

Title: Amending PCBs Regulations to provide clarity on four provisions in order to more clearly reflect the original policy intent of the Regulations Date: 27 February 2024 BRU No: Lead department or agency: Department for Environment, Food and Rural Affairs Other departments or agencies: N/A		De Minimis Assessment (DMA)	
		Stage: Final	
		Source of intervention: Domestic	
		Type of measure: Secondary	
Summary: Rationale and Options		Contacts for enquiries: Analytical enquiries: scarlett.ray@defra.gov.uk Policy enquiries: sally.read@defra.gov.uk	
Total Net Present Value -£0.01m	Business Net Present Value -£0.01m	Net cost to business per year <small>(EANDCB in 2019 prices)</small> £0.01m	

Rationale for intervention and intended outcomes

Polychlorinated biphenyls (PCBs) are man-made organic compounds which pose risks to human and animal health, such as cancer and reduced fertility, due to their toxic and bio-accumulative properties. Existing domestic PCBs regulations allow some equipment containing PCBs to be used until the end of its useful life, which can be as long as 60 years, while other equipment must be removed from use by the end of 2025 in accordance with our international commitments, assimilated Regulation EU2019/1021 as amended, ('the POPs Regulation'), and our existing PCBs Regulations. A proposed amending Statutory Instrument intends to provide additional clarity to more clearly reflect the original policy intent of the existing PCBs Regulations, with amendments to four provisions that refer explicitly to 'volumes of fluids containing PCBs' rather than to 'volumes of PCBs'. The SI does not contain any new policy positions. The rationale for intervention is to prevent negative externalities from potential PCBs use by providing additional clarity of the regulations to holders of this equipment, who may not take account of the societal and environmental costs from continuing

Describe the policy options considered

Option 0 – Do nothing (baseline)
In this scenario the PCBs Regulations would not be clarified and so there would continue to be some potential ambiguity for business with regards to four provisions, especially which equipment containing PCBs must be removed from use by the end of 2025.

Option 1 – Amend PCBs Regulation to provide extra clarity in the way volumes are referenced (preferred option)
In this scenario the PCBs Regulations are clarified by amendments to four provisions in the Regulations, making clearer to business the originally intended policy position.

Option 2 - Non-regulatory option
In this scenario the PCBs Regulations would not be clarified by further secondary legislation. This option would require Government to engage with industry to clarify the requirements for equipment removal.

Rationale for DMA rating

The proposed amendments will remove existing potential ambiguity with reference to volumes of PCBs, instead clarifying that it is equipment with fluid containing PCBs that needs to be de-commissioned. Following a public consultation, businesses confirmed they are already taking necessary steps to be compliant with the original intent of the PCB regulations, resulting in no additional costs being faced. There is only one monetised cost - familiarisation with the amended regulations - which will be faced by holders of equipment containing PCBs. The EANDCB falls well below the +/-£5 million threshold and so we are confident that a De Minimis Assessment is required.

Will the policy be reviewed? Yes		If applicable, set review date: 27/02/2026		
Are these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes

Senior Policy Sign-off:	✓	Date:	09/02/2024
Peer Review Sign-off:	✓	Date:	09/02/2024
Better Regulation Unit Sign-off:	✓	Date:	05/03/2024

1.0 Policy Rationale

Policy background

1. The UK is a Party to the UN Stockholm Convention on Persistent Organic Pollutants (POPs). POPs are substances which meet four criteria: they are persistent, toxic, bio-accumulative, and can travel over long ranges and across international borders. The Stockholm Convention aims to protect human health and the environment by prohibiting, eliminating or restricting the global production and use of POPs. Polychlorinated Biphenyls (PCBs) are a type of POP and are listed in Annex A of the Stockholm Convention, which means that Parties to the Convention must prohibit and / or work towards elimination of PCBs from production or use.
2. In the UK, the assimilated POPs Regulation (EU) 2019/1021, as amended ('the POPs Regulation') regulates the production, placing on the market, and use of POPs which are banned or restricted under the Stockholm Convention, including PCBs. The PCBs Regulations 2000/1043 for England and Wales specifically regulate the use and management of PCBs, including the registration of PCB-containing equipment, which is in addition to the regulation of PCBs and other POPs as detailed within the POPs Regulation. The PCBs Regulations introduced in 2000 pre-dated the Stockholm Convention on POPs (adopted in 2001) and the broader EU POPs Regulations (developed in 2004 to implement the Stockholm Convention in the EU, and subsequently re-cast in 2019 as Regulation (EU) 2019/1021).
3. PCBs have been used to improve performance in electrical equipment such as transformers by adding them to oils contained within them. In 2001, the text of the Stockholm Convention was put forward for adoption by the Conference of Plenipotentiaries and included the requirement for parties to identify and remove from use certain pieces of equipment containing PCBs by 2025. This obligation was brought into UK law in 2020 following a re-cast of the EU POPs Regulation in 2019 which included the addition of this 2025 deadline.

Problem under consideration

3. Following these 2020 amendments, Defra became aware that there was some resulting potential ambiguity with some of the provisions where certain references are made to volumes of PCBs and fluids containing PCBs, relating to which pieces of equipment need to be identified and decontaminated or removed from use by a deadline of 31st December 2025. An amending SI has been proposed which aims to provide additional clarity to reflect the original policy intent of the PCBs Regulations. It does not contain any new policy positions. The proposed SI was consulted on between May and June 2023 and businesses were mostly supportive of the proposed changes.
4. This intervention clarifies the original policy intent of the PCBs Regulations in line with UK's international obligations under the Stockholm Convention by amending the Regulations. The new SI will remove any potential ambiguity of interpretation regarding four provisions. If the amendments are not made, there could be a risk that the regulations are interpreted incorrectly and in a way that does not align with the original policy intent, with a corresponding risk of potential non-compliance by business. In addition, the UK would not be meeting its international obligations under the Stockholm Convention.

Rationale for intervention

Negative Externalities

5. The objective is to ensure humans and wildlife are protected from PCBs, which are hazardous to humans, animals and the environment. Through introducing the amended regulations, the aim is to provide clarity to holders of these equipment and to remove any ambiguities surrounding how the law could be interpreted. This clarification will also support the regulator if they need to take enforcement action against non-compliant organisations.

6. The market failure the amended regulations seeks to address is negative externalities, relating to pollution. Market failure is a scenario where the market fails to result in an optimum allocation of resources, requiring government intervention. Negative externalities arise when one party, such as a producer of waste, makes another party worse off, yet does not bear the costs from doing so. PCBs are classified as human carcinogens and produce a wide spectrum of adverse effects in humans and animals, including infertility, malformations in the foetus, and issues with child development and the immune system. The continued use of equipment containing PCBs and the potential spillages of oil containing PCBs associated with this equipment will result in PCBs being released into the environment which could affect wildlife as well as humans. The holders of PCB containing equipment do not take account of these societal costs. To account for this extra cost of pollution, the regulations require holders of PCB-contaminated equipment to remove them from use by 2025, before the end of their useful life. This follows the 'polluter pays' principle¹, which states the polluter should bear the cost of preventing environmental damage. The proposed policy intervention will provide extra clarity of the law to support full compliance. This will ensure human health and the environment are protected.

Policy objective

7. The aim of this policy intervention is to clarify regulations where certain references are made to volumes of PCBs and to fluids containing PCBs and therefore to clarify which pieces of equipment need to be identified and decontaminated or removed from use by the deadline of 31st December 2025, in line with the UK's obligations as a Party to the Stockholm Convention on POPs.
8. The extra clarity will ensure that affected parties are aware of their responsibilities under the revised regulations and help to ensure that all pieces of equipment containing PCBs that are required to be removed by the 2025 deadline, will be removed.

Options considered

Option 0 – Do nothing (baseline)

9. In this scenario the PCBs Regulations would not be clarified and so there could continue to be some ambiguity for holders of PCB equipment in four provisions, and especially with the requirement to remove PCBs containing equipment from use by the end of 2025. This could mean that business may not remove from use all equipment required to be removed by the end of 2025 and therefore the international obligation would not be met.

Option 1 – Legislative change - amend PCBs Regulation to provide extra clarity in the way volumes are referenced (preferred option)

10. In this scenario the PCBs Regulations are clarified by amendments to four provisions in the Regulations, making clearer to business the originally intended policy position and therefore ensuring that action is taken to meet the international obligation for equipment removal by the 2025 deadline.

Option 2 - Non-regulatory option

11. In this scenario the PCBs Regulations would not be clarified by further secondary legislation, so some ambiguity in the way that certain provisions are interpreted could remain. This option would require Government to engage with industry to clarify the requirements for equipment removal, although there is a risk that holders of equipment may choose not to meet the requirements of the regulations, resulting in the international obligation not being met.

2.0 Rationale for De Minimis Rating

¹ Supported by HMT guidance on 'moral hazards'.

12. The proposed amendments will remove existing ambiguity with reference to volumes of PCBs and clarify which equipment with fluid containing PCBs will need to be decontaminated or decommissioned. Following consultation on the proposed amendments, all businesses who responded confirmed they are already taking necessary action to be compliant with the policy intent of PCBs Regulations. As a result, the amendments will not require them to change how they operate, resulting in no additional ongoing costs to businesses. The only monetised cost is familiarisation with the amended regulations. Consequently, the EANDCB of this measure falls below the De Minimis threshold of +/- £5m.
13. The position taken in this DMA is that the proposed SI does not introduce any new policy positions but merely seeks to clarify the original policy intent of the legislation, with no costs to business beyond familiarisation costs.
14. The Impact Assessment which was completed in relation to PCBs Regulations 2020/489 assumed that the policy intent and objectives of those Regulations would be understood and implemented by all parties affected, and the assessment of expected impacts identified at the time reflected this. One public body stakeholder has indicated through the consultation exercise that the proposed amending SI will now provide them with additional clarity and certainty about how they should be applying those PCBs Regulations, and that this will be reflected in their compliance planning. The compliance costs which this body expects to incur are not scored within this DMA as they are a public sector body and impacts to registered holders of PCBs-containing equipment were already reflected in the earlier assessment, which assumed full compliance within the timeframes set by PCBs Regulations 2020/489. Nevertheless, for the sake of full transparency we have noted their estimate of potential costs of up to around £30m to replace their transformer equipment. This is an initial ball-park estimation, based on partial information received, and is subject to continued on-going assessment of how many of their transformers contain PCBs. There are several caveats with this estimate as it takes the worst-case scenario of how many transformers are potentially contaminated and also assumes that all transformers need to be fully replaced whereas for some assets, it is often possible to decontaminate equipment by replacing the PCB oils and cleaning the equipment at a much cheaper cost. Further, the use of PCBs has been regulated in the UK since the early 1980s so some PCBs still exist in use in older equipment in which there may not be a large amount of useful life left, and as such only the residual value or life beyond 2025 should be considered rather than the value of the full asset life. This would suggest costs could be significantly lower than £30m.

3.0 Costs and Benefits

Option 0 – Do Nothing

15. There is a small risk of non-compliance in the baseline which may result in reputational damage and costs associated with continued exposure of PCBs to the environment.

Option 1 – Legislative change - amend PCBs Regulation to provide extra clarity in the way volumes are referenced (preferred option)

16. The costs faced by business are familiarisation with the amendments, a one-off cost with no additional or on-going costs. There are also potential benefits associated with avoided releases of PCBs.

Option 2 - Non-regulatory option

17. As there will be no change to the existing legislation, there will be no regulatory costs faced by businesses in this situation.

Costs

The costs and benefits analysed below refer to the preferred option (option 1). This has been assessed against a baseline of 'do nothing'.

3.1 Familiarisation Costs

18. There is expected to be a one-off cost for holders of PCB contaminated equipment to familiarise themselves with the amended regulations. All holders of PCB equipment in England and Wales are required to register contaminated equipment or equipment which is at risk of being contaminated, on the PCB Environment Agency inventory; for Wales this is the PCB Natural Resources Wales inventory. We have assumed all 44 PCB equipment holders, operate independently and therefore all will face these familiarisation costs.
19. Typically, the employee who deals with the equipment would be an Environment Services Manager. We assume it will take them two full working days or 15 hours to read and understand the amended regulations. The time assumption is taken from the PCB Regulation impact assessment² as we expect that equipment holders will read the full regulations again, to ensure they are taking the necessary steps to be compliant. The value of time for a holder is estimated to be the wage of an environmental services manager (£22.90/hour)³. The wage costs are increased by 22 to factor non-wage labour costs (per Regulatory Policy Committee methodology⁴).

$$15 \times 22.40 \times 44 \times 1.22 = \text{£}18,036$$

$$\text{£}18,036 \times (102.252/100) = \text{£}18,442$$

20. We estimate the total costs of familiarisation will be £18,442 of which £16,347 will be incurred by businesses, with the remaining incurred by public bodies. These costs are expressed in 2024 real prices, discounted from a present value base year of 2024. We have used a discount rate of 3.5% to reflect social time preferences in line with the HMT Green Book Supplementary Guidance⁵. The period of appraisal is 2024-2025, as the regulations stipulate the removal of contaminated equipment by 2025.

Benefits

3.2 Avoided environmental and human health impacts

21. This clarity to the regulations will help ensure the original policy objective is achieved, enabling regulators the ability to retain legal support, should they identify non-compliance. The original policy objective was to remove certain pieces of equipment containing PCBs from use by 2025, to abide by UK's international obligations under the Stockholm Convention on POPs. Given stakeholders are taking the necessary steps to be compliant with the intent of the original policy, any environmental benefits are notional.
22. The main benefit from the amended regulations will be protection of the environment, through minimising the risk of non-compliance. PCBs are a group of chemicals that are defined as being POPs, which means they are long-lasting in the environment and bio-accumulative in both humans and animals. In the literature, there are several case studies investigating the effects of PCBs. For instance, the American Chemical Society conducted a study based on stranded marine mammals on the Great Britain coastline. They found in the five-year period (2014-2018) concentrations of PCBs that exceeded the toxic threshold for marine mammals in 48% (88/184) of those sampled. This placed them at risk of health conditions

² PCB Impact Assessment (2020) https://www.legislation.gov.uk/ukia/2020/34/pdfs/ukia_20200034_en.pdf

³ ONS ASHE, PROV (2023). [Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14.5a - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/employment-and-labour/most-popular-statistics/earnings-and-hours-worked/occupations-by-four-digit-soc) Hourly Pay - Gross 2023

⁴ Regulatory Policy Committee (RPC) (2019). RPC guidance note on 'implementation costs'. [RPC short guidance note - Implementation costs August 2019.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/RPC_short_guidance_note_-_Implementation_costs_August_2019.pdf)

⁵ HMT Green Book (2018) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf

such as immunotoxicity and endocrine disrupting end points, which can result in infertility⁶. Due to the lifespan of these creatures, bio-accumulation results in increased exposure to higher concentrations of PCBs. Amending the existing regulations will result in a reduced risk of further release of PCBs into the environment, preventing future damage caused by PCBs. Given stakeholders are taking the necessary steps to be compliant with the intent of the original policy, any environmental benefits are notional.

Business Impact Target Calculations

23. We have assumed the policy amendment will result in a one-off familiarisation cost of £0.02m, which will be directly incurred by businesses. We do not expect there to be any additional costs to businesses as part of this policy. The EANDCB falls well below the +/-£5 million threshold, therefore we are confident that a De Minimis Assessment is required.

Wider Impacts

Equalities Impact Assessment

24. For the original regulations, we carried out a Human Rights Act 1998 Article 1 of Protocol 1 (or Fair Balance) Assessment (HRA A1P1) in relation to the proposed Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000.
25. These provisions of the HRA are relevant because, for the purpose of A1P1, an item of electrical equipment such as a transformer is a 'possession'. Through consideration of the right to 'the free enjoyment of possessions' under the Human Rights Act 1998, we have assessed that the measures are a proportionate means of achieving a legitimate aim.

4.0 Post implementation review

1. **Review status:** Please classify with an 'x' and provide any explanations below.

<input type="checkbox"/>	Sunset clause	<input type="checkbox"/>	Other review clause	<input type="checkbox"/>	Political commitment	<input type="checkbox"/>	Other reason	<input checked="" type="checkbox"/>	No plan to review
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Regulations to be reviewed every five years to ensure continued suitability.

2. **Expected review date** (month and year, xx/xx):

<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	Five years from when the Regulations come into force
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3. **Rationale for PIR approach:**

Rationale for not conducting a PIR:

As the original parent legislation is due to be reviewed in 2026, there is no need for a PIR for this amendment to the original regulations. Under the original regulations the EA and NRW require all holders of equipment on their inventory to test equipment registered for PCBs when they are taken out of use and report whether they contained PCBs. This will continue under their new regulatory position statement; we will therefore be able to monitor how much contaminated equipment is removed and when.

⁶ ACS (2023) **Spatiotemporal Trends Spanning Three Decades Show Toxic Levels of Chemical Contaminants in Marine Mammals**, Williams R et al. [Spatiotemporal Trends Spanning Three Decades Show Toxic Levels of Chemical Contaminants in Marine Mammals | Environmental Science & Technology \(acs.org\)](https://doi.org/10.1021/acs.est.3c00000)