PFAS in PPE: Introductory Webinar to the EU Industry Questionnaire in preparation of ECHA consultation.

Why your input matters.

ESF, ETSA, EURATEX and FESI joint questionnaire webinar
2nd October 2025

Agenda

- Introduction
- Update current status Universal PFAS restriction proposal + joint questionnaire

  Eric van Wely
- Q&A session
- Moderated by Henk Vanhoutte

  Panel :

  ESF : Eric van Wely

  ETSA : Wolfgang Quednau

  EURATEX : Chaima Elyahmadi

  FESI : Jérome Pero

WHAT IS FESI

Federation of the European Sporting Goods Industry

The unique trade association representing the interests of the sporting goods industry in Europe

1 800

Sporting goods manufacturers & retailers

85%

of the European market

€81 billion

Annual turnover

700 000

People employed in Europe

EURATEX
THE TEXTILES AND APPAREL CONFEDERATION

- As the voice of the **European textile and clothing industry**, EURATEX works to achieve a favourable environment within the European Union for the design, development, manufacture and marketing of textile and clothing products.
- Working together with EU institutions and other stakeholders, EURATEX strives for a recognition of the Textiles & Clothing sector as an **essential and strategic part of the European economy**.
- **EURATEX membership** is organised around :
  - **Full members** represent the national textile and clothing associations from around Europe, as well as branch associations (e.g. cotton producers).
  - **Associate members** represent specific segments of the wider supply chain, e.g. the textiles services or labelling, textile machines, etc.
  - **Individual companies** from the T&C supply chain can join as a Partner, providing their technical expertise.

ETSA, THE VOICE OF THE EU TEXTILE SERVICES SECTOR

ETSA, the European Textile Service Association,

represents the Textile Services industry

Textile Services provide laundering and rental services for reusable textile products such as workwear, linen, and uniforms

ETSA represents the value chain with textile manufacturers, national associations, machineries and detergents suppliers

Since 2021, ETSA is European Commission Climate Pact Ambassador and advocates for a phase out of only non-essential PFAS uses

European Safety Federation (ESF)

- The European representative federation for national associations of suppliers of Personal Protective Equipment (PPE)
- In addition, companies and other industry stakeholders can join ESF.
- Member of PPE Expert Group
- Accredited stakeholder at ECHA

PFAS in PPE: Introductory Webinar to the EU Industry Questionnaire in preparation of ECHA consultation.

Why your input matters.

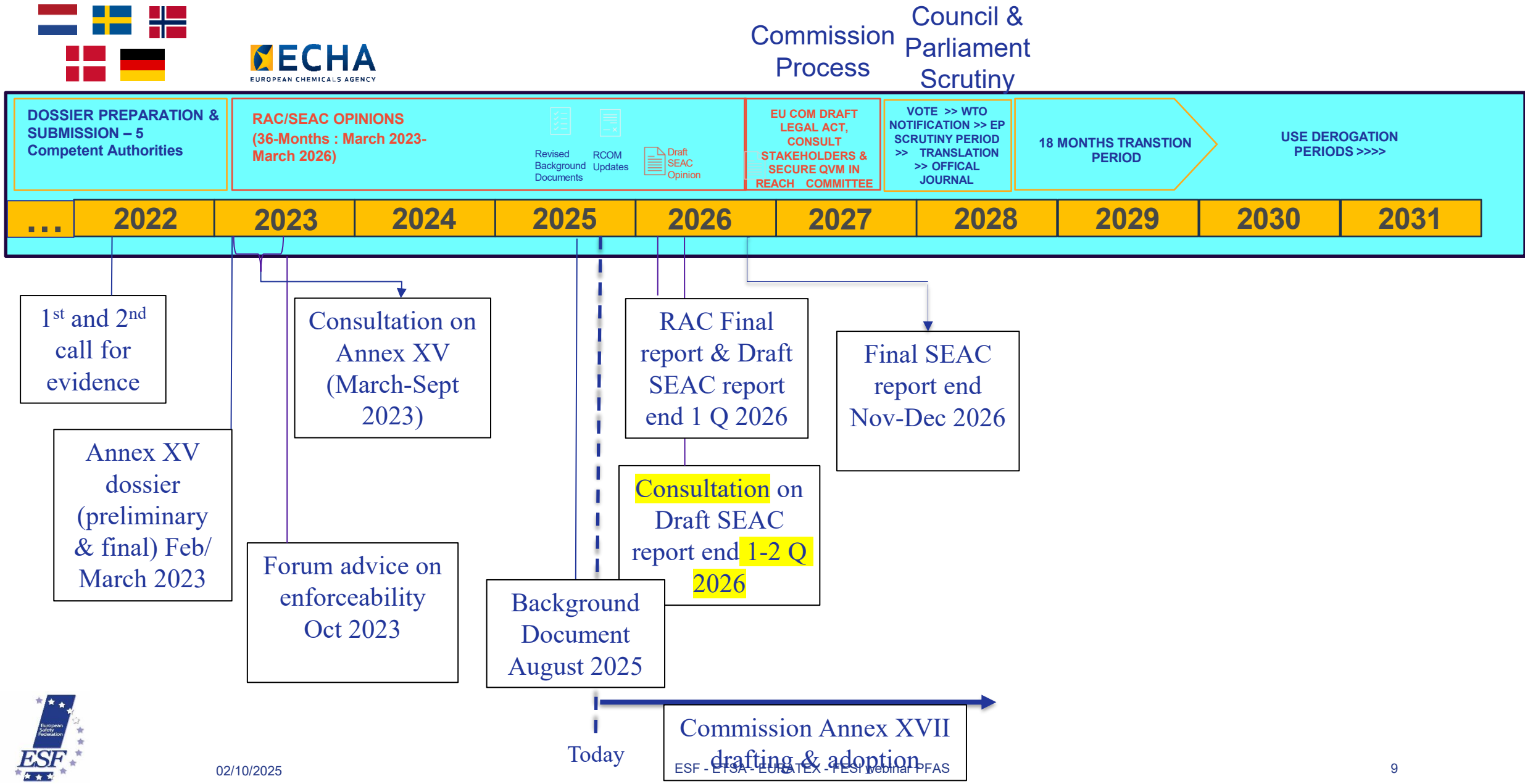
Update current status Universal PFAS restriction proposal + joint questionnaire

Eric van Wely
Expert for ESF as accredited stakeholder at ECHA
DuPont, Global Regulatory Affairs and Standards Manager

Purpose of webinar

- Background and status of Universal-PFAS restriction
  - Timeline & Process of adoption
  - RAC & SEAC
  - Restriction explained
- Reason for questionnaire & why you should respond
- Structure of questionnaire
- Content of questionnaire

Probable Timeline Universal PFAS Restrictions



What PFAS are covered by the universal PFAS restriction?

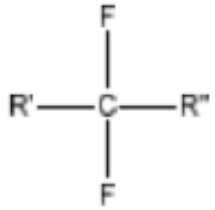
1. Decide on scope of PFAS Restriction – Substance Identity

Broad scope has been used as starting point:

"Substances that contain at least one aliphatic -CF_2- or -CF_3 element".

- **this covers many substances:**
  - 4700 substances in OECD list
  - 6800 substances in ECHA list (registered and C&L notified)
- **various structures**
  - PFAAs, PFSAs, PFAEs,
  - side-chain and backbone
  - fluorinated polymers
  - hydrofluorocarbons
  - side-chain fluorinated aromatics
  - etc. …

CF_3R



$R'CF_2R''$

PFAAs – per- and polyfluoralkyl acids
PFSAs – per- and polyfluoralkyl sulphonic acids
PFAEs – per- and polyfluoralkyl ether based substances

Covers around >9000 substances of which <10% are commercial products

EN 17681-1 (Textiles and textile products - Per- and polyfluoroalkyl substances (PFAS) - Part 1: Analysis of an alkaline extract using liquid chromatography and tandem mass spectrometry)

1 Scope

This document specifies a test method, including the degradation of certain side-chain fluorinated polymers during the extraction with simultaneous alkaline hydrolysis, and using liquid chromatography (LC) and tandem mass spectrometry (MS/MS) for identification and quantification of certain per- and polyfluoroalkyl substances (PFAS). The document is applicable to all materials of textile products.

Table 2 indicates a list of target PFAS which can be analysed with this document. PFAS of Table 2 marked with the footnote e) and footnote f) undergo alkaline hydrolysis and only their per- or polyfluorinated degradation products such as PFOA or *n*:2 fluorotelomer alcohols (*n*:2 FTOHs, *n* = 4, 6, 8, 10) can be determined.

Through the methods outlined in the informative Annex E and Annex F, free *n*:2 FTOHs, PFOA and non-polymeric PFAS of Table 2 marked with the footnote e) and footnote f), that are not stable to alkaline hydrolysis, can be identified and quantified.

Certain side-chain fluorinated polymers release *n*:2 FTOHs (*n* = 4, 6, 8, 10) under the described extraction conditions. Since these side-chain fluorinated polymers can be PFOA or C9-C14 PFCA-related substances restricted by the EU-POPs [1] or EU-REACH [2] regulations, the amounts of released *n*:2 FTOHs can be used to indirectly assess whether the concentration of the aforementioned side-chain fluorinated polymers exceed limits for PFOA or C9-C14 PFCA-related substances.

This document is also applicable to the determination of further PFAS, provided that the method is validated with the additional substances and that these PFAS are stable to alkaline hydrolysis and dehydrofluorination.

- Methanol/NaOH extraction
- Table 2 list of substances
- Quantification at low ppb levels ranging from 0.2 to 200 ppb depending on the chemical (and whether ng/ml or µg/kg respectfully 0.5-20 and 10-400)
- What will the authorities use? This standard or total fluorine?
- Oeko-Tex is expected to take over

Member State – Initiatives on PFAS in products

- **France (1 Jan 2026)**
  - Ban of consumer uses (except **cookware**) including textiles starting in 1 Jan, 2026
  - The ban would not apply to **protective clothing** until 2030, including specifically for safety and civil security professionals beyond 2030, details by draft decree;
- **Denmark (1 Jan 2026)**
  - Ban of consumer uses (food contact, cosmetics, ski wax, etc.) including consumer textiles
  - **Exemption for PPE**, and **general derogation medical devices**
- **Belgium (under discussion)**
  - Ban of consumer uses (food contact, cosmetics, ski wax, etc.) including consumer textiles
  - **Exemption for PPE**, and **general derogation medical devices**

Universal PFAS Restriction – Dossier submitters/ECHA
(Germany, The Netherlands, Denmark, Sweden and Norway)

- The Background Document (BD) derogations largely extended compared to Annex XV dossier, although the documents has been extended to more than 3500 pages.
  - 8 new use sectors
  - In addition to the options of total ban (RO1), restriction with derogations (RO2), a new option of a combined RO2 with additional requirement (RO3) (press-release 11.20.2024 together with RAC & SEAC) to avoid disproportionate impact.
  - RO3 allows for options with additional emission reducing measures (continued use under “strict conditions”) over the full life cycle , communication, reporting. A number of **uses listed that could profit from RO3** are transport, energy, medical devices, …

- General reactions to BD:
  - PFAS manufacturers have general concerns with complexity of the background document
  - PFAS polymer manufacturers concerns with PFAS identification, emission reduction, management plans, disposal and reporting requirements
  - Call from manufacturers for downstream users to look in detail whether their uses are correctly covered – BD document and Annexes A and E (Per- and polyfluoroalkyl substances (PFAS) - ECHA)

Publication of ECHA background document by five dossier submitters

1. Shall not be manufactured, used or placed on the market as substances on their own;

2. Shall not be placed on the market in:
   a. another substance, as a constituent;
   b. a mixture,
   c. an article

in a concentration of or above:
   i. 25 ppb for any PFAS as measured with targeted PFAS analysis (polymeric PFASs excluded from quantification)
   ii. 250 ppb for the sum of PFASs measured as sum of targeted PFAS analysis, optionally with prior degradation of precursors
   iii. 50 ppm for total PFASs (polymeric PFASs included). If total fluorine exceeds 50 mg F/kg the manufacturer, importer or downstream user shall upon request provide to the enforcement authorities a proof for the fluorine measured as content of either PFASs or non-PFASs.

3. Paragraphs 1 and 2 shall apply 18 months from entry into force of the restriction.

Concentration limits

Targeted PFAS analysis, non-polymers PFAS

Targeted PFAS analysis, non-polymers PFAS

All PFAS including non-polymers PFAS - total fluorine content analysis

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5. By way of derogation, paragraphs 1 and 2 shall not apply to:
   a. personal protective equipment (PPE) intended to protect users against risks as specified in Regulation (EU) 2016/425, Annex I, until 13.5 years after EiF;
   b. personal protective equipment (PPE) specifically designed for armed forces, the maintenance of law and order and other emergency response workers, until 13.5 years after EiF;
   c. impregnation agents for re-impregnation of articles referred to in paragraph 5b and 5c until 13.5 years after EiF;

PPE and not limited to Cat III (a) and (c)

Impregnation derogation

RAC & SEAC – opinion only Annex I, Cat III (a) and (c)

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5. By way of derogation, paragraphs 1 and 2 shall not apply to:

   d. placing on the market of articles which were already in end-use in the Union
   e. spare parts intended to replace PFAS-containing articles in articles or complex objects until 20 years after the last date when the complex article was allowed to be placed on the market for the first time or until the end of service life for the specific object, when it is shorter than 20 years
   f. spare parts used in articles or complex objects for which legal obligations related to the use of specific spare parts exist until the end of service life of the complex object

   ll. military applications until 13.5 years after EiF

   ss. woven, knitted and nonwoven re-usable medical textiles as specified in Medical Device Regulation (EU) 2017/745 of the European Parliament and of the Council with a minimum performance requirement of >20 cm hydrostatic head according to EN 13795 for 13.5 years;

Second hand (d) and spare parts (e, f)
(new derogation)

Military applications
(new derogation)

Medical textiles
(new derogation)

Publication of ECHA background document by five dossier submitters

5. By way of derogation, paragraphs 1 and 2 shall not apply to:

aa. industrial and professional uses of lubricants or lubricant additives until 13.5 years after EIF;

vv. solvents used in industrial uses until 13.5 years after EiF;

ww. catalysts and processing aids used in industrial uses until 13.5 years after EiF.

6. By way of derogation, paragraphs 1 and 2 shall not apply to fluoropolymers and perfluoropolyethers for the use in:

p. sealing applications in industrial uses until 13.5 years after EiF

Process derogation
(new derogation)

6. Relevant for FPs and PFPEs

Industrial use of substances/mixtures (FPs and PFPEs) for the production of sealing application articles (i.e., o-rings, gaskets)

Publication of ECHA background document by five dossier submitters

7. Manufacturers, importers of PFASs or PFAS containing articles as well as downstream users formulating PFAS-containing mixtures making use of any of the derogations according to paragraphs 5 a)-c), e) – r), t) -jj), ll) - mm), oo) – qq), ss) – tt), vv)-ww), and 6c) – k), o) – r), t) – x), shall from (EiF + 18 months) provide by 31 May of each calendar year a report to the Agency containing:
   i. the derogation that the intended use belongs to;
   ii. the identity and quantity of the substances placed on the market in the previous year.

The Agency shall make the information available to the Commission and Member States by 31st August every year;

Reporting obligation for selected derogations under 5 and 6: Reporting requirements are proposed for **derogations with a duration of 13.5 years or time-unlimited as well as for all applications of fluorinated gases**

Goal: gather data on the use of these substances in these sectors and to monitor any changes to potentially review restrictions in time

Reporting obligations shall apply to **manufacturers, importers of PFASs and PFAS containing articles as well as formulators.**

ECHA - RAC & SEAC opinion development on U-PFAS Restrictions

March – June 2023
- Conformity check
- Key issues & recommendations
- Start assessment

March 2024
- Hazards (cont) (RAC)
- General approach (SEAC)
- Consumer mixtures & miscellaneous consumer articles
- Cosmetics
- Ski wax

September 2024
- Emissions (fluoropolymers & waste stage) (RAC)
- Textiles, upholstery, leather, apparel, carpets (TULAC)
- Food contact materials (FCM) and packaging (cont)
- Petroleum and mining

March 2025
- ***Applications of fluorinated gases***
- ***Transport***
- ***Energy***

September 2025 (tentative)
- Electronics and semiconductors (RAC & SEAC)
- PFAS manufacturing (RAC & SEAC)
- Horizontal issues (RAC & SEAC)
- Energy (SEAC)
- Lubricants (SEAC cont.)

December 2025 (tentative)
- PFAS manufacturing (cont.)
- Horizontal issues (cont.)
- Electronics and semiconductors (cont.)

March 2026 (tentative)
- Adoption RAC opinion and Draft SEAC opinion

September 2023 - December 2023
- Discussion of first draft opinions:
  - Scope and hazards (RAC)
  - Food contact materials and packaging (initial discussion)
- Overview of comments

June 2024
- **Hazards (RAC)**
- Emissions (waste stage) (RAC)
- General approach (cont) (SEAC)
- ***Consumer mixtures and miscellaneous consumer articles***
- ***Cosmetics***
- ***Ski wax***
- ***Metal plating and manufacture of metal products***

November 2024
- ***Textiles, upholstery, leather, apparel, carpets (TULAC)***
- ***Food contact materials (FCM) and packaging***
- ***Construction products***

June 2025
- Lubricants
- Medical devices
- Transport
- Electronics and semiconductor

Will not be covered by RAC and SEAC
- *Printing applications*
- *Sealing applications*
- *Machinery application*
- *Other medical applications*
- *Military applications*
- *Explosives*
- *Technical Textiles*
- *Broader industrial uses*

Horizontal issues
- Practicality & Analytics – enforcement, concentrations limits, monitoring)
- Emission Factors
- Management Plan
- General approach

Update RAC & SEAC Meetings: PPE /TULAC - September 2024

Textiles, upholstery, leather, apparel, carpets (TULAC)

- Includes PFAS of both production and emission of producing of TULAC
- All PPE part of TULAC
  - Mostly, if not solely focused on repellency
  - No consideration of process uses or incorporation of PFAS
  - TULAC includes PPE such as safety helmets, eye protection, face shields, ear plugs, ear defenders, air bags (e.g. protection from motorcycle falls or when in avalanches) and respiratory protective equipment even if they may contain minor accessories/parts that are textiles (such as helmet straps).
- Technical textiles will be handled separately
- Great misunderstanding what PPE is

European Safety Federation (ESF) reaction to the RAC and SEAC meeting regarding TULAC and PPE in the Universal PFAS restriction proposal

Date : 22/10/2024

To : Mr. Roberto Scazzolo, chair of the RAC
Ms. Maria Ottati, chair of SEAC
ECHA secretariat

As representative organisation of suppliers of Personal Protective Equipment (PPE), we welcomed to be able to contribute during the RAC 70 and SEAC 64 discussion on TULAC for the Universal PFAS Restriction. A couple of points surprised the ESF delegates during the meetings, we would like to highlight these from a process perspective:

First of all, the technical textiles have been taken out from TULAC to be treated separately, while all PPE are covered under TULAC. This is not coherent as materials used to produce protective clothing and other PPE under the PPE Regulation (EU)2016/425, are typically included in technical textiles. Therefore, it would make more sense to include PPE in the technical textiles use sector as, also for PPE, functionality is the priority.

During the TULAC discussion, the PPE FPAS issue seems to have been condensed to issues related to repellency, while there are many films (defined as textiles) used in PPE that may either contain or are produced using PFAS that are included in protective clothing and other PPE for protection against risks related to heat and flame (including electric arc), chemical substances (in any form) and/or greases and solvents as well as any combination of those risks. This is a significant misunderstanding of what protective clothing and PPE are.

Finally, TULAC (Textiles, Upholstery, Leather, Apparel, Carpets), which covers materials that are linked to clothing or garments as the acronym implies, has been extended to other PPE that are not related to TULAC such as safety helmets, eye protection, face shields, ear plugs, ear defenders, air bags (e.g. protection from motorcycle falls or when in avalanches) and respiratory protective equipment even if they may contain minor accessories/parts that are textiles (such as helmet straps). Nevertheless these items of PPE provide protection in a variety of dangerous environments and may or may not contain PFAS as components, such as textiles, films, o-rings or other. Using the acronym TULAC is thus misleading and will only cause confusion as many of these products are not or do not contain textiles.

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Update RAC & SEAC Meetings: PPE /TULAC – September/November 2024

TULAC definition

- Home textiles
- Consumer apparel
- Professional apparel and PPE
  - Professional apparel, e.g. sportswear and uniforms
  - PPE - All protective clothing and other protective tools falling under the definition of PPE are considered in this section (safety helmets, gloves, eye protection, Hazmat suits, high visibility clothing, safety footwear, safety harnesses, ear plugs, ear defenders, respiratory protective equipment…). Electronic components are included in electronics and semiconductors sector.
- Leather applications
- Other and unspecified textile applications

RAC Conclusions

- Uncertainties to emissions estimations
- DS not able to share emission for different sub-uses
- RAC considers that less hazardous alternatives exists for sub-uses
- Uncertainties little impact ton overall conclusions
- Additional work may be required

SEAC conclusion:

- There is evidence supporting specific derogations for the use of PFAS **in limited group** of PPE (chemical & biological)
- Doubts for a broad derogation of all CAT I, II & III warranted to ensure proportionality, or whether 12 year derogation is justified even for armed forces, the maintenance of law and order and other emergency response workers
- Lack of granularity for targeted derogation on both cost and benefits
- SEA: information on costs and benefits do not allow drawing a conclusion on a different derogation period

Update RAC & SEAC Meetings & Consultation:

General opinion from ECHA committees:

- Many derogation not sufficiently justified
- Broad and complex scope (in terms of substances and sectors/(sub-)uses covered)
- Overall lack of robust (qualitative and quantitative) socio-economic information
- Cannot conclude on the magnitude of costs associated with the restriction options RO1, RO2 and RO3 assessed (Costs are likely significant, mitigation impossible to quantify) ➔ proportionality?
- Environmental effectiveness of RO 1 & RO2 >70%
- Challenging to enforce (Many new methods) ➔ substance-based restriction

SEAC Consultation

- targeted (using a survey type) questions (focus on information on the impact of the restriction and possible alternatives) and cover two sections:
  - General questions on the SEAC Draft Opinion sections (including 8 new sectors of use) – free text questions
  - Specific questions on the SEAC evaluation of the sectors of use (14 original sectors) – questions with a numerical, multiple choice or free text (with character limit)
  - Confidential response is possible, but no attachments.
- Sector use mapping that stakeholders can use to identify where their use is covered. Guidance to be developed.
- ECHA webinar on 30th October: questions can be submitted upfront or during the webinar (link: Events – ECHA)
- As missed uses are covered by default in the original proposal, input can be provided in the consultation.

ESF, ETSA, EURATEX and FESI joint questionnaire

- RAC and SEAC are the responsible Committees for ECHA's scientific opinions (derogations, transition periods, feasibility, costs, benefits, and societal consequences and enforceability (FORUM) of a restriction)
- Final legislative decisions are made by the Commission.
- Consultation is important as it is the last official step in process to react to both BD and draft opinion before Commission work
- **Deadline –** Complete by **31 December 2025**.
- The questionnaire will be used for the each association's respective response to the SEAC consultation but also subsequently with any interactions with the Commission.

ESF, ETSA, EURATEX and FESI joint questionnaire

- Questions in the survey are based on questions received from ECHA and authorities during the UPFAS process
- This questionnaire prepares you to voice your concerns in the consultation – identify unrealistic rules, unworkable bans, and unintended consequences.
- Provide us more information so that we can represent you better in the consultation – more weight given to association than individual companies in the past ➔ **even partial input is useful**
- If you don’t want to share data with the associations - you need to respond directly to the ECHA consultation

ESF, ETSA, EURATEX and FESI joint questionnaire

“PPE” as covered in the questionnaire

- Technical textile / raw material / ingredient / component used in PPE or other covered products (as listed below)
- All types of PPE (scope of the PPER (EU)2016/425)
- PPE excluded from the PPE Regulation (armed forces, law and order; self-defence; seagoing vessels or aircraft)
- Medical textiles that are medical device (MDR(EU) 2017/745)
- Professional outdoor safety equipment
- Cleanroom garments
- Technical textiles in other application than under the PPE Regulation or the Medical Device Regulation
- Workwear and uniforms that are not PPE

ESF, ETSA, EURATEX and FESI joint questionnaire

Who should respond to the questionnaire?

- **EU Manufacturers** and **Non-EU manufacturers** of finished products and raw materials used in “PPE”
- **Importers based in EU/EFTA**
- **Distributor**
- **Service providers** involved in maintenance, care or refurbishment of “PPE”

➔Whether you produce raw materials, apply finishes, assemble PPE/ workwear, or maintain and clean “PPE”, your input is valuable.

➔*The information received will be treated in a confidential manner*

ESF, ETSA, EURATEX and FESI joint questionnaire

Structure of the questionnaire:

- Set-up in Survey Monkey
- Section 1A: PFAS in Production of PPE – Direct use (intentional)
- Section 1B: PFAS in Production of PPE – Unintentional use
- Section 1C: PFAS in Production Process – Exposure & Emissions
- Section 1D: PFAS in Production Process – Alternatives to PFAS

manufacture

- Section 2: “PPE” product containing PFAS (Manufacturer / importer)
- Section 3 – Impact of PFAS restriction for PPE sector – socio economic assessment (SEA)
- Section 4: “PPE” (containing PFAS) in-use phase (all)
- Section 5: “PPE” (containing PFAS) in end-of-life phase (all)

Q&A session

Moderated by Henk Vanhoutte

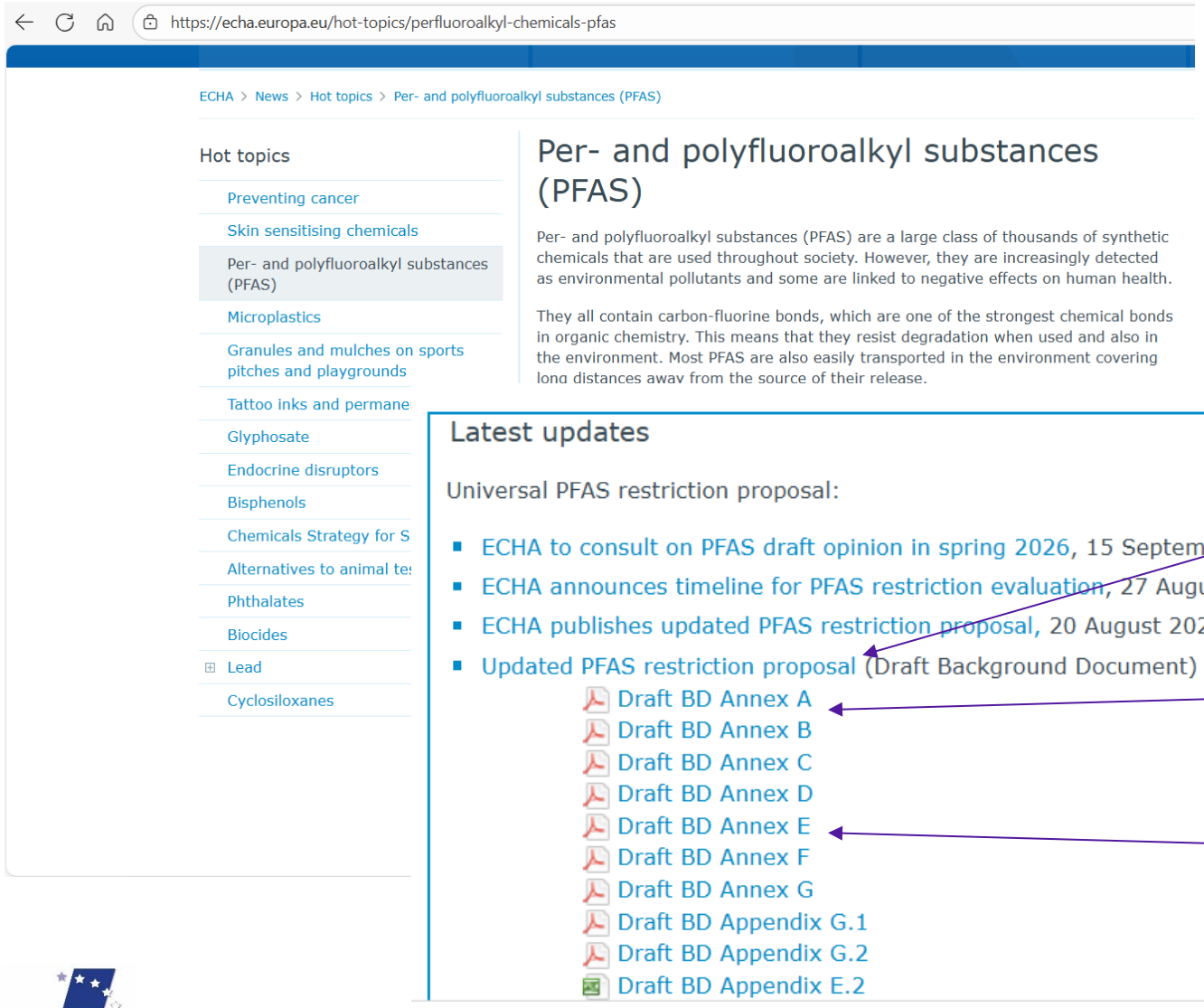
Panel :

- ESF : Eric van Wely
- ETSA : Wolfgang Quednau
- EURATEX : Chaima Elyahmadi
- FESI : Jérome Pero

Additional information/links

- CEFIC FPP4EU: Home - FPP4EU
- OECED PFAS definition: Reconciling Terminology of the Universe of Per- and Polyfluoroalkyl Substances | OECD
- ECHA:
  - General FPAS: https://echa.europa.eu/hot-topics/perfluoroalkyl-chemicals-pfas
  - Overall PFAS Restriction: Registry of restriction intentions until outcome - ECHA (europa.eu)
  - ECHA general PFAS information: Per- and polyfluoroalkyl substances (PFAS) - ECHA
  - RAC Meeting information: Meetings of the RAC – ECHA
  - SEAC Meeting information: Meetings of the SEAC – ECHA
  - FORUM compendium of test methods :3807683c-5340-4638-b5bc-5554635cdc8a
- "The PFAS policy landscape across Europe and beyond": https://www.env-health.org/wp-content/uploads/2025/09/HEAL_PFAS-National-Action-Plans_Report_2025.pdf and database of action plans and national measures https://www.env-health.org/wp-content/uploads/2025/08/ANNEX11.pdf

ECHA website



Key documents

Background document

Annex A on Manufacturing and Uses

Annex E Impact assessment

Further questions:

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