

ECOS 2024 Fall Meeting

***Breakout Option #3: PFAS Destruction, Disposal, & Designation***

Wednesday, September 4 at 2:10 - 3:10 p.m. Eastern

# Evaluating PFAS Destruction Technologies

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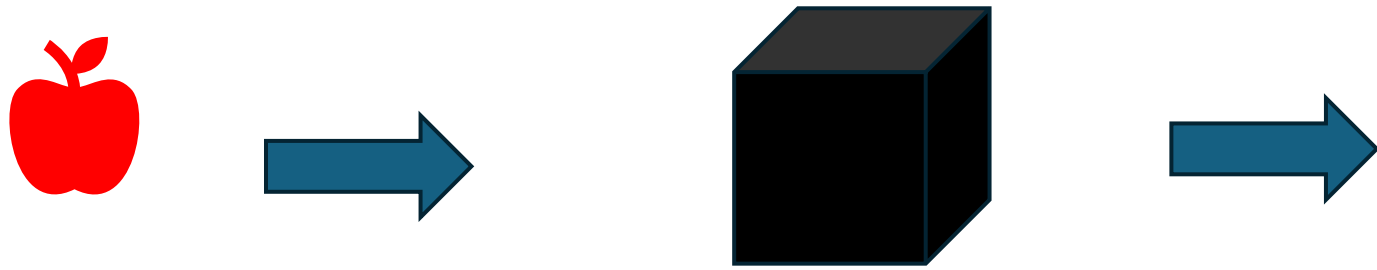


## **Question 1:**

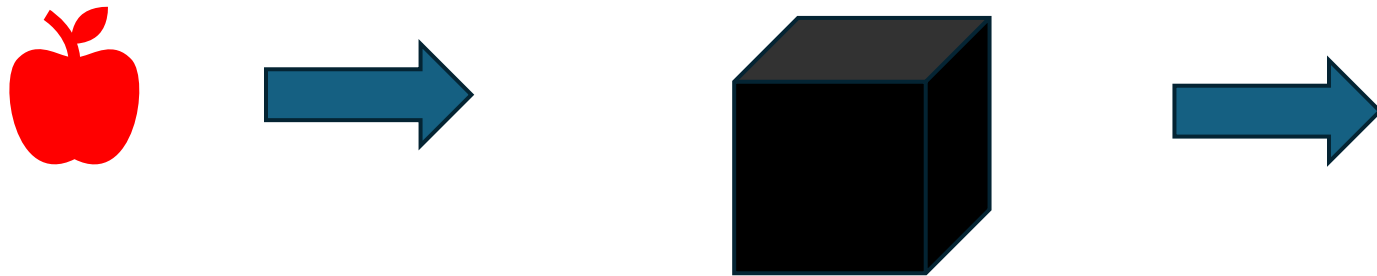
**What are the top challenges or considerations you see with regards to PFAS destruction and disposal policy and technology?**



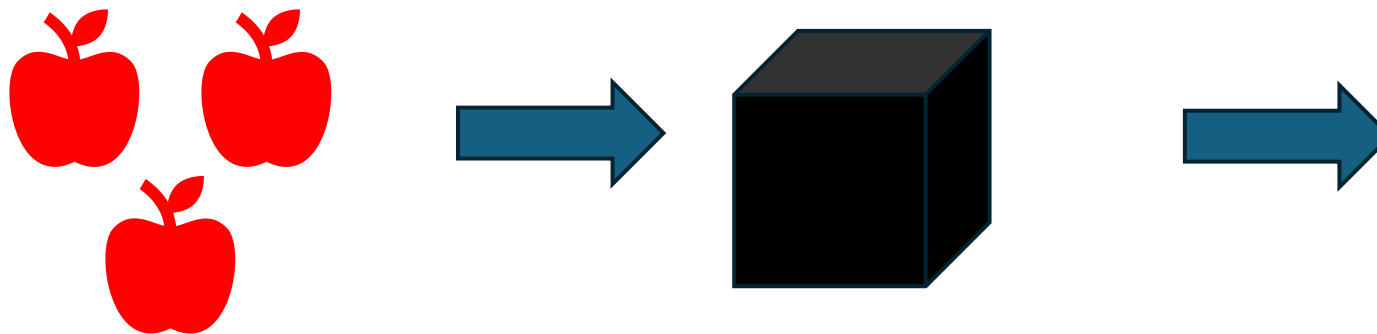
# Destructive Technology Evaluation Test Methods



OTM-45 If successful it just shows that you can't see the whole intact apple.  
1<sup>st</sup> step of evaluation



OTM-50 and OTM-55 Can you see any pits or stems?  
PIDs (products of incomplete destruction)



DREs Destruction removal efficiencies. To get more nines you need more apples.  
99.9999% is 100 times more efficient than 99.99%.

## **Question 2:**

**Can each of you walk through these considerations and steps again, but in the context of firefighting foam?**



# Protecting Liability and Sustainability



Creates a defensible narrative backed by data. Simplified story to tell about how material is handled.



Infrastructure already exists so we do not need to re-create the wheel.



Focus on using resources we already have and making the best use of them. Ex. Non-solvent based on-site carbon and resin regeneration.



Consider energy and water usage.

### **Question 3:**

**What are your top one or two suggestions for the audience?**



# Top 5 Evaluation Criteria for PFAS Treatment and Disposal Choices

- Viability - acceptance by regulators, the public, and consideration of environmental justice
- RCRA permitted facility
- Proven Results
- Sustainable and Scalable – energy and water use
- Maximum emission control technologies





# Basic Questions to Ask in the Absence of Standardized Evaluation Criteria

- What are the demonstrated removal/destruction efficiencies, demonstrated using OTM-45, OTM-50?
- Do they address compounds beyond PFOA and PFOS and short-chained PFAS compounds?
- Can you identify a potential path for liberation or transformation? Remember that a potential change in structure can make the compound invisible to LC/MS/MS analysis.
- If it is a destructive technology are emission controls in place, example MACT certified (**Maximum Achievable Control Technologies**) **Montreal Protocol**?
- What is the future liability if new discoveries are made?