EXPLANATORY MEMORANDUM TO

THE OZONE-DEPLETING SUBSTANCES (GRANT OF HALON DEROGATIONS) REGULATIONS 2023

2023 No. 336

1. Introduction

1.1 This explanatory memorandum has been prepared by Department for Environment, Food and Rural Affairs ("Defra") and is laid before Parliament by Command of His Majesty.

2. Purpose of the instrument

2.1 This instrument grants derogations requested by the Ministry of Defence (MoD) with regard to the continued critical use of Halon-1211 in the lavatory waste receptacle fixed fire suppression system, and in the portable fire extinguishers for the protection of cabin and crew compartments in existing Airseeker Rivet Joint (RJ) RC-135W aircraft (the Airseeker aircraft), beyond the critical use end dates of 31 December 2020 and 31 December 2025 respectively. The derogations are granted using the power in Article 13(4) of Regulation (EC) No 1005/2009 (recast) of the European Parliament and of the Council of 16th September 2009 on substances that deplete the ozone layer as retained in UK law as it applies in Great Britain (the Ozone-Depleting Substances (ODS) Regulation).

2.2 The derogations allow MoD the continued use of Halon-1211 in the Airseeker aircraft's fixed fire protection system for the protection of the lavatory waste receptacle, and in the portable extinguishers for the protection of cabin and crew compartments, since there are currently no available technically and economically feasible alternatives to using halon in those systems for such military aircraft.

3. Matters of special interest to Parliament

Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

4. Extent and Territorial Application

4.1 The extent of this instrument (that is, the jurisdiction(s) which the instrument forms part of the law of) is England, Wales, and Scotland.

4.2 The territorial application of this instrument (that is, where the instrument produces a practical effect) is England, Wales, and Scotland.

5. European Convention on Human Rights

5.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

6. Legislative Context

6.1 The ODS Regulation prohibits the placing on the market of ozone-depleting substances (ODS) (Article 5(1)) and products and equipment containing or relying on

ODS (Article 6(1)). However, the ODS Regulation permits critical uses of halons (Article 13). Such uses are listed in Annex VI of the ODS Regulation. Annex VI, as amended by Regulation (EU) No 744/2010 as retained in UK law as it applies in Great Britain, sets cut-off dates and end dates for those critical uses. The critical uses listed in Annex VI includes the use of Halon-1211 in certain fire protection systems and portable extinguishers on aircraft.

6.2 Relevant definitions of terms in Annex VI are:

- "Cut-off date" means the date after which halons must not be used for fire extinguishers or fire protection systems in new equipment and new facilities for the application concerned.
- "End date" means the date after which halons shall not be used for the application concerned and by which date the fire extinguishers or fire protection systems containing halons shall be decommissioned.
- "New equipment" means equipment for which, by the cut-off date, neither of the following events has occurred:
    - signature of the relevant procurement or development contract.
    - submission of a request for type approval or type certification to the appropriate regulatory authority. For aircraft, submission of a request for type certification refers to a submission of a request for a new aircraft type certification.

6.3 In aircraft, use of Halon-1211 in fixed systems for the protection of lavatory waste receptacles has a cut-off date of 31 December 2011 and an end date of 31 December 2020.

6.4 In aircraft, use of Halon-1211 in portable fire extinguishers for the protection of cabin and crew compartments has a cut-off date of 31 December 2014 and an end date of 31 December 2025.

6.5 Article 13(4) of the ODS Regulation allows for the granting of derogations from cut-off dates and end dates in specific cases. This means the use of halon can continue beyond those dates, provided an applicant can demonstrate that there is no technically and economically feasible alternative to using Halon-1211. A derogation may only be granted by regulations made by the appropriate authority.

6.6 The ODS Regulation applies to Great Britain only. Northern Ireland remains subject to EU ODS legislation in accordance with the Northern Ireland Protocol.

6.7 The Article 13(4) power to grant a derogation is devolved. Therefore, the appropriate authority in England, Scotland and Wales is the Secretary of State, the Scottish Ministers, and the Welsh Ministers respectively. Ministerial consent has been provided by the Scottish and Welsh Ministers for the Secretary of State to exercise the Article 13(4) power to grant derogations on their behalf. The grant of the derogations in this instrument is based on such consent and therefore applies to Scotland and Wales as well as to England.

7. Policy background

What is being done and why?

7.1 Halons are a type of ozone-depleting substances (ODS). If emitted to the atmosphere, ODS damage the Earth's stratospheric ozone layer. Under the UN Montreal Protocol

on Substances that Deplete the Ozone Layer, ODS have largely been phased out in developed countries.

7.2 Remaining ODS use in the UK is very limited, tightly controlled and monitored under the ODS Regulation. It is permitted only in essential applications where no alternatives are available, such as fire extinguishers in ships and aircraft, laboratory, and analytical uses, and as feedstock for other chemicals. Imports and exports must be licensed and annual reports on production and consumption must be submitted to the UN Ozone Secretariat.

7.3 Previously, the European Commission undertook most of these control functions on behalf of the UK, including granting derogations in the case of critical uses of halons. The geographical extent of the ODS Regulation is Great Britain only. Northern Ireland remains subject to EU ODS legislation in accordance with the terms of the Northern Ireland Protocol. Powers under the ODS Regulation are devolved.

7.4 While the ODS Regulation prohibits the placing on the market of ODS, certain critical uses are permitted. This includes the critical use of Halon-1211 in the lavatory waste receptacle fixed fire suppression system, and in the portable fire extinguishers for the protection of cabin and crew. As described in the Legislative Context section, such use is time-limited, but derogations can be granted to permit the continuing use of Halon-1211 (and other halon substances) beyond those set time limits, where an applicant in a particular case can demonstrate that there is no technically and economically feasible alternative to halon available.

7.5 The Airseeker aircraft form part of a combined US/UK RJ fleet of aircraft, which continues to be managed by the US Air Force (USAF) Big Safari Program Office, under the Sustainment and Follow-on Development Memorandum of Understanding (SFD MOU). The UK Government has no influence over the manner in which the global fleet is managed but is obligated to maintain the UK-based aircraft to the same configuration as all other aircraft in the global fleet. This enables interoperability and exchange between US and UK aircrews. Therefore, this derogation application is for existing applications, which were procured under a Foreign Military Sale (FMS) contract from the United States Government. The contract was agreed in June 2011 and the 'out of service date' for the aircraft is 2035.

7.6 The Airseeker aircraft's out of service date (OSD) of 2035 extends beyond the end date for Halon-1211 in fixed systems for the protection of lavatory waste receptacles (2020) and in portable fire extinguishers for the protection of cabin and crew (2025). Therefore, MoD have applied for derogations to enable continued use of these substances in accordance with Article 13 of the ODS Regulation.

7.7 MoD applied for the derogations to disapply the "end date" for both applications.

7.8 For both applications, MoD submitted that there is currently no implementable "drop in" replacement for Halon-1211 in the lavatory waste receptacle fixed fire suppression system and in portable fire extinguishers for the protection of cabin and crew compartments. Although there are potential theoretical alternatives that either have a greater mass or require a greater volume of suppressant, these alternatives would require structural design modifications to the Airseeker aircraft which is technically and programmatically unachievable. The aircraft are managed by the US, and they have no plans currently to modify the aircraft to replace such halon uses. MoD are contractually obliged to maintain the aircraft given to the UK to the same configuration as all other aircraft in the global fleet owned by the US.

7.9 In assessing the applications by MoD, both the latest Assessment Report of the Montreal Protocol's Halons Technical Options Committee (HTOC), published in December 2018, (the HTOC Report) and the United Nations Environment Programme (UNEP) Progress Report of the Technology and Economic Assessment Panel (TEAP), published in May 2022 (the TEAP Progress Report) have been reviewed. According to the HTOC Report, despite over 20 years of research, the civil aviation industry had not yet been able to find any replacements for Halon-1211 that they deem to be acceptable from an efficiency perspective (i.e., space and weight), a toxicity perspective or both. Since publication of the HTOC Report, further investigation has identified that, while evaluation of alternatives to Halon-1211 has continued, there are still no alternatives available that address all of the space, weight and safety considerations.

7.10 The TEAP Progress Report further confirms that alternatives to Halon-1211 have yet to be developed for the different sizes of handheld extinguishers that are installed in military aircraft and helicopters, and on smaller civil aircraft. The process of replacing an extinguisher is costly and is delaying the development of the smaller unit used in cockpits in these aircraft.

7.11 Having carefully reviewed the evidence provided by MoD and having assessed the HTOC Report and TEAP Progress Report, all of which identified the ongoing lack of acceptable alternatives to Halon-1211 that address the necessary considerations, the Secretary of State is content that there are no technically and economically feasible alternatives available for use in the Airseeker aircraft that the derogations have been applied for. On that basis, the Secretary of State is content to grant the derogations for the aircraft through this instrument. The derogations are granted by Secretary of State, as the appropriate authority for England and, with the consent of Scottish and Welsh Ministers, as the appropriate authority for Scotland and for Wales respectively.

7.12 The derogations will remain under review and may be withdrawn in the event that alternatives become technically and economically feasible.

What will it now do?

7.13 This instrument will grant MoD derogations from the 31 December 2020 end date for the use of Halon-1211 in the fixed fire protection systems for the protection of lavatory waste receptacles, and from the 31 December 2025 end date for the use of Halon-1211 in the portable extinguishers for the protection of cabin crew compartments in relation to the Airseeker aircraft only. The effect of this is that from the date the SI comes into force, the end dates will no longer apply in relation to these specific uses.

8. European Union Withdrawal and Future Relationship

8.1 This instrument does not relate to withdrawal from the European Union.

9. Consolidation

9.1 No consolidation is required.

10. Consultation outcome

10.1 The consultation requirement as provided for in Article 25D(9) of the ODS Regulation has been satisfied. The only body or person with a substantial interest in

the Regulations was the applicant for the derogation i.e., MoD. There were no other bodies that the Secretary of State thought appropriate to consult.

10.2 The Devolved Administrations were engaged throughout the development of this instrument and agreement between officials on its provisions was reached. Furthermore, Ministerial consent has been provided by the Welsh Government and Scottish Government for the Secretary of State to exercise the power to grant derogations under Article 13(4) of the ODS Regulation.

11. Guidance

11.1 No guidance is required.

12. Impact

12.1 There is no, or no significant, impact on business, charities, or voluntary bodies.

12.2 There is no, or no significant, impact on the public sector.

12.3 A full Impact Assessment (IA) has not been prepared for this instrument because it relates to maintenance of existing regulatory standards. The only cost associated with these measures is from the release of greenhouse gases to atmosphere. There are nine fire extinguishers across the fleet containing a total of 91.2kg of Halon-1211. This is equivalent to 159.6 MtCO2e at a global warming potential of 1,750 (calculated using the Intergovernmental Panel on Climate Change Assessment Report (AR) AR5 without feedback). If all this gas were released to the atmosphere it would impose total costs of £40,000 (calculation was based on £252/tCO_2e according to the guidance paper on Valuation of greenhouse gas emissions: for policy appraisal and evaluation - GOV.UK (www.gov.uk)). Based on discussions with MoD we are confident that leakage rates are significantly below the threshold that would require an IA (the gas should only be emitted in the event of fire, and this has not happened).

13. Regulating small business

13.1 The legislation does not apply to activities that are undertaken by small businesses.

14. Monitoring & review

14.1 There is no requirement to review the granting of derogations covered by this statutory instrument.

15. Contact

15.1 Ademola Adeseun at the Department for Environment, Food and Rural Affairs, Telephone: +44 (0)2087203545 or email: ademola.adeseun@defra.gov.uk can be contacted with any queries regarding the instrument.

15.2 Lee Davies, Deputy Director for Climate, at the Department for Environment, Food and Rural Affairs can confirm that this Explanatory Memorandum meets the required standard.

15.3 Lord Benyon MP, Parliamentary Under Secretary of State, at the Department for Environment, Food and Rural Affairs can confirm that this Explanatory Memorandum meets the required standard.