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COMMISSION STAFF WORKING DOCUMENT
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT

Accompanying the document

**Proposal for a Regulation of the European Parliament and of the Council
amending Annexes IV and V to Regulation (EU) 2019/1021 of the European Parliament
and of the Council on persistent organic pollutants**

{COM(2021) 656 final} - {SEC(2021) 379 final} - {SWD(2021) 299 final} -
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Policy context

Persistent Organic Pollutants (POPs) are chemicals that persist in the environment, bio-accumulate and can **cause significant adverse effects to human health or the environment**. This impact assessment addresses options to change the **thresholds that apply to certain POPs in waste** and that are set out in Annex IV of the POPs Regulation. If POPs are present in waste at concentrations that are equal to or higher than these thresholds, then the waste cannot be recycled; in most cases, it should be disposed of in such a way that the POPs it contains are **destroyed or irreversibly transformed**.

What is the problem?

The POPs Regulation covers a total of 26 POP substances (or groups of substances), but this impact assessment looks at a limited number of POPs, that either:

- are already listed in the POPs Regulation, and for which tightening the limit values in Annex IV could be justified, to adapt their limit values to scientific and technical progress: PBDEs, HBCDD, SCCPs, dioxins and furans, and dioxin-like PCBs¹.
- have recently been listed as POPs under the Stockholm Convention, and therefore have to be reflected in Union legislation (i.e. the POPs Regulation): PFOA, dicofol and pentachlorophenol (PCP)².

These POPs are, with limited exceptions, **generally not used any more** in new products in Europe, but past use means they are still found in waste. If the waste materials in which the POPs are contained (e.g. plastic, wood, paper) are recycled, then they may re-enter the economy, harming the environment and human health.

Setting a limit value for these substances determines the way in which waste that contains POPs has to be managed, the ultimate goal being to ensure that this waste is managed in an **environmentally sound way**. Generally, this means that waste exceeding the limit values for POPs content will have to be destroyed or irreversibly transformed through incineration or other permitted disposal operations, stopping POPs from re-entering the economy.

This action may limit the uptake of secondary raw materials that could otherwise be obtained from waste, reducing the potential for these materials to contribute to a circular economy. However, this may also help to improve trust in secondary raw materials in terms of their level of contamination. The resulting substitution of secondary material by primary material can also have adverse effects, often contributing to greenhouse gas emissions.

What do we want to achieve?

The specific objective of the initiative is to set or revise limit values for this limited number of POPs in waste, in a way that achieves the best possible balance between three general objectives:

- the transition to high-quality, toxic-free material cycles;
- increasing recycling and circularity;
- reducing greenhouse gas emissions.

¹ PBDEs are polybrominated diphenyl ethers; HBCDD is Hexabromocyclododecane; SCCPs are short-chain chlorinated paraffins; and PCBs are polychlorinated biphenyls.

² PFOA is used here to refer to perfluorooctanoic acid, its salts and PFOA-related compounds.

Finding the right balance will ensure **environmentally sound management of POP waste**. This will meet the overarching objective of the POPs Regulation, of protecting human health and the environment, and ensure that the measure also contributes to the **climate and circular economy objectives** in the **European Green Deal**, to the greatest extent possible.

What are the options?

- **Policy Option 1: Baseline** – assumes no change in the list of substances and no new limit values are set.
- **Policy Option 2: Middle value** – sets limit values under Annex IV for the new substances and also for POPs already listed in the Regulation, where tightening these values could be justified.
- **Policy Option 3: Low value** – sets stricter limit values under Annex IV.
- **Policy Option 4** considers a fourth, even lower limit value in Annex IV for dioxins and furans and dioxin-like PCBs.

What is the preferred option and why?

The impact assessment analyses how to achieve the **best balance** between the objective of eliminating POP substances from the environment while, at the same time, increasing circularity and recycling and reducing greenhouse gas emissions. The stricter (i.e. the lower) the limit value, the more waste will be destroyed instead of being available for recycling.

The following environmental, social and economic impacts are among those considered:

- Changes in the mass flows of POPs – amount removed/destroyed, thus avoiding health and environmental impacts.
- Effectiveness of the measure – comparison of projections of emission reductions and other existing emissions/sources of exposure.
- Changes in the amounts of waste sent to different treatment options (recycling, incineration, landfill, etc.).
- Costs and benefits for waste producers and waste operators (especially for SMEs) resulting from the different treatment outcomes. Relevance of novel waste sorting and decontamination technologies.
- Administrative burdens for economic operators and public administrations.
- Changes in the availability of secondary material resulting from recycling.
- Changes in greenhouse gas emissions associated with the different options.

The preferred option is a combination of Option 2 and Option 3, depending on the specific POP. For HBCDD and SCCPs, the preferred option is at intermediate level. For the other substances, the preferred option is for the lower values, in some cases slightly modified compared to the initial approach, to allow for more effectiveness or better implementation. For example, for PBDEs, the preferred option is an initial limit value of 500 mg/kg, followed by a reduction to 200 mg/kg 5 years after the measure enters into force.

There are financial costs related to some of the measures. For most of the substances, these will not be significant either for waste management services or economic operators more

generally. For example, the net cost for PBDEs could be around two million Euro a year. For HBCDD and for dioxins and furans, additional waste management costs from diverting the waste concerned from recycling/non-hazardous landfill to hazardous waste disposal could exceed 135 and 55 million Euro a year, respectively, but the estimates are uncertain. There will also be a small increase in administrative burdens, related to additional testing costs.

In all cases, the estimated benefits clearly outweigh the costs. The values proposed will **reduce the release of POPs** that are intrinsically dangerous to the environment and to human health.