

Response ID ANON-75K5-1Z7E-K

Submitted to Consultation on potential amendments to the Persistent Organic Pollutants (POPs) Regulation
Submitted on 2023-04-27 16:29:21

Introduction

About you

1 Would you like your response to be confidential? (Required)

No

Reason for confidentiality:

2 What is your name?

What is your name?:

(Redacted) (Redacted)

3 What is your email address? If you enter your email address, then you will automatically receive an acknowledgement email when you submit your response.

Email address:

(Redacted) .co.uk

4 Are you responding as an individual or on behalf of an organisation?

Organisation

5 What type of organisation are you responding on behalf of?

Industry association

Other:

6 If you are responding on behalf of an organisation, what is the name of the organisation?

organisation name:

British Plastics Federation - Recyclers & Product Safety Groups

7 Where in the UK are you/your organisation based and/or in operation? (tick all that apply)

England, Wales, Scotland, Northern Ireland

Waste limits (iii) - Short Chain Chlorinated Paraffins (SCCPs)

27 Is this proposal of particular importance to you and/or the organisation you represent?

Yes (please specify how below)

28 To what extent do you agree or disagree with our proposed waste limit for SCCPs (1,500 mg/kg)?

I don't know

29 Please explain the reasons for your answer to question 28, with reference to evidence and/or possible alternative options where relevant

Please explain the reasons for your answer to question 28, with reference to evidence and/or possible alternative options where relevant:

In response to question 27:

Some of our members are metal recyclers and therefore handle coated cables, which are known to contain SCCPs. If this waste stream were to become a POP, it would have a massively damaging impact on the sector.

It is worth stating that SCCP has no active REACH registration and, as a raw material, has not been manufactured or imported in Europe since 2011 and, as described in the EU Risk Assessment report for SCCPs, was not used in PVC applications. However, chloroalkanes containing short chain groups are manufactured and used extensively in Asia and such substances are imported into Europe and the UK in the form of end products, such as cable insulation and sheathing. The SCCPs are present in the PVC cable sheathing, and there is no practical way to differentiate PVC cable that does and does not contain such SCCPs components and would result in all PVC coated cable becoming POPs.

It is also important to mention that the POPs listing for SCCP is for those SCCP products with average levels of chlorination at 48% and above. However,

segregation of such products is also not possible for the majority of cases.

Once the copper is recovered, this will leave a PVC granule that is classed as POPs waste, with the following effects:

- It will therefore be difficult to dispose of POPs containing PVC.
- Compliant operators will therefore no longer be able to process PVC coated cable as there is no outlet for the PVC.
- This will drive cable (which has very valuable copper content) down illegal routes through non-compliant operators who will be able to profit off the copper recovery without the burden of managing the PVC correctly and increase incineration.
- It could also increase illegal export of waste.
- Furthermore, PVC from cable sheathing is a valuable secondary raw material for the production of traffic management products. In the UK about 40,000 tonnes of PVC cable sheathing is converted into these products. If this feedstock were removed, these manufacturers will likely not be able to operate, and this will kill this industry in the UK. Without manufacturing the products in the UK, they will need to be imported from the far east, where they will be likely made with SCCP containing recycle.
- Since there is no effective method to sort SCCP containing PVC from non-SCCP containing PVC, there is no possible disposal route for destruction of PVC and testing is very difficult, lower limits will be harmful to industry.
- This also applies to WEEE plastic recyclers as there is always residual wire and cable in the plastics that arrive for processing. These PVC elements end up in the POPs incineration fraction and we there are always get adverse comments about chlorine content in this stream.

In response to question 28:

Reducing the limit by such a significant amount while there are no practical solutions to PVC containing POPs could kill the industry overnight. However, what we do not yet fully understand is what % of cable contains SCCP above 1500 mg/kg, and what the levels are overall in PVC cable sheathing. It may be that 1500 mg/kg means that cable and cable sheathing is non-POPs, however that evidence should be obtained first.

If a phased approach was used, this would give industry time to:

- A. Properly quantify the level of SCCP in PVC cable granule and understand if this will be above or below the 1500 mg/kg threshold; and
- B. Look at how to properly segregate the material and develop solutions for destruction of the PVC. Without this, the environmental damage from the illegal processing and export of this high value waste stream (due to copper) will far outweigh any benefits and will have the exact opposite outcome than is desired.

30 Are you aware of any evidence to help determine whether SCCPs may fall above or below the waste concentration limit of 1500mg/kg in the UK? Please provide details if so, including with reference to relevant waste streams, tonnages, concentration levels, ability to segregate wastes, and other impacts where possible.

Are you aware of any evidence to help determine whether SCCPs may fall above or below the waste concentration limit of 1500mg/kg in the UK? Please provide details if so, including with reference to relevant waste streams, tonnages, concentration levels, ability to segregate wastes, and other impacts where possible. :

Please see the BMRA report for data on whole cables, but data on cable sheathing is lacking.

31 Do you have evidence of the tonnage of waste containing SCCPs in the UK and how they are currently disposed of (landfill, recycling, Energy from Waste)? Please provide details if so.

Do you have evidence of the tonnage of waste containing SCCPs in the UK and how they are currently disposed of (landfill, recycling, Energy from Waste)? Please provide details if so. :

Recovynl have data on the tonnage of PVC cable sheathing converted into traffic management products. In 2022 this was ~30,000 tonnes, although this did not capture all recyclers and the actual figure will be >40,000 tonnes. This is all converted into traffic management products. None of this is disposed of properly.

32 Are you aware of any anticipated costs for disposing of SCCPs contaminated waste (such as incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes etc)? If so, please provide any supporting evidence.

Are you aware of any anticipated costs for disposing of SCCPs contaminated waste (such as incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes etc)? If so, please provide any supporting evidence. :

Disposing of this waste will not only be costly but improbably with the current waste management infrastructure. No incinerator will accept such high levels of chlorine, with most incinerators looking for <1% chlorine in the feed. PVC contains >50% chlorine.

Disposal will therefore need a highly coordinated effort from recyclers, DEFRA, the EA and incinerator operators to facilitate the disposal of this waste stream through highly effective dilution. This is in theory possible, but will not happen if the market is left to regulate itself.

WEEE plastic recyclers find it difficult to remove all the residual copper from the cable which then also leads to heavy metals residue in this incineration fraction, again which is viewed very negatively by the incinerators.

33 Are you aware of any other organisations that may be impacted by this proposal? Please provide details if so, including references to the number of organisations, types of organisations (Local Authorities, businesses, independent or public bodies), size (micro, small, medium or large), and the anticipated impacts, if known.

Are you aware of any other organisations that may be impacted by this proposal? Please provide details if so, including references to the number of organisations, types of organisations (Local Authorities, businesses, independent or public bodies), size (micro, small, medium or large), and the anticipated impacts, if known. :

Manufacturers of traffic management products will lose access to their raw material, stopping this manufacturing industry in the UK.

34 Are you aware of any evidence to suggest that a lower waste concentration limit would be achievable in the UK with regards to technical and economic feasibility? Please provide details if so, including with reference to current and/or future limits of detection for SCCPs in waste.

Are you aware of any evidence to suggest that a lower waste concentration limit would be achievable in the UK with regards to technical and economic feasibility? Please provide details if so, including with reference to current and/or future limits of detection for SCCPs in waste. :

Waste limits (iv) - Polybrominated diphenyl ethers (PBDE)

35 Is this proposal of particular importance to you and/or the organisation you represent?

Yes (please specify how below)

why important PBDE WL (iv):

Some of our members process large quantities of shredder residue, in which there are low levels of PBDE in the overall waste stream. However, this is done to recover recyclable polymers. The by-product of this is a dense plastic fraction which contains flame retardants. The level of PBDEs in this fraction is ~300 – 350 ppm, but will likely vary. If the limit was reduced below this level, then recycling the plastic would be economically infeasible, and the whole plastic stream (with a concentration of approximately 100 – 200 ppm) would be disposed of as non-POPs to remain below the limit. This will result in companies no longer being able to recover valuable polymer that is used in the manufacture of new items, reducing the level of plastics recycling, and increasing the cost of processing shredder residue. Furthermore, there will be issues finding disposal routes for an increased volume of the unprocessed residue that hasn't had any polymer recovered from it and the residue will be even more unattractive to the incineration markets.

36 To what extent do you agree or disagree with our proposed waste limit for PBDE (350 mg/kg, dropping to 200 mg/kg 5 years after entry into force)?

Strongly Disagree

37 Please explain the reasons for your answer to question 36, with reference to evidence and/or possible alternative options where relevant

Please explain the reasons for your answer to question 36, with reference to evidence and/or possible alternative options where relevant:

As the industry has expressed on many occasions, a 500 mg/kg limit would be feasible, as this would mean ASR dense plastic remains below the limit. Dropping the limit to 200 mg/kg in 5 years may be feasible as we see the levels of PBDEs in the waste reduce over time, but predicting this accurately is not possible.

38 Based on current EA evidence, decreasing the PBDE waste limit to 200mg/kg in GB is expected to have no/minimal additional impacts on WEEE/ELV plastic recycling, compared to existing waste limits. Are you aware of any evidence to either support or oppose this? Please provide details if so.

Based on current EA evidence, decreasing the PBDE waste limit to 200mg/kg in GB is expected to have no/minimal additional impacts on WEEE/ELV plastic recycling, compared to existing waste limits. Are you aware of any evidence to either support or oppose this? Please provide details if so. :

This is incorrect. A 200 mg/kg limit would have a huge and disastrous effect on ELV recycling and possibly on LDA processing.

The BMRA estimate is that there is ~1.2 million tonnes of shredder residue produced in the UK. This relates to ~200,000 tonnes of plastic. This is from a mix of ELV, LDA and domestic metal scrap.

This plastic is split (roughly) 25% polypropylene, 25% flame retardant free ABS, PS and filled PP, and 50% dense plastic including flame retarded polymer. There is therefore ~100,000 tonnes of dense plastic from the processing of shredder residue (as well as 100,000 tonnes of recyclable polymer that can be introduced back into the economy). The level of PBDEs in this dense plastic is ~300 – 400 ppm.

Therefore, if the level were reduced to 200 ppm (or even 350 ppm), it would mean an additional 100,000 tonnes of POPs waste would need to be incinerated.

However, because the non-separated plastic is likely to be below the 200ppm limit, what it would result in is the disposal of the 200,000 tonnes a year of plastic (50% of which could be recycled). Meaning none of the ELV plastic will be recycled, in contradiction to the aims of the circular economy.

For WEEE, the situation is slightly different. A lower limit may possibly make LDA a POPs waste, significantly increasing the cost and complexity of handling this material. Even if the LDA itself is not a POPs waste, certain shredded outputs (i.e. the plastic) may become a POPs waste, and in the same manner as ELV the business case for recycling may be severely impacted.

As LDA and ELV are processed together in light iron, either it will impact the whole 1.1 – 1.2 million tonnes of residue, or it may result in LDA having to be processed separately and at a higher cost.

If the feedstock material becomes too costly, operators will stop processing it. If recyclers no longer handle some of these more difficult waste streams, the upstream effect could be damaging, with no legal disposal route for these items from householders. As a worst case, ELV and LDA could create a backlog in the system leading to mass dumping, illegal export and/or illegal processing.

Furthermore, the evidence was very narrow and conducted on only small samples over a small process window with 8 WEEE plastic recyclers. This is not sufficient evidence! Current mechanical recycling has its limitations and until further progress is made then there is a very real risk of closing this recovery route, established test procedures and capabilities do not match the requirement to prove compliance. We have no control over the POPs levels in the material that arrives for recycling so there is no real evidence when and if it will reduce. So how can timelines for reductions be implemented?

39 Are you aware of any evidence to indicate the presence of PBDE in CDW plastics and textiles, and/or other waste streams or sectors?

Please provide details if so, including with reference to relevant waste streams, tonnages, concentration levels and impacts where possible.

Are you aware of any evidence to indicate the presence of PBDE in CDW plastics and textiles, and/or other waste streams or sectors? Please provide details if so, including with reference to relevant waste streams, tonnages, concentration levels and impacts where possible.:

40 Are there any additional costs you anticipate for disposing of PBDEs contaminated waste under the proposed waste limit (such as incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes etc)? If so, please can you provide any supporting evidence.

Are there any additional costs you anticipate for disposing of PBDEs contaminated waste under the proposed waste limit (such as incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes etc)? If so, please can you provide any supporting evidence. :

Yes. Disposal of POPs plastic in the UK costs between £250 and £400/tonne. In contrast, disposal of non-POPs dense plastic costs £50 - £100/tonne. The value add of recycling ELV/LDA plastic is ~£200/tonne. This means if the dense fraction became POPs, there would be no business case for the recycling of this plastic. It would move from a benefit to the UK economy of £40 million to a cost of £20 million (assuming £100/tonne disposal fee for the 200,000 tonne)

It may also mean the case for recycling shredder residue as a whole is put into jeopardy, and it may be more cost effective to incinerate the 1.2 – 1.2 million tonnes of ASR and recover no recyclable or secondary raw materials. Alternatively, the more cost effective solution may be to stop processing ELV or LDA.

Finally, the plastic recycling process also removes small residual metals which will otherwise remain in the mix and the incinerators do not like metals in the feed.

41 Are you aware of any other organisations that may be impacted by this proposal? Please provide details if so, including references to the number of organisations, types of organisations (Local Authorities, businesses, independent or public bodies), size (micro, small, medium or large), and the anticipated impacts, if known.

Are you aware of any other organisations that may be impacted by this proposal? Please provide details if so, including references to the number of organisations, types of organisations (Local Authorities, businesses, independent or public bodies), size (micro, small, medium or large), and the anticipated impacts, if known.:

Any other comments or evidence to share?

110 Please use this space if you have any other comments or evidence that you would like to share relating to this consultation.

Please use this space if you have any other comments or evidence that you would like to share relating to this consultation.:

I am writing on behalf of the British Plastics Federation (BPF) the world's longest running plastics industry trade association.

The main purpose of the BPF is to promote and support a successful UK plastics sector, which it does by providing a variety of services to its different sub-sector-focused groups, including special projects, events, updates, research and other activities.

The BPF also runs a number of committees focused on industry-wide issues, covering areas like skills and education, sustainability, product safety, fire safety, and health and safety.

The new proposed limits pose a significant challenge to the plastics industry. The matter at hand is complex and needs careful consideration.

Having consulted our members, it is clear that a reduction in limits for recyclers could reduce the in specification output material by approximately 15%. In the current climate, for some businesses, this could shut the doors. Furthermore, there would be an increase in incineration, extra costs and a lower yield from feedstocks than currently.