#), establishing MPART as an enduring body to address the threat of PFAS contamination in Michigan, protect public health, and ensure the safety of Michigan’s land, air, and water, while facilitating inter-agency coordination, increasing transparency, and requiring clear standards to ensure accountability.

Since 2017, MPART has solidified its role as a national leader in identifying and addressing PFAS contamination by the coordinated activities of seven different state agencies. This coordination and collaboration have allowed Michigan to effectively leverage the actions of all agencies to swiftly identify and respond to PFAS in our communities. These department agencies include the departments of: Environment, Great Lakes, and Energy (EGLE); Natural Resources (DNR); Transportation; Agriculture and Rural Development (MDARD); Health and Human Services (MDHHS); State Fire Marshal; and Military and Veterans Affairs, all of which have staff dedicated to continuously address PFAS issues. MPART currently has 4 full time staff and over 300 staff working part time on PFAS in addition to their other duties, many of whom are

serving on committees that collaborate at a national level, including Interstate Technology and Regulatory Council, Environmental Council of the States, Great Lakes PFAS Task Force, and many others.

MPART's collaborative and strategic efforts are first and foremost focused on protecting public health by sampling drinking water and identifying and remediating sources of PFAS contamination. As Michigan began to identify communities and residents in need of alternate water supplies due to PFAS contamination, the need for protective drinking water and cleanup standards became critical.

In the absence of any existing national PFAS standards, Michigan needed to take decisive action to take on the challenge of addressing PFAS. EGLE developed water quality values for PFOA and PFOS<sup>1</sup> in 2011 and 2014, respectively, and in January 2018, Michigan established groundwater cleanup standards for PFOA and PFOS. These enforceable standards laid the foundation for Michigan to require action to protect human health and the environment. In August 2020, EGLE consulted with state and federal experts to promulgate drinking water standards under the Safe Drinking Water Act for 7 PFAS compounds. Michigan has been able to take these actions due to the collaborative efforts of MPART, the legislature, our Governor and our citizens. Without a strategic collaborative approach at the national level, other states will have to pave their own path to address the complex health, ecosystem and policy issues that surround PFAS.

### **Strong Federal Coordination Needed**

MPART is encouraged by the actions laid out in the EPA PFAS Strategic Roadmap and the goals for coordinated and cooperative cross-agency efforts to develop improved tools to address PFAS as announced by the Biden Administration in October 2021. However, more can and must be done to coordinate and collaborate on the tough issues that PFAS presents to not only to our nation, but to the world. Let me give an example of how MPART's strategic coordination has benefited the citizens of our state.

Starting in 2018, Michigan's Department of Environment, Great Lakes and Energy conducted pioneering work to trace PFAS in wastewater back to industrial facilities. At one location, these results led us to halt the land application of heavily impacted biosolids on farmland. Sampling efforts revealed that crops and cattle on the farm had been impacted by the industrially contaminated, PFAS-containing biosolids. Determining next steps at the farm required thoughtful collaboration with the state DNR, MDARD, and MDHHS.

The federal government's lack of a unified approach and standards meant that Michigan could not obtain written guidance or advice from our federal agencies regarding acceptable levels of PFAS in beef, resulting in Michigan conducting our own public health evaluation and risk determination. Similar situations in Maine and New Mexico highlight the need for national research and standards for food and crops, and for enhanced federal coordination to provide clarity and assistance for our farmers and our states.

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<sup>1</sup> PFOA is perfluorooctanoic acid and PFOS is perfluorooctanesulfonic acid

In fact, there are still many PFAS issues that would benefit from coordinated efforts at the federal level, such as food testing and standards for PFAS in the food supply, further study and better understanding of the transport and deposition of airborne PFAS, continued research to find an effective fluorine-free replacement for firefighting foams, collaboration and research to advance our toxicological understanding of PFAS and human health effects, and better public notification and transparency so that our citizens can be better informed about PFAS risks.

#### Coordination on Food Supply Impacts/Risks

There is a real need for national studies of PFAS in the food supply to understand how PFAS enters and affects the food supply, and the potential associated health risks from PFAS in food. Standardized testing methods are needed for crops, livestock, and food products to provide producers and consumers with useful and consistent information and to build the data set needed to begin establishing health-based standards for food. Given the complexities of our global food basket and the current lack of required testing for PFAS, it is not feasible for individual states to develop and implement consistent methods to evaluate food safety across the nation. Consumers, farmers, state and federal regulators, and health agencies would all benefit from the coordination of these efforts at the national level.

Michigan has a robust Eat Safe Fish program that is the result of successful coordination and cooperation of several different departments to collect the fish, analyze the data, evaluate the information, and determine the public health risk. Michigan collects over 600 surface water samples and 800 fish annually to monitor the PFAS levels and provide the data for the Eat Safe Fish Program. Coordination of fish sampling and testing at the national level is also needed to ensure that the PFAS impacts to the food chain cycle--specifically bioaccumulation and biomagnification--in fish and wildlife can be research and evaluated.

#### Coordination on Research of Fate, Transport and Deposition of Air Borne PFAS

An issue that goes hand-in-hand with evaluation of risks in the food supply is the need for a deeper understanding of the fate and transport of PFAS in our environment – specifically how PFAS moves within and through the air. Understanding PFAS fate, transport and deposition of airborne PFAS is crucial to a complete understanding of the impacts and risks to not only public health but also to sensitive and threatened species in our ecosystem. Although several different agencies are collecting air data, it is unclear how this information will be used at the national level to inform broad policy decisions regarding the use and production of PFAS-containing products, and ensuring that downwind surface water bodies and ecosystems are protected. Funding additional national research on PFAS, fate, transport and deposition is a critical piece of the PFAS cycle that can only be answered with broad collaboration and coordination at the federal level.

### Coordination on Development of Less Toxic AFFF

MPART has picked up over 55,000 gallons of firefighting foam containing PFAS--known as aqueous film forming foam, or AFFF--in the last three years as part of the AFFF Pick-up and Disposal Program. This proactive program to remove PFAS-containing AFFF from our fire stations and airports prevents future contamination by safely disposing of AFFF and has been coordinated by MPART and supported by our legislature. It is widely recognized that the use of AFFF containing PFAS results in dispersion of PFAS into the air, surface waters, soil, and groundwater. Federal coordination with the Department of Defense, the Federal Aviation Administration and the Environmental Protection Agency is needed to not only find a suitable replacement for the AFFF containing PFAS, but to also ensure that the fluorine-free replacements are effective and less toxic. Michigan urges collaboration of the researchers within the government and in the private sector to ensure that the next generation of AFFF products are less toxic to the environment, and meet appropriate firefighting standards for smothering fires and blanketing fuel, and ideally, easily used with current firefighting equipment.

### Coordination on Research to Understand PFAS Toxicology

Exposure to various PFAS is associated with adverse health outcomes. In Michigan, MPART is conducting community-based health studies<sup>2</sup> to extend knowledge further by identifying links between exposures to PFAS and health outcomes. This is being done through two community-based studies in Michigan. While these studies are expected to yield important data, including information from Michigan's participation in a nationwide PFAS health study, additional federal coordination is needed to further expand on our knowledge of the toxic effects from the thousands of PFAS currently in use.

Because there are thousands of PFAS and labs are able to detect them at lower and lower levels, our ability to accurately measure the presence of PFAS has greatly outpaced our ability to perform risk assessments for each PFAS identified in the laboratory data. To help close this gap, coordination of the federal agencies is needed to enable decision makers to protect public health based on chemical similarities among the thousands of PFAS and make reliable predictions about risk, using what we do know about the more-studied PFAS. This kind of national collaboration can be used to promote the development of tools that would allow regulators and health agencies to reliably predict PFAS characteristics--such as persistence, bioaccumulation, and toxicity--based on known relationships and similarities among PFAS.

### Coordination of Public Notification and Transparency, and Funding

An important piece of our collaborative MPART model is our Citizens Advisory Work Group (CAWG), which is made up of residents from around the State who have been directly or indirectly affected by PFAS in their communities. The CAWG allows our citizens to have a way to directly provide input to MPART on PFAS topics. Their voices have reinforced the MPART mission to collaborate among departments and be

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<sup>2</sup> [The Michigan PFAS Exposure and Health Study \(MiPEHS\) is being](#) conducted in the communities of Parchment and Cooper Township in Kalamazoo County and the Belmont/Rockford area in Kent County; the [Multi-Site Study \(MSS\) is a national study](#) in seven communities across the U.S., including the communities participating in the MiPEHS.

transparent in our efforts. The CAWG has also stressed the importance of notifying the public when PFAS has been found in communities, especially for residential drinking water well owners who may potentially be at risk. MPART has collaborated with the CAWG and several agencies and other partners to develop successful measures to inform the public in Michigan. Nationally, a toolbox of potential notification protocols would be helpful for other states. Being able to share data with the public would help communicate PFAS information nationally. And federal agencies should work together to share their data and provide consistent messaging about PFAS so that people can make sound decisions as to how to reduce risk for themselves and their families.

Finally, to touch upon funding. Michigan has been fortunate to have a legislature that has supported PFAS investigations and protecting public health by appropriating a significant amount of state funding. State funding has been used to conduct investigations, provide treatment at sites, hook homes up to municipal water, and provide filters to homes when municipal water is unavailable. Federal funding is needed to support states in these efforts and to conduct research, develop tools for states and citizens to use, and create standardized policies and criteria. States may also need help with bridge funding in areas where citizens need to connect to municipal water but struggle financially with a water bill they have not had to pay previously. We believe that will remain a challenge for Michigan and other states.

Thank you again for the opportunity to discuss Michigan's leadership on the cutting edge of PFAS mitigation policy at the state level, and to discuss the need for national collaboration and coordination moving forward. I welcome hearing from the other witnesses today and I look forward to answering your questions.

If you would like additional information on Michigan's efforts, please visit the MPART website at [www.michigan.gov/pfasresponse](http://www.michigan.gov/pfasresponse) and see the attachment below. Thank you.

**Attachment:**

**Additional Information on Michigan's PFAS Actions:**

MPART's coordinated strategic approach has led to the following accomplishments:

Public Health:

- Since ingestion of PFAS via drinking water is the primary route of exposure for our citizens, between 2018 and 2020, Michigan systematically sampled 2,474 public water supply systems to determine the occurrence and concentrations of PFAS. This sampling showed that while most of our systems were below the EPA lifetime health advisory level in place at the time, there were two public systems that had concentrations above the health advisory level. Upon finding elevated concentrations in a school and a public water system, Michigan moved swiftly to provide alternate water and work with the systems to identify long-term solutions. Michigan also identified a number of water systems with elevated PFAS results that were below the EPA lifetime health advisory levels and provided guidance on methods to reduce concentrations in finished drinking water.
- In early 2019, Michigan began the process of establishing State Drinking Water Standards as allowed under the Safe Drinking Water Act. In August 2020, Michigan completed that process and formally established Drinking Water Standards for 7 different PFAS, which protects approximately 75% of Michigan residents.
- This past fiscal year, approximately 2,500 public water supplies were subject to PFAS compliance sampling under the Michigan Safe Drinking Water Act. This includes either annual or quarterly monitoring.

Identification of PFAS Contamination:

- Developed groundwater cleanup criteria for 7 PFAS, which have been used to hold polluters accountable for cleanup efforts at PFAS sites.
- Identified over 224 MPART sites with concentrations of one or more of the 7 PFAS compounds exceeding groundwater cleanup standards. For each MPART site, nearby residential wells are evaluated and sampled if any are determined to be at potential risk.
- Collected precautionary residential drinking water samples in neighborhoods around suspected PFAS sites that were at risk for groundwater contamination.

Reduction and Elimination of PFAS Sources:

- Since 2018, EGLE has collected an average of 632 surface water samples and 886 fish samples annually to monitor PFAS levels. By the end of 2021, a total of 2,694 surface water samples were collected to identify water bodies with PFAS contamination and to track down source(s) of contamination.
- To date, a total of 4,574 edible portion fish samples (e.g., fillets) were collected for PFAS and other contaminant analyses. These data are used by MDHHS to issue fish consumption advisories.

- Worked with Wastewater Treatment Plants with Industrial Pretreatment Programs to identify, reduce, or eliminate potential sources of PFAS and sample their effluent concentrations to determine compliance with Michigan's Water Quality values.
- Requested groundwater sampling at all currently or formerly licensed solid waste landfills with known drinking water wells nearby. As of July 2022, all 47 of these landfills have been sampled for PFAS and, where appropriate, nearby drinking water wells have been screened for the presence of PFAS.
- Awarded grants to 19 airports where firefighting foam (AFFF) was known to have been used, for testing and monitoring PFAS in groundwater and storm water.
- Removed 55,000 gallons of firefighting foam from Michigan's fire stations and airports as part of a pickup and disposal program.

#### Collaboration

- MPART has broad collaboration with both federal and states including:
  - A member of the Great Lakes PFAS Taskforce with the Great Lakes St. Lawrence Governors & Premiers and participating in sub committees on Foam, Wildlife, biosolids and air
  - Environmental Council of States: PFAS subcommittee
  - Interstate Technology Regulatory Council: PFAS Workgroup
  - EPA coordination meetings with Office of Research and Development
  - New England Interstate Waters Pollution Control Commission for Biosolids collaboration

#### Public Health Studies and Biomonitoring Projects:

- The Michigan Department of Health and Human Services (MDHHS) has collaborated with Centers for Disease Control and Prevention's (CDC) Agency for Toxic Substances and Disease Registry (ATSDR) on project design and has received funding through CDC and ATSDR for multiple projects and studies over the last several years.
  - The design of the North Kent County Exposure Assessment was guided by ATSDR's PFAS Exposure Assessment Technical Toolkit with input from ATSDR.
  - MDHHS was awarded funding by ATSDR to carry out the Multi-site Study, a nationwide PFAS health study, in Parchment and Cooper Township in Kalamazoo County and the Belmont/Rockford area in Kent County.
  - MDHHS was awarded funding by CDC to conduct two biomonitoring projects: the PFAS in Firefighters of Michigan Surveillance (PFOMS) Project, which will determine per- and polyfluoroalkyl substances (PFAS) blood concentrations in Michigan firefighters, and the Michigan Chemical Exposure Monitoring (MiChEM) Project, which aims to find the statewide average blood and urine concentrations of a variety of chemicals including PFAS.
- To augment the above projects, MDHHS is conducting the Michigan PFAS Exposure and Health Study, which will investigate the associations between PFAS exposure and health outcomes over time, and the PFAS Exposure and Antibody Response to COVID-19 Vaccine study, which is investigating associations between PFAS exposure and the immune system response to COVID-19 vaccine, specifically antibody response to COVID-19 vaccine.