ACWA 2023 Mid Year Meeting

Wisconsin PFAS Surface Water Quality Criteria Rule Implementation

Adrian Stocks Wisconsin DNR Water Quality Bureau Director 3/15/2023



Water Quality Standards rule

• Define existing narrative standards with numeric public health significance thresholds for PFOS, PFOA (NR 102, 105)

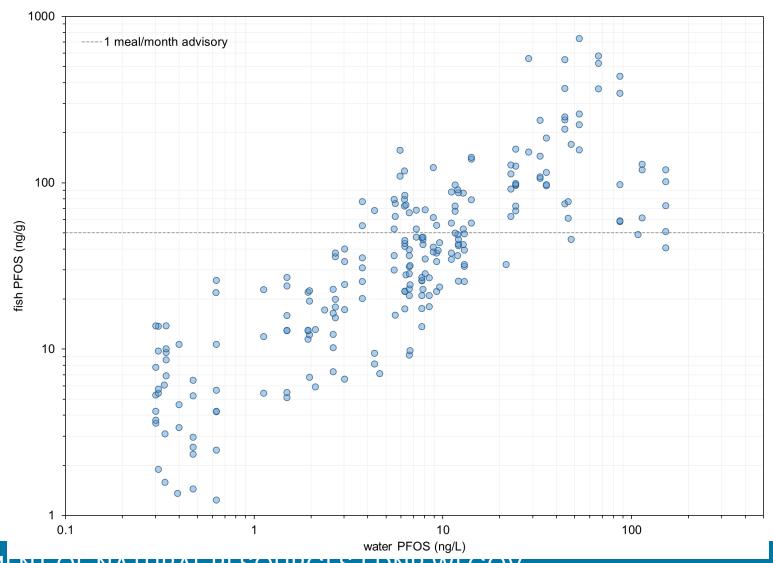
• Establish WPDES permit requirements for wastewater discharges of PFOS, PFOA to surface waters of the state (NR 106)

 Add specifications for preservation, holding time of samples to be analyzed for PFAS (NR 219)

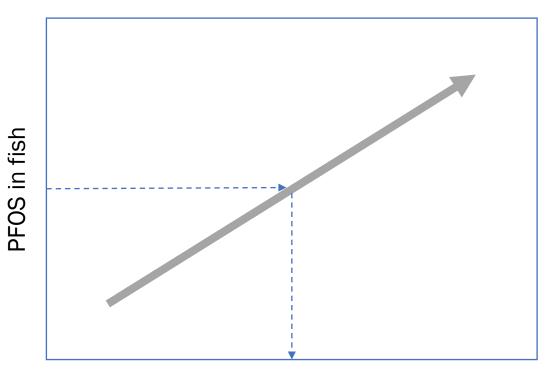
PFOS Water Quality Standard

PFOS = 8 ng/L

Prevents issuance of 1 meal/month fish consumption advisory



- PFOS proposed threshold = 8 ng/L
 (ppt)
- Protect people's exposure through fish consumption



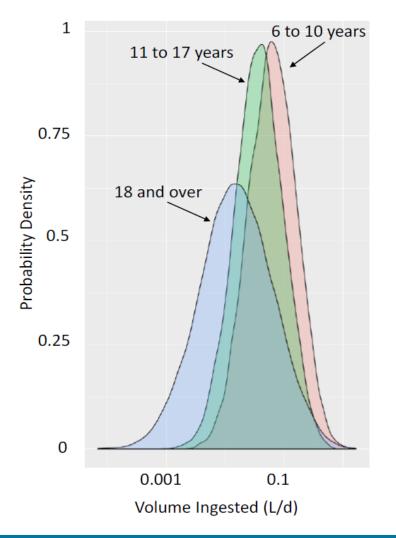
PFOS in water

DNR chose a level of PFOS in fish tissue, and set standard at the corresponding PFOS water level- (1 meal/month)

PFOA Water Quality Standard

PFOA = 20 ng/L in drinking water sources Protects against daily ingestion

> **95 ng/L in all other waters** Protects against incidental ingestion by children during recreation



Rulemaking Process and Timeline

Rule Submitted to EPA on Aug 15th, 2022

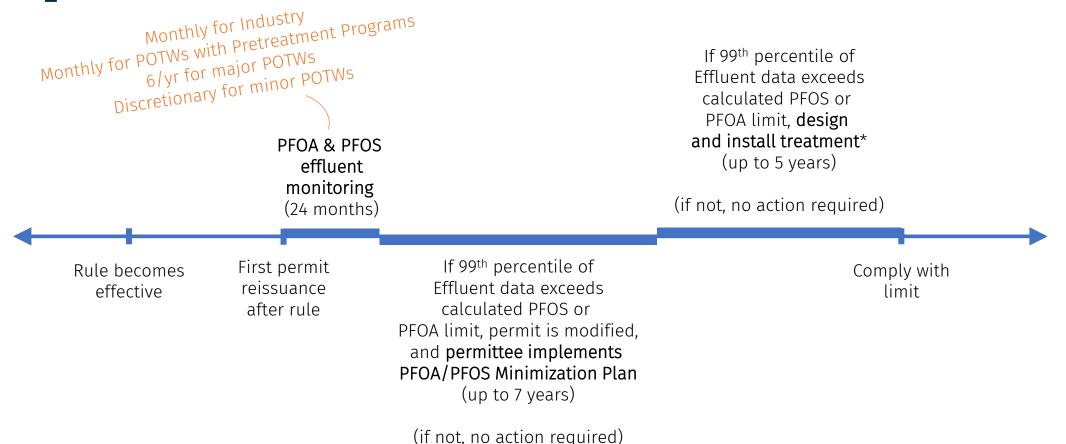
Rule approval on Feb 03rd, 2023

Found that sound science was used and is protective....

Implementation focuses on source reduction

- 2 years of monitoring to determine need for limit
- 7 years of source reduction
- Experience shows this to be effective approach for difficult pollutants (e.g. Mercury)

Implementation Process



PFOA/PFOS Minimization Plans



• Permittee drafts PMP and DNR reviews

- Implement PMP within 12 months of approval
- PMP shall include:
 - Documentation of previous PFAS-reduction activities
 - Proposed PFAS-reduction activities
 - Documentation/assessment framework

We are proposing several areas of focus for CWSRF Emerging Contaminant funding.

- <u>Pollutant Minimization Plan (PMP)</u> development and/or implementation and/or source identification that addresses PFAS in publicly owned treatment works' (POTW) effluents, including consultant costs and plan development, <u>implementation</u>, and sampling costs.
- <u>Landfill Leachate treatment</u> to remove PFAS at publicly owned landfills prior to discharge to a sanitary sewer or waters of the state.
- <u>Treatment to remove PFAS from groundwater</u> dewatering discharges associated with publicly owned projects. Examples include:
 - Water main, sanitary sewer, or storm sewer construction necessitating groundwater dewatering in areas with contaminated groundwater that has reasonable potential to exceed Wisconsin's water quality standards for PFOS or PFOA
 - Building construction necessitating groundwater dewatering in areas with contaminated groundwater that has reasonable potential to exceed Wisconsin's water quality standards for PFOS or PFOA
- <u>Treatment of pore water from dredging projects</u> with reasonable potential to exceed Wisconsin's water quality standards for PFOS or PFOA
 - Costs associated with elective dredging projects such as private marina construction are not eligible.
- <u>Biosolids sampling, storage, and/or disposal expenses incurred by facilities seeking to investigate or address PFAS in biosolids</u> in accordance with Wisconsin's <u>Interim Strategy for Land Application of Biosolids Containing PFAS</u>
 - Such projects shall only be eligible for funding under the CWF EC program where a privately-owned responsible party able to pay does not exist or has not yet been identified. In cases where a responsible party is later identified, the state may seek to recoup funds.
- <u>Public sanitary or storm sewer reconstruction</u> or lining projects to reduce inflow and infiltration of groundwater or stormwater contaminated with PFAS

QUESTIONS DNR.WI.GOV WISCONSIN DEPT. OF NATURAL RESOURCES

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POTW Takeaways

- Only 3/77 POTWs sampled sampled had PFOS concentrations exceeding proposed standard
- Only 2/77 POTWs exceeded proposed PFOA standard in their waterbody
- After correcting actual results to expected 99th percentile values,
 - ~3.6% of POTWs are expected to need to implement PMPs (23/639)
 - ~0% of POTWs without SIUs (0/521)
 - ~18% of POTWs with SIUs (17/92)
 - ~23% of POTWs with authorized pretreatment programs (Q>5 MGD) (6/26)

Pulp/Paper Takeaways

- Only 2/20 mills sampled sampled had PFOS concentrations exceeding proposed standard
- 0/20 mills exceeded proposed PFOA standard in their waterbody
 - 2 have PWS downstream
- After correcting actual results to expected 99th percentile values,
 - ~15% of direct discharging mills are expected to need to implement PMPs
- 9 mills discharge to sanitary sewers for POTWs that are expected to need to implement PMPs