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Edward Mountain MSP Convener Net Zero, Energy and Transport Committee c/o Clerk to the Committee Room T3.40 The Scottish Parliament Edinburgh **EH99 1SP**

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Dear Edward,

The Persistent Organic Pollutants (Amendment) Regulations 2024

I appreciate the Committee's time in scrutinising these proposals for amendment of the UK POPs regulation by UK Statutory Instrument, that I intend to consent to on behalf of Scottish Ministers.

As you will appreciate, the content of these amendments, not to mention the regulatory topic itself, is exceptionally technical. Given this, and the technical nature of the Committee's many questions, I have reproduced your questions below before including my response for each.

I have intentionally framed the answers as broadly as possible and hope this satisfactorily answers the Committee's questions on this UKSI in full, so that Committee is able to take a view on the proposed legislation when it meets on 25th June.

1. Given the Scottish Government's commitment to align with EU standards where possible, why is the Scottish Government content with the various areas set out in the notification where the UK POPs regime will diverge from EU standards?







The primary purpose of the proposed UKSI is to bring the UK POPs regulation up-todate with changes at international level, as agreed at the Stockholm Convention. A public consultation was held by the UK Government last year and the Scottish Government was consulted on the content of that consultation. The purpose of it was to seek views on a number of proposals and policy options, and to generate evidence to inform future policy and potential responses to upcoming and future proposals under the Stockholm Convention. Amendments to the UK POPs Regulation that relate to obligations under the Stockholm Convention which the UK, as Party to the Convention, must implement at a national level, were included for information only. A response to comments report has been published.

The majority of proposals in this UKSI align with changes made to the EU POPs regulation in 2023. For the few instances where the proposals do not align, these concern some of the proposed changes to Annex IV of the UK POPs regulation (that lists waste concentration limits; some POPs were previously used as ingredients in industrial or household goods, for example as additive flame retardants). Proposals here add or revise limits to reflect changes in guidance by the Basel Convention, or put in place limits suitable for GB in the absence of limits recommended at Convention level; three of the five UKSI proposals reflect guidance limits agreed at Convention level, while the remaining two are proposed in the absence of agreement at Convention level and reflect a limit deemed appropriate to a GB context based on available evidence. For these two, the UKSI proposals tighten existing limits but do not commit at this stage to further tightening of these limits over time, as is the case in the EU POPs regulation (please also refer to answer to question 11).

Last year's UK Government consultation also considered potential waste limit changes for three other POPs, but based on all evidence UK Government and Scottish and Welsh Governments concluded that it is premature to propose new limits for these. Stricter limits have been in place in the EU for these three POPs since June 2023.

This UKSI does not preclude aligning with the few specific cases where there is divergence with the EU in the future once evidence is available. It is important to note that the proposals in the UKSI will bring the UK POPs regulation into closer alignment with the EU regulation than is currently the case. For context and clarity, in the annex to this letter I have set out all limits in the UK and EU POPs regulations' Annex IV and include a summary and explanation of how these compare. You will note that overall there are 26 limits set for 30 POPs, and that for the majority of these limits (21, if proposed changes are included) there is no divergence between limits set in the EU and UK.

There is no agreed "right or wrong" limit that can be set for POPs in waste. In setting waste limits, careful consideration must be taken on how substances were used to identify and analyse affected waste streams, to understand how relevant wastes are managed, and analyse how a proposed limit may directly impact waste management systems and, indirectly, consumers and the environment. Simply deciding that all wastes that contain any measurable level of a POP need to be managed as POPs







waste would mean all affected wastes would need to be disposed of as hazardous waste or incinerated (as technologies to separate many POPs from the materials they are contained in at scale are not yet available). This would have huge ramifications for the waste sector and beyond in GB. I do not believe this is a proportionate approach relative to the risk.

I am satisfied that these differences with the EU are sufficiently justified. All proposals are for reducing limits in waste, in line with expectations to remove these substances from materials cycles and reduce their potential for environmental exposure. For the cases where the EU has reduced limits but this UKSI has not made such a proposal, there are clear reasons for this (please refer to annex). I expect proposals for such reductions to follow as the evidence for suitable limits becomes available.

2. Has Environmental Standards Scotland been involved in any discussions over the divergence from EU law on POPs?

We have not engaged with ESS specifically on the preparation of this UKSI or the UK Government consultation that preceded it.

ESS has a remit to monitor public authorities' compliance with environmental law and the effectiveness of environmental law and of how it is implemented and applied. Officials have discussed chemicals safety regulation and the Scottish Government's role in this more broadly with ESS, and will continue to do so.

Given the Scottish Government has legislative powers in the UK POPs Regulation to amend the Annexes to the POPs Regulation in response to amendments to the Stockholm Convention, and/or in response to scientific and technical progress, why is the Scottish Government not proposing to use it powers to legislate in this area to pursue its policy commitment to align with EU environmental standards?

I do not believe this is the right approach now for two reasons. Firstly, it is the view of the Scottish Government, along with the Welsh and UK Governments, that the evidence is not there to suggest these EU limits are suitable in a GB context. To this end, my officials have worked with UKG officials, considering the EU's impact assessment (published April 2021), responses to last year's consultation and evidence collected and generated by the English Environment Agency as reviewed by SEPA. Legislating for lower limits now could have unintended consequences, or not actually result in any material improvements for protections. The English Environment Agency, with SEPA, is actively investigating POPs in different waste streams with the goal of informing further proposals for revised or new waste limits according to these advances in scientific and technical progress. Secondly, applying stricter limits in Scotland could place an additional major burden on our councils' services to dispose of more wastes, with additional costs potentially being passed onto communities.

4. In considering whether or not to give consent to these Regulations, what consideration did the Scottish Government give to the prevalence of the relevant







POPs in the environment in Scotland and the associated risks to public health and the environment, including cumulative impacts?1

By their nature POPs are long lived in the environment and are difficult to remove once there. This is why the Stockholm Convention's primary purpose is to eliminate POPs at source. Several POPs are also Priority Substances under the Water Framework Directive. SEPA has a duty to monitor these substances in the environment. On the basis of information from SEPA, there are very few instances where priority substances that are also POPs have caused a waterbody to fail the chemical status test in Scotland where they are monitored. The evidence tells us that where found, levels of these chemicals are typically much lower than encountered in, for example, England's water environment.

By cumulative impacts, I understand that people can be exposed to a sum of the same chemicals via different routes of exposure, which is an additional driver for removing POPs from materials cycles, but as I explain above we need evidence on which to base decisions on suitable waste limits to make sure we are taking the most effective actions.

- 5. To what extent is the Scottish Government's decision to consent to a UK-wide approach (which does not align with EU standards) impacted or informed by:
- Capacity of the Scottish Government to separately regulate in this area;
- Agreement with the UK Government that it is not possible to align with EU standards in the specific area listed in the notification;
- The operation of the Chemicals and Pesticides (or any other) Common Framework
- Other factors

The protection of people's health and the environment is of paramount importance. In any decision in this area I will also consider my Government's policy to align, where appropriate, with the EU. While it has been generally agreed with the UK Government that the UK POPs regulation will operate consistently across GB, the Scottish Government will consider in each case whether or not to exercise it powers to legislate separately in this area. Our view is that in the specific cases here where the proposed legislation does not align with the EU, it is not the right course of action owing to a lack of evidence as described above. As I have stated, this does not preclude aligning in the future once evidence is available. We work closely with SEPA, which regulates POPs in Scotland, to ensure there is appropriate capacity to carry out its statutory duties. Officials assure me that work towards this legislative proposal has followed the principles laid out in the Common Framework. Among my primary considerations is whether there is appropriate evidence to support decisions.







¹ 1 The Committee notes, in relation to standards that impact on waste management, that certain waste services are excluded from application of the market access principles in the UK Internal Market Act under Schedule 2

6. Has the Scottish Government sought the advice of SEPA on this decision, as the relevant enforcement agency? If so, what advice was received?

Yes. Early in the process, before the UKG consultation, my officials sought the views of SEPA on the waste limits being proposed with a particular focus on those where they differed from the EU. SEPA's view was again sought on the revised proposals after changes had been made following the consultation process.

Focussing on the waste limits that differ from those in the EU, SEPA's view was that there was a lack of evidence on which to base a waste limit in Scotland and that it was appropriate to consider evidence generated through English Environment Agency/Defra funded studies. In terms of future evidence generation, SEPA confirmed that a GB or UK-wide approach was an appropriate way to gather evidence on representative levels of POPs in different waste streams, and that evidence from England was important for understanding levels in waste streams here in Scotland.

7. How has the Scottish Government assessed the proposed changes against the quiding principles for the environment, in particular the precautionary principle?

Setting regulatory limits on levels of POPs that are allowed in wastes impacts final disposal routes, meaning that some wastes must be diverted from e.g. reuse, recycling or landfill. There is no "right or wrong" limit for POPs in waste. As a minimum, I expect the UK to follow Basel Convention guidelines on limits and go beyond these where evidence is compelling for tighter restrictions. Any decisions must take full account of the guiding environmental principles. Here we are dealing with a legacy situation where actions, through the Convention, have been taken already to rectify pollution at source. In this case, we are seeking to minimise as far as possible the content of POPs in wastes in line with the prevention and precautionary principles. The new and revised limits proposed here do this I believe in a pragmatic way (please see related answers above and below).

8. There are areas where the notification states that limits cannot currently be reduced or reduced further (or tightened restrictions put in law for a later date) due to lack of evidence around "the most appropriate values". For example this is the case regarding the limit for PCDD/PCDF and dl-PCBs, where the EU has already imposed a tighter limit of 5 µg/kg since 10 June 2023. How does this decision not to impose stricter controls due to uncertainty accord with the precautionary principle under the Continuity Act?

In chemicals regulation, the precautionary principle is applicable where there is a strong possibility that not acting may result in serious or irreversible harm to the environment from a chemical risk; in such cases lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. The risk needs to be balanced against the social and economic impact of any measures. In this case, evidence on the hazard that the







POPs known as dioxins and dioxin-like furans and PCBs pose for people is not disputed. The uncertainty is on how people and the environment may be exposed from disposal of materials contaminated with these POPs.

The EU's change in limit results in part from its adoption of new "toxic equivalency factors" for this group of POPs (these allow the toxic potency of individual chemicals in the group to be taken into account, so that an overall standard can be derived for this group of POPs).

The UK Government's view here is that it is premature to adopt these new toxic equivalency factors because they have not yet been formally adopted by the World Health Organisation, the body responsible for their derivation. I also understand that the new factors can mean, for some non-waste materials, overall dioxin toxicity appears lower than according to the original factors used in the UK POPs regulation². I believe that the approach we are already taking with the existing limit is proportionate to the level of risk and the lack of sufficient evidence, and therefore is in accordance with the environmental principles, and in particular with the precautionary principle.

9. In relation to PBDE limits, the UK Government initially proposed lower limits (350 mg/kg, dropping to 200 mg/kg 5 years after entry into force) and said it would only consider other options where "compelling evidence is presented regarding unforeseen impacts and/or burdens". Has the Scottish Government reviewed the evidence provided that "lack of incineration capacity and the impacts of disposal costs" mean that lowering the limit to 350 and beyond was not possible, and does it agree that this assessment applies to waste management in Scotland?

The evidence has been reviewed by the Scottish Government with input from SEPA. Councils across Scotland have only recently had to implement new rules on waste domestic furniture because of current limits on one of this group of PBDE additive flame retardants known as decaBDE. My view is that we are making an improvement over the current situation (no limits on collective PBDEs, excluding the PBDE decaBDE) and that the approach is pragmatic in that it should not create an additional serious burden on councils at this time, but is still part of a progressive approach to reducing and eventually removing these POPs from waste streams. Please also refer to the annex entry for PBDEs.

10. How have the potential additional incineration costs raised by stakeholders in the 2023 consultation been weighed against the potential public health and environmental benefits of introducing stricter limits?

To reiterate what I have said in answer to the committee's previous questions, we must remove these substances from materials cycles to reduce their potential for







² The 2022 world health organization reevaluation of human and mammalian toxic equivalency factors for polychlorinated dioxins, dibenzofurans and biphenyls - ScienceDirect

environmental exposure. However, any actions to achieve this need to be evidencebased to avoid unintended consequences, including unnecessary cost burdens.

My decision to support the proposed changes is based on consideration of the available evidence and my understanding that the evidence is not there in all cases to suggest existing limits need revising in a GB context.

Given this, I believe the changes proposed strike the right balance between risk to the environment and the risk of unintended consequences. That said, we will continue to review further evidence as it emerges to ensure that we continue to get this balance right.

11. The notification refers to "more time" being needed to consider further evidence on introducing lower limits in some cases e.g. for PBDE. What are the proposed timescales for this further work and do the Regulations provide for a legal requirement for this review? If not, does the Scottish Government consider this commitment to review and further consider lower limits should be set out in the Regulations (noting the EU approach requiring further reviews in some instances)?

Article 15.2 of the UK POPs Regulation says "The appropriate authority shall keep Annexes IV and V under constant review and shall, where appropriate, make legislative proposals to amend these Annexes in order to adapt them to the changes to the list of substances set out in the Annexes to the Convention or the Protocol or to modify existing entries or provisions in the Annexes to this Regulation in order to adapt them to scientific and technical progress".

This means that as and when new evidence that is significant enough and sufficient on which to base new or revised limits is available, proposals for changes should be made without undue delay. For such changes I would seek agreement amongst the Appropriate Authorities for the reasons I have set out earlier in this letter. Should this not be possible, and where I think there is a strong case for amending an annex to the regulation (and with due regard to the environmental principles), I would consider whether this change should be progressed via SSI.

12. The 2023 UK Government consultation states that future further legislative changes to the POPs Regulation will depend on multiple factors, including "UK priorities, such as those laid out in 25 Year Environment Plan, the Environment Improvement Plan and the upcoming Chemicals Strategy". What information is the Scottish Government aware of regarding the timescales for the UK Chemicals Strategy, and how are you currently feeding in to this work to ensure devolved interests are represented in areas of UK-wide regulation?

My officials have continued their engagement with counterparts in Defra and agencies of government towards completion of a chemicals strategy. Despite this positive engagement, I find it frustrating that we have not reached a position where a







UK strategy can be published, but you will appreciate with the UK General election pending, it is difficult for me to say any more on timescales and delivery.

Yours sincerely,

MÀIRI MCALLAN





ANNEX: relevant entries in Annex IV of the UK POPs Regulation, and how these compare with the EU POPs regulation

POP	EU POPs agreed limits	UK POPs SI	Summary & further explanation
	_	proposed limits	
	r POPs limits that were subjec	t to 2023 UKG consu	
PBDEs (previously used as additive flame retardants in placing toutiles and	Progressively tightened to 200 mg/kg from December 2025 to December 2027 and	Proposal to reduce current limit of 1000mg/kg to 500 mg/kg , including the PBDE	UK POPs proposal aligns with current EU value but doesn't commit to review period or lowering of limit. The UKG consultation "lead" option was 500mg/kg dropping to
in plastics, textiles and other materials)	beyond for (the sum of) concentrations of five PBDEs (including the addition of decabromodiphenyl ether to list of PBDEs). This change came into force in the EU on 10 June 2023	decabromodiphenyl ether. No date-specific "ratchet" proposal.	350 mg/kg after 3 years, and 200mg/kg after 5 years. PBDEs have primarily been used as flame retardants in a variety of applications. Key waste streams are electrical goods, plastics and textiles in vehicles, and plastics from construction. Evidence from plastic recyclers highlighted the lack of incineration capacity and the impact on disposal costs for going lower than the 500mg/kg threshold. The 500 mg/kg is a halving of the current limit, and introducing this now will provide more
HBCDD (Hexabromo-	via Regulation 2022/2400. New limit of 500 mg/kg	No proposal to	time to consider further evidence on introducing a lower limit. UK will continue to be unaligned with EU's 2023 revision
cyclododecane) (previously used as an additive flame retardant in various products but especially insulation products used in construction)	Requirement that the "Commission shall review that concentration limit to lower that value to not higher than 200 mg/kg no later than 30 Dec 2027." This change came into force in the EU on 10 June 2023 via Regulation 2022/2400.	lower current limit from existing 1000mg/kg.	pending further evidence. The UKG consultation "lead" option was 500mg/kg, with the option to drop to 200mg/kg after 5 years following review. HBCDD has been used as an additive flame retardant primarily in construction materials eg in-wall insulation panels. Existing insulation panels must already be managed as POPs waste as they generally exceed the current waste limit. The lower limit may impact mixed construction waste that contains insulation panel waste but this is uncertain. HBCDD was also used in furniture, and evidence suggests that levels used exceed the current limit.
(cont.)			Stakeholder responses to the UK Government consultation indicated that to further reduce the limit would be constrained by







POP	EU POPs agreed limits	UK POPs SI proposed limits	Summary & further explanation
			any uncertainty over the presence and approach to analysing HBCDD in coatings and adhesives and mixed waste.
Dioxins and dioxin-like furans and PCBs (dioxins and furans are byproducts of incomplete combustion, PCBs were mainly used in sealants and dielectric fluids until the 1980s)	Requirement that the "Commission shall review that concentration limit no later than 30 Dec 2027." This change came into force in the EU on 10 June 2023 via Regulations 2022/2400. *toxic equivalents	Current limit of 15ug TEQ*/kg with no proposal to change this following consultation. *toxic equivalents	UK will continue to be unaligned with EU's 2023 revision pending further evidence. The UKG consultation "lead" option was to lower limit to 0.005mg TEQ/kg. Dioxins and furans arise from incomplete combustion of some fuels. Although uncertain, some evidence suggests that ash from domestic burning would need to be diverted from household waste with a limit of 0.005mg/kg as it would be categorised as hazardous waste. There are no facilities to enable this change currently. Biomass power plant fly ash could also be affected.
			Greater clarity on these issues is expected through the next Conference of Parties cycle.
SCCPs (Short Chain Chlorinated Paraffins)	New limit of 1,500 mg/kg	Current SCCPs limit is 10,000mg/kg. No	UK will continue to be unaligned with EU's 2023 revision pending further evidence.
(previously used in metal working fluids, some use as additive flame retardant or plasticiser) (cont.)	Requirement that "The Commission shall SCCPs limits have not been introduced to the 2024 regulations due to the uncertainties remaining with regard to the review that concentration limit no later than 30 December 2027."	proposal to amend this value following consultation.	The UKG consultation "lead" option was 1500mg/kg. SCCPs were historically added to rubber and some plastic products as flame retardants and/or plasticisers. Uncertainties remain with regard to potential impact on activities such as recycling of PVC cables, although some evidence from the EU suggests SCCPS were not used in large quantities as plastic additives. Evidence from the EU suggests that either limit – 1500 or 10000mg/kg – will affect how waste conveyor belts and sealants used in construction need to be disposed of at end of life.







POP	EU POPs agreed limits	UK POPs SI proposed limits	Summary & further explanation
	This change came into force in the EU on 10 June 2023 via Regulation 2022/2400.		
PFOA (perfluoro-octanoic acid and related compounds) (previously used as nonstick and waterproof/ greaseproof coatings in textiles, consumer goods, industrial applications)	New Limit of 1 mg/kg (PFOA and its salts), and 40 mg/kg (sum of PFOA-related compounds) Requirement 'The Commission shall review that concentration limit and shall, where appropriate, adopt a legislative proposal to lower that value, where such lowering is feasible in accordance with scientific and technical progress, no later than 30 December 2027.' Entry doesn't note the concentrated fire-fighting foam (FFF) mixtures as the Annex I PFOA derogation for fire-fighting foams only applies till July 2025 (expectation stockpiles will have been disposed of before July 2025 deadline).	Proposed new Limit of 1 mg/kg (PFOA and its salts), and 40 mg/kg (sum of PFOA-related compounds) Currently no limits set. No specific review date proposed for these. In the UK it is expected that these foams will be taken out of use in accordance with the Convention but not necessarily disposed of by July 2025. So UK POPs regulation entry includes stricter limits to address FFF stockpiles that	UK POPs proposal aligns with current EU value but doesn't commit to review period for lowering of limit. The UKG consultation "lead" option reflects what is proposed (1 mg/kg (PFOA and its salts), and 40 mg/kg (sum of PFOA-related compounds). Relevant waste streams are thought to include clothing and shoes, carpets, fabric and upholstery, some PPE, FFF, some electrical products. Evidence suggests all of these are likely to be below the proposed threshold. Textile recycling, for example, brings extensive social and environmental benefits so we consider this to be the right approach.
(cont.)		tally with the Annex	







POP	EU POPs agreed limits	UK POPs SI proposed limits	Summary & further explanation
	This change came into force in the EU on 10 June 2023 via regulation 2022/2400.	I (trace contaminant) entry to ensure all foams and stockpiles are captured: "2. In concentrated fire-fighting foam mixtures— (a) sum of the concentrations of PFOA and its salts: 0.025 mg/kg; (b) sum of the concentrations of PFOA-related compounds: 1 mg/kg."	
PCP (Pentachlorophenol, its salts and esters) (banned pesticide)	100 mg/kg	No current limit Proposal to introduce limit of 100 mg/kg for sum	UK POPs proposal aligns with EU value Limits agreed at Convention level
,		of PCP related compounds.	
Dicofol	50mg/kg	No current limit Proposal to	UK POPs proposal aligns with EU value
(banned pesticide)		introduce limit of 50mg/kg	Limits agreed at Convention level
PFHxS (perfluorohexane sulfonic acid, salts and related compounds)	1 mg/kg; sum of PFHxS related compounds 40 mg/kg	No current limit. Proposal for limit of 1 mg/kg, and for sum of PFHxS	UK POPs proposal aligns with EU value Limits agreed at Convention level

Scottish Ministers, special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See www.lobbying.scot







POP	EU POPs agreed limits	UK POPs SI proposed limits	Summary & further explanation
(a PFAS used as a		related compounds	
replacement for PFOA)		40 mg/kg	
Other entries on Annex I	V that were not subject to 20	023 UKG consultation	
POP	EU POPs agreed limits	UK POPs SI	Summary & further explanation
		proposed limits	
Endosulfan	50 mg/kg	50 mg/kg	
hexachlorobutadiene	100 mg/kg	100 mg/kg	
Polychlorinated	100 mg/kg	100 mg/kg	
naphthalenes			
Perfluorooctane sulfonic	50 mg/kg	50 mg/kg	
acid and its derivatives			
(PFOS)			
DDT (1,1,1-trichloro-2,2-	50 mg/kg	50 mg/kg	
bis (4-			
chlorophenyl)ethane)			
Chlordane	50 mg/kg	50 mg/kg	UK and EU POPs regulation limit aligned for 18 POPs
Hexachlorocyclohexanes,	50 mg/kg	50 mg/kg	ok and Ed FOFS regulation limit aligned for 16 FOFS
including lindane			(majority of which are banned pesticides or industrial chemicals;
Dieldrin	50 mg/kg	50 mg/kg	includes one legacy PFAS)
Endrin	50 mg/kg	50 mg/kg	includes one legacy i i Aoj
Heptachlor	50 mg/kg	50 mg/kg	
Hexachlorobenzene	50 mg/kg	50 mg/kg	
Chlordecone	50 mg/kg	50 mg/kg	
Aldrin	50 mg/kg	50 mg/kg	
Pentachlorobenzene	50 mg/kg	50 mg/kg	
Polychlorinated	50 mg/kg	50 mg/kg	
Biphenyls (PCB)			
Mirex	50 mg/kg	50 mg/kg	
Toxaphene	50 mg/kg	50 mg/kg	
Hexabromobiphenyl	50 mg/kg	50 mg/kg	





