Hazardous Substances Advisory Committee

Minutes of 30th meeting: 16 March 2021

---

1. Welcome and approval of the draft agenda

1.1 The Chair, Professor Chris Collins, 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.

2. Updates from the 2020/21 programme of work

2.1 John Sumpter provided an update on the HSAC Review of the Prioritization and Early Warning System (PEWs) for chemicals in the environment and requested for any other HSAC members to provide comments.

Action: For HSAC to provide comments on the report which will be finalized by 19th March.

2.2 Chris Collins provided an update on the HSAC response to the Consultation on the revised National Action Plan (NAP) for the sustainable use of pesticides. The document will be circulated to the committee for comments with an aim to submit by the end of the month.

Action: For HSAC to provide comments once the document is circulated.

2.3 Andrew Johnson provided an update on the collaborative work on copper with the expert committee on pesticides (ECP). Andrew and Chris Green (Defra) met with the ECP and will develop a report on copper to help advise ministers with the status of copper in the environment and recommendations on the authorizations of emergency use of copper for plant protection products. The review will show; the uses of copper in the environment; review hazard data and provide a risk analysis in both water and soils; and show trends for copper related to environmental impacts. The first draft will be complete by mid-June and for circulation to policy teams. A full document will be circulated to HSAC for discussion at the July or September HSAC meetings.

Action: For HSAC to provide comments on the report once circulated, ahead of the July or September 2021 meetings.

2.4 Chris Green (Defra) provided an update on the development of the horizon scanning exercise to identify chemical uses of emerging concern through a Delphi method. The exercise is progressing on time and aims to be delivered by the end of the month.

3. Chemical Strategy – update, ambition and considering the future environment

2.1 Mary Tomlinson (Defra) provided an update on the strategy's development. The team is working to publish a consultation in 2021and thanked the committee for their input thus far. Next steps include developing a set of high-level principles to create a bedrock of strategy which will be agreed across Whitehall and stakeholders. These principles will be brought to HSAC for input.

2.2 Gintare Masiulyte (Defra) discussed the vison for the environment. A previously published HSAC paper proposed six actions which was mapped against a chemical lifecycle, including design, production, use and disposal. These stages could be used to address the future scenarios of the use of chemicals. HSAC were asked what environment they would like to live in, in 2040 from a chemical perspective. Responses included;

- Positive feedback on mapping actions against the life cycle of chemicals.
- Having no 'unnatural' chemicals in the environment. To achieve this, all chemicals in use should be biodegradable within a set period of time.
- Intensification of the work already being done on chemicals and pollution management to ensure the environment, wildlife and human health is not adversely impacted, using an independent assessment body to provide evidence based reassurance on the state of the environment.
- A need for a shift in the burden of proof for how we approach issues and to consider how we deal with uncertainty. Natural sciences and humanities have a role to play.
- Enjoying the benefits of chemicals but also seeing declining burdens of chemicals in the bodies of wildlife and humans and a return to "ideal" biodiversity.
- Using new materials that replace carbon. A need to ensure that life cycle analysis is closed off and to look into our natural resources.
- A need to think beyond chemicals and consider other policy areas driving chemical use (e.g. food systems, technology, medicine).
- The need to consider the One Health concept in relation to chemicals
- Avoiding a situation where chemical issues are exported to other countries to meet our goals.

4. Update on the Beyond 2020 Framework and an International Science-Policy interface

4.1 Ellie Bates (Defra) provided an update on the Beyond 2020 Framework which will be postponed indefinitely. Previous working groups investigated targets, indicators, milestones, governance, issues of concern and financial considerations. Lessons learned will now be considered.

4.2 Claire Dixon (Defra) discussed the UN Environment Assembly and negotiations around strengthening the Science-Policy Interface (SPI) for chemicals and wastes where a decision will be made on how to move this forward in February 2022 (UNEA5) It was indicated that climate change has a dedicated group (IPCC) as does biodiversity (IPBES) although pollution does not have a similar body on science evidence for pollution. HSAC were asked for their views. Responses included;

- A desire for HSAC to have a role in the debate about the development of a new science policy interface body.
- Support for having an IPCC/IPBES equivalent global body dedicated to pollution as a whole, rather than just chemicals and wastes (radiation, microbial, chemical, waste).
- Some concern that the chemicals subject is more challenging than climate and biodiversity. There are already divided views on the risk posed by single chemicals (e.g. bisphenol A) and it may be challenging to get a strong consensus base.
- Need to look at the goals and principles on which we base environmental policy instead of relying on gathering “enough” evidence, which risks paralysis by analysis and delayed action.
- Transdisciplinary is important and an SPI would need to transcend the limits of existing disciplines, including the health community and the political sciences and humanities.
- The political science and humanities have a large body of evidence on the study of other global science-policy interface bodies (IPCC and IPBES)
- The British Academy and the Centre for Science and Policy in Cambridge were suggested as good organisations to approach to consider how to harness the humanities. The Royal Society of Physicians was suggested to harness the health community.

5. The History of Trying to Establish Causation with Chemicals

5.1 Andrew Johnson discussed the duties of those working with chemicals in the environment including the need to ensure that characteristics of new chemicals and likely exposure levels would not harm the environment. Issues such as determining whether there can ever be certainty about chemicals and causation, and can we take action without certainty without causation are important to consider. There is an option of applying the precautionary principle, and it was posed to HSAC how we can use different approaches to research chemicals in the environment, and could we use an evidence sequence? He called for the UK to develop its own weight of evidence/ecoepidemiology criteria to support decision making.

5.2 Discussion points included;

- Having vast quantities of monitoring data and how we could link this to changes in populations and species.
- The need for ecologists to understand population changes and address data from ‘animals in situ’.
- How biomarkers can directly link to specific chemical exposures.
- The move towards using computational chemistry where modelling could be a tool used to predict trends with environmental pollution.

6. Forward Plan for HSAC and the 2021/22 Programme of Work

6.1 Chris Green (Defra) discussed the forward plan including recruitment, existing wok and initial thoughts from HSAC on the 2021/22 work programme

6.2 The committee bid farewell to Professors Tamara Galloway and Richard Murphy who are leaving the committee at the end of the month. Both have given a highly commendable seven years of public service to the committee applying independent scientific expertise to protecting the environment and human health from chemical risks.

Annex A

List of attendees:

HSAC Members

Professor Christopher Collins (Chair)

Professor Michael Depledge

Professor John Sumpter

Professor Andrew Johnson

Professor Susan Owens

Professor Gary Hutchison

Professor Peter Matthiessen

HSAC Secretariat

Chris Green	Defra – Chemicals, Pesticides and Hazardous Waste Team
Fatima Nasser	Defra – Chemicals, Pesticides and Hazardous Waste Team
Kasim Ali	Defra – Chemicals, Pesticides and Hazardous Waste Team

Officials

Ahamad Akbor	Defra – Chemicals, Pesticides and Hazardous Waste Team
Claire Dixon	Defra – Chemicals, Pesticides and Hazardous Waste Team
David Williams	Defra – Chemicals, Pesticides and Hazardous Waste Team
Edward Latter	Defra – Chemicals, Pesticides and Hazardous Waste Team
Emily Winters	Defra – Chemicals, Pesticides and Hazardous Waste Team
Georgia Heritage	Defra – Chemicals, Pesticides and Hazardous Waste Team
Gintare Masiulyte	Defra – Chemicals, Pesticides and Hazardous Waste Team
Hermione Mackelworth	Defra – Chemicals, Pesticides and Hazardous Waste Team
Liz Lawton	Defra – Chemicals, Pesticides and Hazardous Waste Team
Mary Tomlinson	Defra – Chemicals, Pesticides and Hazardous Waste Team
Melanie Foster	Defra – Chemicals, Pesticides and Hazardous Waste Team
Michael Lockhart	Defra – Chemicals, Pesticides and Hazardous Waste Team
Ruth Coward	Defra – Chemicals, Pesticides and Hazardous Waste Team
Matthew Lovatt	Defra – Chemicals, Pesticides and Hazardous Waste Team
James Kearney	Defra – Chemicals, Pesticides and Hazardous Waste Team
Julie Mayhew	Defra – Chemicals, Pesticides and Hazardous Waste Team
Terry Jones	Defra – Chemicals, Pesticides and Hazardous Waste Team
Suzie Qassim	Natural England
Bronagh Mallon	DAERA

Helen Thompson	DAERA
Janet Sheridan	DAERA
Eloise Proctor	Welsh Government
Rosie Driscoll	Welsh Government
Joshua Codd	Welsh Government
Martin McVay	Scottish Government
Kerry Sims	Environment Agency
Nathalie Tonge	Environment Agency
Olivia Osborne	Food Standards Agency
Ovnair Sepai	Public Health England
Observers	
Camilla Alexander-White	Royal Society for Chemistry
Edwin Routledge	Brunel University London