

Historical and Current Uses of PFAS

May 22, 2018

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Overview

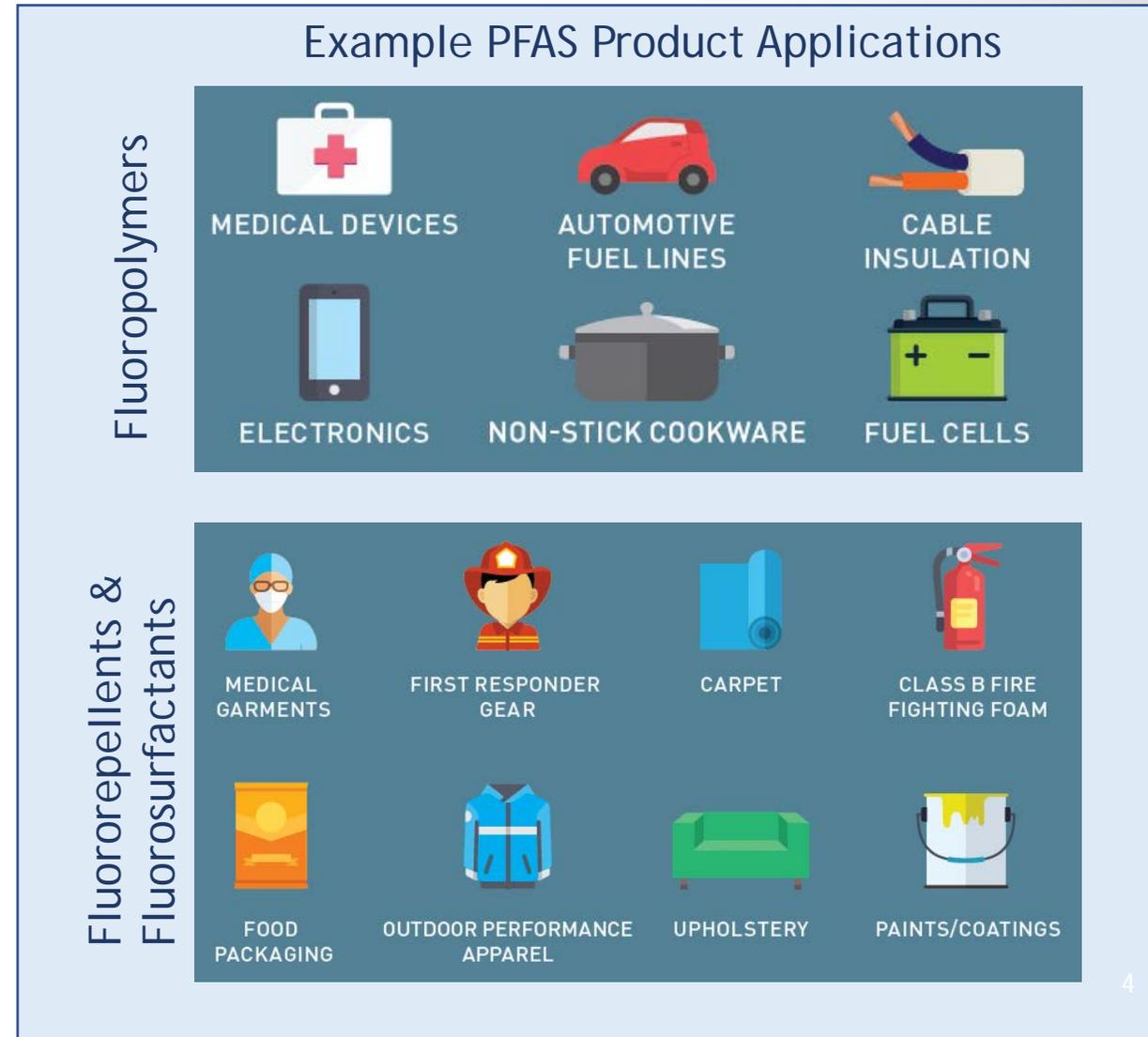
- Overview of industry engagement on PFAS issues
- Historical overview of PFAS compounds and products
- Innovation in PFAS chemistry - uses today
- ACC and chemical industry commitment to multi-stakeholder review process

PFAS Industry Engagement and Innovation

- **Legacy PFAS:** Starting in early 2000s, industry worked with EPA to phase out legacy (long-chain) PFAS, including virtual elimination of facility emissions and product content.
- **Today's PFAS:**
 - ✓ Improved hazard profiles
 - ✓ Improved manufacturing processes and stewardship efforts
 - ✓ Enable vital applications in the U.S. economy

PFAS Overview and History

- PFAS chemistry includes a range of substances with very different properties
- PFAS product categories include fluoropolymers, fluororepellents and fluorosurfactants
- Legacy PFAS products used (e.g., PFOA, PFOS, PFHxS, and longer chains) or were based on long-chains



PFAS Products Manufactured Today

Fluoropolymers

- Properties: Durable, stable, inert
- Example uses: medical devices; electronics; automotive; aerospace; semiconductors
- Manufacturing process: a variety of short-chain polymerization aids

Fluororepellents & Fluorosurfactants

- Properties provided: Water/oil repellency; grease/soil resistance; surface modification and protection; wetting & leveling
- Example uses: medical garments, carpet, textiles, first responder & military gear, AFFF, paints & coatings
- Manufacturing: Short-chain products

Today's PFAS



Satisfy rigorous regulatory scrutiny and testing requirements

- Acute and chronic toxicity
- Reproductive and developmental toxicity
- Long-term environmental fate testing



Meet regulatory safety standards



Improved manufacturing processes



Supported by best practices



Remediation options available and being demonstrated

Ongoing Industry Efforts on PFAS



Science & Research. Characterizing the different hazard/toxicity profiles and exposure sources of PFAS chemistries



Product Stewardship. Development of best practices and programs to minimize emissions



Education & Outreach. Informing risk communication that educates the public and other stakeholders on risks & benefits of different PFAS chemistries



Stakeholder Engagement. Supporting development of a science- and risk-based approach that:

- recognizes all PFAS are not the same
- prioritizes PFAS for research and development of guidance/standards
- where appropriate, establishes science-based standards for PFOS, PFOA, other legacy PFAS
- includes finalizing a SNUR to address imports of legacy PFAS
- involves stakeholder engagement and transparency

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Additional Resources:

www.fluorocouncil.com

<http://www.oecd.org/chemicalsafety/portal-perfluorinated-chemicals/>