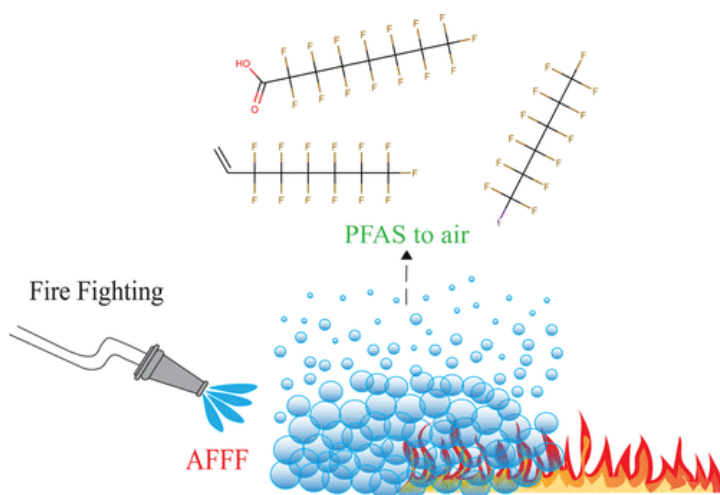


Bulletin #85, December 21, 2023

Volatilization

When water changes to steam, its volume increases 1700 times.

3% AFFF will expand correspondingly and off-gas PFAS. Where AFFF is used, products of combustion will contain PFAS.



Humans breathe in 2,100 to 2,400 gallons (8,000 to 9,000 liters) of air each day.

“Recent studies have found that lung tissues typically accumulate the highest concentration of PFAS. However, perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) have also been found to build up in liver and bone tissue,” according to Schmidt & Clark LLP.

Carcinogenic chemicals contained in firefighting foams will volatilize. Check out your states’ right to know chemicals such as:

- 1,4-Dioxane
- Benzene
- Fermentation derived cellulose
- Formaldehyde
- Methanol
- PFOA

Wise-Answer, accessed 10/20/2023,

<https://www.tandfonline.com/doi/abs/10.1080/10962247.2023.2192009>

ACS, Environ. Sci. Technol. Lett, Release of Volatile Per- and Polyfluoroalkyl Substances from Aqueous Film-Fforming Foam, Julia Roth, February 20, 2020,

<https://pubs.acs.org/doi/abs/10.1021/acs.estlett.0c00052> [graphic]

Schmidt & Clark LLP, Accessed on 11/1/2023, <https://www.schmidtdandclark.com/are-pfas-absorbed-through-the-skin>



U.S. State Regulatory Information:

Specific State regulations to be aware of:

Alaska - Designated Toxic and Hazardous Substances

California – Permissible Exposure Limits for Chemical Contaminants

Florida – Substance List

Illinois – Toxic Substance List

Kansas – Section 302/303 List

Massachusetts – Substance List

Minnesota – List of Hazardous Substances

Missouri – Employer Information/Toxic Substance List

New Jersey – Right to Know Hazardous Substance List

North Dakota – List of Hazardous Chemicals, Reportable Quantities

Pennsylvania – Hazardous Substance List

Rhode Island – Hazardous Substance List

Texas – Hazardous Substance List

West Virginia – Hazardous Substance List

Wisconsin – Toxic and Hazardous Substances