

PFAS Contamination Marinette, Peshtigo, and Surrounding Communities

Listening Session 7

April 15, 2020



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What to Expect from this Listening Session

- Safer-at-Home
- New Challenges – all DNR staff are working from home
- First remote meeting – we are learning, too
- This meeting format is new to us



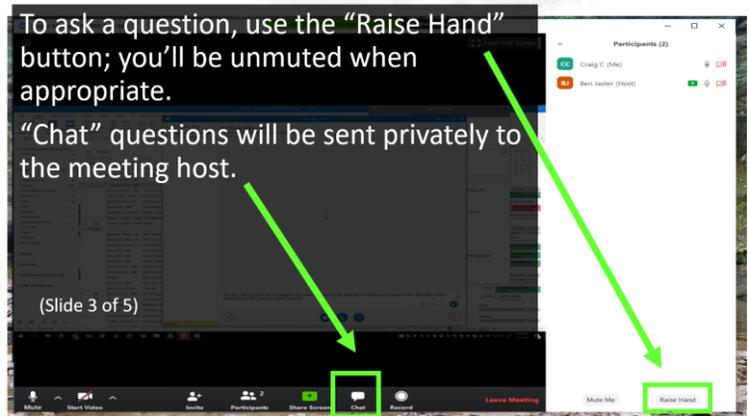
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What to Expect from this Listening Session

'Zoom' Technology

- All attendees are automatically muted when they join the call
- If you are joining by web:
 - **During the presentation** – use 'chat' feature to type questions
 - **After presentation** – use the 'chat' feature or 'raise hand' feature to request to be unmuted to ask a call
- If you are joining by phone:
 - Write questions down and contact us later (next slide)

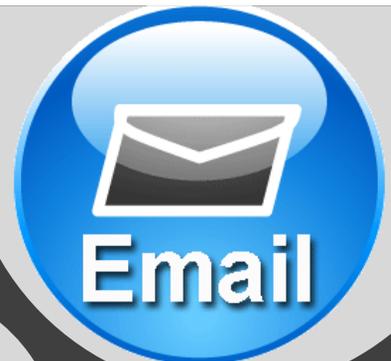


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What is a Listening Session?

Ongoing and open communication regarding the details of the PFAS contamination in these communities

- **7th in a series of sessions**
 - Next meeting in May, then every other month after that
- **First 'remote' meeting**
 - Other options for contacting DNR
 - Call (888-626-3244) or
 - email DNRJCIPFAS@wisconsin.gov
- **Also – check out website and FAQs**
<https://dnr.wi.gov/topic/Contaminants/Marinette.html>



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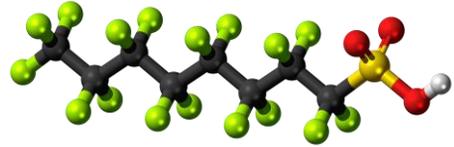
Welcome and Agenda

Presentation:

- DNR and Safer-at-Home Order
- Overview: PFAS Chemicals
- Overview: Addressing PFAS Contamination
- Update on Site Investigations
- Upcoming Important Dates

Listening Session:

- Question + Answer Session



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COVID-19

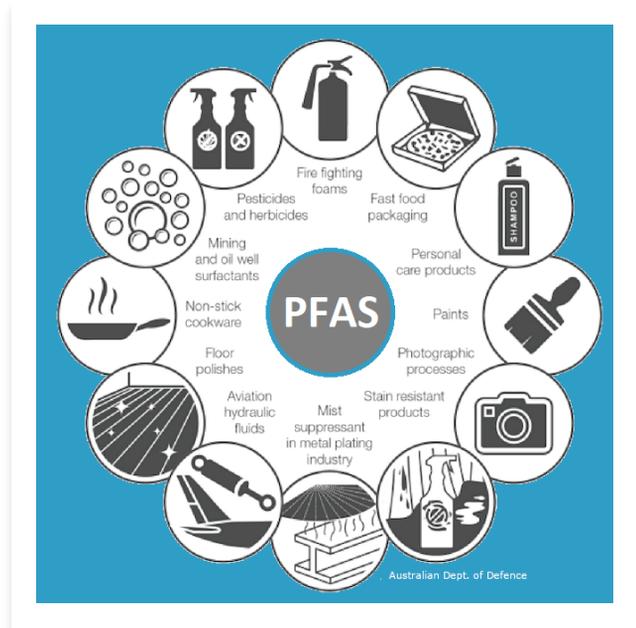
- Responsible parties must maintain compliance with laws
- Department-wide process for requesting variance of regulatory deadlines

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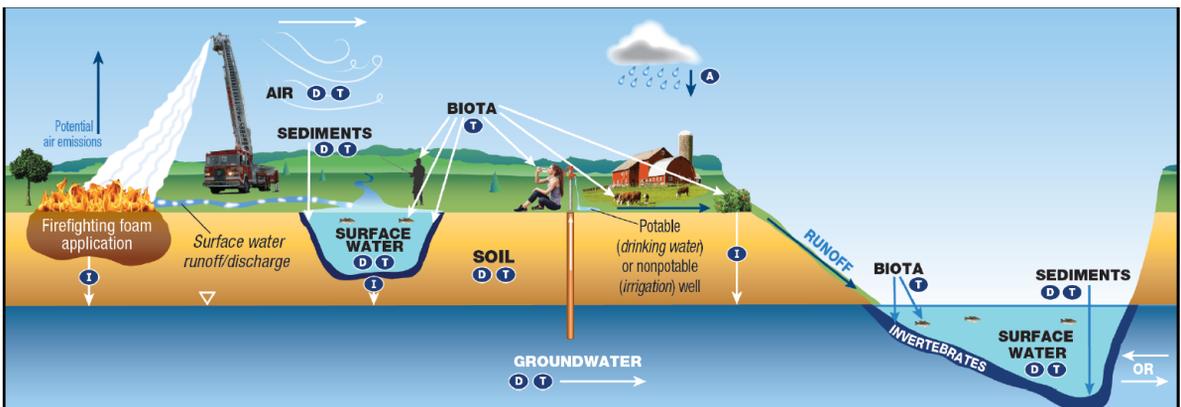
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What are PFAS?

per- and polyfluoroalkyl substances (PFAS)



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KEY A Atmospheric Deposition D Diffusion/Dispersion/Advection I Infiltration T Transformation of precursors (abiotic/biotic)

PFAS in The Environment

- Groundwater
- Stormwater runoff
- Surface water
- Air
- Biosolids
- Others (construction and waste)

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High levels of PFAS may



Increase
cholesterol



Reduce
antibody
response



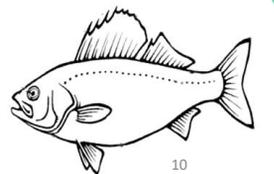
Decrease
fertility in
women

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Major Exposure Pathways to PFAS

- Drinking contaminated water.
- Eating fish caught from contaminated water (PFOS, in particular).
- Accidentally swallowing contaminated soil or dust.
- Eating food that was packaged in material that contains PFAS.



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Interrupting PFAS exposure will reduce PFAS levels in our body.

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If your private well water has combined PFOA and PFOS above 20 ng/L*

- Use an alternative water source for drinking, cooking, or preparing infant formula.
- You can use water for showering, bathing, and washing hands.
 - PFAS do not easily enter the body through skin



* DHS's recommended groundwater standard for PFOA and PFOS

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During Recreational Activities in Waterways (creeks, ponds, and rivers):

- Do not drink water or swallow foam.
- Do not allow pets to drink water or swallow foam.
- After touching water, wash hands, pets, or other items to avoid accidentally swallowing PFAS.
- Follow DNR fish consumption advisories:
 - <https://dnr.wi.gov/FCSEExternalAdvQry/FishAdvisorySrch.aspx>

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DHS' Work

- Evaluating literature to determine safe levels in water
- Identify exposure pathways at specific sites
- Make recommendations to prevent or reduce exposure
- Educate affected communities and local health professionals about site contamination and potential health effects






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DHS' Updates

- Public Health Assessment - Open House
- PFAS Information Session for Clinicians
- Send health-related questions to: DHSEnvHealth@dhs.wisconsin.gov
- Health-related PFAS information: www.dhs.Wisconsin.gov/chemicals/pfas.htm



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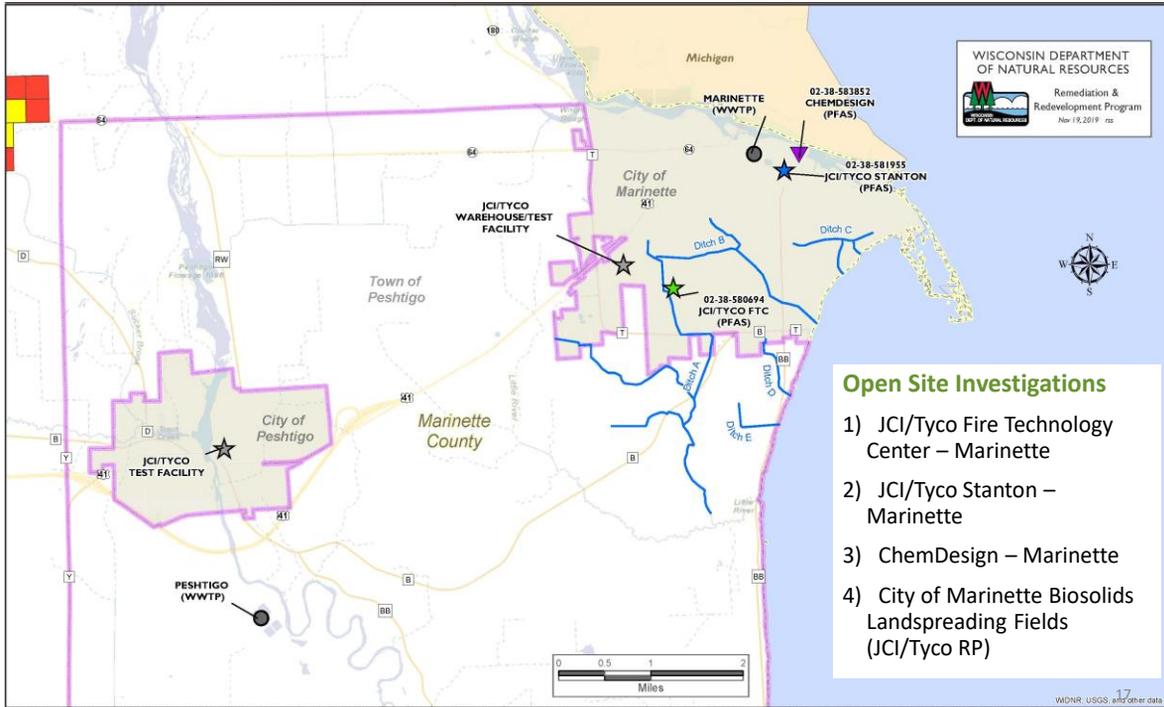
PFAS in Marinette, Peshtigo, & Surrounding Communities – What is a Site Investigation?

- Responsible parties must follow the process laid out in state law
- Each Case is at a different stage in their investigation (x 4 cases)
- Iterative Process



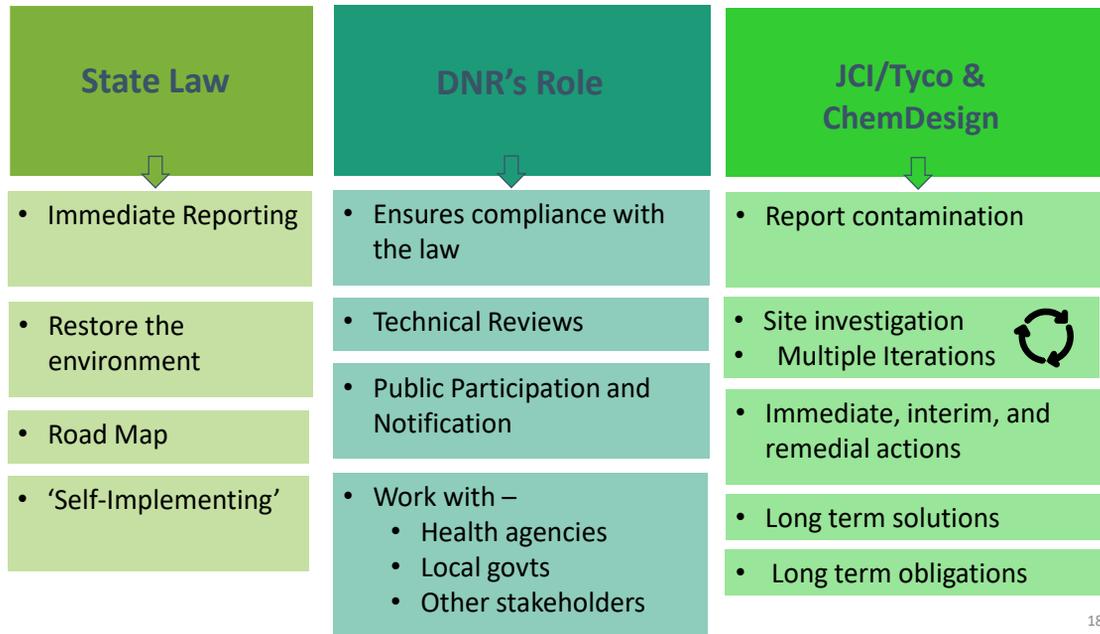
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Roles and Responsibilities



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- 1) Biosolids Landspreading Fields (City of Marinette)
- 2) JCI/Tyco Fire Technology Center (FTC)

Site Investigation Updates

BRRTs On The Web (BOTW)

Basic Search
Advanced Search

[HELP](#)

BRRTs data comes from various sources, both internal and external to DNR. There may be omissions and errors in the data and delays in updating new information. Please see the [disclaimers page](#) for more information. We welcome your [Feedback](#).

<https://dnr.wi.gov/botw/SetUpBasicSearchForm.do>

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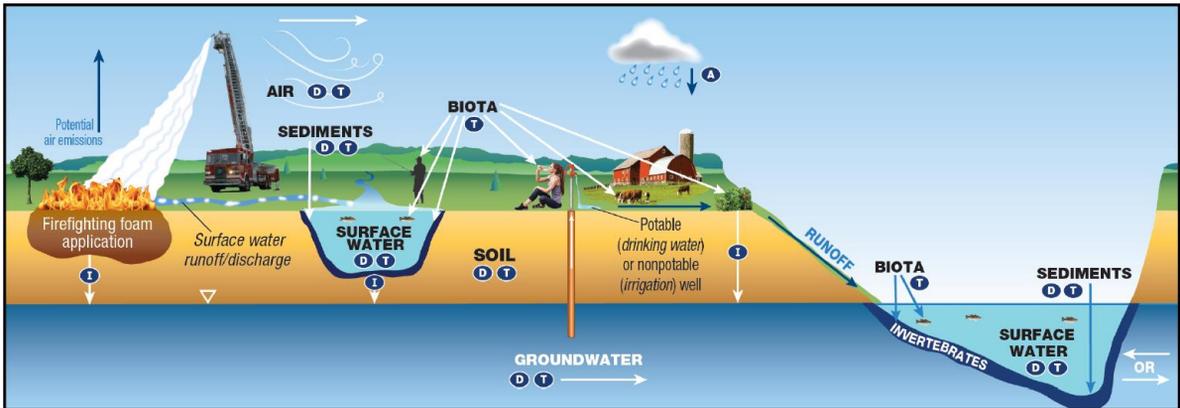
Biosolids Landspreading Fields

- What are biosolids?
- Why were they landspread?
- How is JCI the responsible party?
- How much of the investigation has been conducted to date?
- What's next?



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Sources of PFAS to the Environment: Fire Training Areas

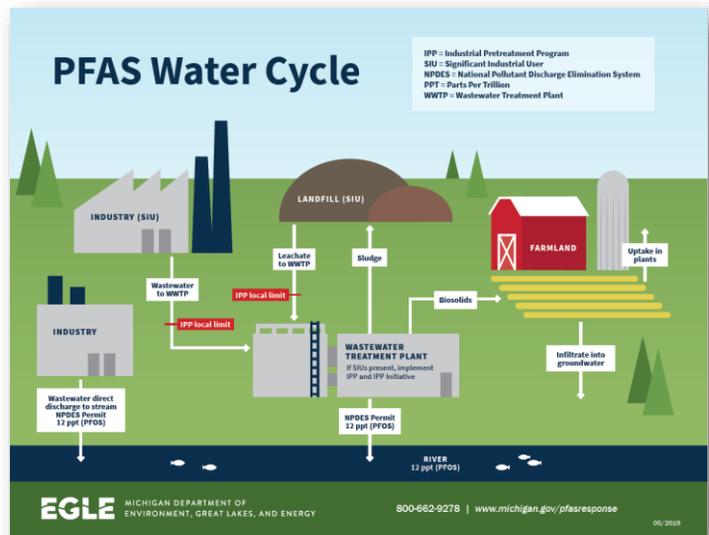
- Groundwater
- Stormwater runoff
- Surface water
- Air
- Biosolids
- Others (construction and waste)

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Fate and Transport

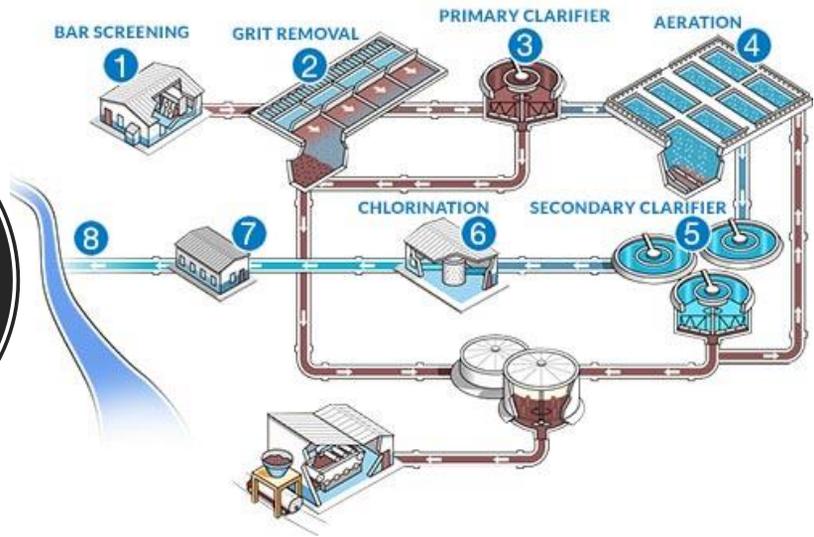
- Wastewater treatment plants are not sources of PFAS
- PFAS accumulate in sludge/biosolids during the treatment process
- Management of biosolids activity regulated by DNR



https://www.michigan.gov/documents/pfasresponse/PFAS_Water_Cycle_631266_7.pdf

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Wastewater Treatment Process



- General treatment process: blue = liquids, brown = solids
- PFAS is found in both liquids and solids

<https://www.coleparmer.com/tech-article/eight-stages-of-wastewater-treatment-process>

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Recycling water, nutrients & energy from homes & businesses...

Biosolids fertilize farms & turf, recycling nutrients, building soils, sequestering carbon.

Cleaned water replenishes natural systems.

Disposal Options

- Landfill
- Land application

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Biosolids in Marinette Area



Currently no PFAS concentration standards for land application of biosolids

- **Marinette**
 - Currently holding biosolids
 - JCI/Tyco no longer sends foam to sewer
- **Peshtigo**
 - Currently holding biosolids

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Biosolids Landspreading Fields – The Basics

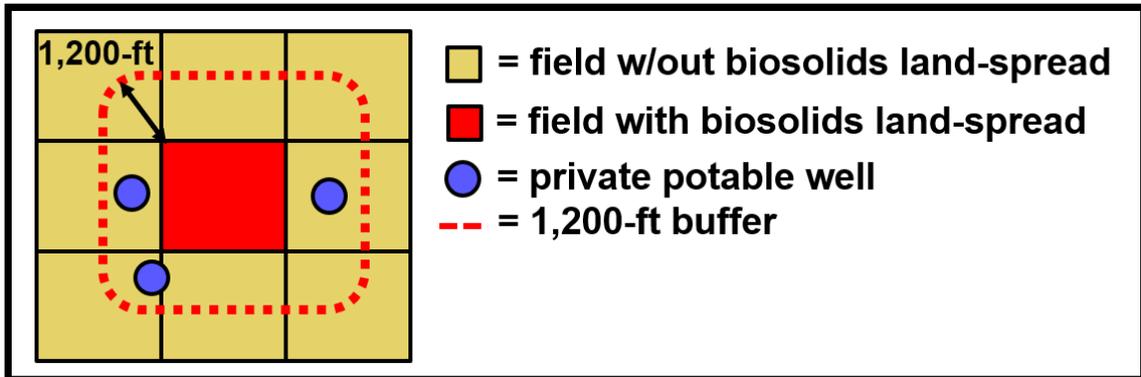
- Point of Clarity....
- Open site investigation is due to biosolids landspread on fields
- City of Marinette biosolids contained PFAS
- Initial focus on private well sampling
- Soil, groundwater, and surface water will be tested as part of this investigation



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Biosolids Land spreading Fields

- DNR determined JCI/Tyco to be responsible party in July 2019
- Site investigation initiated March 2020
- Private well sampling within 1,200-ft of 61 fields



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Biosolids Landspreading Fields – Private Well Sampling

- 577 total parcels within 1,200-ft buffer of fields
- 174 private drinking water wells confirmed
- Owners contacted for sampling
 - 170 yes
 - 4 declined
- 200+ parcels to be reviewed for wells



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Biosolids Landspreading Fields – Results to Date

- More data forthcoming
- Continue to provide updates as we receive information
- DNR directed JCI/Tyco to provide bottled water to anyone with sample results > 20ppt

How Do I Get Bottled Water?



If you have sample results > 20 ppt PFOS/PFOA, you may request bottled water from JCI/Tyco by:

Calling 1-800-314-1381

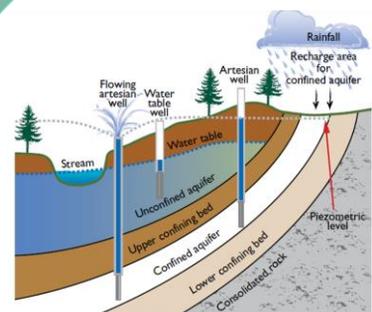
Email: James.comx@jci.com

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Biosolids Land spreading Fields – Next Steps

- JCI/Tyco will report additional sample results to DNR and well owners within 10-days of receipt
- DNR and JCI/Tyco will meet in May 2020 to discuss sample results
- JCI/Tyco must submit work plan for soil, groundwater, and surface water investigation of area surrounding fields



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Biosolids Land spreading Fields – Next Steps

- JCI/Tyco has suspended sampling due to COVID-19
- JCI/Tyco applied for ‘variance’ in regulatory timelines
- DNR has not approved variance – still under review
- Questions about private well sampling timeline – contact JCI/Tyco

tyco

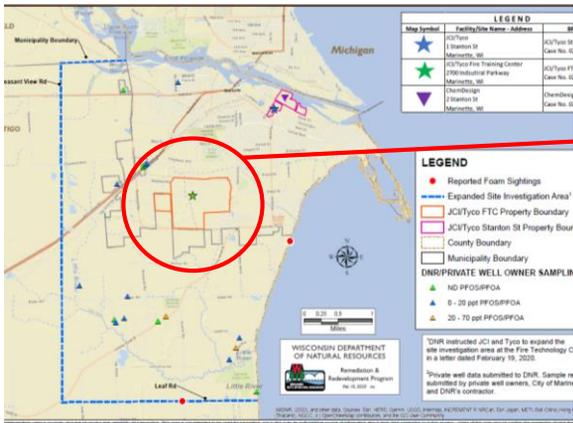
<https://tycomarinette.com>

Contact Us
 If you have any questions, please call our dedicated phone line at [715-582-7100](tel:715-582-7100) or send an email to Jim Cox at Tyco in Marinette: James.Cox@jci.com.

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JCI/Tyco Fire Technology Center (FTC), Marinette, WI

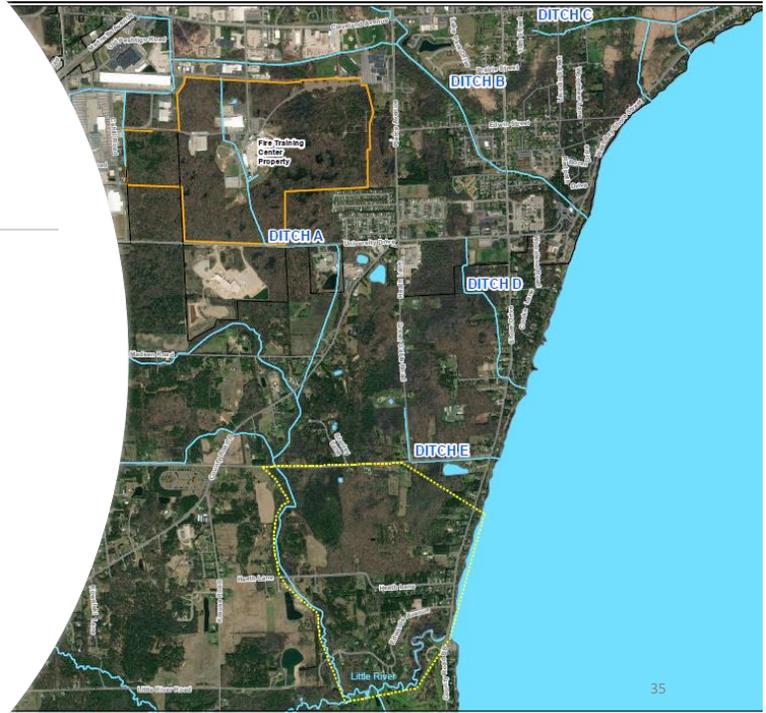


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JCI/Tyco Fire Technology Center

- JCI/Tyco submitted 'Southern Area' site investigation report – for sampling conducted in 2019 → *Heath Lane Report*
- Report discusses groundwater sampling in area identified by **yellow-dotted-line**
- Report only addresses groundwater transport of PFAS
- DNR directed JCI/Tyco to evaluate other pathways including surface water and air
- Report is under review by DNR with technical comments expected in May 2020



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JCI/Tyco Fire Technology Center

- JCI/Tyco reported to DNR that they are contacting well owners via telephone regarding quarterly sampling – may experience delays due to COVID-19
- JCI/Tyco applied for 'variance' in regulatory timelines
- DNR has not approved variance – still under review
- Questions about private well sampling timeline – contact JCI/Tyco

tyco

<https://tycomarinette.com>

Contact Us

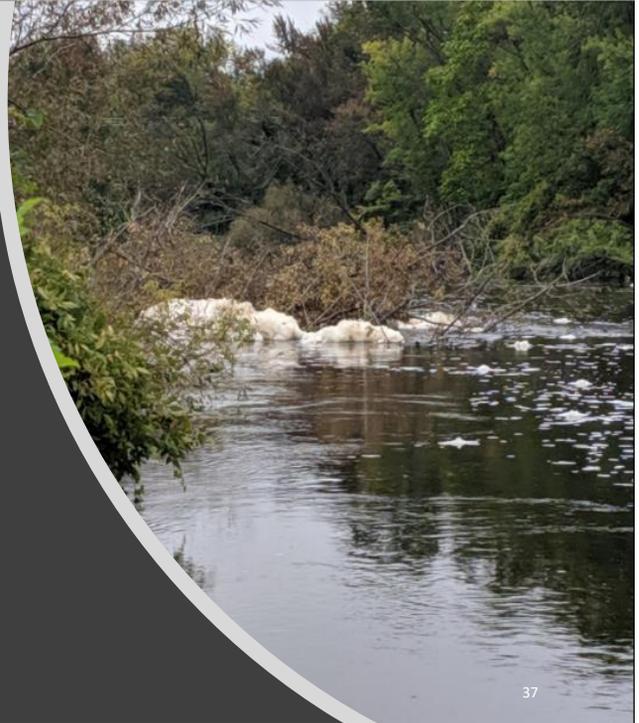
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Foam on Waterways

- Lots of reports of foam on waterways with heavier spring rains
- We're logging reports in database
- Tested foam in summer 2019 – >80,000ppt (PFOS + PFOA)
- All foam on waterways – natural or from human activities – is potentially dangerous to health when ingested



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Sampling Updates

- **DNR Deer Study**
 - 20 deer collected and sent to State Lab of Hygiene
 - Sample results likely summer 2020
- **JCI/Tyco Fish Sampling**
 - 3 private ponds where fish will be collected
 - Sampling to be conducted summer 2020
- **JCI/Tyco Bay of Green Bay Sampling**
 - Sampling to be conducted summer 2020



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Upcoming Important Dates

May

- DNR provides technical comments on FTC 'Southern Area' Investigation Report (Health Lane Area)
- May 20th – Next Listening Session

July

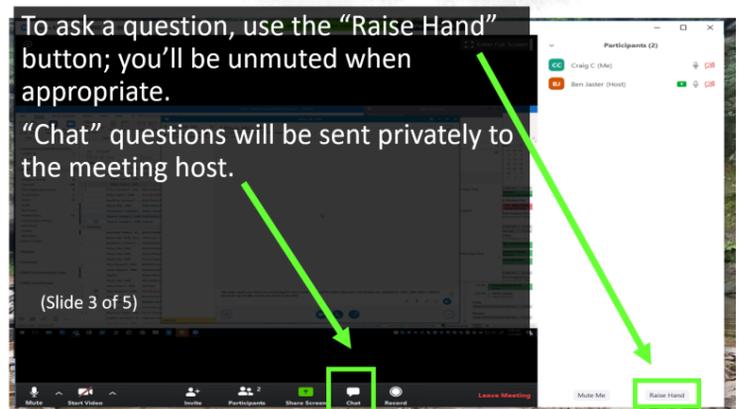
- July 15th – Next Listening Session



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Ground Rules – Listening Session

- Use the **'chat'** feature *or* **'raise hand'** feature to request to be unmuted to ask a call
- 3-mins per person → everyone has the opportunity to voice concerns
- Keep comments constructive
- Attack the problem not the person



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