

## Report

# Breaking the cycle: addressing PFAS concentration in recyclable products

**Date:** 2.02.2024

**Moderator:** Victor Dries

**Reporter:** Peter Loncke

**Subject:** Q&A session

- 
1. Question Change|Chemistry: How can we collaboratively ensure that discarded textiles do not end up in places around the world where they are not reused?

Theresa Kjell: that is a very broad question and there are not always obvious solutions to all problems. A key point is that a large proportion of textiles are blends. Tests show that to do good recycling, one needs to have more than 90% cotton or wool. So an honest discussion on blends is crucial.

Victor Dries: buying fewer clothes and wearing them longer also increases circularity.

Theresa Kjell: yes, ultimately recycling is more complicated than it seems.

2. Question European Environment Agency: In the textile industry, not only ordinary PFAS are used but also PFAS polymers. We don't actually know very well yet what happens when these are processed as waste. Has this aspect already been looked into?

Stijn Steuperaert: no.

Theresa Kjell: we indeed need more knowledge about the incineration of such waste. We know that only 1% is recycled now, what happens to the rest (incineration, Africa...).

Peter Loncke: in the debate on the universal PFAS restriction, it was correctly stated that there is a lack of knowledge on the effects of burning PFAS polymers. But also about how to recycle these polymers.

3. Question University Copenhagen: interesting info on measurements in Flanders on PFAS in certain wastes. Is this information shared with other countries and is there a possibility to coordinate

research/measurement programmes? Is there an option to share the work a bit? Could KIS play a role in that.

Peter Loncke: it's always good to share data and it would be nice if there was some form of symbiosis around different types of information. KIS is intended for companies that need hands-on experience on the topic of SvHC in their specific business context. It is about generating company-specific data and finding good methods for the specific situation.

Victor Dries: KIS does intend to cooperate with similar centres of excellence abroad. The focus of KIS is more on remediation and less on waste. For soil, there are already exchange and coordination forums.

4. Question Dutch Ministry of Environment: several measurements of PFAS in various wastes have already been made by OVAM and a new measurement campaign with other wastetypes is planned. Is there an idea of what % of wastes will exceed POPs limits?

Peter Loncke: In the first campaign there were no exceedances of the POPs limit. Of course, it may be different in the second campaign. There is some literature on this and we see that the concentrations can fluctuate a lot, but we are going to have to see if this also applies to Flemish wastes.

5. Question Veolia: one does not know how and what PFAS contaminates the incoming wastes. The only thing one can do is to take measurements of emissions via stack and discharge water. So one is very much in demand for more information upfront from the waste producers. This requires a legal framework to ensure that this information is delivered. This involves both final disposal and recycling of waste containing PFAS.

Peter Loncke: on our planning is a more general vision on the tension between circular economy and the detoxification of cycles. To support that exercise we are going to do a more extensive search of the literature. Together with our second measurement campaign that will lead to a better idea to where the problems are precisely. Then OVAM will try to develop guidelines for the different relevant waste streams and their sectors to make sure they look at the right compounds and criteria for their waste category. This exercise will be done in close collaboration with the relevant sectors. If all goes well there should be a set of guidelines by the middle of next year, or if necessary a legislative framework will be proposed by then.

Theresa Kjell: brands are facing the same problems and questions. They also want more traceability and transparency. Unfortunately, there do not seem to be many openings for legislative proposals at the moment. It would have been useful if these issues had been included in the Reach revision, but it has been sadly delayed. An opening is perhaps the work happening under the product passport of the Ecodesign Regulation. It is not yet entirely clear what information will be included in those passports. There are a number of derogation possibilities, so it is important to watch carefully to ensure that the relevant information flows will be made available in the future.

Victor Dries: attention should also be paid to the substances of concern that prevent proper recycling and waste treatment.

6. Question Denuo: the federation is a cool lover of the product passport. The question is whether it will be useful for the waste and recycling sector. Hopefully, there is no analogy to be drawn with the SCIP database which is completely unusable for the sector. There are limit values in the universal PFAS restriction proposal that are a lot higher than some values currently applied locally in Flanders. In this region, the PFAS pool is full but how can that be reconciled?

Theresa Kjell: Despite the fact that there will be tensions and problems around this in the future, the power of anticipation (there will be legislation coming, there is a problem for reputation...) should not be underestimated. Already, alternatives are starting to emerge. Ultimately, no company wants to continue using those substances if it is not absolutely necessary.

Stijn Steuperaert: there are already questions from companies asking whether it is not possible to track down the origin of PFAS in company wastewater to a specific source.

7. Question Victor Dries: is there legislation in other countries around safe cycling or PFAS in recycled

Dutch ministry of environment: is working on a framework. There is now an advisory document from RIVM on this. There will now be discussions with recyclers about the potential impact for them. This is a temporary framework until the u-PFAS restriction becomes active.

8. Question Victor Dries: we have seen that measurements are also taking place in Denmark. Are there any other countries?

Austrian Ministry of Environment: they are also going to start a small measurement campaign.

Joint Research Center: the organization is already doing a lot of research on different aspects of PFAS. They are definitely interested in teaming up with people in the room.

## **ANNEX 1 - PRESENTATIONS**

- CHEMSEC - Theresa Kjell,
- OVAM - Peter Loncke
- Centexbel Belgium- Stijn Steuperaert

## **ANNEX 2 – LIST OF PARTICIPANTS**

Flemish Government ( Departement Omgeving, Departement Zorg, Department of Mobility and Public Works, Department for Business and Trade, OVAM, VMM), Agoria, APPLiA, Arche Consulting, Arkema, Astoria Consultancy, Atlas Copco, Change Chemistry, CHEM Trust, Chemours, ChemSec, Denuo, Environment Agency Austria, Essenscia, European Commission, European Environment Agency, European Environmental Bureau (EEB), ExxonMobil, Fedustria, Finnish Environment Institute Syke, FIPRA International, FOD Volksgezondheid en Leefmilieu, HAZARDOUS WASTE EUROPE, Huduma VOF, Industrious Law, Ineris, Jan De Nul / Envisan, Le Monde, Leefmilieu Brussel, Materia Nova, Ministry of Infrastructure and Water Management NL, Panasonic Europe, Sarpi BeNe (Veolia), Sciensano, SMART, SPAQUE SA, SPF Economie, PME, Classes moyennes et Energie, Veneto Region – Italy, Veolia Environmental Services Belux NV, Vewin (Dutch Association of water companies), VITO nv, Zwijndrecht Gezond