



STATE OF MICHIGAN  
EXECUTIVE OFFICE  
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Committee on Energy and Commerce

*Subcommittee on Environment*

**Perfluorinated Chemicals in the Environment:**

**An Update on the Response to Contamination and Challenges Presented**

Thursday, September 6, 2018

Good morning Chairman Shimkus and Ranking Member Tonko. Thank you for holding this hearing and for inviting me to testify before this subcommittee. Thanks also to Congressman Upton, Congressman Walberg, and Congresswoman Dingell from Michigan for your steadfast, bipartisan focus on this important issue. My name is Carol Isaacs, and I am Director of the Michigan PFAS Action Response Team, or MPART.

Michigan is one of a growing number of states throughout the country dealing with a suite of chemicals collectively called PFAS. Although there are thousands of different per and polyfluorinated chemicals, we have significant knowledge about only a few at this point. Certainly, the oldest PFAS compounds are no longer made but, unfortunately, they remain in our environment and the human body for a prolonged period of time. Current research is evolving but indicates these chemicals are known to be associated with negative health impacts.

To address this public health threat, on November 13, 2017 Governor Rick Snyder issued an Executive Directive forming the Michigan PFAS Action Response Team (MPART). This unique structure integrates ten State of Michigan agencies and departments and has worked effectively

to enhance cooperation and coordination among local, state and federal agencies charged with identifying, communicating and addressing the potential effects of PFAS. The response team has been instrumental in creating investigation and response protocols to identify and protect regions of the state with known or possible PFAS contamination that threatens the drinking water of our residents. MPART is charged with effectively implementing protocols to rapidly and comprehensively investigate the presence of significant PFAS contamination and to continue to mitigate against this contaminant in drinking water across Michigan.

The many proactive steps MPART has taken since its formation in November 2017 include the following.

- Michigan established new clean-up criteria for groundwater used for drinking water.
- MPART has taken legal action against responsible parties like Wolverine Worldwide.
- MPART has identified 35 PFAS state sites that are associated with historic and operating industrial/manufacturing operations, aqueous film-forming firefighting foam (AFFF) discharges, landfills, and military installations. For your convenience, I have included a map detailing these sites. Notably:
  - 4 sites are public water supplies
  - 5 sites are active or former military sites (Alpena CRTIC, Escanaba DFSP, Camp Grayling, KI Sawyer, Wurtsmith AFB)
  - Nearly 6,000 test samples have been taken by MPART team members for PFAS throughout all 35 sites.
  - MPART has overseen the delivery of alternative water to more than 1,600 households with PFAS detections and overseen the installation of more than 700 household filtration systems. MPART has also overseen connections to municipal water for homes and impacted wells.
- MPART has funded \$1.5 million in-state laboratory improvements to speed up PFAS testing.

- MPART has met with more than 200 wastewater treatment plant personnel across the state to identify and work cooperatively toward the elimination of PFAS being discharged into water resources, such as our rivers.
- MPART has partnered with the landfill industry to develop standard sampling protocols to evaluate PFAS in landfill leachate statewide by December 2018. This effort will also evaluate how landfill design and operating practices affect the concentration of PFAS in leachate.
- MPART is overseeing the sampling of fish and deer for PFAS contamination in areas near known AFFF releases.
- MPART has contacted 1,000 fire departments throughout the state to determine their use and storage of PFAS-containing firefighting foam.
- MPART is piloting a first-of-its-kind project for the removal of PFAS containing foam from the surface of Van Etten Lake near the Wurtsmith Air base.
- Plainfield Township, through a State \$750,000 grant, has a granular activated carbon pilot project underway with 5 filters capable of filtering 9 million gallons/day.
- Ann Arbor will pilot a similar project in the near future.
- MPART has called upon federal agencies like the EPA to move forward with additional research and standard making for PFAS.
- MPART has created an independent Science Advisory Panel to review current research on PFAS and make recommendations regarding health effects, environmental pathways, remediation, and whether PFAS analytes, in addition to PFOA and PFOS should be regulated.
- MPART established a state level PFAS local public health advisory group.
- MPART has engaged approximately 70 external state and national groups on PFAS. See attached list.
- MPART has held many community forums for residents. Individual meetings with residents continue to be held to discuss drinking water testing results. Community leadership is regularly updated on the status of PFAS within communities.

- MPART holds regular legislative conference phone calls to update the State House and Senate. Michigan's legislature appropriated an additional \$23 million at the end of 2017 to allow MPART to investigate PFAS and improve lab capabilities.
- MPART will test all 461 schools on a private well system by the end of year.
- Importantly, MPART has undertaken the most comprehensive state drinking water survey in the nation. All public water systems are being tested through a \$1.7 million appropriation from the legislature. This survey is testing all drinking water systems with more than 25 people served. This will include mobile home parks and small communities.

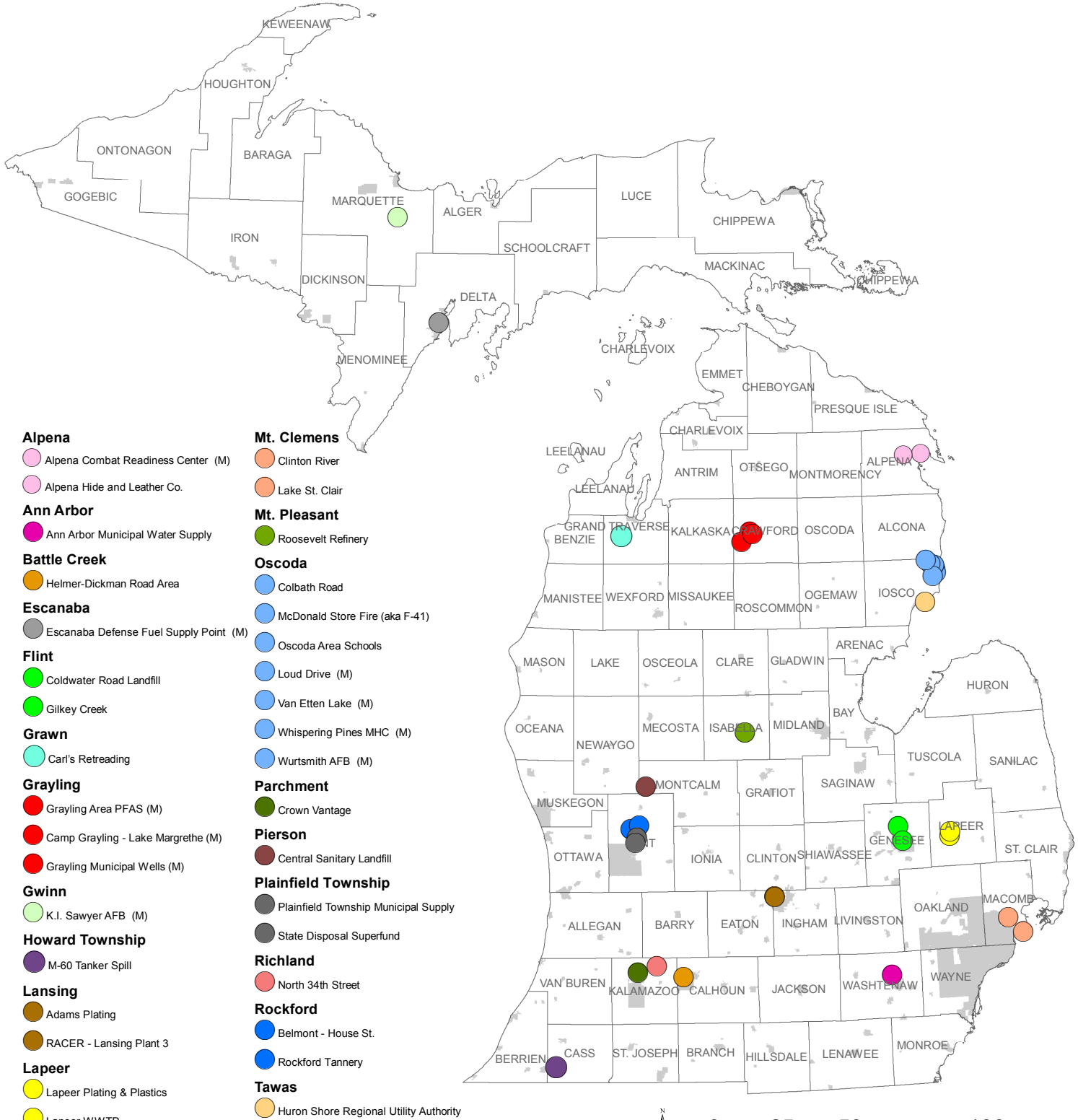
The wisdom of a comprehensive survey of drinking water is important because this survey will test the drinking water of the vast majority of Michigan residents. Through this testing survey we were able to find and mitigate high levels of exposure to PFAS in the drinking water in one of our communities – Parchment, Michigan. PFAS levels were 20 times higher than the Lifetime Health Advisory level set by EPA. Within a matter of hours, the State was able to alert the community, pay for bottled water to be distributed by the community, and assist in helping to provide a new water source from a nearby community. Michigan's proactive and aggressive approach to PFAS resulted in more than 3,000 Michiganders being protected from a previously unknown contaminant. The community must also be thanked for their cooperation and willingness to respond to this situation in such a unified manner. Work continues with this community to test all private wells near potential contamination sources. I want to thank Congressman Upton for his participation and help. He was on the front-lines of this response from day one.

I will close with addressing a few reasons why PFAS is a national issue and why safeguarding the nation's drinking water requires the cooperation and help of our federal partners. Not only do states look to EPA for guidance and standards related to safe drinking water, but the Department of Defense (DoD) also bases its action on the EPA Lifetime Health Advisory level of

70 ppt. A national standard would allow uniform understanding of PFAS chemicals by all and would also assist in better understanding the use and disposal of the PFAS chemicals. Closer cooperation between The Agency for Toxic Substances and Disease Registry and EPA will further strengthen the interface between health advice and the application of clean-up standards. We also look to the Federal Aviation Agency to work with DoD on standards and practices for use of firefighting foam with the goal of uniformity between state and federally regulated entities, such as airports and military bases. Finally, the US Department of Agriculture should bolster its work with the states to better understand how this emerging class of contaminants interact with the food chain, including research related to PFAS uptake within plants.

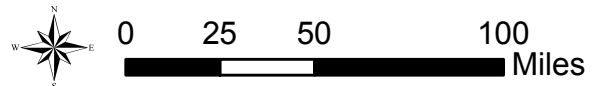
In closing, clean drinking water is essential to all Americans and protecting the public from PFAS contamination is possible, but it takes substantial resources. Governor Snyder recognized this and has initiated one of the most comprehensive statewide responses to PFAS in the nation. In addition to what states like Michigan are providing from state budgets, federal funding will be required to ensure a comprehensive approach across all jurisdictional boundaries. This includes funding to allow DoD to fully remediate PFAS contamination from its current and former military bases as well as continued research into these emerging contaminants that can inform future regulations and standards. We, therefore, appreciate Congress's consideration of these issues as you determine future budget priorities.

Thank you for your attention to this important issue. I look forward to your questions.



- Alpena**
  - Alpena Combat Readiness Center (M)
  - Alpena Hide and Leather Co.
- Ann Arbor**
  - Ann Arbor Municipal Water Supply
- Battle Creek**
  - Helmer-Dickman Road Area
- Escanaba**
  - Escanaba Defense Fuel Supply Point (M)
- Flint**
  - Coldwater Road Landfill
  - Gilkey Creek
- Grawn**
  - Carl's Retreading
- Grayling**
  - Grayling Area PFAS (M)
  - Camp Grayling - Lake Margrethe (M)
  - Grayling Municipal Wells (M)
- Gwinn**
  - K.I. Sawyer AFB (M)
- Howard Township**
  - M-60 Tanker Spill
- Lansing**
  - Adams Plating
  - RACER - Lansing Plant 3
- Lapeer**
  - Lapeer Plating & Plastics
  - Lapeer WWTP
- Mt. Clemens**
  - Clinton River
  - Lake St. Clair
- Mt. Pleasant**
  - Roosevelt Refinery
- Oscoda**
  - Colbath Road
  - McDonald Store Fire (aka F-41)
  - Oscoda Area Schools
  - Loud Drive (M)
  - Van Etten Lake (M)
  - Whispering Pines MHC (M)
  - Wurtsmith AFB (M)
- Parchment**
  - Crown Vantage
- Pierson**
  - Central Sanitary Landfill
- Plainfield Township**
  - Plainfield Township Municipal Supply
  - State Disposal Superfund
- Richland**
  - North 34th Street
- Rockford**
  - Belmont - House St.
  - Rockford Tannery
- Tawas**
  - Huron Shore Regional Utility Authority

(35 Sites)



(M) - PFAS sites on or impacted by active or former military facilities

External Groups Engaged on PFAS

The following groups have been engaged by DEQ, DHHS, MDARD, MDOT, LARA, and other MPART agencies on Michigan's PFAS response.

Agency for Toxic Substances and Disease Registry (ATSDR)  
Airport Cooperative Research Program  
American Association of Airport Executives - Great Lakes Chapter  
American Institute of Professional Geologists (AIPG), MI Section  
American Water Works Association (AWWA), MI Chapter  
Association of State and Territorial Solid Waste Management Officials (ASWSWMO)  
Association of State Drinking Water Administrators (ASDWA)  
Concerned Citizens for Responsible Redevelopment/Remediation (CCRR)  
Council of State and Territorial Epidemiologists (CSTE)  
Environmental Council of States (ECOS)  
Federal aviation administration  
Food & Drug Administration-Detroit Office  
Food & Drug Administration-Office of Regulatory Affairs  
Interstate Technology Regulatory Council (ITRC)  
Maine Department of Agriculture  
Michigan Agri-Business Association (MABA)  
Michigan Agricultural Commodity Executives quarterly meeting (includes a big cross-section of associations and entities, like Michigan Milk Producers, Michigan Allied Poultry, Michigan Pork Producers, Michigan Blueberry Commission, Michigan Wheat Commission, Michigan Soybean, and many more).  
Michigan Association for Local Public Health (MALPH)  
Michigan Association of Airport Executives  
Michigan Association of Fire Chiefs  
Michigan Chapter of the National Association of Surface Finishers  
Michigan Chemistry Council (MCC)  
Michigan Farm Bureau  
Michigan Fire Inspector Society  
Michigan Fire Service Instructors Association  
Michigan Professional Firefighter Union  
Michigan Fire Fighter Training Council  
Michigan Manufacturers Association (MMA)  
Michigan Rural Water Association  
Michigan State Fireman's Association  
Michigan State University Extension  
Michigan Tribal Environmental Group  
Michigan Waste and Recycling Association (MWRA)  
Michigan Water Environment Association (MWEA)  
Minnesota Department of Agriculture  
Minnesota Pollution Control Agency  
Multi-State Partnership for Security in Agriculture  
National Groundwater Association  
National Science Foundation (NSF) International  
Northern Michigan Fire Chiefs

External Groups Engaged on PFAS

Ohio Environmental Protection Agency  
Saginaw Chippewa Indian Tribe  
Saginaw-Midland Water Supply Corporation  
Southeast Michigan Council of Governments (SEMCOG)  
Southeast Michigan Fire Chiefs  
State Health Departments  
    Alaska Department of Health and Social Services  
    Colorado Department of Public Health and Environment  
    Minnesota Department of Health  
    New Hampshire Department of Health and Human Services  
    New York State Department of Health  
    Ohio Department of Health  
    Pennsylvania Department of Health  
    Texas Department of State Health Services  
    Wisconsin Department of Health Services  
US Environmental Protection Agency  
UP Fire Chiefs  
Washington Department of Agriculture  
Western Michigan Fire Chiefs