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Nordic Workshop on PFASs

Outcomes

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Nordic Workshop on PFASs - Outcomes

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Background

The "Nordic[1] workshop on joint strategies for per- and polyfluorinated alkyl substances (PFASs)" was hosted by the Swedish Chemicals Agency[2] in Stockholm, Sweden on 5-6 April, 2017.

The aim of the workshop was to gather scientific and regulatory experts, identify common issues related to PFASs, recommend priorities and steps/strategies forwards and facilitate continued information exchange and cooperation. Participants consisted primarily of Nordic delegates but also representatives from other regions and arenas e.g. the European Commission, the EEA, the ECHA PFAS network.

The developments below reflect the discussions that occurred during the workshop. As many members were attending in their personal capacity, the elements below should not be considered as being officially endorsed by the organisations to which the participants belong.

However, the conclusions described below can be considered as being supported by the Swedish Chemicals Agency, the Swedish National Food Agency, the Swedish Environmental Protection Agency, the participants from the Danish Environment Protection Agency and from the Danish Veterinary and Food Administration, the Environment Agency of Iceland, the participants from the Norwegian Environment Agency, the Norwegian Food Safety Authority and from the Norwegian Institute of Public Health, the Environment Agency of the Faroe Islands, the Austrian Environment Agency, and the German Environment Agency.

[1] For more information on the Nordic Chemical Group, please read http://www.norden.org/en/nordic-council-of-ministers/council-of-ministers/the-nordic-council-of-ministers-for-the-environment-mr-m/institutes-co-operative-bodies-and-working-groups/working-groups/nordic-chemical-group-nkg

[2] http://www.kemi.se/

Outcome – General Considerations

PFASs are widely used in society and are as a whole group a cause for concern. Individual PFASs or their degradation products are extremely persistent in the environment. Some are proven to be bioaccumulative and toxic, whereas for others, there is a lack of publicly available scientific data. Nevertheless, certain PFASs have been ubiquitously detected in the global biotic and abiotic environment, even in remote regions such as the Arctic. Recently, PFASs have also been found in ground- and drinking water in a number of countries. Currently, there are strong indications that PFASs are increasingly used in chemical products, processes and articles, and more and more are detected in various environmental matrices. In contrast, knowledge about the specific uses and sources of emission as well as hazards and risks is poor for many of the substances in this group.

The workshop participants identified the needs for improving and expanding the current applicable PFAS terminology, in particular improving nomenclature for some subclasses of PFASs, as well as more research to fill data gaps. This includes e.g. substance identification and definition of the PFAS group, toxicity of some substances, in particular those that to date have been overlooked, and bioaccumulation potential. However, the workshop agreed also that the current level of knowledge on this group of substances and the extent of concerns about PFASs are sufficient to **justify prompt action.**

In order to tackle the problems raised by PFASs efficiently, the action should have the following characteristics (the numbering does not indicate any priority or chronological order):

1. It would enable us to fill in critical data gaps on PFAS and their alternatives, ideally within an international cooperation.
2. It would apply to PFASs as a group/groups, as opposed to a substance by substance approach. It would also be designed to adapt to the evolution/development of PFASs themselves, so that ideally there would be no need to revise the scope to address novel PFASs. This would also allow the problem of "pseudo-substitution" (i.e. replacing a substance with one that is structurally similar and thus often has similar hazardous properties) to be tackled in the future.
3. It would effectively regulate not only PFASs but also PFAS-containing articles (including imported ones, see the global scope below) and improve the traceability of those articles.
4. Specific uses of PFASs that have been justified as essential for society would be allowed only under controlled conditions aimed at keeping any releases to

the environment and human exposure during and after product life to an absolute minimum.

5. Given the long-distance mobility of PFASs and the global use of PFAS-containing articles, and the fact that many production sites are located in third countries, the action should have a global scope.
6. The PFASs remaining on the market due to the allowed essential uses (see element 4 above) should not be further spread by reuse or recycling - so as not to contaminate waste streams and end-up in articles where they would not be allowed.
7. It should enable to monitor PFAS in the technosphere, the environment and humans.
8. Remediation technologies for PFAS-contaminated sites should be developed and PFAS-contaminated areas should be identified and cleaned up.
9. Innovations should be promoted, and possibly incentivized, towards non-hazardous alternatives (e.g., sustainable chemistry).

Outcome – Specific Considerations

Based on the above characteristics, the workshop participants identified specific concrete measures in different areas (e.g. regulation, science, monitoring, and remediation). The groups of measures proposed were arranged according to different strategies based on distinct reasoning, but all strived to come as close as possible to the characteristics listed above. The measures that were most commonly discussed are described below. A key consideration is that these various measures should support and reinforce each other if they were to be implemented.

First, there is a need to raise more awareness on the problems that PFASs may cause for the environment and human health. The awareness raising measures should target the general public, relevant authorities, and policy-makers. This could be combined with an action at global level to label products containing PFASs. The labelling would show consumers the extent of the use of PFASs and allow an informed choice whether or not they want to buy such products. Furthermore, it would facilitate the separation of PFAS-containing products at the waste stage and allow dedicated handling.

Second, regulatory action is necessary. Preferably, a global regulation on PFAS would be needed (e.g. under the Stockholm Convention) but, given the time necessary to put it in place, existing EU regulatory tools can be used and further developed. The most effective instruments should be identified and used. The key regulation in this regard would be the REACH Regulation, but also other instruments can be used to accompany the measures under REACH. For instance, the drinking water directive and the groundwater directive could be amended in order to establish limits for PFASs and monitoring obligations.

The REACH Regulation enables to generate information on PFASs (that can be used in other legislation) and some of its provisions could be given their full potential. PFASs could indeed be considered "*substances of equivalent concern*" under Article 57(f) of the REACH Regulation (for instance based on extreme persistence and mobility) and included in the candidate list, with a view of making them subject to authorisation obligations or to be used as the basis of concern for restriction.

Restrictions under the REACH Regulation could also be applied to non-essential uses of PFASs (in particular in consumer products, both produced in the EU or imported), in addition to the restriction that was already adopted for PFOA, its salts and PFOA-related substances.

Workshop participants also identified areas of REACH where provisions were not sufficient to cover PFASs as a group. Therefore, it was suggested that the REACH Regulation should be amended in order to: (i) include registration for polymers, and a redefinition of a polymer in line with established polymer science definitions; (ii) allow for more automatic testing for persistence in substance evaluation; (iii) include "very persistent" substances in the list of substances of very high concern or make a specific category for "very very persistent" substances; and (iv) ensure that imported articles are covered when measures on PFASs are adopted.

Third, a number of monitoring measures were suggested including: (i) ensuring that producers share information on chemical identity of their products including impurities, synthesis methods, and analytical methods as well as analytical standards; (ii) developing a standardised method for monitoring total organic fluorine with a low detection limit in various matrices including products and in human blood; (iii) developing a historical inventory of PFAS on the market; and (iv) preparing a monitoring strategy guidance document to support policy measures.

Fourth, the following scientific needs were identified: (i) mechanistic studies of the effects and fate of PFASs in the environment and biota to facilitate read-across and to avoid pseudo-substitutions; (ii) more information on the substance identity of PFASs and alternatives; and (iii) more information on the fate and transport of PFASs at the waste stage (incineration and recycling).