

# Hazardous Substances Advisory Committee (HSAC)

## Meeting Minutes – 42<sup>nd</sup> HSAC Meeting

5<sup>th</sup> July 2024

### **Item 1: Welcome by the Chair and approval of the draft agenda**

1.1 The Chair, Professor Iseult Lynch, welcomed all attendees to the meeting (see Annex A).

1.2 The draft agenda was approved with no additional items added under any other business. No conflicts of interest were declared with items on the agenda.

### **Item 2: Welcome from CPHW Deputy Director, Marc Casale**

2.1 Marc Casale thanked the Chair for the welcome and noted the result of the previous day's General Election. The new Ministers, when appointed, will give a specific steer on their priorities. Meanwhile, Marc noted that our priorities for bringing scientific advice into Government remained the same; understanding the challenges, understanding the policy options and making sure assessments are underpinned by robust evidence.

2.2 Marc stated that we would be open to exploring new ways of working with our expert Committees, including considering how Committees and Ministers might be brought together.

2.3 In response to questions on the potential for better co-ordination between Committees and policy regimes, Marc stated that Defra will have to see what priorities the new Ministers have and that scientific advice was key to being able to inform Ministers' opinions.

### **Item 3: Approval of the minutes from the 41<sup>st</sup> meeting, and review of actions**

3.1 The minutes from the 41<sup>st</sup> Meeting were approved. The Chair updated on the previous meeting's actions as follows:

- **Action: HSAC to decide whether, and who, to send to the Endocrine Disrupting Chemicals (EDCs) Roundtable**
  - The EDCs Roundtable has passed. We didn't end up sending anyone from the HSAC. An update on EDCs policy positions will be brought to the HSAC once the new Government's priorities are known.

- **Action: Ed Latter (Chemicals Policy Lead) to circulate the PMT interim position statement for comment**
  - Completed. Ed thanks the Committee for their comments. An update will be given once the new Government's priorities are known.
- **Action: HSAC Secretariat to draft a document giving all the feedback on the opinion piece ideas and circulate to the HSAC for prioritisation.**
  - The Secretariat circulated a summary of the discussion had at the last meeting, plus some additional feedback that has been received from Policy Leads since. This will be discussed on today's agenda.
- **Action: HSAC Secretariat to investigate including members of the public in the committee, introducing a mentoring scheme for committee members, and whether the HSAC could have a role in decisions around OECD test guidelines.**
  - The HSAC Secretariat has not yet progressed this. This action will remain open and will be updated on at the next meeting.
- **Action: HSAC Secretariat to send round polls to identify dates for future meetings.**
  - The HSAC Secretariat were not able to set meetings beyond the summer as teaching timetables had not been confirmed. A poll will be sent out shortly to book meetings for the rest of the year.

#### **Item 4: Update on current and previous commissions – led by the Chair, Iseult Lynch**

4.1 The Chair reported that the main ongoing commission was the Evidence Review of Pro-Additive Containing Plastics, which the Defra Waste Directorate and Gideon Henderson, Defra Chief Scientific Advisor, requested the HSAC to do. This is a follow-up from a report published by the HSAC in 2019 looking at the evidence of the environmental fate of what were at the time called oxo-degradable plastics. The current review is being drafted by a sub-group of this committee and will be sent to the full HSAC for comment before being submitted to Defra, and published as an HSAC report.

4.2 The HSAC have also been asked to comment on an Environment Agency report reviewing options to assess the “sufficiency” of environmental endocrine disruptor databases for regulatory purposes. This report was sent round with the agenda and was discussed further at this meeting.

#### **Item 5: The effects of flame retardants on human health – developing a work programme – led by Cecile Brich, Defra**

5.1 Cecile Brich provided brief background to the work. Hazardous flame retardants were one of the five priorities under the UK REACH Work Programme 2022-23. An update to the 2003 Environment Agency scoping report has been produced, however this only focused on environmental risk.

5.3 There is a need to further investigate the impact of potentially hazardous flame retardants on human health. This will include consideration of how flame retardants may be grouped for action and the possible policy actions that would reduce potential risk. The Committee were asked to input their ideas on how to effectively direct the next steps.

5.4 Stuart Harrad recommended the updated Office of Product Safety and Standards report on Fire Safety Regulation published in April 2023, which has a screening level approach for looking at the relative risks of human exposure from different furniture type products, including on dermal exposure. Stuart's group has data on dermal exposure, including dermal permeation coefficients (which enable exposure estimation) for some UK flame retardants. He also noted that Richard Hull from the University of Central Lancashire was looking at an international comparison of fire safety and it appeared that the fire safety benefits possibly are not as good as currently reported.

**Action: Stuart to share the data his group has on dermal exposure with Cecile Brich.**

5.5 Stuart also suggested looking at the Republic of Ireland's recent review as they are facing similar challenges; they have looked at humans' exposure by looking at household dust, car dust and office dust. Stuart suggested using a combination of non-targeted screening mass spectrometry and horizon scanning to provide a complete picture.

5.6 Jason Weeks highlighted work done 20 years ago on protecting bats from flameproofed timbers by measuring dermal uptake and modelling exposure. This is transferable to modelling human data.

5.7 Alan Boobis mentioned that the European Food Standards Agency have been looking at the risk of dietary exposure to flame retardants. They did a comprehensive study 10-12 years ago and are now revisiting. The chemicals were grouped according to structure and the toxicology was then reviewed.

5.8 John Colbourne said that grouping these substances by structure, bioactivity or some other way would allow regulation by group rather than individual substance. This aids prioritisation by enabling read across from data rich compounds to other members of the group in terms of mode of action. This helps to tackle the uncertainties around substances with less information available.

5.9 The Committee agreed that this would be a good case study for New Approach Methodologies.

**Action: HSAC to prepare structured feedback based on Cecile's questions.**

- The HSAC Secretariat took an action to set this document up and to share it with the HSAC for input.

**Item 6: "A review of options to assess the "sufficiency" of environmental endocrine disruptor databases for regulatory purposes" – led by Ian Doyle, Chemicals Assessment Unit, Environment Agency**

6.1 Ian Doyle gave an overview of the report he presented, which seeks to determine what constitutes sufficient data to allow a Predicted No Effect Concentration for endocrine disrupting chemicals to be derived for an adequate control assessment.

6.2 Several approaches in the derivation of probabilistic or deterministic Predicted No Effect Concentrations were described for three data rich compounds; nonylphenol, octylphenol and 17 $\alpha$ -ethinyloestradiol. The results were also validated against other compounds.

6.3 Stewart Owen acknowledged his role in the pharmaceutical industry when providing his comments. He expressed concern that the results of the study would always require the most in-depth data to be collected, and that reproductive data was undervalued.

6.4 The question of whether this approach would require further animal testing and full life cycle studies when the Government priority was to reduce animal testing was also raised.

6.5 Ian Doyle emphasised that this test was only to assess control measures for chemicals that have already been identified as an endocrine disruptor. He stated that substances of very high concern would already have significant data requirements but acknowledged that instituting these measures might send a message that the fullest level of data would always be required.

6.6 Luigi Margiotta-Casaluci suggested that the report go on to investigate how New Approach Methodologies could be used to fulfil the same purpose for these three substances.

6.7 Laura Carter requested that the risk to the terrestrial environment be further considered and referenced several papers showing high levels of endocrine disruptors in soils, probably due to sludge application. She also suggested that the possibility of using aquatic Predicted No Effect Concentrations for the terrestrial environment be investigated. Ian Doyle acknowledged this gap and stated the Environment Agency had started a piece of work looking into this.

**Action: The Committee to provide written feedback on the report by the end of July.**

**Item 7: Valuing environmental risk from chemical pollution – results from the recent Defra study** – led by Ahamad Akbor, Evidence & Analysis Hub, Chemicals, Pesticides & Hazardous Waste, Defra

7.1 Ahamad Akbor gave an overview of a piece of Defra funded research seeking to place an economic value on environmental damage from chemicals. This research will be published in due course.

7.2 Laura Carter raised that there is a need for research to understand where it is appropriate to use aquatic data to read across to impacts on terrestrial species, and where it is not.

7.3 John Colbourne appreciated the attempt to bring economic analysis to this issue and raised that information from the European project 'PARC' may be able to contribute. He suggested that it may be possible to sidestep the need to connect species impacts with ecosystem function by instead focusing on healthy biodiversity as the goal.

7.4 John Colbourne also suggested that focusing on clades rather than species would help deal with the issue of species interdependence in assessing chemical impacts on an ecosystem scale. Ahamad stated that the project team did attempt to look at clades but found a lack of data at that scale inhibited investigation.

7.5 Stewart Owen suggested that UKRI should be consulted on the ways they could fill the evidence gaps highlighted by this work.

**Action: Ahamad to share the report with the Committee with the condition that it is not shared further until it is published.**

**Action: Ahamad and Julia to come back to the Committee with suggested next steps for this area of work**

### **Item 8: Consideration of a systematic process for prioritising substances for further regulatory activities – led by Cecile Brich, Defra**

8.1 Cecile introduced the topic, asking the HSAC for ideas of how Defra can develop a systematic, robust and transparent process for prioritising action on chemicals. Cecile set out the current prioritisation process in UK REACH however Defra feels that there is scope to further refine the prioritisation process for UK REACH and for other policy activities.

8.4 Jason Weeks highlighted the importance of undertaking horizon scans, suggesting that horizon scanning should be a continuous process undertaken every 2-3 years to address the uncertainty in future issues arising. He stressed the importance of sharing the intelligence across the different arm's length bodies and departments to help with collective prioritisation and thinking about how you score different hazards or chemicals. He suggested it might be good for the HSAC to oversee the process of horizon scanning. It was agreed that further thought needs to be given to the process of how we tackle emerging risk, and that Defra should look at the Food Standard Agency process for food safety. Iseult Lynch suggested Chemwatch's sin list, but the challenge is that the list is very long.

**Action: Jason to share documents on Food Standards Agency prioritisation process with Cecile.**

8.5 Iseult Lynch identified that it's important to consider what policy levers are available and how those levers might work better for different substances.

8.6 Luigi Margiotta-Casaluci acknowledged that this was a very difficult, but important challenge. He suggested considering grouping chemicals by activity such as endocrine disruption and considering the contribution of a new chemical to the current mixture that is out there. Pharmacological or New Approach Methodology-based data can be used to assess the current cumulative risk for a specific end point.

8.7 Laura Carter mentioned that there has been significant progress on the evaluation of toxicity which will help prioritising from a toxicological hazard perspective. Therefore, there is the opportunity to capitalise on the emergence of higher resolution data on chemical

presence in the environment. She suggested the use of non-targeted screening to generate unbiased data. She identified the need to be able to predict exposure rates in the environment using minimal input, acknowledging the challenge when you are dealing with hundreds of chemicals. She proposed that joining the high throughput approach of non-targeted screening with toxicological endpoint data could provide a way to prioritise the available evidence.

8.8 John Colbourne highlighted the agreement across the HSAC of the importance of taking a grouping approach.

8.9 Suzie Qassim highlighted the imbalance of data available. PEWS has shown a paucity of data particularly in the terrestrial environment. The ChemPOP study by Andrew Johnson showed an improvement in the freshwater environment compared to the terrestrial environment, potentially due to greater monitoring of the freshwater environment enabling more effective decision making in terms of environmental protection.

8.10 Suzie also stated the importance of system architecture; you need to understand where the data you're gathering should be saved. Cecile confirmed that work is underway to develop a domestic approach to data requirements under UK REACH. The aim is to have more data on uses and exposure than EU systems to enable a more targeted approach.

8.11 Iseult confirmed that the HSAC were keen to work on this further with Cecile.

**Action: HSAC to prepare structured feedback based on Cecile's questions.**

- The HSAC Secretariat took an action to set this document up and to share it with the HSAC for input

**Item 9: Discussion on the next HSAC opinion paper(s) – led by Iseult Lynch, Chair**

9.1 Iseult Lynch noted that the HSAC were keen to follow up on their previous paper on New Approach Methodologies but the Defra leads were not available for this meeting to discuss. Marc Casale noted that it may be wise to wait until the new Government's goals in this area became clearer.

9.2 The focus of the discussion was on potential key policy questions for the teams delivering the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) legislation. Marc Casale noted that the new Government might be interested in understanding where there are strong grounds for not aligning with the European Union.

9.3 The essential use concept was noted as an area where the United States Government and European Commission have made statements, but the United Kingdom has not. It was suggested that looking at potential criteria that would justify diverging from the European Union would be valuable to look at.

9.4 It was requested that the issue of data extrapolation from the aquatic compartment to the terrestrial compartment should be listed as a possible future paper.

9.5 It was suggested that Defra's Foresight Team be consulted about looking into agile ways of regulating, based on models used internationally. It was felt there was still potential to create opportunities to maximise chemicals registrations and the use of science in making decisions.

9.6 The questions around consumer behaviour were discussed, with the current preference to consider how Government might raise awareness among stakeholders of the differing perceptions of risk given lack of information and uncertainty. It was noted that the HSAC might need support from behavioural scientists to tackle this.

9.7 Olivia Osborne noted that the Food Standards Agency has been doing work on New Approach Methodologies and consumer behaviour that may be valuable to the HSAC and emphasised the importance of cross-Committee working to share information and priorities. Olivia also co-Chairs the cross-Whitehall Group on New Approach Methodologies and is happy to take any planned work by the HSAC there for comment.

**Item 10: How can chemical regulation be used to support the transition to safer and sustainable chemical alternatives?- led by Ola Dosunmu, PhD candidate, ECORISC, Lancaster University**

10.1 Ola Dosunmu gave an overview of his research, which focuses on the extent to which chemical regulation drives regrettable substitution and how the decision-making process can be used to enable and support the transition to more sustainable chemistries.

10.2 The research has already highlighted industry views on the challenges of uncertainty in regulation, lack of data on alternatives and mismatches between the time allocated to find alternatives and the time required to develop them.

10.3 Stewart Owen highlighted that the lack of an agreed definition for 'sustainable by design' hampers ability to design sustainable alternatives. Nevertheless, there may be ways to promote innovation through the legislation, for example by extending patent length in certain situations, or fast-tracking assessments where certain criteria are met.

10.4 The Committee gave permission for their contact details to be shared with Ola so that he could follow up with individuals after the meeting.

**Item 11: AOB**

**Action: HSAC Secretariat to send round a poll for the remaining meetings of 2024.**

## ANNEX A

### ATTENDANCE LIST

#### HSAC:

- Iseult Lynch
- Stewart Owen
- Jason Weeks
- Luigi Margiotta-Casaluci
- John Colbourne
- Kevin Jones
- Stuart Harrad
- Laura Carter

#### Secretariat:

- Julia Sussams
- Yasmin Wright

#### Defra Policy Officials

- Marc Casale (Deputy Director, Chemicals, Pesticides and Hazardous Waste)
- Mark Chandler (Head of Evidence & Analysis Hub, Chemicals, Pesticides and Hazardous Waste)
- James Dancy (Head - Chemicals Hub: Legislation & Delivery, Chemicals, Pesticides and Hazardous Waste)
- Ahamad Akbor (Economist, Evidence & Analysis Hub, Chemicals, Pesticides and Hazardous Waste)
- Cecile Brich (REACH Work Programme Team, Chemicals, Pesticides and Hazardous Waste)
- Sarah Heathcote-Jones (Chemicals Policy Team, Chemicals, Pesticides and Hazardous Waste)

#### Defra Agency Representatives

- Ian Doyle (Environment Agency)
- Claire Massey (Environment Agency)
- Suzie Qassim (Natural England)

#### Other Government Department and Agencies

- Ovnair Sepai (UKHSA)
- Olivia Osborne (FSA)
- Britta Gadeberg (UKHSA)
- Emily Bird (UKHSA)
- Frances Hill (OPSS)
- Francesca Gauntlett (OPSS)

#### External Stakeholders

- Alan Boobis (Imperial College and Chair, Committee on Toxicology)
- Camilla Alexander-White (Royal Society of Chemistry)
- Roger Pullin (Chemical Industries Association)



- Chloe Topping (ChemTrust)
- Mohamed Elkhailifa (British Plastics Federation)
- Ola Dosunmu (Lancaster University)
- Andy Sweetman (Lancaster University)
- Kate Shipton (Cruelty Free International)

#### Devolved Governments

- Siobhan Fitzpatrick (Northern Ireland Environment Agency)
- Aoibhinn Corrigan (Department of Agriculture, Environment & Rural Affairs, Northern Ireland)