



# CLEAN WATER TOWN HALL

Donna  
**Lasinski**  
STATE REPRESENTATIVE

WORKING FOR YOU IN LANSING

# PANELISTS

- Gerald Tiernan - Jackson District Supervisor, MDEQ Remediation & Redevelopment Division
- Lisa Fischer - Toxicologist, MDHHS
- Kristen Schweighoefer - Environmental Health Director, Washtenaw County Health Department
- Daniel Brown - Watershed Planner, Huron River Watershed Council

**Clean Water Town Hall**

**Michigan Department of  
Environmental Quality**

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**Gerald Tiernan  
District Supervisor  
Remediation & Redevelopment Division**

March 7, 2019



# What is an Emerging Contaminant?

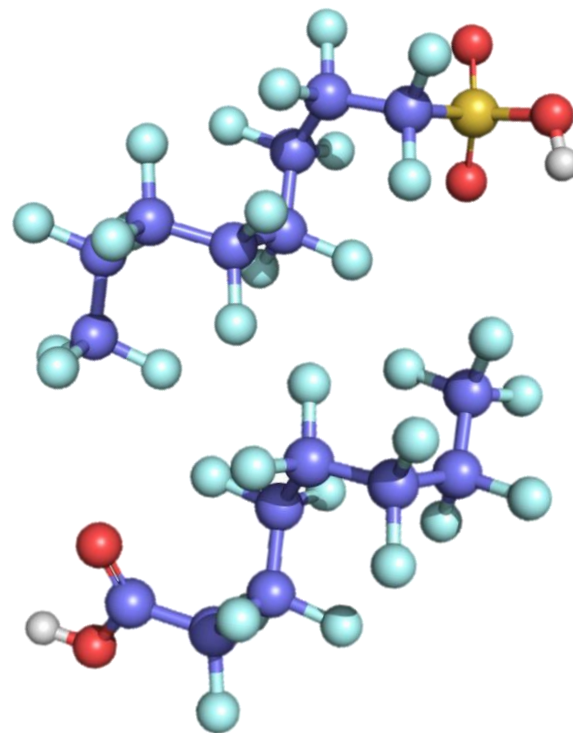
Chemicals and materials that have pathways to enter the environment and present real or potential unacceptable human health or environmental risks...

and  
either...

Do not have peer-reviewed human health standards...

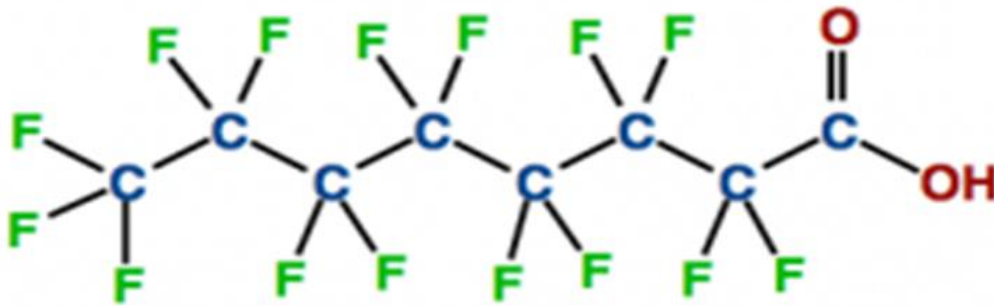
or...

Standards/regulations are evolving due to new science, detection capabilities or pathways.





# Per-and polyfluoroalkyl substances (PFAS)



**PFOA** - perfluorooctanoic acid

- Strong carbon-fluorine bonds
- Hydrophobic(repels water) and oleophobic (repels oil, fat, grease)
- 5,000+ compounds
- Many industrial applications

# PFAS Uses



**Aerospace**



**Apparel**



**Building and  
Construction**



**Chemicals and  
Pharmaceuticals**



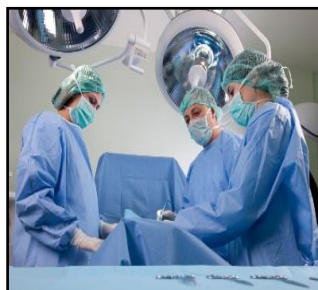
**Electronics**



**Oil & Gas**



**Energy**



**Healthcare and  
Hospitals**

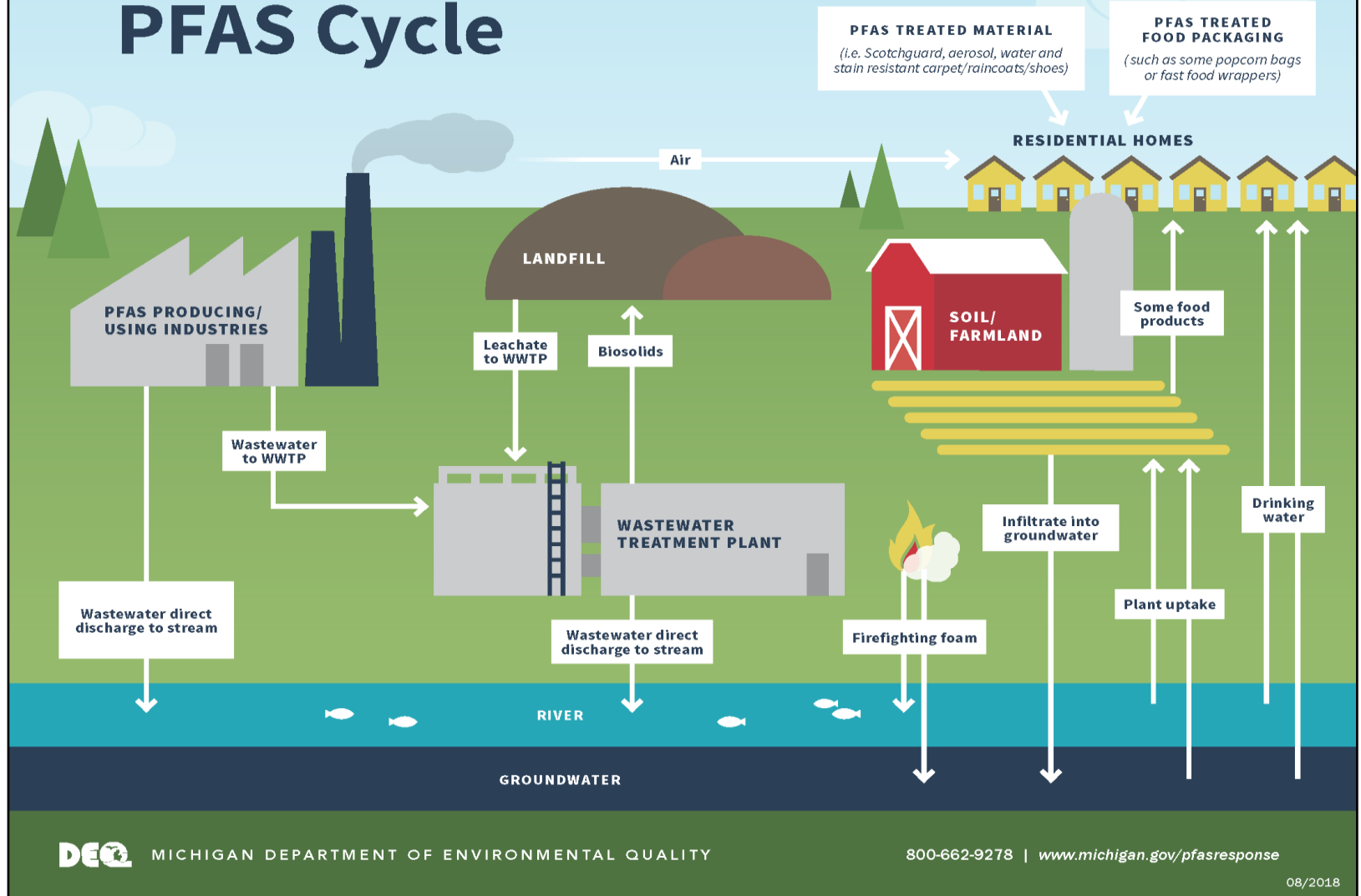


**Aqueous Film  
Forming Foam**



**Semiconductors**

# PFAS Cycle



# Michigan PFAS Action Response Team (MPART)

- Cooperation and coordination among all levels of government
- Leadership





# Michigan PFAS Action Response Team (MPART)



DEQ will coordinate communication, tracking, budgeting, legislative outreach & media support



Cooperation among all levels of government



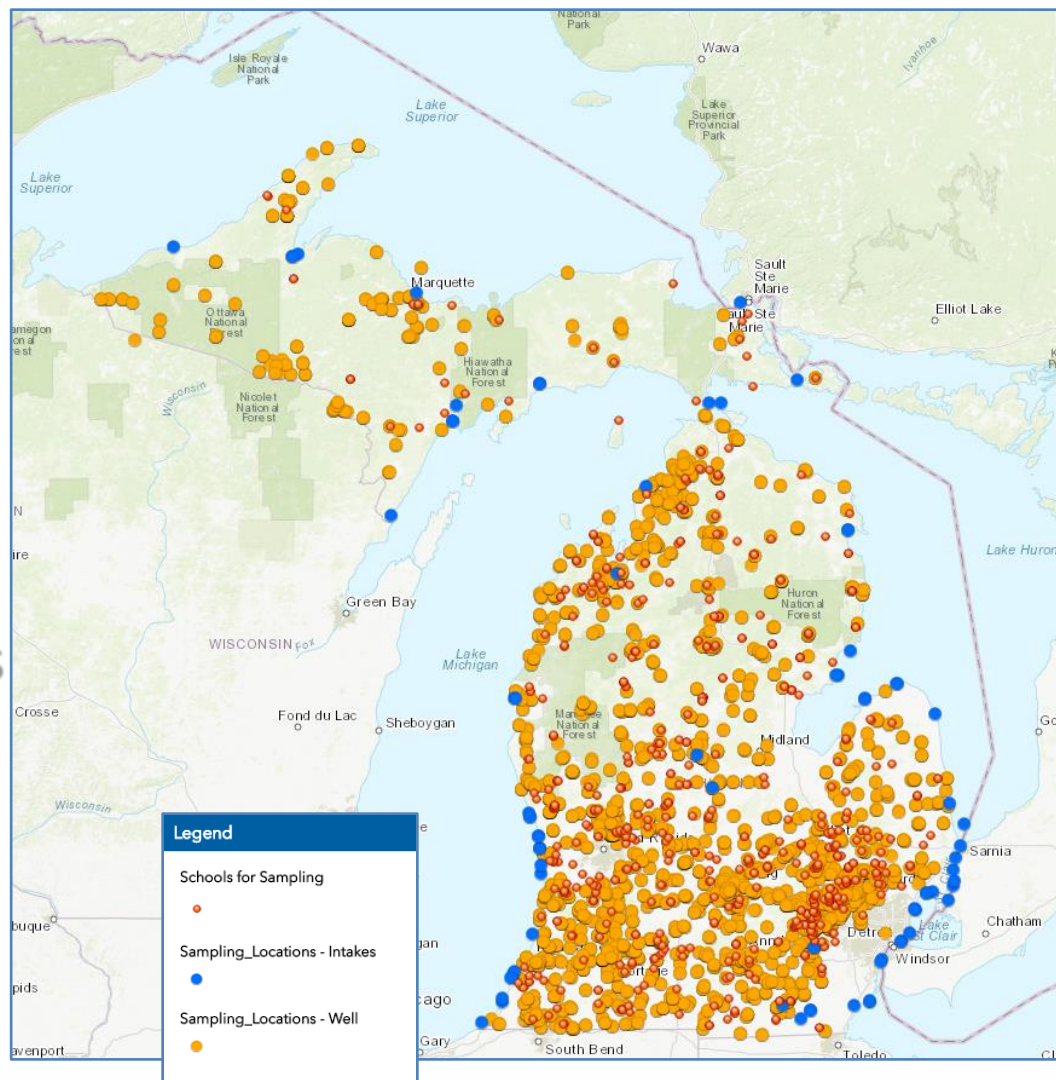
More emphasis on multi-agency Technical Advisory Work Groups



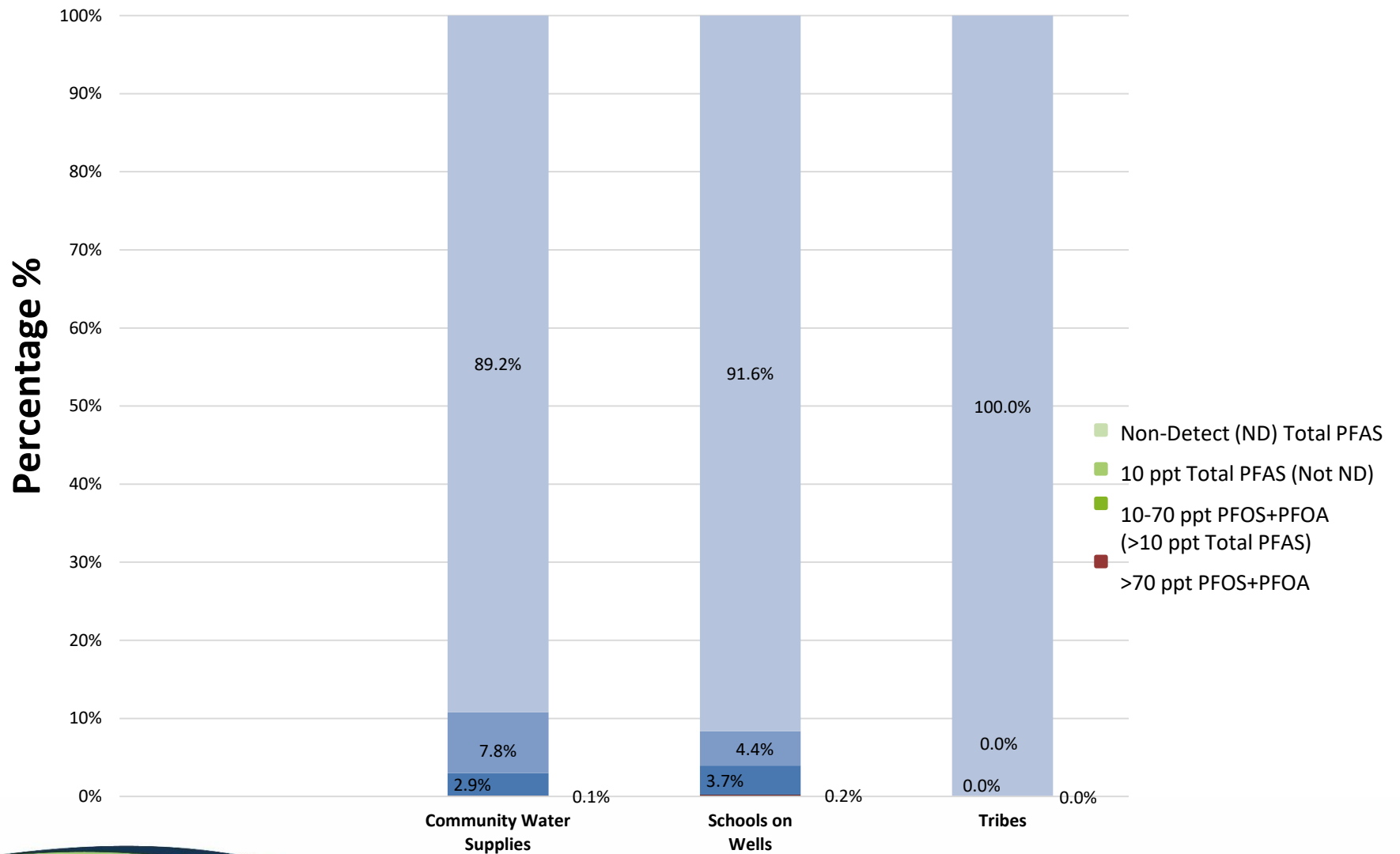
Creates Citizen Advisory Work Group

# Supplies Tested:

- Type I CWS
  - Surface Water Systems
  - Groundwater Systems
  - Combination SW/GW Systems
- Type II Non-transient Non-community Water Supplies
  - Schools
  - Child Care Providers
  - MI Head Start Programs



# Statewide Public Water Supply Testing Initiative Results\*



\*As of January 4, 2019

## TAKING ACTION, PROTECTING MICHIGAN

HEALTH

TESTING AND TREATMENT

MICHIGAN PFAS SITES

FISH AND WILDLIFE

FIREFIGHTING FOAM

ABOUT MPART

PFAS RESPONSE

## Huron River

The Huron River drains portions of seven counties in southeast Michigan. The Huron River Watershed is more than 900 square miles and consists of hundreds of tributary creeks, lakes, and the Huron River proper. The Michigan Department of Environmental Quality (MDEQ) began sampling intensively on the Huron River due to the city of Ann Arbor detecting per- and polyfluoroalkyl substances (PFAS) in the Huron River, which is the main source of the city of Ann Arbor's drinking water, and the discovery of perfluorooctanesulfonic acid (PFOS) in the river at levels over the Rule 57 water quality standard of 11 parts per trillion (ppt) PFOS. The following is a timeline of PFAS investigation activities in the Huron River Watershed.



[https://www.michigan.gov/pfasresponse/0,9038,7-365-86510\\_88060\\_88065-476105--,00.html](https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_88060_88065-476105--,00.html)



## Washtenaw Industrial Facility LLC (former Universal Die Cast), Saline, Washtenaw County

Updated: February 22, 2019

### Background

Washtenaw Industrial Facility LLC (formerly Universal Die Cast) is located at 232 and 290 Monroe Street in Saline. This site has a history of plating operations. Due to this history, both Washtenaw Industrial Facility LLC (WIFL) and the MDEQ have collected groundwater samples from the northern part of this site.

### Recent Accomplishments

- The MDEQ participated in a conference call with the USEPA, WIFL, WIFL's legal counsel, and WIFL's consultant.

### Next Steps

- The MDEQ will continue to work to assess the impacts to the Saline River and determine if WIFL's property on the south side of the river (290 Monroe St.) is facing similar issues.
- The MDEQ will work with the USEPA to direct WIFL to determine the extent of PFAS on-site and determine what options are available for managing the groundwater.
- The MDEQ will work with WIFL to sample the monitoring wells on the property. Based upon those results, WIFL may be directed to install additional wells to provide adequate coverage along the river.
- There are several parcels to the south of the river and a few of those are east of Monroe St that have domestic wells. There are also two former water supply wells on the former plant site. They are approximately 50 feet deeper than the existing groundwater samples and there is a substantial clay layer between the monitor wells and the water supply wells. The DEQ will be directing the facility to sample this deeper aquifer in an expedited manner.



[https://www.michigan.gov/pfasresponse/0,9038,7-365-86511\\_82704-489606--,00.html](https://www.michigan.gov/pfasresponse/0,9038,7-365-86511_82704-489606--,00.html)

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES

**LISA FISCHER, TOXICOLOGIST**

DIVISION OF ENVIRONMENTAL HEALTH

DRINKING WATER INVESTIGATION UNIT

**(517) 284-4287**

**[FISCHERL@MICHIGAN.GOV](mailto:FISCHERL@MICHIGAN.GOV)**

# MDHHS AND CLEAN WATER ISSUES

- PROVIDE INFORMATION ABOUT THE EFFECTS OF CONTAMINANTS ON HUMAN HEALTH
- RECOMMEND WAYS TO LIMIT OR STOP EXPOSURE TO CONTAMINANTS FOUND IN DRINKING WATER
- RELEVANT DRINKING WATER ISSUES:
  - PFAS
  - LEAD AND COPPER
  - OTHER HEAVY METALS
  - VOLATILE ORGANIC COMPOUNDS (VOCs) LIKE 1,4-DIOXANE

# PFAS

- PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)
- HUMAN HEALTH EFFECTS INCLUDE:
  - LOWERING A WOMAN'S CHANCE OF GETTING PREGNANT
  - INCREASING THE CHANCE OF HIGH BLOOD PRESSURE IN PREGNANT WOMEN
  - INCREASING THE CHANCE OF THYROID DISEASE
  - INCREASING CHOLESTEROL LEVELS
  - CHANGING IMMUNE RESPONSE
  - INCREASING THE CHANCE OF CANCER, ESPECIALLY KIDNEY AND TESTICULAR CANCERS
- STAYS IN FISH AND WILDLIFE TISSUE (BIOACCUMULATION)



# 1,4-DIOXANE

- NO HEALTH EFFECTS FROM BREATHING LOW LEVELS OF DIOXANE HAVE BEEN IDENTIFIED
- AT VERY HIGH LEVELS, COMBINED EXPOSURE TO DIOXANE (SKIN CONTACT, BREATHING, AND DRINKING) MAY CAUSE CANCER AND AFFECT THE LIVER AND KIDNEYS
- DOES NOT STAY IN FISH AND WILDLIFE TISSUE



# **Washtenaw County Health Department**

**Representative Donna Lasinski's  
Clean Water Town Hall  
Scio Township Hall  
March 7, 2019**

# Water Quality and Water Safety

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- Permit private/home drinking water wells
- Review inspection reports for property transfer cases
- Oversight of non-community drinking water wells
- Source of local information, groundwater flow, contamination, etc.

# Residents with Well Water

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- WCHD permits water wells for private homes.
- We require a well record submittal. This record is called a well log and contains information on well depth, construction and soil types.
- Require initial sampling for coliform bacteria, nitrates & arsenic.
- A 10 foot clay layer is considered protective for most situations.
- Information on how to access your well records is available on our website.
  - [Washtenaw.org/EnvHealth](http://Washtenaw.org/EnvHealth)



# Residential Well Sampling – PFAS & 1,4-Dioxane

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- We are not aware of any residential water wells in Washtenaw County with PFAS detections.
- WCHD, in partnership with DEQ, samples approximately 55-100+ homes each year for 1,4-dioxane.
  - There are 3 current drinking water wells with 1,4-dioxane detections of 1-2ppb.
  - These drinking water wells get sampled biannually.
  - There have been sporadic detections in the past of other drinking water wells.
- At this time, there are no broad recommendations to test your home for PFAS or 1,4-Dioxane.

# Non-Community Water Supplies

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- WCHD oversees water sampling requirements for Non-Community (Type II) Water Supplies.
  - A Non-community Water Supply is a water system that provides water for drinking or potable purposes to 25 or more persons at least 60 days per year or has 15 or more service connections.
  - Includes schools, restaurants, motels, campgrounds, and churches.
  - Does not include apartments or permanent residences.
- 240 Type II water supplies

# Non-Community Water Sampling for PFAS and 1,4-Dioxane

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- All schools and day care centers on wells were offered free PFAS testing through state.
  - All tested child care centers were non detect
  - Avila child care in Chelsea refused sampling
  - Precious Ones child care in Whitmore Lake will be tested in early 2019
  - Emerson Elementary School had 14 ppt PFAS.
    - Providing bottled drinking water and looking into other long term solutions
    - No known sources of contamination
  - All other schools were non detect
- 1,4-Dioxane: 1 day care center is tested biannually for 1,4-dioxane due to proximity to plume, but has always been non-detect.

# Other Washtenaw County PFAS Sampling Results

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- All (24) municipal water supplies tested & results received.
  - City of Ann Arbor municipal supply had detection of 52 ppt total PFAS in raw water in July.
  - All other municipal supplies were non-detect, including Ypsilanti Community Utilities Authority (YCUA, serving much of the municipal water on the eastern side of Washtenaw County)
- Do not eat fish advisory for fish caught in Huron River Watershed due to elevated PFAS levels in fish samples.
- All state water sample results and investigation sites available through [washtenaw.org/pfas](https://washtenaw.org/pfas) and [michigan.gov/pfasresponse](https://michigan.gov/pfasresponse)



# WCHD Role in 1,4-Dioxane Contamination

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- Facilitate the Coalition for Action on the Remediation of Dioxane (CARD) group since its founding in 2006.
- Contracted by DEQ to perform residential well water sample monitoring near the plume.
- Review data to ensure protection of public health.
- Make recommendations for better data and monitoring.
- Advocate for using best available science in 1,4-dioxane cleanup to protect public health.
- Take calls/questions from homeowners on well water.
- Provide education.

# WCHD Role in PFAS Contaminations

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- Take calls/questions from homeowners on well water
- Advise local residents on water testing/filters
- Work with the Type II water supplies on any further testing, treatment and questions
- Coordinate do not eat fish posting/information and other time sensitive local information
- Liaison between local issues and statewide work

# Clean Water Challenges in the Huron River Watershed

**Daniel Brown**

Watershed Planner  
Huron River Watershed Council

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Huron  
River  
Watershed  
Council

# Dioxane Concerns

HRWC joined the lawsuit against Gelman.

- Ann Arbor and area drinking water is at risk
- Enormous magnitude of of potential damages downriver
- Notoriously difficult to clean up

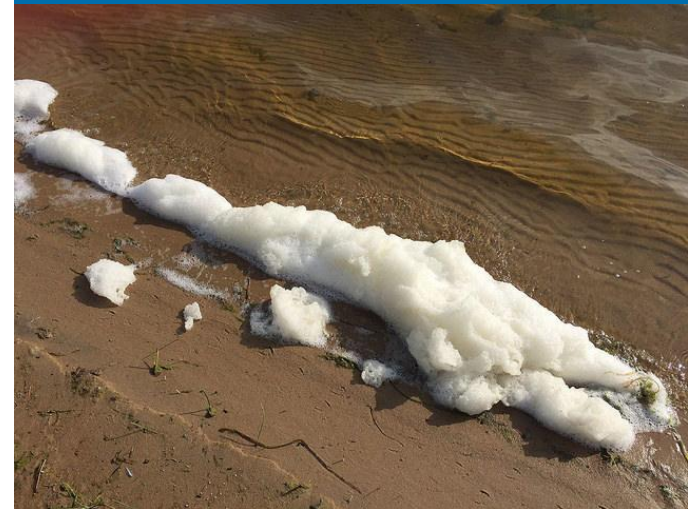


# PFAS: What You Can Do

- **Call your state and federal representatives and tell them to support a strict drinking water standard.**
- **Encourage your local government to work with area fire departments to retire PFAS fire-fighting foam.**
- **Be aware of home solutions but be cautious about claims of effectiveness.**



Almost half of Michigan fire departments are still using fire-fighting foam containing PFAS.







Huron  
River  
Watershed  
Council

Learn More:

[HRWC.org/PFAS](https://hrwc.org/PFAS)





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