PFAS in Drinking Water

Town of Stella Board Meeting
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PFAS are a family of human-made chemicals.

PFAS = per- and polyfluoroalkyl substances
PFAS are resistant to Water and Heat.
PFAS have been used in many products since the 1950s.
Firefighting foam
Firefighting foam  Non-stick cookware
Firefighting foam

Non-stick cookware

Food packaging
Firefighting foam
Non-stick cookware
Food packaging
Water-resistant materials
High levels of some PFAS can impact human health.
DNR and DHS are working to evaluate where PFAS is found in Wisconsin.
DNR project to sample statewide for PFAS in residences with private water supply wells:

- Goal to inform “ambient” PFAS occurrence in shallow groundwater
- State divided into 450 equal areas (124 square miles)
- Samples for PFAS testing collected summer/fall 2022
- Results to date show 3 samples above WI PFAS health guideline values
- Sample from Starks tested very high for PFAS
Starks area sampling

• PFOA in Starks sample from Statewide Project at 12,000 ppt
  • WI DHS health guidance value is 20 ppt

• DNR sampling of residences in Starks and close vicinity
  • 56 residents/occupants offered DNR sampling for PFAS
  • 31 of those offered DNR sampling accepted - all samples collected

• Results: 20 PFAS test results received to date:
  • 2 results no detection of PFAS
  • 3 results below WI PFAS health guidance values
  • 15 results above WI PFAS health guidance values
    • 9 results with PFAS above 1,500 ppt

• Starks area testing shows highest PFAS levels seen in WI private well sampling to date
Starks area geology

• approximately 40’-50’ glacially deposited sand, gravel, clay, and silt
• “granite” bedrock below glacial deposits

Starks area groundwater

• water table at about 15’-25’ below ground surface
• regional groundwater flow estimated to be to the southwest

Starks area well construction

• many wells constructed “shallow”, in glacial deposits
• some wells constructed “deeper”, into granite bedrock
PFAS samples collected in Starks and close vicinity
Current PFAS “expanded” sample collection area around Starks
Well Compensation Grants

- Income limit of $100,000
- Up to $16,000 per grant
- Must get grant approval before work is done or equipment purchased
- More information is needed before we can recommend new well construction
- Search for ‘Well Compensation’ at dnr.wi.gov
Well Compensation Grants

• Save receipts for well sampling and bottled water
  • May be reimbursed if eligible for a grant
• PFAS treatment equipment is eligible and should be NSF/ANSI certified
• Treatment may not remove contaminants below advisory levels
• Multi-stage treatment filters using granular activated carbon are effective
• The higher the concentration of PFAS, the more often the media will need to be replaced
Where is the contamination?  
Who/what is at risk?

Contamination Discovered  
Investigation  
Remedy  
Closure

Immediate Action  
Interim Actions  
Ex.: Bottled Water  
Soil Excavation  
Deep Wells

✓ Goals met  
✓ Contamination stable  
✓ Risks mitigated

Conceptual drawing for illustration purposes only.
You can take action to reduce you and your family’s PFAS exposure.
1. If you have been contacted by DNR about testing your well and have not yet done so, connect with them about sampling.
Action Steps

2. If you have not been contacted by DNR but are concerned, consider testing your well for PFAS and using an alternative source of water for drinking, preparing beverages, and certain foods until results are available.
3. If your well has been tested and PFAS levels are above DHS’ health thresholds, use an alternative source of water for drinking, preparing beverages, and foods that take up a lot of water.
Alternative water sources:

Bottled water that has been filtered or purified
Alternative water sources:

- Bottled water that has been filtered or purified
- Water from a source that has been tested for PFAS and levels are low
Alternative water sources:

- Bottled water that has been filtered or purified
- Water from a source that has been tested for PFAS and levels are low
- Water from certified treatment device if PFOA & PFOS are less than 1500 ng/L
In summary,

PFAS are a group of human-made chemicals that can affect health.

We have found elevated levels of PFAS in some private wells in the Stella area.

You can take steps to reduce your exposure to PFAS.
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