

Response ID ANON-75K5-1Z6U-2

Submitted to Consultation on potential amendments to the Persistent Organic Pollutants (POPs) Regulation
Submitted on 2023-04-27 12:00:45

Consultation information and next steps

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)

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)

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?

Other (please specify)

Other:
Trade Association

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

organisation name:
British Plastics Federation EPS Group

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

England

Waste limits (viii) – Hexabromocyclododecane (HBCDD)

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

Yes (please specify how below)

importance reason HCB WL (viii):

As HBCD was already phased out in the UK (due to the REACH authorisation of HBCD) the only areas of impact is in demolition waste. See below Environmental Agency document text which applies to handling of expanded polystyrene insulation boards (EPS) and extruded polystyrene (XPS) insulation board waste.

Environmental Agency Waste Stream briefing
Hexabromocyclododecane (HBCD) July 2016

Information from the Environment Agency on the destruction of waste containing HBCD.

From 30 September 2016 waste which contains Hexabromocyclododecane (referred to as HBCDD or HBCD) (a brominated flame retardant) must be destroyed. HBCD has been used in expanded polystyrene (EPS) and extruded polystyrene (XPS) insulation foam boards and blocks since the 1970s and HBCD can be found in some upholstered furniture and electric and electronic equipment. These wastes can no longer be landfilled, re-used or recycled. It will be referred to as HBCD in this note.

Regulation (EU) 2016/460 comes into force on 30 September 2016 and because it requires materials containing HBCD to be destroyed, those materials must be discarded and will therefore be waste.

How to identify this waste

It is believed that approximately 40% of all EPS and XPS insulation boards and blocks used in construction since the 1970s contained HBCD, manufactured in a wide range of styles, sizes, colours and thicknesses that are commonly unmarked and will be difficult to differentiate by sight alone.

Boards and blocks containing HBCD may be bound to other products to form a composite or panel system and may include a vapour barrier foil or an architectural face e.g. vinyl. Testing of all rigid insulation boards and blocks may be necessary in the future to determine which ones contain HBCD. Where proper assessment of EPS/XPS construction materials does not rule out the presence of HBCD it must be assumed that HBCD is present and that the material should be destroyed in accordance with the Persistent Organic Pollutants Regulations 2007.

This applies to material containing >1000 mg/kg of HBCD and to off-cuts arising from stocks of new material still in use. In most cases whilst the use of HBCD as a flame retardant has ceased, it will continue to be removed from the demolition of buildings for the next 50 years or longer.

How to achieve destruction

From 30 September 2016 products containing HBCD should not be landfilled or recycled.

Unless testing proves otherwise it should be assumed that all polystyrene blocks used in buildings contain the flame retardant HBCD.

The safe way to destroy HBCD in England is by incineration. HBCD is unlikely to be present in concentrations that make it a hazardous waste so it is acceptable for it to be destroyed in a municipal incinerator.

Waste handling

Waste materials containing HBCD should be handled in such a way as to not release the HBCD. Melting polystyrene containing HBCD into blocks is not allowed as it may release the POP. This has been carried out previously to reduce transport costs and/or to aid recycling.

Duty of Care requires that all waste be properly described on waste transfer documentation so that the right onward management can take place in line with the waste hierarchy. Waste containing HBCD should be properly identified and described. Early segregation will help the management of the waste and may save on handling costs.

Packaging waste: Polystyrene is commonly used as a packaging material for a wide range of goods. It is unlikely that EPS/XPS used in packaging will have been treated with the flame retardant HBCD.

Storage of products containing HBCD: Anyone storing more than 50kg of materials (not waste) containing HBCD will need to notify the Environment Agency.

Where to find out more:

NFDC - DRIDS

<http://nfdc-drids.com/drid/insulation/z3-boards-blocks-containing-hbcd.html>

GOV.UK

Disposal of Pops <https://www.gov.uk/dispose-of-waste-containing-persistent-organic-pollutants-pops>

Storage of pops <https://www.gov.uk/storing-persistent-organic-pollutants-pops>

Stockpile notification form <https://www.gov.uk/government/publications/persistent-organic-pollutants-notifying-pops-stockpiles>

Legislation

The European Commission's Regulation on persistent organic pollutants is implemented in the UK by the Persistent Organic Pollutants Regulations 2007. Regulation (EU) 2016/460

Prepared by Graham Winter July 2016

The current waste limit of 1000mg/kg captures all previously manufactured HBCD content in PS foam.

63 To what extent do you agree or disagree with our proposed waste limit for HBCDD (500 mg/kg)?

Disagree

64 Please explain the reasons for your answer to question 63, with reference to evidence and/or possible alternative options where relevant

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The supporting documents provide a response as to why the proposed waste limit should not be lowered from 1000mg/kg. See following HBCD industry group position.

HBCD Industry Group and EUMEPS opinion on the revision of low POP content values for Hexabromocyclododecane (HBCD) in waste

Brussels, 31 March 2023

1. Introduction and executive summary

The HBCD Industry Group (IG) would like to share its opinion related to the review of the provisional low persistent organic pollutant content (LPC) values in the technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with persistent organic pollutants (POP). In particular, the HBCD IG would like to propose a constructive way forward and provide for a sound and reliable analytical reference, should a limit value below the currently validated level of 1000 mg/kg HBCD become enacted.

The proposal follows a series of submissions by the HBCD IG which have highlighted the constraints of implementing low limit values in the absence of validated analytical methodologies for measuring the HBCD content in PS materials. Indeed, it has been pointed out in particular that in the absence of any field-tested tools conformity with lower specified (concentration) limits cannot be guaranteed and consequently the risk of non-compliance with regulatory requirements would force collection and sorting facilities to divert waste to incineration or landfill and/or expose operators to fines and eventually business cessation.

2. Addressing analytical methods for HBCD in Polystyrene Foam waste

Needless to say, that the appropriate analytical methodologies and equipment to measure HBCD in a polystyrene (PS) foam matrix represent a prerequisite for successful compliance and enforcement of the LPC values. Today the accepted standardized method is validated for concentrations at and above 1000 mg/kg HBCD.

Based on the experience gained over the past 5-10 years, the HBCD IG has prepared relevant documentation that displays in more detail the analytical boundaries and constraints in relation to the proper waste management of HBCD containing foams.

Indeed, analytical methods and the performance of the required measuring devices ought to be critically assessed and validated in the operational context in which they are effectively used. What is possible and practicable under controlled laboratory conditions does not guarantee proper use in waste collection and recycling operations, where representative sampling, speed and throughput represent essential working requirements.

The analytics of the substance HBCD in the polystyrene matrix by GC-MS is referenced in EN IEC 62321-9:2021 and provides a basis for investigations at levels below 1000 mg/kg HBCD, considering the constraints listed:

- The standard EN IEC 62321-9:2021 was validated in the International Interlaboratory Study IIS9 down to 1000 mg/kg for HBCD, the current threshold value for the LPC level being = 1000 mg/kg HBCD in waste.
 - Any reduction of the LPC value means that the standard cannot be applied without additional validation to determine or verify the new limit value.
 - Another major issue for investigating HBCD in EPS is the absence of regulations for sampling, sample treatment and sample preparation.
- This also includes the fact that absolutely no reference samples of HBCD in polystyrene for the intended concentration range of 1000 mg/kg HBCD or below are being offered neither by accredited government agencies nor by institutes that could be used to calibrate the laboratory analysis GC-MS.
- The Commission Regulation (EU) 2016/460 amending Annexes IV and V (LPCL in POP waste) has been in effect since March 30, 2016. In the past six years, compliance with the limit value for LPC for HBCD in waste as specified in the regulation has not been subject to the required market surveillance by the EU Member States throughout Europe.

3. Proposal on a collaborative way forward

Considering the above-mentioned facts, the elaboration of a validated analytical method satisfying today's needs and requirements related to a limit below 1000 mg/kg HBCD come as a necessity to meet compliance and enforcement objectives. Even though the HBCD IG is of the opinion that a 1000 mg/kg HBCD limit satisfies the health and environmental needs related to the safe management of the PS waste foams, we would like to offer our future engagement in the development of an appropriate analytical technique should this limit be reduced by a COP decision. For that purpose, we welcome the participation of Parties to overcome the barriers described above, in particular, in relation to the availability of samples.

Considering that 2-3 years will be needed to finalize a validated method, the HBCD IG asks the Parties for an increased collaboration with the industry and postpone a final decision by that time frame, viewing in particular the needs by countries that have access to less developed technologies. To note, this particular approach is being chosen, recognizing that the work of a standardization body would be delayed since it will be confronted with the same barriers whilst having less access to i.e. participating laboratories and possible reference samples.

The HBCD IG having gained experience over the past years within its analytical working group could offer to take a lead in this matter, in close exchange with the Parties willing to participate in the effort.

As a responsible actor, the HBCD IG would like to use this constructive approach to help ensure that regulatory requirements can be effectively met and complied with.

4. Conclusion

The HBCD IG remains of the opinion that any LPC value lower than 1000 mg/kg HBCD is prone to pose significant challenges for the polystyrene value chains. However, this initiative is meant to engage the involved Parties so as to satisfy the environmental and commercial requirements needed in meeting compliance and enforcement related to basic technical obligations, as specified by entrepreneurial and business planning security.

5. About the industry sector

This paper sets out the views of relevant and engaged industry sectors. The HBCD Industry Group gathers former producers of HBCD (BSEF), producers of expandable polystyrene (EPS), and producers of the extruded (XPS/Exiba) and expanded (Eumeps) polystyrene foams, under the auspices of Plastics Europe. Its primary mission is to develop guidance in the management of the end of life of the HBCD legacy substance, and to provide support for the safe, efficient, and quantitative elimination of HBCD from the value chain.

Currently the accepted standardised method is validated for concentrations at and above 1000mg/kg HBCD.

The standard EN IEC 62321-9:2021 was validated in the International Laboratory Study IIS9 down to 1000 mg/kg for HBCD, the current threshold value for the LPC level being = 1000mg/kg HBCD in waste. Any reduction of the LPC value means that the standard cannot be applied without additional validation to determine or verify the new limit value.

65 Based on current evidence, we anticipate the economic costs of lowering the HBCDD waste limit in GB to be minimal for all waste streams. Are you aware of any evidence to either support or oppose this view, including with reference to costs such as incineration gate fees,

administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes etc? Please provide details if so.

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See answer 65

66 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.

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XPS Board manufacturer industry

Waste limits (ix) – UV328, Dechlorane Plus, and Methoxychlor

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

Not Answered

importance reason WL (ix):

68 Are you aware of any evidence to suggest a waste concentration limit value for UV-328 that would be suitable for adoption within GB if and/or when this substance is adopted as a POP by the Stockholm Convention? Please provide details if so, including with reference to data sources, timescales, tonnages impacted and potential costs (including incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes), if known.

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69 Are you aware of any evidence to suggest a waste concentration limit value for Methoxychlor that would be suitable for adoption within GB if and/or when this substance is adopted as a POP by the Stockholm Convention? Please provide details if so, including with reference to data sources, timescales, tonnages impacted and potential costs (including incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes), if known.

Are you aware of any evidence to suggest a waste concentration limit value for Methoxychlor that would be suitable for adoption within GB if and/or when this substance is adopted as a POP by the Stockholm Convention? Please provide details if so, including with reference to data sources, timescales, tonnages impacted and potential costs (including incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes), if known. :

70 Are you aware of any evidence to suggest a waste concentration limit value for Dechlorane Plus that would be suitable for adoption within GB (if and/or when this substance is adopted as a POP by the Stockholm Convention)? Please provide details if so, including with reference to data sources, timescales, tonnages impacted and potential costs (including incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes), if known.

Are you aware of any evidence to suggest a waste concentration limit value for Dechlorane Plus that would be suitable for adoption within GB (if and/or when this substance is adopted as a POP by the Stockholm Convention)? Please provide details if so, including with reference to data sources, timescales, tonnages impacted and potential costs (including incineration gate fees, administrative costs or time taken to familiarise with the requirements and sourcing disposal, testing, segregation, storage of wastes), if known. :

UTC exempted levels (iii) – call for evidence regarding HCB

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

Not Answered

88 If you answered yes to question 87, how would it impact you or your organisation? Please provide details, including any supporting evidence or information on potential financial costs?

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89 Are you aware of any evidence to suggest that a UTC exemption for HCB is needed within the UK? If yes, please provide details on your answer including any supporting evidence or information on potential financial costs.

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90 Are you aware of any evidence to suggest that a UTC exemption to allow 10 mg/kg (0.001 % by weight) would be suitable for adoption within GB? Please provide details if so.

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91 Are you aware of any evidence to suggest that a UTC exemption of another value would be suitable for adoption within GB? Please provide details if so.

Are you aware of any evidence to suggest that a UTC exemption of another value would be suitable for adoption within GB? Please provide details if so. :

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.

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