



# The Local Government Perspective on PFAS

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# PFAS Overview – Plan for the Day

- Discuss Municipal Examples and Costs – Toni Herkert, League of Wisconsin Municipalities
- Monitoring in WPDES Permits – Vanessa Wishart, MEG-Wastewater
- Rural Water Cost & Testing- Chris Groh, Wisconsin Rural Water Association

## PFAS Water Treatment Costs – Eau Claire

- Accrued expenses: \$1,506,952
  - Includes Laboratory testing, contractual services, chemical increase, pilot testing and plant modifications.
- Contract for treatment Design: \$ 767,500
  - Cost for design and engineering of the PFAS treatment facility
- Project cost estimation: \$24,000,000
  - Estimated construction cost for PFAS removal facility

## PFAS Costs/Issues Marinette

- First concern drinking water safety - Marinette draws its freshwater from the Bay of Green Bay thru a water inlet in the bay. Significant testing was done at water intake pipe, water plant, and post discharge to the public to make sure our drinking water was safe.
- Each test costing between \$400-\$1000 were done multiple times, at all points and several times throughout the year.

## PFAS Costs/Issues Marinette

- Road projects and development projects are now faced with additional testing prior to the project start. DNR has requested advance testing as well as testing during dewatering as part of discharge permits.
- Requires the City to do further testing (request reimbursement from RP) However, the RP does not own all contamination of dewatering activities in the whole City.
- Since Marinette has a known issue, DNR is asking for testing in all areas of the City if PFAS numbers are not available prior to a project start.

# PFAS Costs/Issues Wausau

## REMAINING DEBT

The Wausau Water Works Commission and Wausau City Council approved a plan to build a new drinking water treatment and since 2020 borrowed \$44M in Wisconsin DNR Safe Drinking Water Fund loans to build it. Starting in 2023, the utility must start paying that debt back at about \$2.9M a year. Including the interest that ends up being about \$52.5M total over the life of the loan.



# PFAS Costs/Issues Wausau



## PERMANENT PFAS REMOVAL

Granular Activated Carbon (GAC) filtration systems reliably remove a variety of elements and compounds from water, including PFAS. Municipal GAC systems for cities the size of Wausau generally cost between \$15M - \$20M.

## PFAS Costs/Issues Wausau

- Recently the Wausau Water Works Commission met to discuss the rates required to pay for upgrades to the brand-new drinking water facility in addition to continuing to pay for the debt on the new facility.
- While commissioners, council members, and the public were anticipating another 27.5% increase after 27.5% in rate increases already went into effect since 2020, Wausau Water Works is now looking at another 64.5% increase.



# Municipal PFAS Costs/Issues

According to information from the annual Intent to Apply period for the State Revolving Loan Fund programs, which closed at the end of October:

- **14 municipalities** submitted for requests for PFAS, PFOA, or emerging contaminants.
- **More than 500** submissions to the Safe Drinking Water Loan Program – including **30+ projects for PFAS/emerging contaminants** (across those initial 14 municipalities), in addition to lead service line replacements and traditional drinking water projects.
- There are more than **600 submissions to the Clean Water Fund Program** –including things like wastewater, stormwater, and non-point projects.

# PFOS and PFOA Monitoring in WPDES Permits

## Thresholds for PFOS and PFOA

- New DNR surface water quality rules establish surface water thresholds of public health significance of 8ppt for PFOS and 20ppt or 95ppt for PFOA
- As WPDES permits are being reissued, they include monitoring requirements for PFOS and PFOA
- Most POTWs are discharging wastewater below those thresholds

# PFOS and PFOA Monitoring in WPDES Permits

## Pollutant Minimization Plans

- If monitoring results show effluent has a reasonable potential to exceed the thresholds, a POTW may be required to implement a pollutant minimization plan (PMP)
- If a PMP is required, the POTW has up to 85 months (7 years) to implement that PMP
- If the PMP is not successful, the permittee may be issued limits, at which point the permittee could apply for a variance

# PFOS and PFOA Monitoring in WPDES Permits

## Monitoring Requirements and Effluent Limitations

Parameter	Limit Type	Limits and Units	Sample Frequency	Sample Type	Notes
PFOS		ng/L	1/2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.
PFOA		ng/L	1/2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.

# PFOS and PFOA Monitoring in WPDES Permits

## POTW Costs

- Monitoring requirements will likely cost POTWs thousands of additional dollars over a permit term relating to costs for sampling and analysis
- For those POTWs that must implement a PMP, the costs will be significantly higher, likely in the many tens of thousands of dollars
- Treatment, however, would be in the tens of millions of dollars and is not feasible at this time

# Impact for Rural Water Systems

- Cost of compliance for rural municipalities and sanitary districts
  - Actual costs shown are beyond rural municipal budgets
  - There is no budget for additional low-level compliances
- Treatments do not guarantee compliance with sub ppt level concentrations
  - How low is low enough?
  - Limits on how low treatments can go
  - What's next?

# Drinking Water Testing & What's Next

The initial testing schedule for systems based on their population served is shown below:

<b>POPULATION</b>	<b>INITIAL MONITORING PERIOD</b>
<b>Population &gt; 50,000</b>	October – December 2022
<b>Population = 10,000 – 49,999</b>	January – March 2023
<b>Population = 300 – 9,999</b>	April – June 2023
<b>Population &gt; 50 – 299</b>	July – September 2023