

29.04.2021

Meeting with 3M/EMEA on PFAS restriction dossier

Short report to be shared with PFAS restriction group

Date: 26 April 2021**Place:** Webex**Reporting Member State:**

- ☒ DE
☐ NL
☐ SE
☐ NO
☐ DK

Participants (names and organization):

Member States: 5.1.2e (DE CA, BfC), 5.1.2e (DE UBA), 5.1.2e (DE BfR), 5.1.2e, 5.1.2e (NO CA), 5.1.2e (DK CA), 5.1.2e (SE CA)

3M/EMEA: 5.1.2e 3M, 5.1.2e
 5.1.2e 3M, 5.1.2e
 5.1.2e 3M, 5.1.2e
 5.1.2e 3M (Government Affairs, Germany), 5.1.2e
 5.1.2e

Role of stakeholder/company:

- ☐ Sector organization
☒ Manufacturer of PFAS
☐ Importer of PFAS and PFAS-containing formulations
☐ Formulators of PFAS
☐ Industrial user of PFAS(-formulations)
☐ Professional user of PFAS(-formulations)
☐ Manufacturers of articles using or incorporating PFAS
☐ Importers of articles containing PFAS
☐ Manufacturers and users of alternatives to PFAS
☐ NGO
☐ Other

Specific use sector (if applicable):

- ☐ Firefighting foams
☐ Textiles, leather and apparel and textile related products

- ☐ Food contact materials and non-stick kitchenware
- ☐ Household products
- ☐ Paper and packaging
- ☐ Construction products
- ☐ Personal care products including cosmetics
- ☐ Other(s)

Specific PFAS substance (if applicable):

- ☐ Perfluoroalkylsubstance:
- ☐ Polyfluoroalkylsubstance:
- ☒ Polymers:.....
- ☐ Perfluoropolyethers:
- ☐ Side-chain fluorinated polymers:
- ☒ Other...

Specific subject (if applicable):

- ☐ Grouping, substance ID
- ☐ Hazard and exposure, human health
- ☐ Hazard and exposure, environment
- ☐ Scientific studies
- ☐ Analytical methods
- ☐ Alternatives (technical availability, functionality)
- ☐ Essential uses
- ☐ Other.....

Stakeholder invited to provide the information presented in call for evidence or public consultation? Yes or no

Report

Agenda:

1. Brief introduction to 3M
2. Responsible manufacturing & 3M PFAS stewardship
3. PFAS uses
4. Fluoropolymers
5. 3M Novec fluids as alternatives to F-Gases
6. Immersive cooling
7. Upcoming group PFAS restriction in Europe

3M gave the attached presentation.

They present a technology for recycling of fluoropolymers by thermal decomposition (see slide 7). They explain that they have patented this technology and are in contact with other companies who are interested in it. The recycling revolves around managing the thermal decomposition to get back the monomers. For PTFE an efficacy of more than 95% was stated. The process is still being

developed and in the learning phase for other chemicals. 3M only evaluates the technology with their own manufacturing waste.

Concerning the liquids 3M explained that recycling is not considered but that downstream users have an interest in using durable products/liquids that last for a long time.

Regarding substance ID and additional information on the liquids 3M refers to their registration dossiers and the data that is available therein. In their view the substances are neither bioaccumulative nor toxic and, therefore, do not present a risk to the environment.

3M also claims that the PFAS-based liquids cannot be substituted without performance losses in many applications. They explicitly mention fire suppression, heat transfer and insulating gases. In insulating gases, PFAS are used in mixtures with other gases and only in low concentrations. Reference is also made to the F-gas Regulation and the reduction of the global warming potential (GWP) where the liquids produced by 3M play a major role as substitute for SF₆ due to their low GWP.

Asked about PFAS-free alternatives 3M states that they are developing such alternatives for the PFAS-enabled uses and expect to move to these within the next 5 years for some uses. As an example, PPE is mentioned where alternatives based on hydrocarbons are available.

A complete phase-out of PFAS is, however, not possible according to 3M. On the contrary, they see a major role of PFAS in the context of the CSS.

Answers to specific questions submitted to 3M:

Oil, gas and mining:

PFAS are used in this sector for chemical protection, e.g. where corrosive chemicals are needed. 3M explains that PFAS are not used anymore for well stimulation and are planned to be discontinued for mist suppression for mining (planned for summer 2021).

Regarding the market share, 3M feels that this is difficult to express in numbers as many products are sold to the US market but use of these products may still occur in the EU. PFAS for oil/gas is an important market for 3M but in the EEA the market share is low in comparison with other PFAS sectors (estimate: 10% or less).

In the mining sector PFAS are used for hydrometallurgy. This has an even lower market share in the EEA (almost negligible).

Impurities in fluoropolymers:

3M fluoropolymers contain only low amounts of impurities and also releases during use are expected to be low, but not fully understood. Indication of stability/durability is assumed from use of products, e.g. in the construction sector.

Immersive cooling:

Cooling of data centers is, according to 3M, an emerging application of PFAS. PFAS are used due to their low GWP and their non-ozone depleting properties. The main area of application are industrial and professional uses. Due to the late notice of the more specific questions and the limited time in the meeting, further discussion on this topic was not possible. However, 3M was asked to come back to the questions in writing within the next 4 weeks.

Scientific article that was mentioned in the meeting as information that we are aware of, and that presents concerns related to fluoropolymers:

Lohmann, R., Cousins, I. T., DeWitt, J. C., Glüge, J., Goldenman, G., Herzke, D., Lindstrom, A. B., Miller, M. F., Ng, C. A., Patton, S., Scheringer, M., Trier, X. & Wang, Z. (2020): [Are Fluoropolymers Really of Low Concern for Human and Environmental Health and Separate from Other PFAS?](#) *Environmental Science & Technology*, 54, 12820–12828.