

PFAS & Metal Finishing (NAICS 332813)

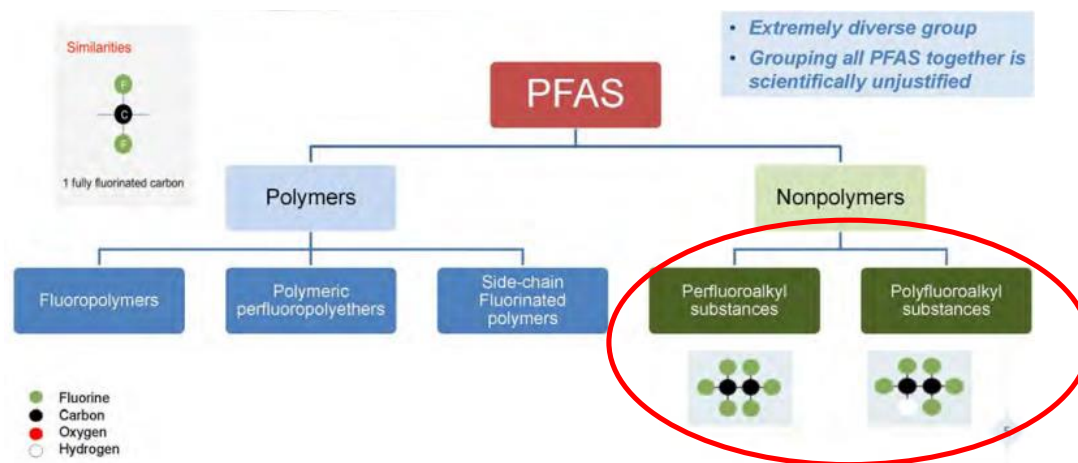
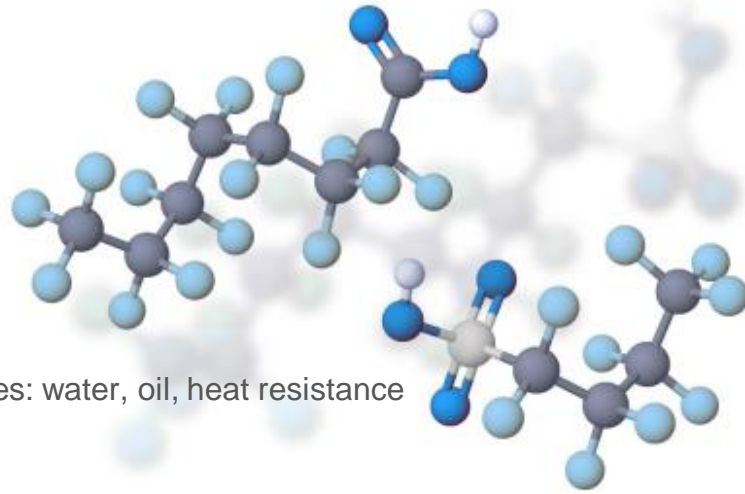
Environmental Risk Management Review

March 2022

PFAS Overview

The Basics

- Manmade chemicals since the 1940s
 - Durable, persistent = forever chemicals
 - Desirable in industry due to numerous properties: water, oil, heat resistance
- PFAS have contaminated the environment
 - via spills and unintentional releases
 - process emissions to air and surface water
 - disposal of solid waste
 - wastewater from primary and secondary manufacturers.
- Scientific studies show that PFAS accumulates in human bodies over time & is attributed to a growing list of adverse health effects.



Regulatory Action

PFAS will be regulated at both the state and federal levels under the following programs and permits:

- ❖ MPCA Monitoring Plan (Minnesota PFAS Blue Print)
- ❖ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
 - As a “hazardous substance”
- ❖ Toxics Release Inventory (TRI)
 - Mandatory reporting
- ❖ Clean Air Act
 - As a hazardous air pollutant
- ❖ Stormwater
 - Updated pollution prevention plans
- ❖ Industrial discharge (MCES)
 - Required testing by the local publicly owned treatment works
- ❖ Resource Conservation and Recovery Act (RCRA)
 - Solid and hazardous wastes
- ❖ Toxic Substances Control Act (TSCA)
 - The farthest reaching program, with a 10-year “look back” requirement and no “minimum quantity opt-out”

OPERATIONAL RISKS

- **EPCRA Reporting, TRI**
- **Permits: Wastewater and/or Stormwater**
- **Stack Emissions, Air Permits**
- **Wastewater Treatment Ponds**
- **On- and Off-site disposal of solid & hazardous wastes**
- **Fire Training or Fire Response using Class B foams**
- **Presence of septic tanks, leach fields, older wastewater impoundments**
- **Wastewater Pretreatment**
- **Proximity to DoD facilities (former & current).**
- **Proximity to Major Airport facilities (former & current)**
- **Proximity to Industrial or Municipal Landfills**
- **Business is located within an area with known PFAS “regional issues”**
- **Past / Present Remediation Case**
- **Onsite Monitoring Wells**
- **Proposition 65 Applicability (California)**

PFAS Understanding Your Risk

Identify Exposure Points

- Metal Plating – Chrome electroplating
 - Purpose of product: reduce surface tension, wetting agent, mist suppression for harmful vapors, lower drag-out and surfactant properties
 - PFOS banned since 2015, BUT historical use of PFOS-containing chemicals is still a potential source of PFOS - persistent
 - Aluminum Anodizing – Fume suppressants associated with Chromic Acid Desmutter/Deoxidizer
- Use can be difficult to track
 - Lack of consistent nomenclature & omission from SDS due to confidential or proprietary classification or low volume percentage
 - Newer non-PFOS fume suppressants may contain other PFAS. Other PFAS may be precursors to PFOS and PFOA.
 - Examples of demisters/defoamers/surfactants used at sites found to have PFOS include:
 - ANKOR WETTING AGENT F, manufactured by Enthone (SDS listed “fluorinated surfactant(s)” of 1-5%)
 - Clepo Chrome Mist Control, manufactured by MacDermid Incorporated (SDS lists ingredients as “proprietary”)
 - Fumetrol™ 140 Mist Suppressant (Atotech USA, Rock Hill, SC). Available SDS indicate that it contained “organic fluorosulfonate” between 1%-7% by weight.
 - Mist suppressants presumed to contain PFOS that were studied by the U.S. Environmental Protection Agency, Region V, in their PFOS Chromium Electroplater Study, September 2009, included the following products:
 - Benchmark Benchbrite STX
 - Benchmark CFS
 - MacDermid Proquel B
 - MacDermid Macuplex STR
 - Plating Process Systems PMS-R
 - Femetrol-140
 - Brite Guard AF-1 fume control

MPCA PFAS Monitoring Plan – Released 03/22/2022

Phase One: Industrial Stormwater Monitoring

- Chrome Platers, Airports, Automotive Shredders based on NAICS codes
 - MPCA focused PFAS monitoring strategy on **facilities** or sites related to those industry sectors that MPCA and EPA experts identified as **likely to use, emit, or discharge PFAS** based on media- and program-specific information.
 - EPA & MPCA relied on North American Industry Classification System (NAICS) codes. See Appendix F of Plan.
 - Known instances of chrome plating facilities in Minnesota shown to be releasing PFAS through stormwater via deposition to roof tops before moving to soil, surface water, and groundwater.
 - Frequency beginning in 2022. Notification by mail.
 - Three quarterly samples will be taken within the first half-hour of a stormwater discharge.
 - If PFAS are found in stormwater sampling during the first two quarters, the facility will be asked to identify and eliminate potential PFAS sources to stormwater.
 - For the remainder of the sampling period, quarterly monitoring will ideally reflect the reductions of PFAS discharges seen from this source identification and elimination effort. If efforts to reduce PFAS levels are not successful, additional steps may be taken to ensure protection of human health and the environment, including ongoing PFAS monitoring.
 - Prescriptive locations for sampling points based on permit BMLs and identified AOCs.
 - Utilize PFAS accredited labs: although test for 30-40 PFAS analytes - focus on PFOS results only.
 - <10 ng/L PFOS – no source reduction plan needed; 10-1,000 ng/L – 180 days to develop plan; >1,000 ng/L – 90 days to develop plan

MPCA PFAS Monitoring Plan – Released 03/22/2022

Phase One: Wastewater Monitoring

- Significant Industrial Users (SIUs) discharging wastewater to MCES
 - MPCA identified 80 WWTP for monitoring in Phase One which likely means WWT facilities may require clients to also monitor for PFAS to ID point sources.
 - MPCA will request monitoring based on individual permits as ID'ed in Appendix F.
 - Facilities with multiple permits ID'ed in Phase One – MPCA will determine which media has the highest potential for PFAS release and include the facility in the relevant program's monitoring plan.
 - Frequency beginning in 2022. Notification by mail.
 - Future phase monitoring plans will be determined by phase one results.
 - Important to ID influent sources

What to do next?

Be Prepared

1. Initiate an internal and confidential “risk assessment” of the following: locations, operations, and products/materials that may be potential sources of PFAS, including imported materials used in manufacturing. Documentation will be critical to future reporting.
2. Review all operating permits (air, waste, water) and determine potential present and future requirements for compliance obligations.
3. Understand the effect on your supply chain, vendors, and products.
4. Prepare and budget for ongoing and future compliance obligations.
5. Gather and analyze insurance policies and vendor contracts for the potential coverage implications for an unexpected claim, business interruption, or regulatory enforcement action. Note that most insurers are rapidly trending towards excluding coverage for PFAS liabilities (e.g., clean-up and claims).

Insurance Archeology

Review historic insurance policies for potential coverage

- Due to various interpretations of wordings, older insurance policies may offer some coverage for PFAS
 - Pre-1990s GL policies may not have a pollution exclusion – therefore the older the policy, the better chance of coverage for PFAS
- Older GL policies may offer coverage as a result of:
 - A lack of specific pollution exclusion
 - Legal and technical defense costs being paid in addition to the limits of liability
- It is always the duty of the policyholder to provide a timely notice of a claim, therefore you should:
 - Locate all historic GL policies *before* a claim arises
 - Review the policy wordings to understand if coverage potentially exists

Insurance Considerations

Does your insurance cover PFAS liabilities?

- You may have some coverage for PFAS, depending on the wording for ‘pollution’
 - Specific PFAS exclusions have become more common on Site Specific Pollution Legal Liability renewals
 - A pollution exclusion may only exclude “traditional” types of toxic substances, but not other claims, such as:
 - Claims arising out of a policyholder using a substance as it was intended to be used in the ordinary course of business
 - Claims relating to an indoor spill, as opposed to outdoor contamination
 - Claims for a sudden & accidental pollution event – e.g. a drum puncture
 - Claims arising from an insured peril – e.g. a fire or flood
- Types of claims that could trigger coverage:
 - Being named as a defendant in a toxic tort lawsuit
 - Demand by a state or federal regulatory agency that requires you to investigate and/or remediate PFAS contamination
 - A demand by a third party (neighbor) that requires you to investigate and/or remediate PFAS contamination
 - Bodily injury claims from alleged exposure to PFAS

To learn more or for assistance contact your MMA Account Manager or one of our environmental experts:
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