

KIMO Resolution 2022/01

Per- and Polyfluoroalkyl substances (PFAS)

This resolution was agreed unanimously by members at the KIMO International AGM on 7 October 2022 and became KIMO policy on that date

Per- and polyfluoroalkyl substances (PFAS) are synthetic chemical compounds which, because of their ability to repel water, dirt and fats, have been widely used in the fabrication of industrial and consumer products. There are in fact several thousand different fluorinated substances with similar properties in this group. The compounds have been used as a coating on a diverse range of items including fabrics, furniture, cookware carpets, packaging and metals. PFAS can be released into the environment through both the manufacture and use of these products.

PFAS are classed as persistent organic pollutants (POPs) – organic substances that persist and accumulate in the environment and degrade extremely slowly. They can be transported over long distances by air or water. They are prevalent in the marine environment and have been identified in bathing water and in rainwater. High concentrations have been measured in ocean foam along the shoreline. The substances accumulate in the food chain and are toxic to humans and animals. The substances have also been a cause of contamination of sources of drinking water and of soil.

The European Persistent Organic Pollution Regulation 2019/1021 bans or restricts the use of PFAS. The EU has also decided to ban 200 PFAS substances in phases starting in February 2023.¹ This is the EU's largest ban on a group of similar chemical compounds.² However, this ban does not include all forms of PFAS, some of which are also of concern, as water contaminated with these types cannot easily be purified.³

There is still a considerable lack of knowledge about the extent of the PFAS problem, both in Europe and globally, but it is clear that a serious plan of action is needed now. Tighter restrictions need to be imposed and monitoring increased to ensure that inputs to the aquatic environment are slowed down via cleaning and phasing out.

The knowledge base must be significantly increased and sources of PFAS better identified. We do not know how many PFAS originate from rivers and streams flowing into the North Sea and the Baltic Sea. We have not sufficiently measured PFAS in the discharge of general wastewater effluent

¹<https://chemsec.org/eu-puts-200-pfas-out-of-business-but-thousands-remain/>

²<https://www.theguardian.com/environment/2022/apr/25/eu-unveils-plan-largest-ever-ban-on-dangerous-chemicals>

³<https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies>

or from diffuse emission from the exhaust of incineration plants. We do not know how harmful each of these individual PFAS substances is.⁴

There needs to be a plan for phasing out and banning of harmful PFAS. Efforts must be made to prevent PFAS entering the environment. The European ban needs to be expanded to cover all PFAS.⁵

PFAS substances in wastewater from sewage treatment and from flue gas from incineration plants need to be better regulated. Municipalities also need guidelines for handling wastewater and sludge from sewage treatment plants.

Cleaning must be optimized, primarily at the source and secondarily at treatment plants. Financial aid for modern cleaning technology must be made available. Tests with modern cleaning methods show that some PFAS compounds can be cleaned out of water.

Finally, a robust monitoring strategy and stricter limit values and guidelines are needed. A monitoring program should be initiated that exposes the concentration and quantities of PFAS in the marine environment, streams, lakes, groundwater, but also in fish, shellfish, mussels, meat, milk, eggs, etc. Development of standardized methods for sampling must therefore also be in place.

KIMO

Recognizing the need for a clean environment in and around the Northern and Baltic seas and the threat posed to marine ecosystems and coastal communities' economies by release of PFAS into the marine environment urges the European Commission and Member States to:

- 1) Impose a total ban in the European Union on the whole group of PFAS compounds**
- 2) Conduct research into the wider impacts and behaviour of PFAS in the marine environment and encourage systematic monitoring and sampling programmes to measure the effects of these compounds in the environment, including in marine wildlife**
- 3) Strictly regulate discharge limits of PFAS from industrial effluent, sewage treatment and waste management sites including flue gas from incinerators, with effective programs for monitoring and assessment.**
- 4) Support the development of effective cleaning technologies to remove PFAS and other hazardous chemicals from the treatment of wastewater before it enters the marine environment.**

⁴ <https://www.endsreport.com/article/1725832/revealed-gaps-defras-knowledge-toxic-pfas-pollution-uk>

⁵ <https://www.politico.eu/article/forever-chemicals-pfas-ban-restrictions/>

5) Support initiatives to investigate the spread of PFAS in the ocean, including spread to the Arctic and other uninhabited regions.

6) Support initiatives that investigate the risk of pollution from PFAS spreading from the marine environment to land, for example by sea foam, and the impacts on food resources in coastal zones.

KIMO members:

Agree to submit this Resolution to all National Governments, the European Commission and other relevant organisations.