The Changing Nature of Fire-Fighting Foams

Understanding the risk posed by PFAS





What are AFFF?

Aqueous Film-Forming Foams (AFFF) are used in fighting Class B flammable liquid fires. We can broadly group them into two categories:



Fluorine Free

Those that are fluorine free (referred to as **F3** or FFF).



Contain Fluorine

Foam that contains fluorine (F) chemicals; these are a broad range of chemical substances called PFAS (Per- and Poly-FluoroAlkylated Substances), including **C8** (PFOS & PFOA) and **C6** (PFHxA and PFHxS) fluorosurfactants.

Is fluorine harmful?

- (i) Many PFAS are proven to cause environmental and human health impacts. Others are suspected of posing risks and nothing is known about many others.
- i Living organisms (including humans) can absorb PFAS into their bodies which can interfere with the hormonal system, the immune system, impact the reproductive system, and are possibly carcinogenic.
- (i) PFAS break down very slowly, if at all, in the environment. Many PFAS dissolve in water, meaning they can end up in waterways if AFFF is discharged.





If you use AFFF, these are the key messages for you...

- Follow the current restrictions on AFFFs containing PFOA
- i Limit the use of AFFFs that contain any other PFAS
- Purchase suitable replacement foams that are free of PFAS
- Prepare for the future

FURTHER INFORMATION

The EPA hosts a website - www.pops.ie. Here you will find the booklet The Changing Nature of Fire-Fighting Foams (Understanding the Risk Posed by PFAS). This site also contains very useful information on POPS, PFAS, the known composition of particular brands of AFFF, whether fluorine-free or not, and any updates on restrictions. To avail of a derogation that will allow you to continue to use AFFF containing PFOA for a limited period and to satisfy your reporting obligations contact the EPA via email: pops@epa.ie

FIRE FIGHTING FOAMS& YOU



Do you understand the risk posed by PFAS and the changing nature of fire-fighting foams?



All those involved in the purchase, management, use and disposal of foams need to be aware of the legal obligations related to **PFAS-containing foams.**

containing AFFF for users, operators including:

- Current regulations and requirements
- Identifying PFAS foams
- Storage & use
- Disposal
- Replacement of PFAS foams