FREQUENTLY ASKED QUESTIONS (FAQ) ABOUT THE UNIVERSAL PFAS RESTRICTION

In February 2023, a proposal to ban the group of highly dangerous PFAS (Per- and polyfluoroalkyl substances) was presented to the European Chemicals Agency (ECHA) who is now in charge of its assessment. This proposal builds on a critical amount of concerning and emerging evidence on the risks posed by these chemicals to the environment and human health. Unfortunately, numerous industrial stakeholders have been sharing, in the context of the ECHA process and publicly, a broad array of misleading or distorted information with an aim to discredit the proposed ban. This 'Frequently asked Questions' aims to clear up some of the easily misinterpreted information disseminated since the beginning of the process, by presenting key information.

THE UNIVERSAL RESTRICTION OF ALL PFAS UNDER REACH

Question 1 – Is the restriction a blanket ban of all PFAS?

Answer– A blanket ban is not the option proposed and being assessed by ECHA

The five member states (the Dossier submitters or 'DS') are proposing a ban of all PFAS, but that includes various derogations. Some uses are completely excluded from the ban (e.g. PFAS as active substances used in pesticides) while others (e.g. personal protective equipment against fire, medical devices) will likely get time limited derogations. A blank ban is not the option proposed and being assessed by ECHA.

Question 2 – Would a ban overlap with existing regulation?

Answer– The restriction regulates a situation that is not yet or not sufficiently addressed under other existing EU legal frameworks

REACH is the horizontal framework governing the production, selling and use of chemicals in the EU. The proposed restriction under REACH specifically covers the large group of PFAS.
Some PFAS are already addressed in some regulations, which do not address environmental hazards such as high persistence, high bioaccumulation and/or high ecotoxicity. To ensure all PFAS are addressed, due to their persistent and additional hazardous properties, existing sector or use-related regulation is not sufficient.

Question 3 – Can PFAS emissions also be minimised through existing legislations?

Answer - A REACH restriction is the most efficient and effective measure to regulate the group of PFAS.

Reports of widespread PFAS pollution throughout Europe show that industrial efforts to limit emissions on site, and other regulatory initiatives have failed to prevent this disastrous pollution. The necessity of adopting a ban under the REACH Regulation has been thoroughly demonstrated and justified by the dossier submitters of this restriction proposal: a wide restriction is the most efficient, effective and proportionate measure[1].

[1] Annex XV dossier, p. 3, 74

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Question 4 – Is the proposed action on PFAS proportionate to the issue?

Answer – Action to prevent further pollution and harmful impacts is well justified

The risks to the environment and human health posed by the PFAS group are more and more documented through epidemiological studies as well as environmental and bio-monitoring. A lot of evidence shows that PFAS are persistent and that additionally, some PFAS subgroups present additional hazards such as toxicity, mobility, bioaccumulation, and long-range transport. In such a situation it is necessary and more proportionate to avoid and minimise further damage which we are already witnessing across Europe, than repair it.

Question 5 – Is the restriction of the entire PFAS group only based on the persistency of PFAS?

Answer – The high persistence of PFAS combined with other hazardous properties justify action

The grouping in the PFAS restriction is based on structural similarity that triggers equivalent hazards and risks among the substances covered, primarily related to the very persistent property of the substances. The developers of the restriction consider that grouping based on persistence avoids regrettable substitution which we've seen in the case of long-chain PFAS being replaced with shorter PFAS molecules. The approach taken until now of regulating them individually is not efficient and does not fully address the concerns they pose.[2]

Question 6 – Are PFAS necessary for the EU to reach its political green transition targets?

Answer - No transition can be claimed to be green if it relies on the continued pollution of people and the environment. The restriction allows for time-limited derogations for uses where there are no available alternatives.

Currently, the European industry heavily relies on PFAS technologies yet frontrunner companies are already adopting PFAS-free alternatives[3], even in traditionally challenging sectors like semiconductors[4] and hydrogen production[5]. Even for high-performing PFAS as fluoropolymers, only about 8% of the total production volume go towards 'essential uses ' i.e. critical to health, safety or the functioning of society, such as renewable energy, semiconductors and pharmaceutical sectors. The DS have already assessed the information on availability of alternatives and propose prolonged transition periods for specific uses where needed.

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[2] - Cousins et al. (2020) The high persistence of PFAS is sufficient for their management as a chemical class. Environmental science. Processes & impacts 22 (12), 2307-2312. DOI: 10.1039/d0em00355g
- Restriction Dossier section 1.1.2., p. 20f.
- Kwiatkowski et al. (incl. JamieDW, XeniaT) (2020) Scientific Basis for Managing PFAS as a Chemical Class. Environ. Sci. Technol. Lett. 2020, 7, 532−543
- Cousins, et al. (2016) The precautionary principle and chemicals management: The example of perfluoroalkyl acids in Groundwater. Environ. Int. 2016, 94, 331−340.

[3] https://pfascentral.org/pfas-free-products/
https://www.pfasfree.org.uk/pfas-free-products

[4] Sharma et al (2023) Safer and effective alternatives to perfluoroalkyl-based surfactants in etching solutions for the semiconductor industry. Journal of Cleaner Production, 415, 137879. https://doi.org/10.1016/j.jclepro.2023.137879

[5] (Hydrogen production) Fraunhofer IAP, July 2023. Novel anion-conducting membranes for electrolysis. https://www.iap.fraunhofer.de/en/press_releases/2023/novel-anion-conducting-membranes-for-electrolysis.html

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Question 7 – How does the proposed ban impact industry and investors' interest in innovation?

Answer - A restriction boosts innovation and creates industrial leaders, which attract investors

Right now, the European industry relies on PFAS technologies, what is not sustainable in the long-run and risks hampering the EU's autonomy. Conversely the restriction of PFAS is likely to boost innovation across sectors by incentivising companies to replace PFAS with safer alternatives. The restriction process ensures that sufficient transition periods are granted for clearly outlined uses where there is a lack/reduced availability of suitable alternatives to move away from PFAS. This will enable a continuity of business operations affected by the ban.
A restriction moreover creates certainty by making clear what uses can continue, for how long, and which cannot. A ban actually attracts investors that are concerned about the continued use of hazardous chemicals. PFAS pollution has further triggered an increasing number of lawsuits against companies and sparked action to tighten legislation around the world. Investors believe that companies' licence to operate is dependent on the public understanding of risks and impacts.[6]

Question 8 – Are all companies and their supply chains prepared for the restriction?

Answer – PFAS regulation is not new. Supply chains have had opportunities to become aware of the EU intention to ban PFAS and would have at least seven years to prepare.

It is the responsibility of manufacturers and users of chemicals to know and comply with EU regulations. In addition to the many international, national and local regulatory initiatives that have targeted PFAS over the past years, the dossier submitters started years ago to communicate about their restriction proposal being under preparation for the EU. They officially registered their intention to ban PFAS in 2021. This process has moreover included a number of consultations with the relevant industry sectors and their representing associations, so that companies had the opportunity to hear about the proposed ban and contribute to its framing. This process is not over and is expected to take at least another two years, providing industry with ample time to contribute, think about and implement PFAS alternatives. Even after the ban's entry into force, many supply chains will benefit from extra time to bring their business in compliance with the new legislation. Hence, no company can reasonably claim it is unprepared.

Question 9 – Do PFAS alternatives provide the same safety?

Answer – Safety is essential but no long-term barrier to phase-out PFASs

In the context of the PFAS restriction, the Dossier Submitter has acknowledged the importance of safety considerations and proposed several time-limited derogations on that basis[7]. PFAS uses identified as essential for safety and for which there is no alternative available will continue to be allowed, until alternatives that allow to achieve the required level of safety are developed. Safety concerns pose no barrier to moving on with the universal PFAS restriction.

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[6] ChemSec article - Investors with $8 trillion call for phase-out of dangerous "forever chemicals"

[7] The safety standards are however a good example since the are only conflicting with a phase out of PFAS in 2 EU member states (FR & IT). In other countries PFAS can already be replaced by alternatives without significantly lowering the safety. Despite the natural alternatives available, European companies have been delaying the switch until the standards are adopted. The standards still hampering the change to natural refrigerants must be revised.

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Question 10 – Can society handle the consequences of banning all PFAS?

Answer – The phase-out of PFAS is designed to avoid disruptive adverse impacts to society

The restriction is in its current drafting, leaves room to mitigate unwanted effects to society in case critical products were to disappear and it will spur (green) innovation, which is where the EU would like to be. The dooms-day scenarios industry draws where they predict that, giving up PFAS will take us as a society a century back, are misleading and distracts from the currently ongoing discussion. In fact, a restriction prevents further harm to people and our planet. The restriction dossier explains that eventually the societal cost of inaction will always surpass the costs of a ban on the use of PFASs.[8]

Question 11 – Are equally efficient alternatives available, especially for Fluoropolymers?

Answer – Alternatives are already in place or under development for most uses and many companies are determined to be leaders, not laggards

The relevant question is whether there are alternatives fulfilling the needed function in the respective use to substitute PFAS. Key functions need to be defined, maybe not all properties that PFAS provide are always needed. Substitution can take place with alternatives that have the same function, or the process can be redesigned to meet the new demands. A certain level of reduced efficiency is acceptable and needs to be assessed, yet alternatives can also turn out to be more efficient.

More than 90 companies have joined ChemSec's Corporate PFAS movement, many of them having already phased out PFAS, demonstrating the availability of alternatives and the possibility to adapt industrial processes.[9]

Question 12 – Are Fluoropolymers a cause for concern?

Answer – Assessments about concern and regulatory needs, must match today's knowledge and understanding of acceptable risks and impacts

The OECD hosted in the 90s expert discussions to develop criteria for so-called 'polymers of low concern' with little need for data submission to regulating authorities. Renowned researchers in the field clarify that the drafted, but never adopted or agreed, criteria do not reflect potential risks to health and the environment throughout a polymers entire lifecycle and conclude that FPs are not of low concern[10].

Throughout the lifecycle we find concerning data. A large share of the emissions come from the production process of fluoropolymers[11], such as polymerization processing aids (e.g. GenX), emissions of fluorinated gases and fluoropolymers contain substantial amounts of non-polymeric PFAS. Also, the breakdown of polymers can result in unknown and unexpected substances, and testing should cover the entire chemical mix released by polymers, not just the original material.

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[8] - Restriction Dossier - section 2.3.1. Main restriction options assessed (p. 76 f.)

[9] A range of safer alternatives are available for many PFAS uses including for textiles[66], food packaging[67][68], and paints[69]. (Links see PFAS manifesto)
- ChemSec (2023) The claim that PFAS are critical to the green economy is complete hyperbole
- EPA: Exemptions for Essential Uses of Chlorofluorocarbons for Metered-Dose Inhalers

[10] M. Scheringer (2024) - OECD Global Forum on the Environment dedicated to Per- and Polyfluoroalkyl Substances: An Overview of Current Uses of PFAS (Link)

[11] J. Dalmijn et al. (2024) Emission inventory of PFASs and other fluorinated organic substances for the fluoropolymer production industry in Europe. Environ. Sci.: Processes Impacts, 2024, 26, 269-287. DOI: 10.1039/D3EM00426K

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