Alliance for Telomer Chemistry Stewardship

January 31st, 2023

Attn: Environment and Natural Resources Finance Policy Committee

Dear Chair Hansen and Members of the Environment and Natural Resources Finance and Policy Committee:

The Alliance for Telomer Chemistry Stewardship (ATCS) is a global organization that advocates on behalf of C6 fluorotelomer-based products. Our members are leading manufacturers of fluorotelomer based products. Our mission is to promote the responsible production, use, and management of fluorotelomer based products, while also advocating for a sound science- and risk-based approach to regulation. Fluorotelomer-based products are versatile chemistries with wetting and spreading features, as well as unique properties that repel water, oil and stains. These unique characteristics make fluorotelomers a critical component of first responder gear, medical garments, paints and coatings, upholstery, class B firefighting foam, among other uses that families and businesses across the world rely on.

On behalf of the members of ATCS, we respectfully oppose HF 742, and seek for use of AFFF only when in firefighting emergencies of Class B liquid fires.

About per- and polyfluoroalkyl substances (PFAS)

PFAS are a diverse universe of chemistries with a wide range of critical uses. For instance, fluorotelomers (one type of PFAS) are used in food packaging applications, but are also currently being used in medical garments, hospital gowns, drapes and divider curtains to create a barrier that provides life-saving protection against infections and transmission of diseases like COVID-19 in hospitals. Another type of PFAS, fluoropolymers, are integral to COVID-19 testing equipment and the medical technology that is saving lives across the globe. For example, fluoropolymers are used as coatings for the tubing in COVID-19 test kits because of their unmatched durability, low friction, and extreme heat resistance. They are also used in surgically implantable medical devices, increasing the lifetime of implants and reducing the likelihood of infection and invasive surgery.

The chemical industry supports a comprehensive approach to managing per- and polyfluoroalkyl substances that helps to ensure protection of human health and the environment. This includes appropriate, science-based policies and regulations.

AFFF Is the Most Effective Method for Class B Fires

For high hazard fires where lives are on the line and significant property damage is threatened, the most effective and reliable firefighting agent is crucial to protecting lives and essential property assets. Fluorinated firefighting foams such as Aqueous Film Forming Foams (AFFF) and Alcohol Resistant Aqueous Film Forming Foams (AR-AFFF) made with C6 Fluorosurfactants are produced to meet the most stringent specifications (including military) to combat fuel-based fires. They are proven by recent extensive and rigorous NFPA Research Foundation and US Naval Research Laboratory testing to be the

most effective foams currently available to fight flammable liquid fires occurring in many military, industrial, and aviation situations. It is widely recognized their use is essential in protecting Major Hazard Facilities (MHFs).

Fluorosurfactants used in modern AFFF formulations are supported by a robust body of data demonstrating they do not present a significant risk to human health or the environment. The C6 fluorotelomer-based surfactants used in AFFF have been thoroughly reviewed by regulators prior to introduction into commerce, are subject to ongoing review, and are supported by a robust body of rigorous scientific health and safety data.

This assessment has also included review of potential breakdown (degradation) products. As reflected in the published scientific literature, studies have found that one of the primary potential breakdown products, perfluorohexanoic acid (PFHxA or C6 acid), does not cause cancer (NTP 2018; Klaunig et al. 2015; Loveless et al. 2009); does not disrupt endocrine (hormone) activity (Borghoff et al. 2018); does not cause reproductive or developmental harm (Loveless et al. 2009; Iwai et al. 2019, Iwai and Hoberman 2014); does not build up in the human body and does not become concentrated in the bodies of living organisms (Chengelis et al. 2009b; Iwai and Hoberman 2014; Russell et al. 2013, 2015; Nilsson et al. 2010, 2013; Fujii et al. 2015; Guruge et al. 2016; Gannon et al. 2011, 2016).

Presently, regulation in Minnesota bans the use of AFFF in testing and training purposes of which we agree and requested when passed by this legislature, while continuing the availability of AFFF for high-hazard Class B liquid fires.

For these reasons, respectfully request that you allow for use of AFFF only when in firefighting emergencies in Class B liquid fires.

Thank you for your consideration and we look to work with the Committee and bill sponsors on this language.

Sincerely,

Shawn Swearingen
Director, Alliance for Telomer Chemistry Stewardship

American Petroleum Institute

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January 30, 2023

To Members of the Minnesota House Environment and Natural Resources Finance and Policy Committee:

The American Petroleum Institute (API) appreciates the opportunity to provide comments to the Minnesota House Environment and Natural Resources Finance and Policy Committee regarding HF 742. API represents all segments of America's natural gas and oil industry, which supports more than 11 million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. For more than 90 years, API has led the development of petroleum, natural gas and petrochemical equipment and operating standards, including several on process safety and fire protection.

These standards, and others developed in partnership with the National Fire Protection Association, historically recognized aqueous firefighting foams (AFFF) and other PFAS-containing legacy firefighting foams as a critical tool in managing large fires for the protection of workers and surrounding communities. API engages in federal and state legislative and regulatory advocacy to address the potential health and environmental concerns associated with PFAS with a focus on scientific research; technical legal and economic analysis; and public issues communication. In support of that mission, we offer the following key points:

- Over the past 10 years, API has published 180 new and updated refining safety and operational standards, including more than 15 standards intended to minimize spills, release, or process incidents which could lead to hydrocarbon fires. Yet incidents do happen, and in the event of an emergency of a hydrocarbon fire, firefighting foams that allow swift and definitive extinguishing power are required to protect the lives of the first responders, workers, and the public, as well as the environment.

- Specifically, refiners need a Class B firefighting foam that provides fuel repellency and heat stability, allows for rapid extinguishment and burn back resistance. They require a foam that protects against vapor release, which helps to prevent re-ignition and protect responders working in the area as part of the rescue and recovery operations.

- Most Class B firefighting foams in the U.S. contain fluorosurfactants, a group within the PFAS family, that form a film on the surface of the hydrocarbon. This film creates a blanket that cools the fire, blocks oxygen, and suppresses fuel vapor, quickly extinguishing the fire and, importantly, keeping the fire extinguished. In contrast, other fluorosurfactant-free foams rely strictly on bubble action, which is much more easily disrupted than the fluorosurfactant layer that has proven so effective for the last 50 years.

- Fluorosurfactant firefighting foams have been so superior in saving lives and property that for decades, various entities encouraged inclusion of these ingredients in design of systems, including fire marshals, insurance companies, National Fire Protection Association (NFPA) standard(s), Federal Aviation Agency (FAA) regulations, and Department of Defense (DOD) military specifications (MILSPEC)).

- Currently available fluorine-free foam alternatives may not be effective on all types of industrial fires, and while progress is being made, the transition to newer formulations cannot occur overnight. While testing in controlled situations has occurred, fluorine-free foams have yet to be employed during a significant large-scale tank fire at an industrial facility, creating skepticism about their efficacy in such situations.

Therefore, firefighters and other first responders should be allowed to have the most effective firefighting tools available to them to help protect & save lives and any phase-out of fluorinated firefighting foams must ensure transition timelines are adequate, be considerate of the extensive resource requirement involved in switching entire firefighting systems, and include an exemption provision for refineries should acceptable substitutes not be available.

Sincerely,

Mike Karbo
Associate Director – Midwest Region
American Petroleum Institute