

Proposed “PFAS” Definitions

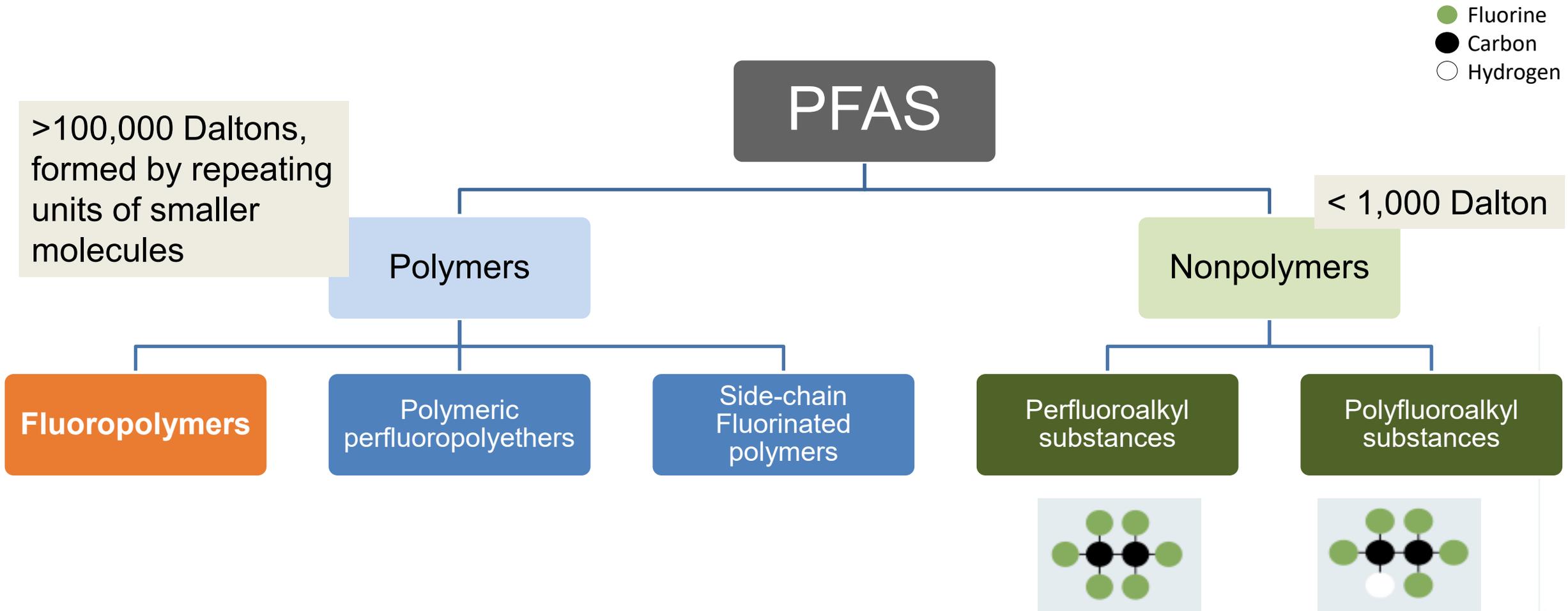
- **WildEarth Guardians: “PFAS chemicals”** means a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom.
- **NMOCD: “PFAS chemicals”** means any chemical with at least a perfluorinated methylgroup (–CF₃) or a perfluorinated methylene group (–CF₂–), excluding those with a Hydrogen [H], Chlorine [Cl], Bromine [Br], or Iodine [I] atom attached to the subject carbon atom. For the purposes of completing environmental investigations, the specific PFAS chemicals that can be included in the chemical analysis include those listed in United States Environmental Protection Agency (US EPA) Standard Analytical Methods documents (specifically, Method 537.1 [drinking water], Method 533 [drinking water], Method 8327 [groundwater, surface water, and wastewater], Method 1633[wastewater, surface water, groundwater, soil, biosolids, sediment, landfill leachate, and fish tissue], OTM-45 [air: semi-volatile and particulate-bound PFAS], and OTM-50 [air: volatile PFAS]; including updated versions for each standard method).
- **NMOGA: “PFAS chemicals”** means a perfluoroalkyl or polyfluoroalkyl substance with two or more sequential fully fluorinated carbons.

EPA's Toxic Substances Control Act PFAS Definition

“[The TSCA] definition provides focus on PFAS of concern based on their persistence and potential for presence in the environment and human exposure. For example, chemicals with (-CF₂-) that are not (-CF₃) are expected to degrade in the environment and most substances with only one terminal carbon (-CF₃) are expected to degrade to trifluoroacetic acid, which is a well-studied non-PFAS.”

- USEPA 2021, National PFAS Testing Strategy PDF pg 5.

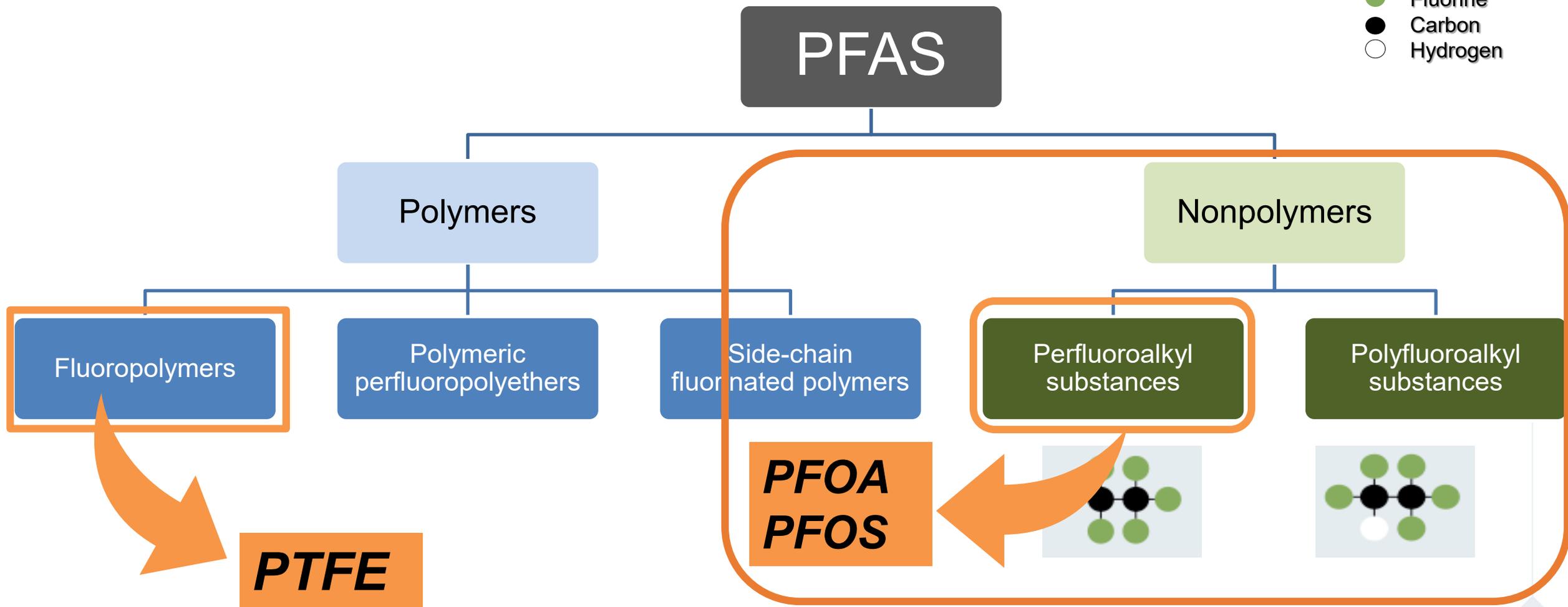
The PFAS Family Tree



>12,000 PFAS Grouped by Chemistry

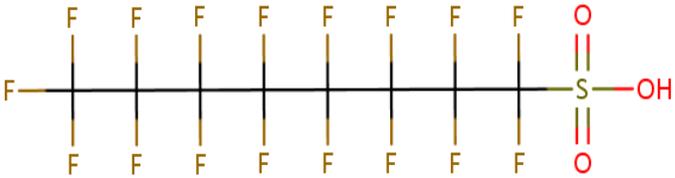
All Very Different Chemistries and Uses

- Fluorine
- Carbon
- Hydrogen

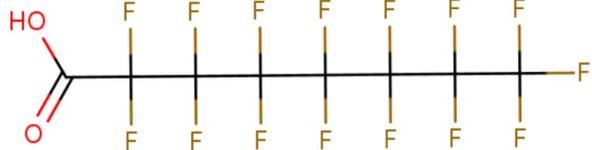


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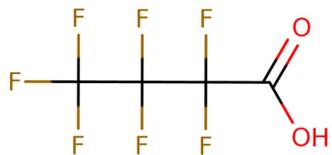
Perfluorinated Substances



PFOS



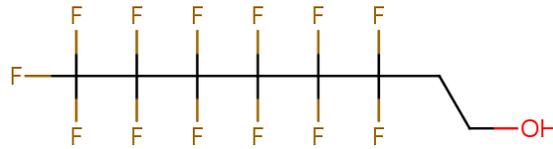
PFOA



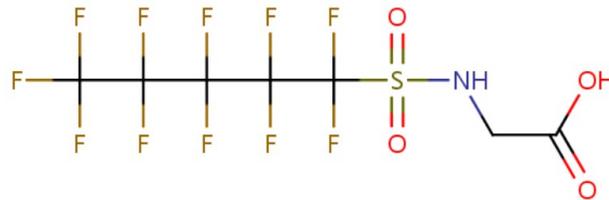
PFBA

NMOGA Rebuttal Exhibit E30.4

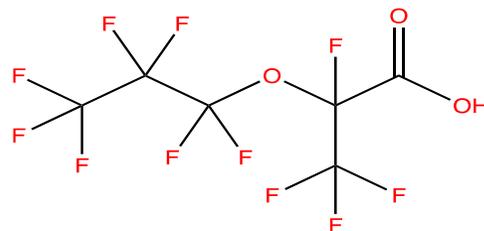
Polyfluorinated Substances – May degrade



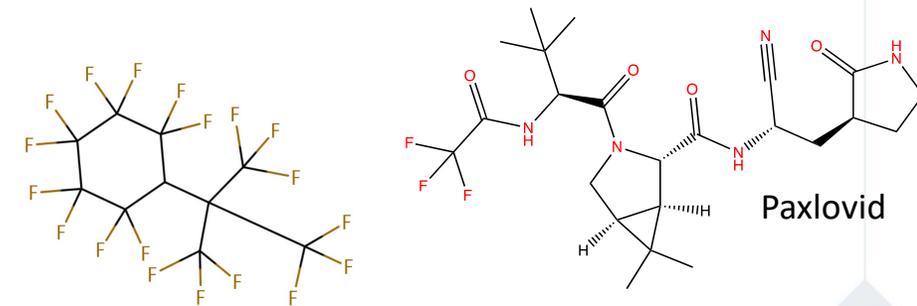
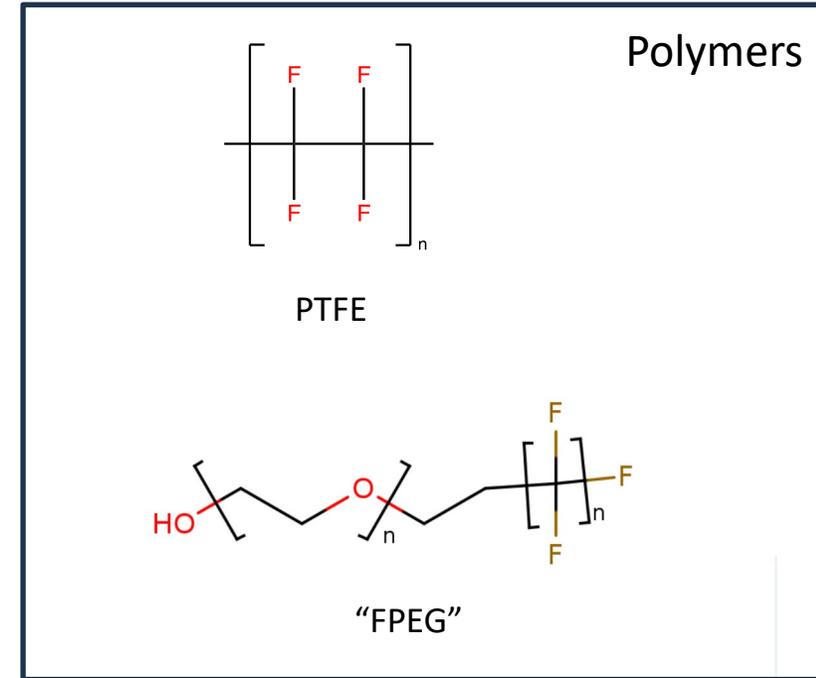
6:2-FTOH



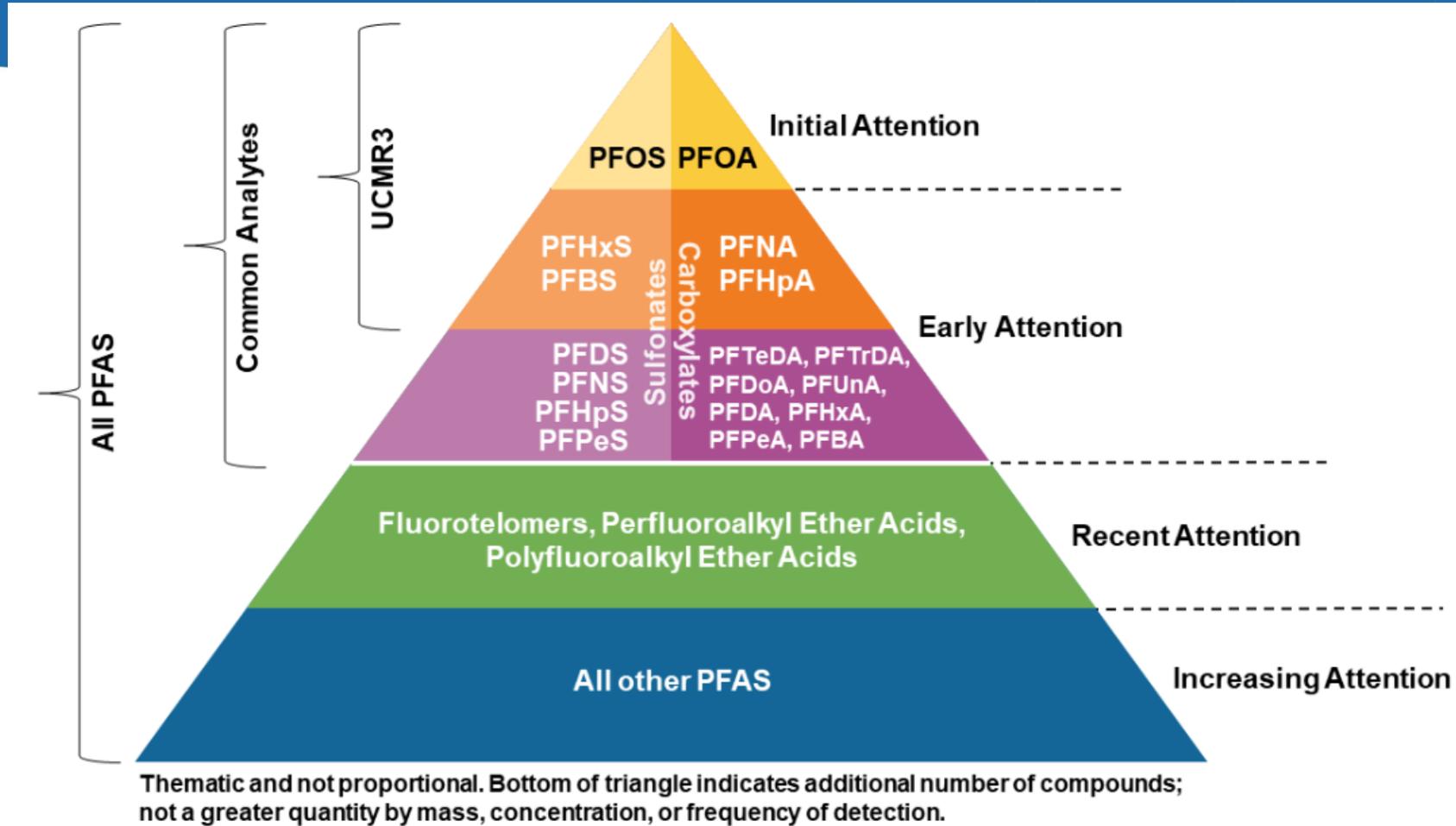
FPeSAA



GenX



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Figure 2-18. Emerging awareness and emphasis on PFAS occurrence in the environment