

Chemical Pollution and One Health – from Reactivity to Proactivity October 2023

Towards an Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution Prevention

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Background

Chemical pollution from manmade or refined chemical substances, mixtures and undesired by-products as well as from their abiotic and metabolic transformation products is one of the major recognized societal challenges related directly or indirectly to the UN Sustainability Development Goals^{1,2}. This also applies to particulates, polymers and debris from various anthropogenic materials, i.e., waste. The global chemical pollution and waste situation is making this environmental and health threat one of the areas referred to as the “Triple Crises” with climate change and loss of biodiversity being the other two³.

At the global level, the United Nations Environment Assembly, at its resumed fifth session⁴ in March 2022, adopted its resolution 5/8 on a Science-Policy Panel (SPP), contributing further to the sound management of chemicals and waste and to preventing pollution. Since October 2022, negotiations have been ongoing within an ad-hoc Open-Ended Working Group (OEWG) to prepare proposals for the SPP, with the ambition of completing the necessary arrangements by the end of 2024. The new SPP is to be established in 2025.

Since the science is instrumental in generating new knowledge as well as in providing evidence for the awareness-raising and decision-making processes that underlie choices for policy and management options leading to stronger protection of the environment and human health from hazardous chemical pollution, the Uppsala Health Summit 24-25 October 2023⁵ workshop “Towards an Intergovernmental panel on chemicals, waste and pollution”⁶ examined in detail several aspects related to procedures and operating principles that, in the eyes of the UHS scientific community, will ensure provision of sound and unbiased recommendations and will not delay decision-making processes.

Approach

The aims of the workshop were:

1. To provide input and recommendations into the process of SPP development.
2. To provide recommendations for the next OEWG-2 meeting organized on 10-15 December 2023.
3. To discuss several operational principles/criteria so that the future SPP can engage relevant scientific expertise on chemical pollution and waste without Conflicts of Interest (COIs).
4. To raise awareness concerning how the scientific community can meaningfully engage in the OEWG’s negotiation process.
5. The workshop attracted 23 participants, with almost half of the group being from abroad. The group included competent participants from academia, authorities and the private sector.

The workshop started with introductory talks by Professor Martin Scheringer and Director Kateřina Šebková followed by three sessions described below. Scheringer framed the need for a Science-policy panel including a historical background, starting with the International Panel on Chemical Pollution (IPCP)⁷ and expressing some hopes and ideas for the intergovernmental SPP from an academic scientist’s point of view. Šebková discussed the status quo of the negotiations on the SPP and highlighted basic elements of the SPP that we already know: a plenary, task forces, working groups: Who will be in these groups? How does this all work? What are important aspects that are still open and what are possible outcomes of the OEWG process?

The workshop participants were grouped and moved into in World Café format for Session 1, sitting at three tables. Each table had a chair, a rapporteur and one topic each to discuss as the groups rotated. The topics were: (i) Who can take part in the work of the SPP once it is established? (ii) What are the

products that the SPP can/should deliver? (iii) What are the issues at stake for optimization of the panel?

Session 2 was organized in group discussions at three tables addressing the following two topics: How can the most knowledgeable and trustworthy experts be identified and motivated to work with the SPP? What are the barriers to SPP, e.g., COI is a big one; lack of time, capacity; insufficient access to documents/information/data?

Session 3 reported back from the five topics discussed in the previous two sessions and a plenary discussion was held thereafter. The discussion concluded in consensus, which was to prepare a letter describing the outcomes as input to the OEWG 2 SPP meeting in December 2023 and its further dissemination to relevant global audiences and stakeholder groups outside the UHS.

Workshop outcomes and recommendations

The participants from the scientific community and science-policy interface explored which principles should be attended to and which mechanisms and procedures should be carried forward, including mobilization of scientific expertise, sufficient inclusion of academia, and identifying and handling stakeholders' COIs. The outcomes of deliberations are presented below, building on the experience available from the work of IPCC and IPBES and current challenges in the scientific community.

A central aspect for the set-up and workflow of the SPP is the interaction with the chemical industry. It is of utmost importance that the chemical industry should not be able to influence the assessments and reports to be developed by the panel. The chemical industry will be important as a provider of information about chemicals and their uses, but this should be limited to a consultative role. For any involvement of chemical industry representatives or consultants or other experts working for the chemical industry in such a role, strict and effective provisions for the identification of COIs need to be applied. To establish and maintain the credibility of the SPP, full transparency of the mandates and funding sources of all experts involved in the work of the SPP will have to be ensured.

In addition to the chemical industry, there are many industry branches and businesses that are downstream users of chemicals, but that do not have a primary interest in the chemical composition of the products they use, but may be important drivers for the transition to alternatives. These industry branches and businesses should also be represented in the work of the SPP, so that a comprehensive understanding of the current extent to which chemicals are needed to provide certain functions can be gained.

For the nomination of experts preparing the primary results of the SPP, transparent rules should be established. Contributions by academic scientists from all fields of science and all countries should be possible without complicated procedures. Information and data from the peer-reviewed scientific literature will form a main pillar of the work of the SPP, but other forms of evidence (non-peer reviewed reports created by credible sources) will also have to be considered. Extensive review of all materials and data provided, peer reviewed and non-peer reviewed, should be performed by the experts working for the SPP.

Uncertainties surrounding the data and other materials used by the SPP should be made transparent, and the implications of these uncertainties should be addressed in the outcomes of the SPP's work. At the same time, these uncertainties should not prevent the formulation of clear and solid statements concerning what is known about chemical pollution problems. The SPP needs to avoid "paralysis by analysis".

The SPP should publish outcomes of its work (assessments, reports, policy briefs, etc.) with sufficient frequency, ideally at least one outcome annually.

The SPP should establish formal linkages with the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). It should also, where this is pertinent, address the needs of the Basel, Rotterdam, Stockholm and Minamata Conventions, the Montreal Protocol, and other protocols on ozone-depleting substances, as well as the emerging new legally binding instrument on plastic pollution, while ensuring a non-duplication of work performed by expert bodies of those conventions.

An important need to be addressed by the SPP is to provide information about the composition of products and materials used in various applications and items handled by consumers.

The SPP should strive to go beyond assessments and analyses, also outlining options for science-based solutions to chemical pollution problems.

The SPP should disseminate its most important results in a language and format that make these results accessible to non-experts as well. This should be used as a basis for an active engagement with different parts of society in different regions of the world.

Finally, the workshop participants concluded that, if the above identified topics are coherently embedded in the SPP set up document, the global community will have created an independent, efficient and expert framework for the provision of science-based and unbiased recommendations and will not delay decision-making processes that strengthen protection of health and environment from the negative impact of chemicals, waste and pollution.



IMAGE CREDIT: IISD/ENB | NATALIA MROZ

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