

Current Regulatory Status

PFAS in Wastewater in Wisconsin

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Topics

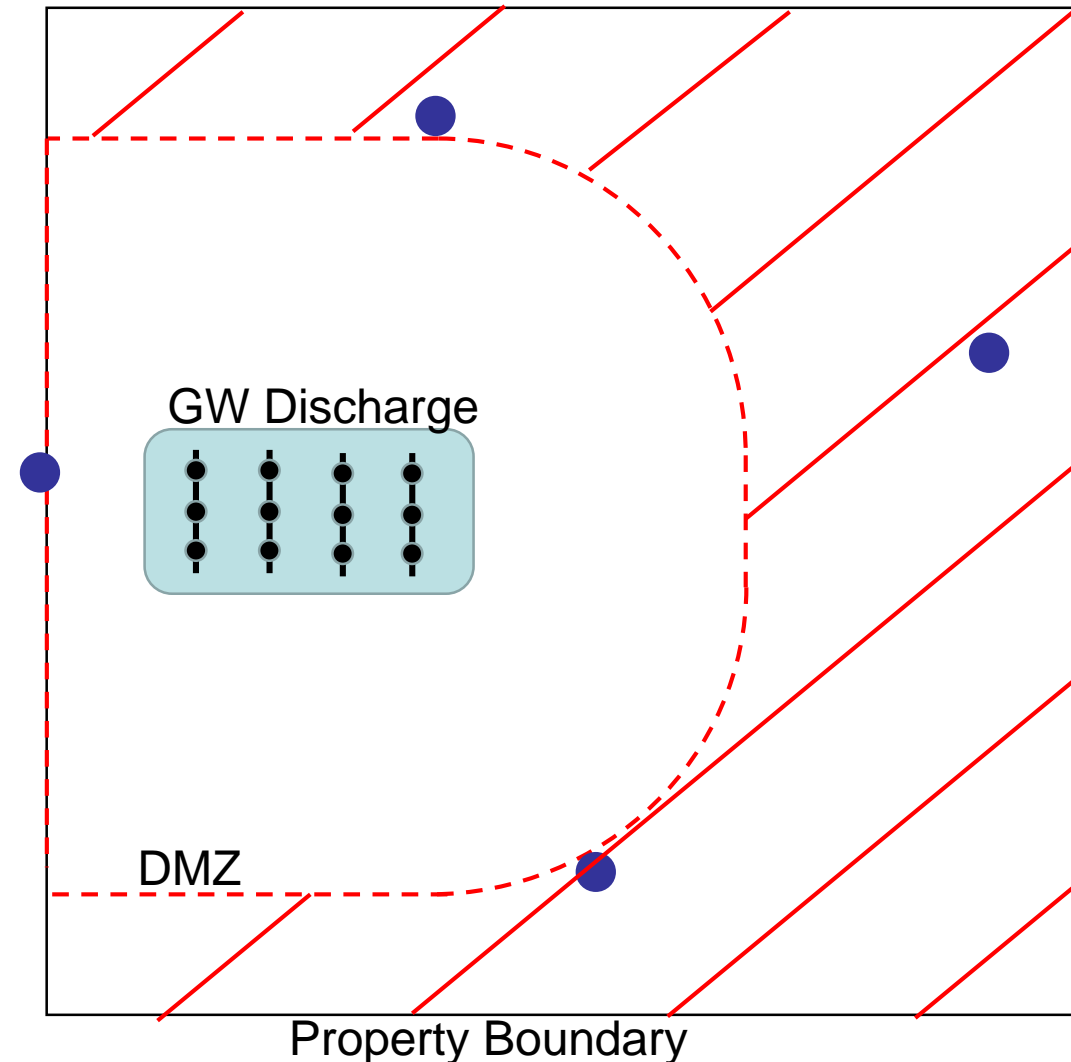
- Types of Standards
 - Groundwater Standards
 - Water Quality Standards (Surface)
 - Biosolids
- Examples of PFAS treatment in WI
 - Husky Refinery
 - Tyco Ditch A & B
 - Dewatering Discharges
- Draft Legislation





Groundwater Standards

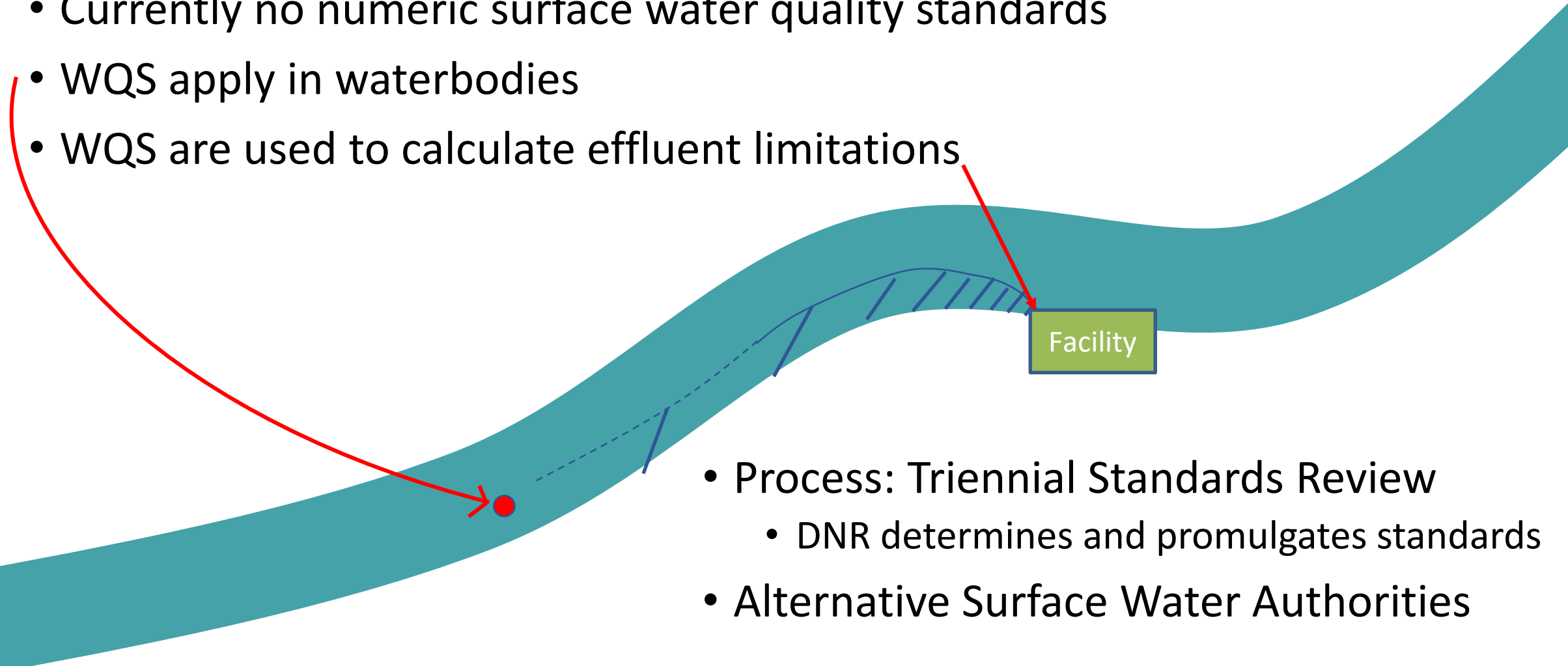
- Currently no numeric standards
- Types of Groundwater Standards
 - Enforcement Standards
 - Preventative Action Limit
 - (Different than MCLs)
- Would apply outside DMZ
- Process:
 - DHS recommends standards
 - DNR (Drinking/Groundwater Program) adopts via rulemaking in ch. NR 140, Wis. Adm. Code





Surface Water Quality Standards

- Currently no numeric surface water quality standards
- WQS apply in waterbodies
- WQS are used to calculate effluent limitations



- Process: Triennial Standards Review
 - DNR determines and promulgates standards
- Alternative Surface Water Authorities

Biosolids



- Currently no ceiling concentrations, cumulative lifetime loading limits, or annual pollutant loading limits for PFAS compounds



- Marinette
 - 210 ppb
 - Currently holding biosolids



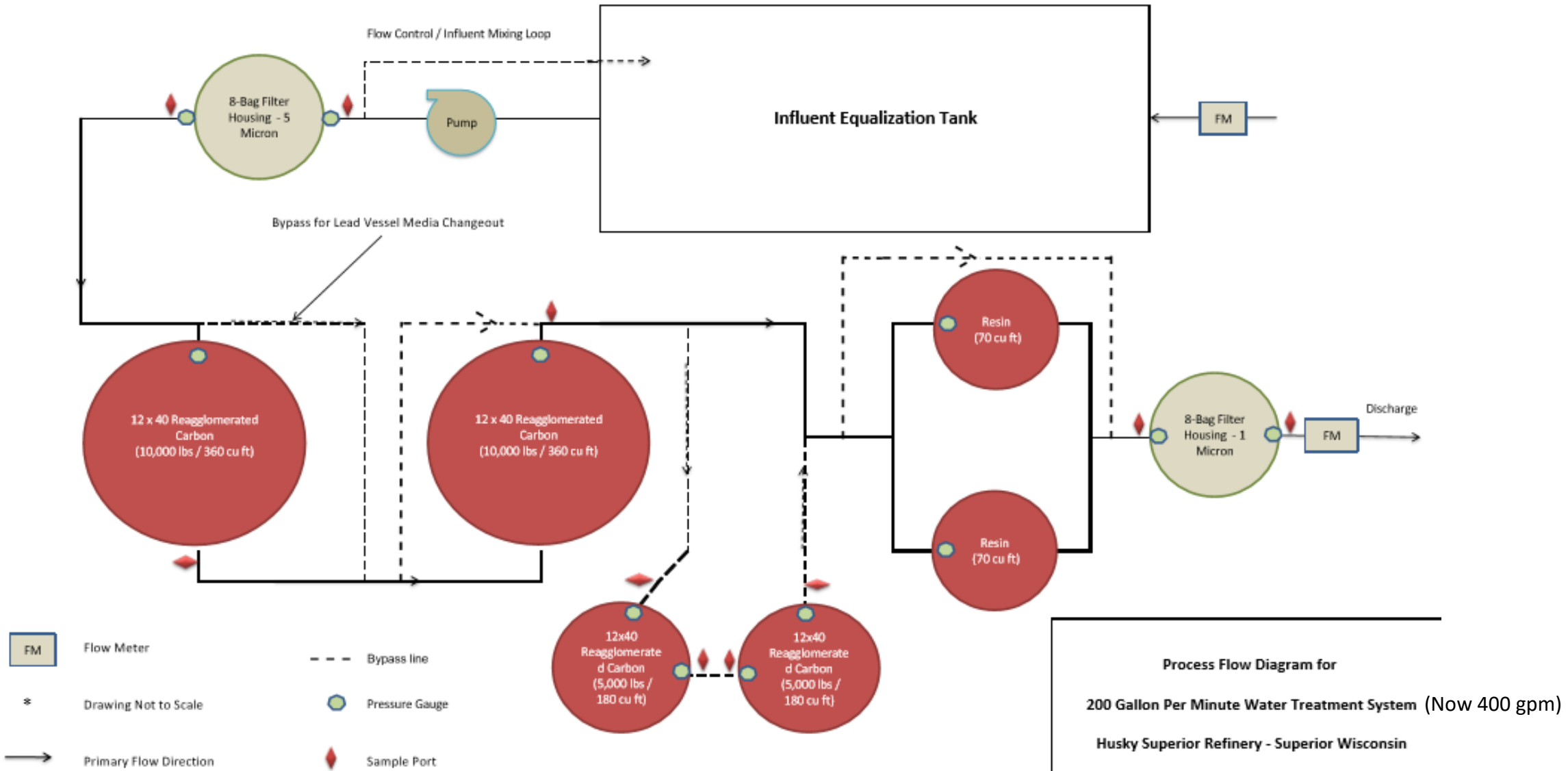
Permitting Examples: Husky Refinery

- Explosion in spring of 2018
 - Firefighting foam used, collected in ponds on-site
 - Husky needed to dewater ponds, but they were contaminated with PFAS
- Petroleum Contaminated Water WPDES General Permit
 - Conditioned that PFAS be removed
 - GP applicability criteria
- Husky installed Granular Activated Carbon and Ion Exchange Resin for treatment





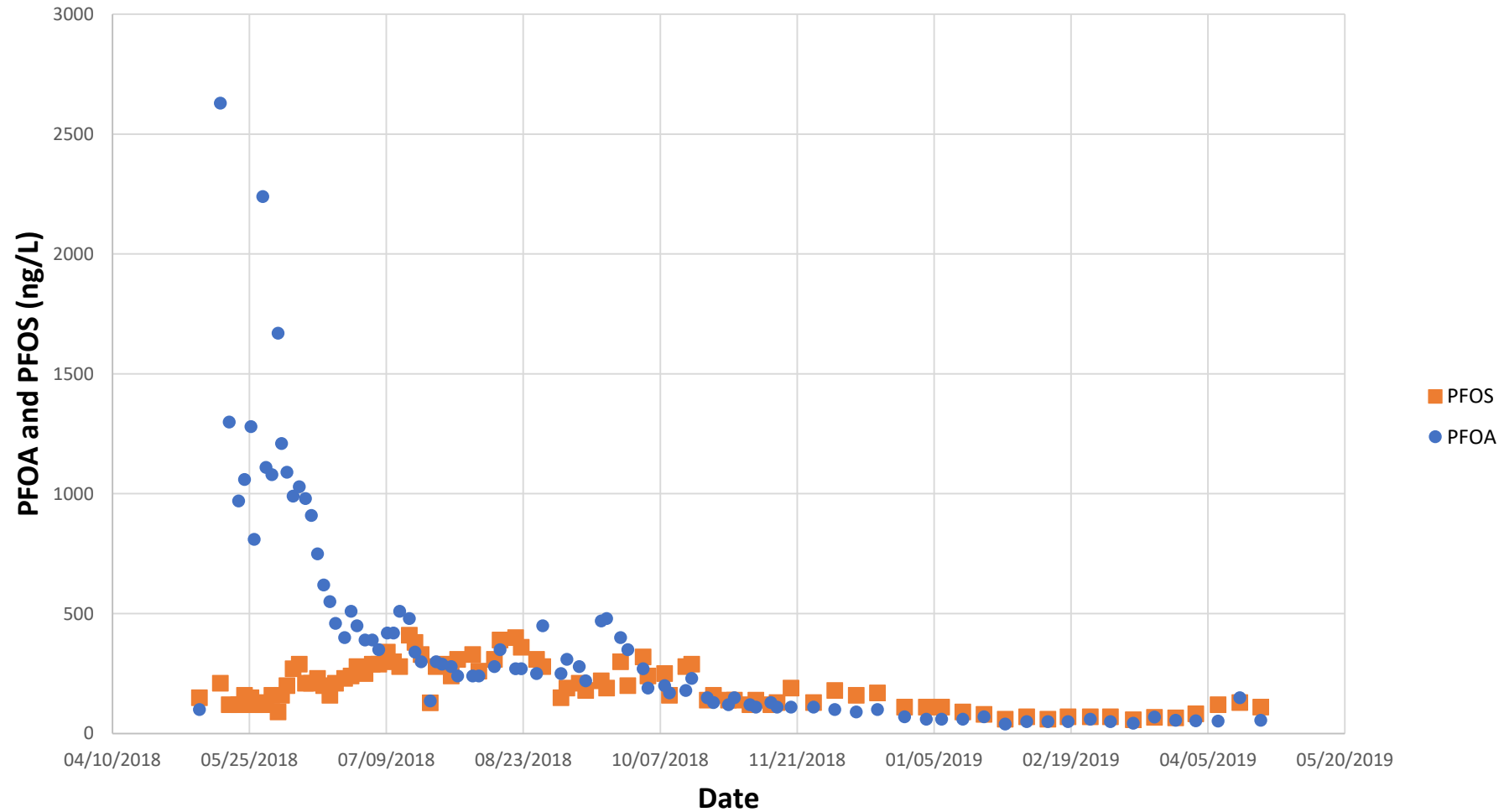
Permitting Examples: Husky Refinery





Permitting Examples: Husky Refinery

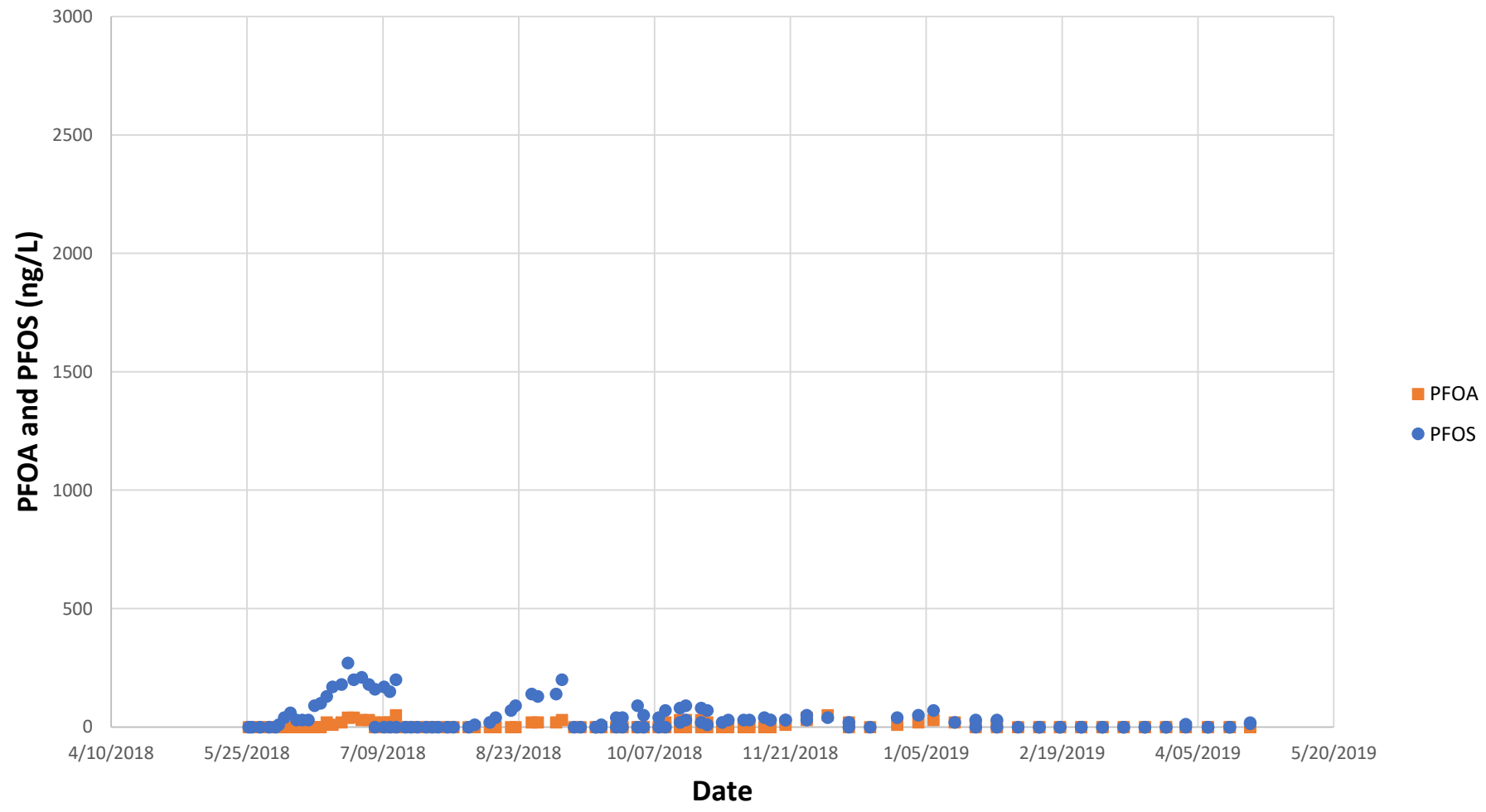
System Influent





Permitting Examples: Husky Refinery

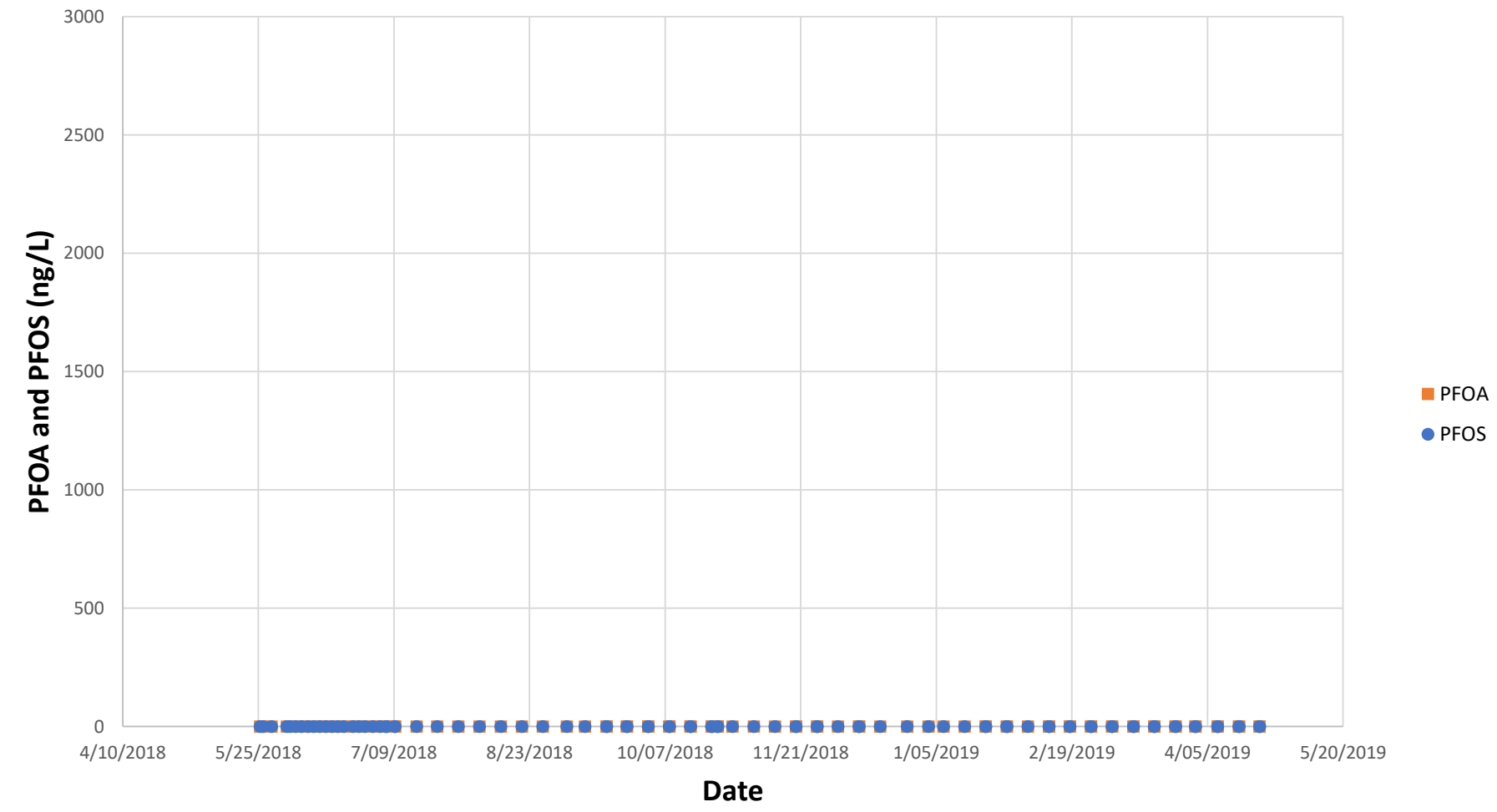
After First GAC Unit





Permitting Examples: Husky Refinery

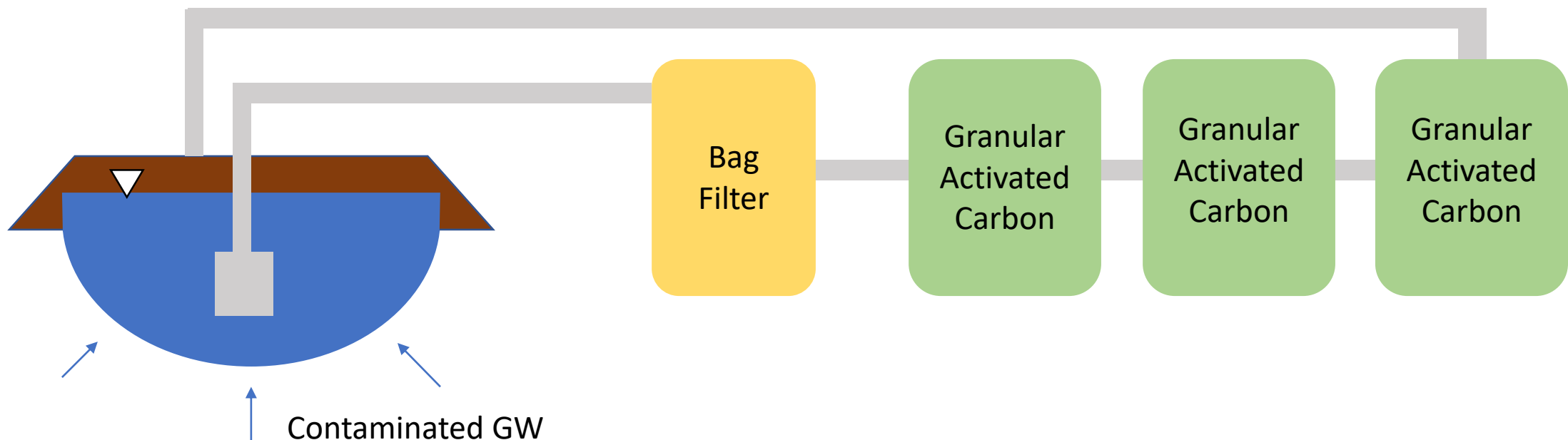
After Lag GAC Unit (when discharging)





Permitting Examples: Tyco Ditch A&B

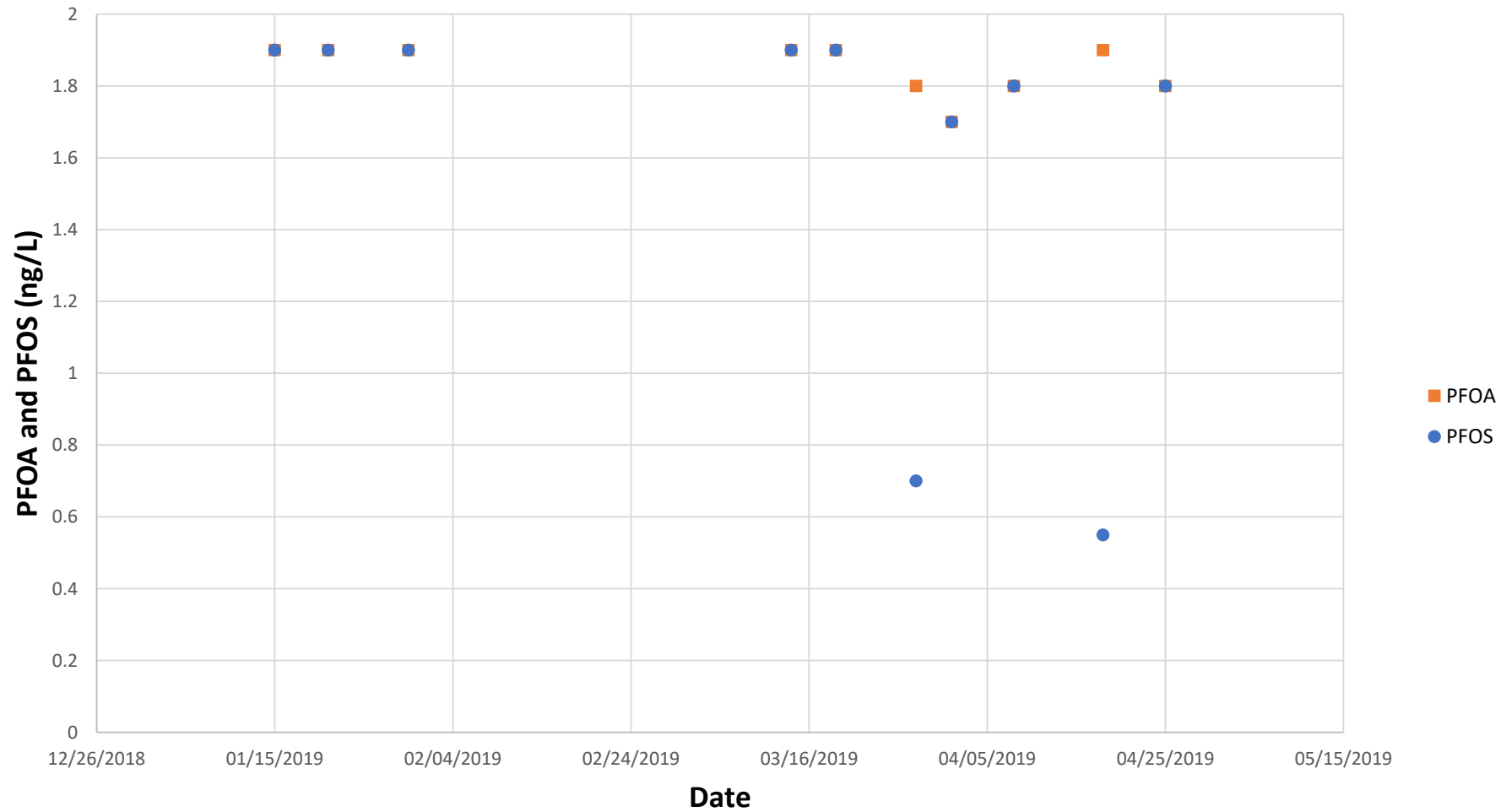
- Tyco Fire Technology Center
- Responsible Party designation
 - Interim Action: Dam Ditches and Remove PFAS
- Discharge covered under Contaminated Groundwater WPDES General Permit
 - Conditioned that PFAS not be present in discharge at toxic amounts





Permitting Examples: Tyco Ditch A&B

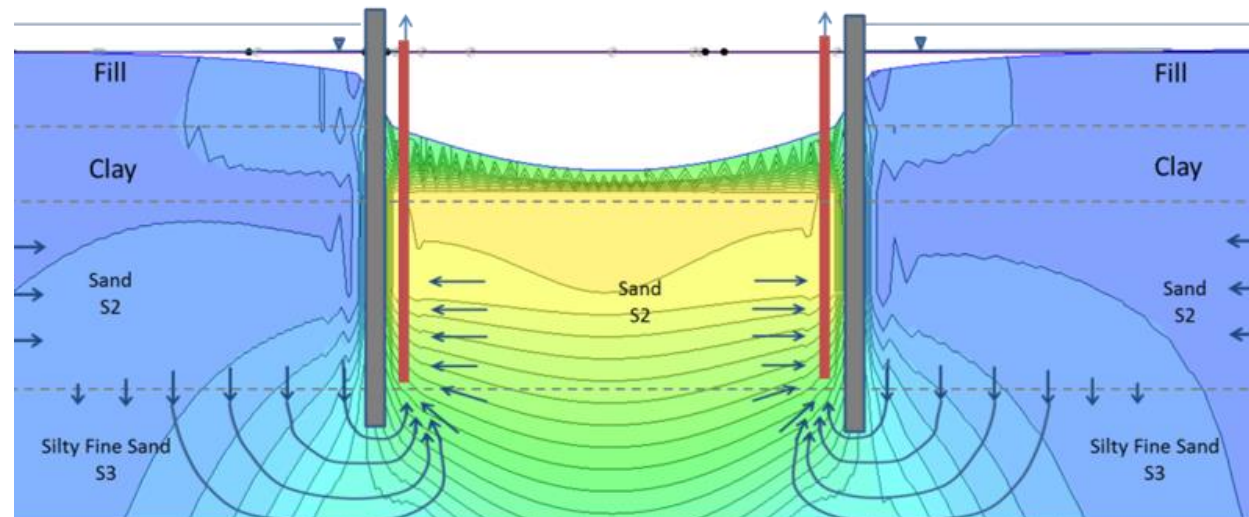
Ditch A Treatment System Effluent



Note: LOQ is generally 1.7-1.9 ng/L

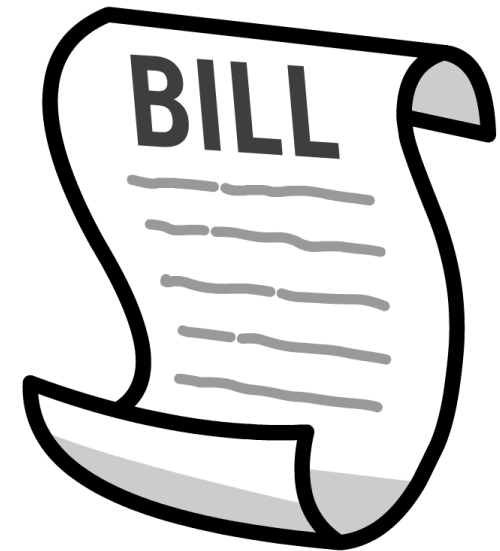
Dewatering Projects

- Analyzing available groundwater data prior to permitting projects
- If adjacent to known PFAS contaminated site and no groundwater data available, sample may be requested
- If elevated PFAS is found, discuss options with applicant



Proposed Legislation

- Released May 23, 2019
- For at least 6 PFAS compounds (PFOA, PFOS, PFHxS, PFNA, PFBS, PFHpA), DNR would establish and enforce:
 - Groundwater Standards[^]
 - Air Emission Standards*
 - Maximum Contaminant Levels (Drinking Water)[^]
 - Water Quality Standards
 - Effluent Standards
 - Listing as Hazardous Constituent*
 - Other solid waste, soil, and sediment provisions*



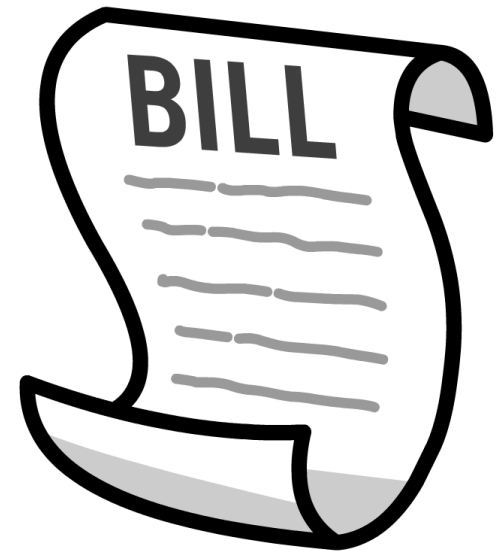
* if warranted to protect public health and welfare and/or environment

[^] DHS-recommended standards would be effective as interim standards

Emergency rulemaking required in most instances. Emergency rules would remain until 7/1/2022 or until permanent rule adopted

Proposed Legislation

- Reporting of PFAS air emissions; PFAS considered air contaminants
- Financial Assurance for PFAS Cleanups
- Access to Information at sites under investigation
 - Regarding transport, treatment, storage, disposal at other facilities
- Lab Certification criteria to be set
- 7.5 FTEs at DNR, 2 FTEs at DHS
- Funding
 - Model to ID sources
 - Survey/track use of AFFF
 - Test Landfill Leachate
 - Investigate PFAS sources and provide alternative water supply





Questions

