

U.S. MISSION TO THE EUROPEAN UNION

This paper responds to the invitation extended by the November 2020 EU Competent Authorities for Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) and Classification, Labeling, and Packing (CLP) (CARACAL) White Paper on essential uses requesting comments on its proposed course of action. In light of that invitation and the underlying policy, this paper identifies issues of particular interest to the United States and provides comments with an initial focus on military and defense supply chain related equities. The U.S. Government has been unable to complete consultations with industry and relevant third countries and hopes to have additional opportunities to pose questions and provide additional input in the future.

The interest of the United States in this proposal derives from its membership in the North Atlantic Treaty Organization (NATO), 21 other members of which are also members of the European Union. Even though the REACH regulation may not apply directly to activities of the U.S. military, the United States offers the following comments in reference to considerations for an essential-use exception to REACH requirements. These comments support the 2016 and 2018 Joint EU-NATO declarations to ensure NATO has the full range of capabilities and forces that are trained, interoperable, deployable, and ready to meet Alliance requirements.

The United States supports consideration of a properly tailored essential-use exception that takes into account the following concerns. The U.S. notes that the proposed REACH regulation might have a supply-chain effect on U.S. defense capabilities as part of NATO operations. Without a properly tailored essential-use exception, the regulation might lead to obsolescence of chemicals produced only within the European Union. This obsolescence would pose a risk to NATO Allies equipment and materiel. In the past, European producers have served as a sole source for certain chemicals in the NATO supply chain. This concern thus is substantial, not hypothetical.

Accordingly, this submission responds to questions raised by the White Paper about the proper desire of an essential uses exception to the contemplated regulation.

Need for a case-by-case approach to definition of essential use

The need for a case-by-case, rather than a predefined, approach to essentiality criteria reflects specific characteristics of particular activities that may be too granular to identify through predefined criteria. The use of PFAS products in firefighting foam provides a concrete example of particular interest to the United States.

PFAS products used in aqueous film forming foam (AFFF) lower the time needed to extinguish a fire, all other things being equal. One can imagine the speed gap between a PFAS-based foam and a PFAS-free foam being sufficiently small to justify treating the PFAS-free alternative as feasible in some circumstances. But, in cases where fires are likely to occur in close proximity to explosives or highly flammable fuels, a common situation in military environments, the speed gap may be unacceptable. Only an approach to essentiality that captures such variations in context will do an effective job of balancing chemical-based risk against the costs of forbidding socially beneficial uses.

In addition to speed of extinction, firefighting foam also must ensure that extinguished fires do not resume. AFFF with PFAS provide a blanket that keeps a fire out and thus suppresses its

reaching nearby volatile materials such as fuel or weapons. The capacity to keep a fire out once it has been extinguished thus is a separate performance issue that distinguishes military use from more conventional uses of firefighting foam.

Factors relevant to determining essential use

When developing criteria for applying an “essential uses” concept to Member State military activities, several issues arise that do not have clear civilian equivalents.

1) Performance Standards

Due to the critical nature of some military operations, performance standards often may be more stringent than those used for equivalent civilian purposes. Some military aircraft may be called on to fly at speeds and with maneuverability that are not encountered in civilian contexts, leading to specific requirements for coatings and other materials. Similarly, the degree of corrosion control (protection) provided by hexavalent chromium (a highly regulated hazardous substance) may not be necessary for commercial aircraft but may be critical for military aircraft spending months at sea on aircraft carriers or other harsh environments. As noted above, the effectiveness of firefighting techniques in normal civilian contexts may not apply in environments where fires occur in close proximity to high explosives, such as on warships or air bases.

Firefighting in military contexts present factors that may not be common in civilian contexts. Military firefighters typically must respond offensively to fires to protect people, equipment, and structures. Some facilities have characteristics, such as nuclear fuel as well explosive-based ejection devices and flammable fuel cells, that make a timely and effective response more urgent. The replacement cost of military equipment, such as aircraft, may dwarf that of many buildings in civilian spaces. For these and similar reasons, the standards for firefighting resources used in a military context must be higher than their civilian contexts.

These examples illustrate a general point. The concept of available alternatives is highly contextual.

2) Interoperability

The overwhelming majority of EU Member States (21 out of 27) are members of NATO. Several other Member States are parties to the NATO Partnership for Peace Framework. For those Member States which see their common defence realized in NATO, the 2016 and 2018 Joint Declaration recognized the urgent need for Allies to develop coherent, complementary, and *interoperable* defence capabilities. A substantial number of these Allies are not represented in EU rulemaking. Interoperability promotes flexibility in deployment and lowers the cost of training and support. A high level of protection of human health and the environment under REACH must account for capability development, crisis management, and cooperative security necessary for our common defence.

Interoperability requirements, among other things, may affect performance standards. These standards will reflect anticipated missions that the alliance might undertake, rather than the specific

security needs of particular states. Compliance with these standards may limit the range of substitutes that otherwise might be available and thus drive an essential-use analysis in particular cases.

3) Availability and Transition Periods

When considering the availability of particular chemicals as substitutes, the existence of the substitute chemical itself and the availability of equipment for storing and applying that chemical should necessarily be considered. Situations may arise where a substitute chemical exists, but that substitute cannot be deployed for specific military uses without also replacing the storage or delivery equipment. Characteristics of the substitute chemical, such for example as its viscosity, may make existing delivery systems infeasible. Wholesale replacement of such equipment might be so costly as to render the substitute chemical unavailable for purposes of an essential-use analysis.

To illustrate this point, the U.S. Department of Defense (DOD), responding to an inquiry of the Government Accountability Office, a body that monitors the U.S. government on behalf of the Congress, recently issued a statement on replacement products. Asked about fluorine-free PFAS foam, the Department responded:

“One of the products used by Denmark and Norway has been tested in preliminary small scale performance testing against the AFFF MILSPEC. Although the product is one of the commercially available fluorine free products, it did not meet the MILSPEC performance standards. Additionally, due to the high viscosity of these fluorine-free firefighting agents, they are not a drop-in AFFF replacement for DOD. If DOD were to utilize these products, the transition will be significantly delayed and incur additional costs due to the need to redesign the foam delivery system hardware.”¹

Even were the product compliant with specifications, as it currently is not, the costs associated with obtaining new equipment would require an essential use exemption for the transitional period.

Similarly, the equipment used to store the foam, including storage tanks and vehicles used to deliver it for application, will contain PFAS residues even after fluorine-free products are developed. Any regulation of foam linked to PFAS residue also would require a transitional essential-use exception to reflect the costs of replacing storage facilities even after deployment of a substitute chemical.

The general point that these examples support is that an essential use exemption under REACH, when considering the availability of substitutes as well as the value of the use for which no substitutes exist in these military contexts, should necessarily take into account not simply the discrete characteristics of the chemical in question, but also the various processes involved in the production and use of the chemical. Furthermore, these issues need to be addressed in the essential use definition itself, and not by leaving it to Member States to exercise their right to derogate with respect to military affairs.

¹ GAO Review of DOD’s Response to PFAS Contamination (104308).