



AFFF Update . . .

3033 Wilson Boulevard
Suite 700
Arlington, VA 22201
(571) 384-7915
Fax (571) 384-7959
cortinaec@comcast.net
www.fffc.org

Fire Fighting Foam Coalition

May 2023

Special Edition

Proposed REACH Restriction on PFAS in Firefighting Foam Now Likely Vehicle for AFFF Regulation in European Union

In January 2022 the European Chemicals Agency (ECHA) published a proposal for a separate REACH restriction on PFAS in firefighting foams. Although there are two other proposed REACH restrictions on PFAS substances in different stages of development and review, it now appears that the proposed ECHA REACH restriction on PFAS in firefighting foam will be the regulation moving forward in the European Union that will cover fluorinated class B foams.

Background

PFAS (perfluoroalkyl and polyfluoroalkyl substances) refers to a class of chemicals that contain fluorine atoms bonded to carbon atoms. Current PFAS definitions include over 4,000 different fluorinated compounds ranging from gases to liquids to solids with different environmental and toxicological profiles. Many PFAS substances are persistent in the environment, and it is this persistence that is the basis for current regulatory proposals. Historically, persistence alone has not been a sufficient justification for restricting a substance under REACH.

The C6 fluorosurfactants used in modern fluorinated class B foams such as AFFF, AR-AFFF, FFFP, AR-FFFP, FP and AR-FP are classified as PFAS substances. Although they are generally considered to be low in toxicity and not bioaccumulative, like other PFAS they are persistent in the environment. PFHxA (perfluorohexanoic acid), a potential breakdown product of C6 fluorosurfactants, is also classified as a PFAS substance. In this newsletter firefighting foams containing C6 fluorosurfactants will be referred to as “PFAS foams.”

There are currently three proposed REACH restrictions on PFAS substances in various stages of development and this has caused confusion within the industry as to which restrictions encompass firefighting foams. A REACH restriction on PFHxA was proposed in December 2019 that included prohibitions on fluorinated class B foams. In January 2022 ECHA proposed a separate REACH restriction on PFAS in firefighting foam and in February 2023 a broad REACH restriction was proposed covering all PFAS substances. ECHA recently clarified that the broad PFAS restriction does not cover firefighting foams and ECHA referred to PFAS in firefighting foam as the restriction moving forward that will cover foams. The PFHxA restriction has been waiting adoption for months and its final outcome is unclear at this time.

ECHA Proposal for a REACH Restriction on PFAS in Firefighting Foam

The public consultation on the proposed REACH restriction on PFAS in firefighting foam began in March 2022 with the six-month comment period ending in September 2022. A draft opinion of the ECHA Committee for Risk Assessment (RAC) and ECHA Committee for Socio-Economic Analysis (SEAC) was released in March 2023 with the public consultation on the RAC and SEAC opinions ending on May 15, 2023. A final decision on adoption of the restriction by EU member states would be expected sometime in 2024.

Below is a summary of the current proposed restrictions on PFAS foams as outlined in the RAC/SEAC draft opinion. It is possible that the proposed restrictions could be modified prior to adoption based on public comments, the final opinions of RAC and SEAC, and the positions of EU member states. Entry into force would occur when the restriction is officially adopted.

Proposed Restrictions on PFAS Foam Use

PFAS firefighting foams cannot be used:

- 18 months after entry into force for training and testing (except testing of systems function)
- 18 months after entry into force for municipal fire services (except if also in charge of industrial fires for establishments covered by Directive 2012/18/EU (Seveso III) and for use in these establishments only)
- 3 years after entry into force for civilian ships including tankers, ferries, tugboats and other commercial vessels
- 5 years after entry into force for civilian aviation (including in civilian airports) and defence
- 10 years after entry into force for establishments covered by the Directive 2012/18/EU (Seveso III) (upper and lower tiers) if they are not already covered under civilian aviation
- 5 years after entry into force for all other uses not listed above
- 5 years after entry into force for portable foam extinguishers as defined by EN3-7, EN-1866 and EN-16856 placed on the market before 6 months after entry into force

Proposed Restriction on Sale and Export of Foam Fluorosurfactants

Fluorosurfactants for use in foam can continue to be placed on the market (sold and exported) and used in the formulation of foam concentrates for 10 years after entry into force, except as a constituent of a firefighting foam in portable fire extinguishers which is limited to 6 months after entry into force

Proposed Restriction on Sale and Export of Foam Concentrates

PFAS foam concentrates can continue to be placed on the market (sold and exported) and formulated for 10 years after entry into force, except as a constituent of a firefighting foam in portable fire extinguishers which is limited to 6 months after entry into force

Proposed Labeling Requirements

6 months after entry into force, packaging of PFAS foam concentrates placed on the market or used (excluding in portable fire extinguishers) and containers of firewater runoffs and PFAS waste must be labeled as follows

“WARNING: Contains per- and polyfluoroalkyl substances (PFASs)”

Other Proposed Requirements

6 months after entry into force users of PFAS foam concentrates (excluding in portable fire extinguishers) shall:

- ensure that they are only used for fires involving flammable liquids (class B fires)
- minimize emissions to the environment and direct and indirect exposures to humans of firefighting foams to the extent that is technically and economically feasible
- establish a site-specific ‘PFAS-containing firefighting foams management plan’
- ensure that collected PFAS-containing waste be handled for adequate treatment that minimizes releases of PFAS to the environment and excludes municipal wastewater treatment
- ensure that PFAS foam concentrates and mixtures held in stock and in need of disposal be handled for adequate treatment that minimizes releases of PFAS to the environment and excludes municipal wastewater treatment

Fire Protection Industry Response

Overall, the fire protection industry’s response to the ECHA REACH restriction proposal for PFAS in firefighting foams has been supportive. The consensus appears to be that the ECHA proposal is clear, comprehensive, and mostly achievable in the timeframes provided. It addresses the important concerns that were raised by manufacturers and users in response to the foam provisions of the PFHxA REACH restriction proposal. Eurofeu, in its comments to ECHA, provided data showing that the 5-year transition period for portable foam extinguishers is not technically achievable due to a lack of manufacturing capacity. In addition, Eurofeu suggested that the marine sector might need more than 3 years to complete a transition to fluorine-free alternatives.

Opinion of SEAC

In its opinion SEAC concluded that the restriction proposed by ECHA is the most appropriate EU-wide measure to address PFAS in firefighting foams, provided that a review on the availability of alternatives for Seveso

installations is carried out before the end of the 10-year derogation for this sector. In addition, SEAC suggested that the transitional periods proposed for the following uses may need to be extended, however, they lack detailed information to recommend a specific length:

- Use by municipal fire brigades
- Placing on the market of PFAS foam fire extinguishers
- Use in the marine sector

Opportunity to Provide Comments

The public consultation on the RAC and SEAC draft opinions ends on May 15, 2023. The PFAS in firefighting foam restriction report and information on how to provide comments on the RAC and SEAC opinions can be found at the following link: <https://echa.europa.eu/restrictions-under-consideration/-/substance-rev/69104/term>

FFFC will continue to provide input to ECHA throughout the development process and would urge users of class B foams to do the same.