

# A step too far?

As the US Government reinforces the EPA PFOA Stewardship Program with regulations on long-chain perfluoroalkyl substances the European Chemicals Agency is holding a public consultation on much stricter regulations that are causing serious concerns in the fire industry, writes Tom Cortina of the Fire Fighting Foam Coalition.

**A**s voluntary measures to eliminate the production of long-chain perfluoroalkyl chemicals (LCPFACs) such as perfluorooctanoic acid (PFOA) become fully effective at the end of this year, environmental authorities in the United States and Europe are proposing regulations to reinforce these voluntary programs. Fluorochemical and foam manufacturers generally support these regulatory proposals as long as they allow for the use of short-chain (C6) fluorotelomers as alternatives. While LCPFACs such as PFOA are considered to be persistent, bioaccumulative, and toxic (PBT), short-chain fluorotelomers have been shown to be low in toxicity and not bioaccumulative.

In the US, the Environmental Protection Agency (EPA) has proposed a Significant New Use Rule (SNUR) that would act as a ban on the manufacture, import or processing after 2015 of LCPFACs for any new use and any existing uses that are not ongoing. The SNUR is intended to provide a regulatory backstop to the US EPA 2010/2015 PFOA Stewardship Program. Under that program eight fluorochemical manufacturers voluntarily agreed to work toward elimination of PFOA, PFOA precursors, and related higher homologue chemicals by year-end 2015 from both plant emissions and product content. EPA reports that all eight manufacturers are on schedule to meet their commitments.

As proposed, the SNUR would be expected to have minimal impact on the production and use of fire fighting foams. Once all current foam manufacturers have fully transitioned to the use of only short-chain (C6) fluorochemicals, the SNUR would effectively stop anyone else from manufacturing or importing fire fighting foams that contain LCPFACs by requiring them to notify EPA prior to undertaking the activity. The SNUR would therefore provide protection for manufacturers that are expending significant resources to reformulate all of their fluorinated foam products in order to complete this environmentally beneficial transition.

In the European Union, the European Chemicals Agency (ECHA) is currently holding a public consultation on a restriction proposed by Germany and Norway on PFOA, its salts, and PFOA-related substances. Similar to the EPA SNUR, the proposed restriction would cover the manufacturing, use, and placing on the market of LCPFACs as a substance, as a constituent of other substances, or in mixtures. Unlike the SNUR, the proposed restriction would also cover articles (products) containing LCPFACs.

The public consultation on the proposed restriction ends on 17 June 2015. Within three months after the public consultation closes, the ECHA's Risk Assessment Committee (RAC) will adopt its opinion on whether the suggested restriction is the

appropriate measure to reduce risk to human health and the environment. The ECHA's Committee for Socio-Economic Analysis will also publish an opinion on the proposed restriction that is subject to a 60-day public consultation. ECHA then forwards the opinions of the two committees to the European Commission. Based on these opinions, the Commission will draft an amendment to the list of restrictions (Annex XVII of REACH) within three months for review by the European Council of Ministers and European Parliament.

The proposed restriction currently includes an extremely low concentration limit of 2 parts per billion (ppb) for PFOA and PFOA-related substances that cannot be achieved in the production of fire fighting foams and would result in a de facto ban on the use of fluorinated foams in the EU. As fluorinated foams are the most effective agents currently available to protect life, high-value property and the environment from the risk of flammable liquid fires in military, oil and gas, municipal, and aviation applications, such a result would have an extremely negative impact on fire safety in Europe. Not surprisingly, foam manufacturers and users have very serious concerns about the impact of this proposed limit and have expressed them to ECHA in early submissions on the consultation. We would urge all foam manufacturers and users that could be impacted by this proposed limit to submit comments to ECHA prior to the June deadline.

The limit on PFOA and related substances may have been purposely set at a low level initially to draw from industry information on what levels can be technically achieved and measured for different applications. It appears that the proposal was not intended to restrict the use of short-chain fluorochemicals, as it refers to them as important substitutes for LCPFACs. The unavailability of short-chain alternatives would drastically change the cost and feasibility of the proposed restriction and lead to a large number of possible derogations (exemptions). Thus, it is likely that the 2 ppb concentration limit for PFOA and related substances will be re-evaluated as the regulation moves through the evaluation process.

The environmental impact of fire fighting foams has been drastically reduced over the last decade with the elimination of PFOS foams, an increased focus on minimising foam discharges, and the ongoing transition to short-chain (C6) fluorotelomer surfactants. Regulatory proposals such as those described above are important steps to reinforce these gains by ensuring that there can be no move back into the use of long-chain fluorochemicals. Industry fully supports these proposals as long as they don't have the unintended consequence of also restricting the use of critical short-chain alternatives.