

# GENESEE COUNTY COALITION FOR CLEAN WATER CONCERNED CITIZENS

## MORATORIUM PETITION

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7430 Marsack Dr  
Swartz Creek, MI 48473  
October 23, 2023

## **1. INTRODUCTION**

## **2. EPA AWARENESS (INFORMATION NOT MIS-INFORMATION)**

- **PFAS**
- **WATER REGULATIONS**

## **3. ADVANCED MANUFACTURING**

- **LOCATION**
- **ADVERSE HEALTH AFFECTS**
- **ECONOMIC AFFECTS**


## **4. CONCLUSIONS**

- **CONCERNS**
- **MUNDY TOWNSHIP BOARD ACTIONS**

## 2. EPA AWARENESS:



### Mundy Township belongs to EPA Region 5 (1)

**Welcome from EPA Region 5 Administrator  
Debra Shore**



## EPA Region 5

Serving Illinois, Indiana, Michigan, Minnesota, Ohio,  
Wisconsin and 35 Tribes



Serving [Illinois](#), [Indiana](#),  
[Michigan](#), [Minnesota](#),  
[Ohio](#), [Wisconsin](#) and  
[35 Tribes](#)

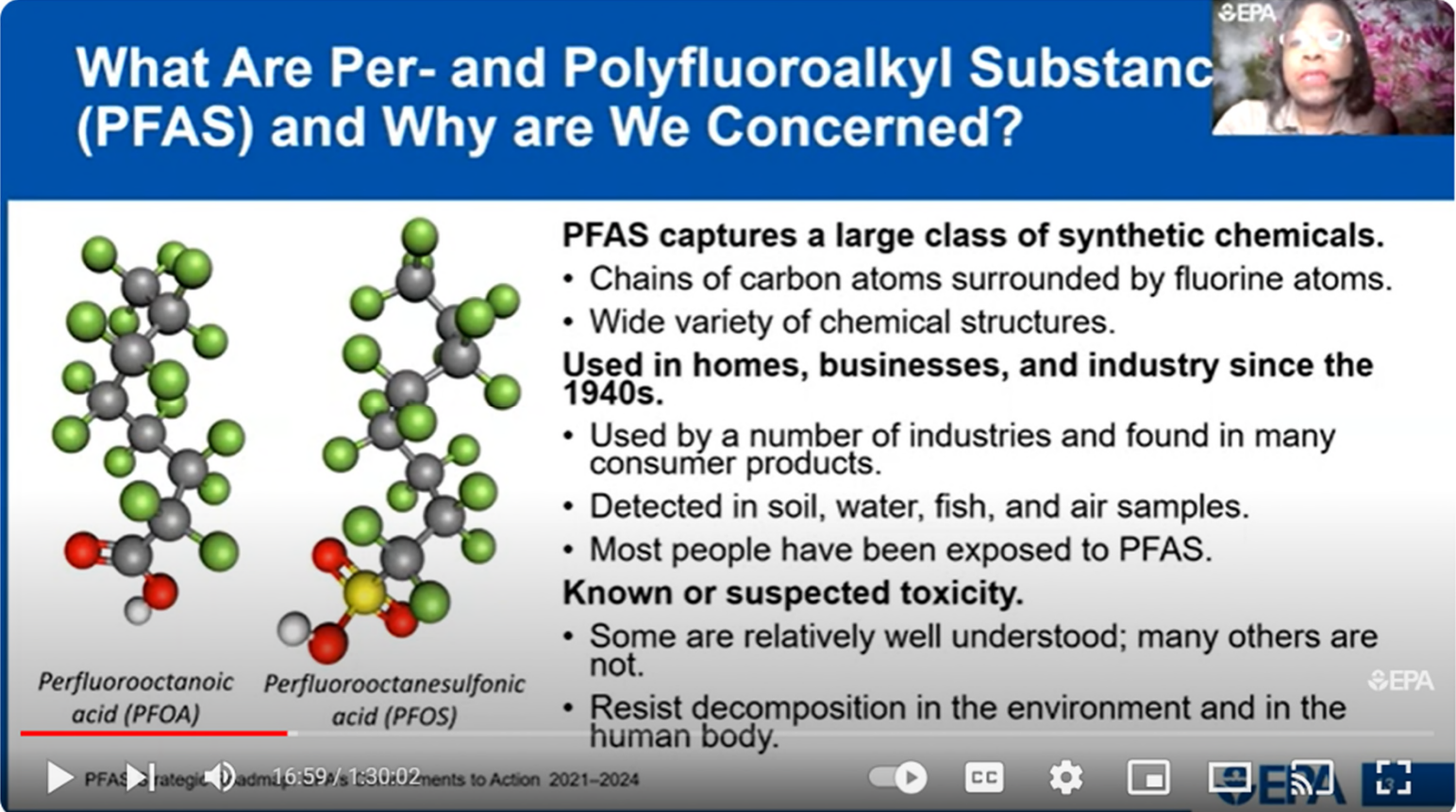
PFAS Strategic Management Commitments to Action 2021-2024

1. EPA PFAS Listening Session: Region 5; April 19, 2023, [https://www.youtube.com/watch?v=2CU3\\_lfhQKY](https://www.youtube.com/watch?v=2CU3_lfhQKY)

## 2. EPA AWARENESS:

➤ PFAS-(POLYFLUOROALKYL SUBSTANCE) used in Semi Conductor Industry and others (1)

➤ MOST PFAS ARE A SOLID, POWDERY MATERIAL AT ROOM TEMPERATURE



**What Are Per- and Polyfluoroalkyl Substances (PFAS) and Why are We Concerned?**

**PFAS captures a large class of synthetic chemicals.**

- Chains of carbon atoms surrounded by fluorine atoms.
- Wide variety of chemical structures.

**Used in homes, businesses, and industry since the 1940s.**

- Used by a number of industries and found in many consumer products.
- Detected in soil, water, fish, and air samples.
- Most people have been exposed to PFAS.

**Known or suspected toxicity.**

- Some are relatively well understood; many others are not.
- Resist decomposition in the environment and in the human body.

**Chemical Structures:**

- Perfluorooctanoic acid (PFOA):** FC(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(=O)O
- Perfluorooctanesulfonic acid (PFOS):** FC(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)S(=O)(=O)O

PFAS Strategic Administration's Commitments to Action 2021-2024

1. EPA PFAS Listening Session: Region 5; April 19, 2023, [https://www.youtube.com/watch?v=2CU3\\_IfhQKY](https://www.youtube.com/watch?v=2CU3_IfhQKY)

GCCCW-PETITION MORATORIUM-102323

## 2. EPA AWARENESS:

- EPA'S COMMITMENT TO MONITOR PFAS <sup>(1)</sup>
- TWO LAWS TO LIMIT AND PROTECT AGAINST PFAS <sup>(1)</sup>:
  - TOXIC SUBSTANCE CONTROL ACT (TSCA)
  - TOXIC RELEASE INVENTORY PROGRAM (TRI)
- **MARCH 14, 2023** EPA ESTABLISHED GUIDELINES FOR PFAS IN DRINKING WATER <sup>(1)</sup>
- MORE DATA AND INVESTIGATION IS NEEDED <sup>(1)</sup>

1. EPA PFAS Listening Session: Region 5; April 19, 2023, [https://www.youtube.com/watch?v=2CU3\\_lfhQKY](https://www.youtube.com/watch?v=2CU3_lfhQKY)



# 3. ADVANCED MANUFACTURING

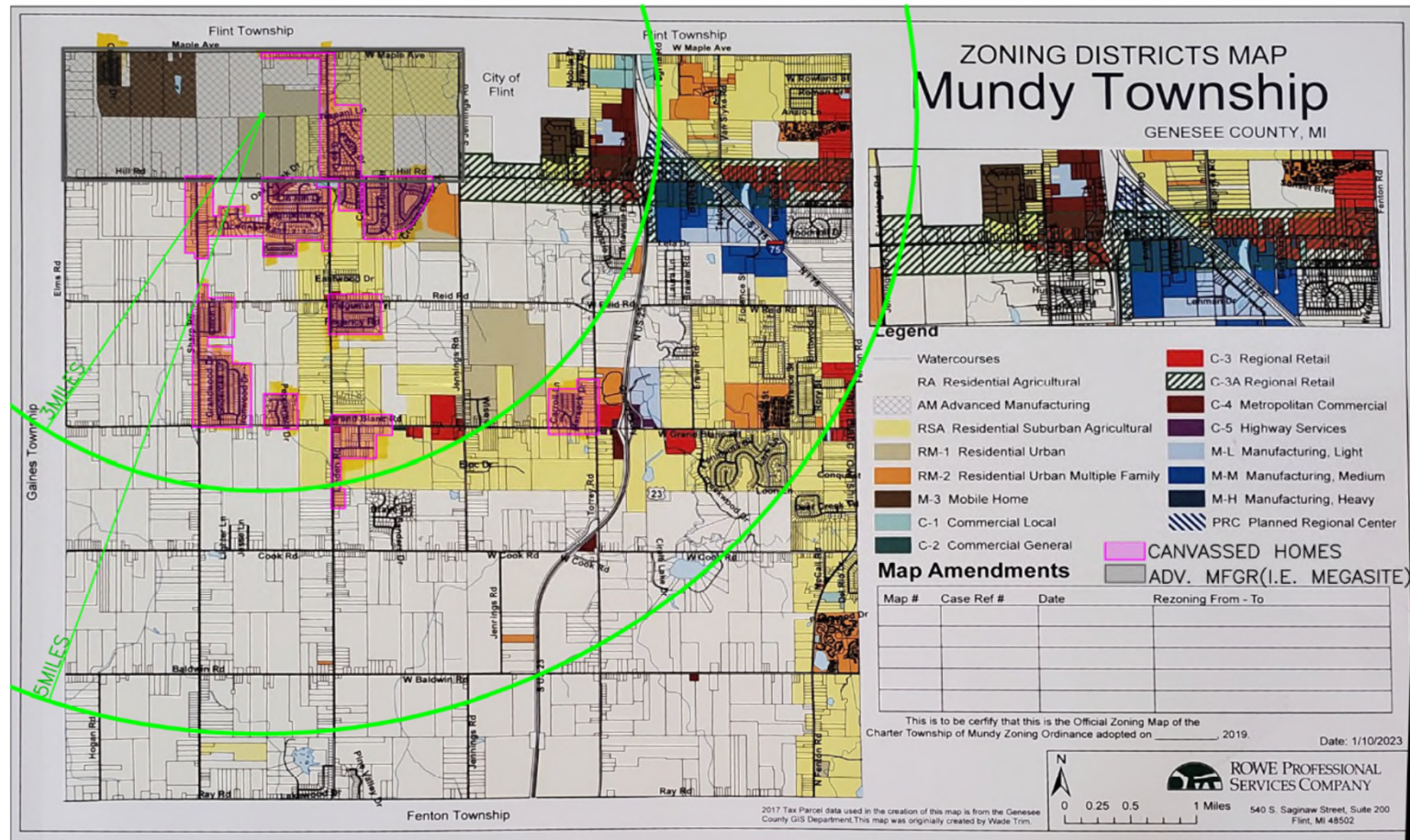
## ➤ LOCATION

### •Affected property

- 9 subdivision within ½ mile
- 2 subdivisions within site
- 4 Manufactured Home Communities (Maple & Elms)
- Swartz Creek Elementary
- 2 Child Day Care Centers
  - (1 within site)

### •Concerned Citizens

- Canvassing since August 2023
- Over 1200 Signatures



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### 3. ADVANCED MANUFACTURING

#### ➤ ADVERSE HEALTH AFFECTS

#### CANCER AND RESPIRATORY HEALTH

- Exposure during wafer manufacturing, fabrication and packaging/testing presents most significant incidents. (1)
- Organic solvents, acids, and metals are irritants to skin or respiratory organs. (1)
- Other materials are carcinogens or reproductive toxins and or neurotoxins. (1)
- Water contamination in groundwater

1. Kim MH, Kim H, Paek D. The health impacts of semiconductor production: an epidemiologic review. Int J Occup Environ Health. 2014 Apr-Jun;20(2):95-114. doi: 10.1179/2049396713Y.0000000050. Epub 2013 Dec 19. PMID: 24999845; PMCID: PMC4090871

### 3. ADVANCED MANUFACTURING

#### ➤ ADVERSE HEALTH AFFECTS

#### REPRODUCTIVE HEALTH

- The Semiconductor Health Study by the Semiconductor Industry Association (SIA) is the largest reproductive health study in the industry & included 14 US companies. (1)
- Elevated risks for Spontaneous miscarriages, irregular menstrual cycles, fertility problems. (1)
- Children born to female workers found an elevated risk for cancer. (1)
- Children born to male workers found more than a casual relationship of infanticide due to congenital malformation especially heart defects. (1)

1. Kim MH, Kim H, Paek D. The health impacts of semiconductor production: an epidemiologic review. Int J Occup Environ Health. 2014 Apr-Jun;20(2):95-114. doi: 10.1179/2049396713Y.0000000050. Epub 2013 Dec 19. PMID: 24999845; PMCID: PMC4090871



### 3. ADVANCED MANUFACTURING

#### ➤ ECONOMIC AFFECTS

- PFAS use is monitored, but new, minerals with little safety data are being added to the manufacturers' needs for semi-conductor production: Gallium and Germanium. (1)
- The U.S. has deposits of gallium but imports 100% Germanium (1)
- Semiconductors are a top U.S. export. Over 80% of U.S. companies' sales are to overseas customers. The US exported \$61.1 billion in 2022 and maintains a consistent trade surplus in semiconductors, with major trading partners such as China.(2)
- China has transitioned to military power instead of economic priority (3)
- Increasing trade tensions between China and the US and Europe could crush US exports slowing or eliminating the need for production from newly constructed plants. (3)

1. The U.S. Wants More Chips, Less PFAS. Can It Have Both? (Verisk Analytics, September 14, 2023)

2. <https://www.semiconductors.org/wp-content/uploads/2023/04/SIA-Industry-Factsheet-2023.pdf>

3. It's official: The era of China's global dominance is over (Business Insider, October 15, 2023)

## 4. CONCLUSIONS

### ➤ KNOWN INFORMATION

- Our group of concerned citizens has canvassed the homes and received signatures from Mundy Township as well as surrounding areas.
- *Citizens are concerned about the changing landscape, unknown health hazards as well as over inflated projections of job and economic prosperity.*
- *The resources made available to the public by the EPA, as well as significant institutions such as the Semiconductor Industry Association (SIA) substantiate our request for caution.*

### ➤ BOARD ACTIONS

- *We are requesting the Mundy Township Board, take action at the next meeting and vote in favor of a one year moratorium on accepting any proposed development for the Advanced Manufacturing Overlay District (MEGA-SITE) as presented in the petition.*

**CITED RESOURCES:**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4090871/>

<https://www.epa.gov/pfas>

Region 5, April 2023 EPA presentation on YouTube:

[https://www.youtube.com/watch?v=2CU3\\_IfhQKY](https://www.youtube.com/watch?v=2CU3_IfhQKY)

<https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act>

<https://www.epa.gov/toxics-release-inventory-tri-program/what-toxics-release-inventory>

<http://core-usw.verisk.com/Insights/Emerging-Issues/Articles/2023/September/Week-3/Semiconductors-and-PFAS-Risk>

<https://www.businessinsider.com/china-xi-jinping-economy-real-estate-debt-bust-american-companies-2023-10>

<https://www.semiconductors.org/wp-content/uploads/2023/04/SIA-Industry-Factsheet-2023.pdf>

**ADDITIONAL INFORMATION:**

Next GCCCW (Genesee County Coalition for Clean Water) Community Meeting at 5pm

Sunday October 29, 2023

ST BARTHOLOMEW ANGLICAN CHURCH

9252 MILLER ROAD. SWARTZ CREEK

[www.megasiteinfo.com](http://www.megasiteinfo.com)