Leaflet 5 – Environmental Aspects of Hazardous Substances and Restricted Materials Management

Part 1: Directive. This part provides the direction that **must** be followed in accordance with statute or policy mandated by Defence or on Defence by central Government.

Part 2: Guidance. This part provides the guidance and best practice that **should** be followed and will help you to keep to this policy.

Contents

Amendment Record

Amendments will be staffed by D-EEI together with the leading areas, relevant subject matter experts and key stakeholders.

Version No	Date	Text Affected	Authority
1.2	Oct 20	Interim update post-handover of policy from DSA to D HS&EP	D HS&EP
2.0	Nov 24	Release of two-part structure, introduction of Policy Statements and transfer of ownership to D CCE	D CCE
3.0	Jan 26	Inclusion of Annex D: PFAS guidance for procurement	D EEI

Key terms and definitions

The definitions of key Defence environmental terms are contained in the JSP 418 master glossary.

For the purpose of this leaflet, the following definitions are used:

a. **Hazardous Substance**. A Hazardous Substance is a substance that has the potential to cause harm to human health and / or impact to the environment.

b. **Restricted Material**. A Restricted Material is one that has any legislative control on the importing, manufacture, use or placing on the market of the material. In some cases, the material can continue to be used for specific uses or where the substance is below a certain concentration in a mixture or article.

Must and should

Where this chapter says '**must**', this means that the action is a compulsory requirement. Where this chapter says '**should**', this means that the action is not a compulsory requirement but is considered best practice to comply with the policy.

Scope

This policy applies to all those employed by Defence (military or civilian) as well as those working on behalf of Defence (for example, contractors). It applies to all Defence activities conducted in any location (UK or overseas).

Part 1: Directive

Introduction

1. The aim of this leaflet is to define the environmental requirements for through life management of Hazardous Substances and Restricted Materials (HSRM) in compliance with legislation, regulations, and statutory requirements. This leaflet applies to all personnel who manage the procurement, use, and disposal of HSRM or material containing HSRM. This can include consumable items, infrastructure, platforms, systems, or equipment. Shortfalls in management can result in unreliable and poor performing equipment, early obsolescence, and / or unnecessary impacts to the environment. Failure to comply with legislation can also leave staff liable to personal civil litigation or the MOD to crown censure.

2. The use of Fluorinated Greenhouse Gases (F Gas) and Ozone Depleting Substances (ODS) are also restricted or, in some cases, prohibited. These are covered explicitly in JSP 418 Leaflets 6. Waste management, including hazardous waste is covered in JSP 418 Leaflet 3.

3. Whilst this leaflet is part of the Environmental Management policy, HSRM can present risks to life and / or impacts the environment. JSP 375 Ch 11 (Management of Hazardous Substances) and Ch 36 (Asbestos), and JSP 376 (Defence Acquisition Safety) cover policy related to health and safety aspects of managing, handling and using HSRM within Defence.

4. Reference should also be made to JSP 850 for Infrastructure and Estate Policy, Standards and Guidance.

5. References to [Defence] ‘Products, Systems and Services (PSS)’, ‘capability’, ‘materiel’ and ‘equipment’ are applicable to infrastructure, platforms and systems.

6. References to environmental cases includes, cases, assessments and other such instruments used to demonstrate the level of environmental impact and legal compliance as described in Def Stan 00-051.

Background

7. HSRM can have a detrimental effect on the environment. Many are natural, but more recently the number of synthetic substances being manufactured has risen significantly. The scale of impact depends on the type and quantity of material being used and whether the impact is direct or indirect. Concentrations can ultimately reach levels where damage to the environment cannot be remediated.

8. Several environmental issues have been connected to the release of certain substances, with some substances producing toxic or harmful effects after a single episodic release, whilst many of the substances are persistent in the environment and if released will accumulate over time, entering supply and food chains.

9. PSS procured for Defence may use HSRM for construction, manufacturing, maintenance or in operational use. Exposure to the environment may result from normal use (e.g., operations and maintenance activities) or during accidental or abnormal circumstances.

Legislation

10. In accordance with the Secretary of States' (SofS's) Environmental Protection (EP) Policy Statement, MOD policy requires Defence to comply with all applicable legislation (that includes legislation giving effect to the UK's international obligations). When overseas, notwithstanding state immunity under customary international law, Defence is to apply UK standards where reasonably practicable, respond to host nations' relevant HS&EP expectations and cooperate with their respective HS&EP authorities. Defence environmental requirements are set by the Defence Safety Authority (DSA) through Defence Safety Authority Regulatory Publications (DSRPs).

11. UK-based manufacturers and importers to the UK placing products and substances on the market have an obligation to comply with all relevant legislation and supply information to allow its safe use whilst minimising harm to the environment. Shortfalls in management of compliance can lead to military capabilities being unsafe, ineffective, or unsustainable due to reduced reliability, performance, or availability of essential materials. In many cases, staff responsible for acquisition of Defence material will be responsible for importing PSS and therefore responsibility for the compliance with UK regulation lies with the MOD.

12. Persistent Organic Pollutants (POPs) are either prohibited, or contain restrictions, under UK Law in line with the Stockholm Convention. POPs present Defence with a particular challenge as there is no provision in UK legislation for any form of Defence Disapplication, Exemption or Derogation (DED), and not all of our strategic partners have ratified the Convention. Products imported from countries that have not ratified the Convention could contain substances prohibited within the UK. Appropriate measures **must** be implemented to ensure compliance with the POP Regulations.

Assurance

13. **Assurance**. The application of this policy **must** be assured using the Three Lines of Defence (LOD) model (Orange Book[1] – Principles and Concepts of Risk Management).

a. The first LOD (1LOD) **must** be provided by those responsible for delivering the activity (normally within the Chain of Command / Management Chain; at ship, unit or establishment level) to reinforce the policy, ensuring it is followed during the activity, and that associated risks are being managed.

b. 2LOD **must** be provided by the chain of command, separate from the assurance given by those responsible for delivering the activity and in line with formal Military Command or Defence organisation assurance mechanisms. 2LOD **should** make use of 1LOD evidence and bring additional subject matter expertise and process excellence to support the 1LOD to ensure all HSRM related risks are being managed and reported effectively.

c. 3LOD **must** be provided as in independent audit function at Defence level by, for example, Government Internal Audit Agency (GIAA), and the Defence Safety Authority (DSA).

[1] Expanded further in JSP901.

Roles and Responsibilities

14. As PSS progresses through the lifecycle, responsibility for management of PSS will change. The DSA mandate general and domain specific regulatory requirements that support the management process. This document refers to the accountable person as the person(s) with the appropriate delegated authority, e.g., Heads of Establishment, Commanders, Managers, Duty Holders, and Regulators, for authorisations or approvals.

15. The accountable person **must** ensure the use of HSRM in their infrastructure, platforms and systems is actively managed with investigations into alternatives made throughout its service life to ensure sound environmental performance is met.

16. It is the responsibility of each individual within Defence to meet their duty of care obligations to protect the environment, and to support the implementation of environmentally sound performance and effective MOD HSRM management policy. This includes through recommendations for alteration of this policy.

Policy Statements

17. Defence has established the following policy statements to provide direction on the management of HSRM (including natural or artificial substances and mixtures), which **must** be followed.

a. **Policy Statement 1 (Page 6)**. Defence Organisations and staff procuring PSS on behalf of the MOD **must** ensure that:

(1) It is compliant with applicable legislation, regulations, and statutory requirements for the management of HSRM through life.

(2) The Accountable Person for staff handling, using, and disposing of PSS containing HSRM ensures the activity is compliant with applicable legislation, regulations, and statutory requirements.

b. **Policy Statement 2 (Page 7)**. Defence Organisations **must** assess their obligations when interpreting and specifying HSRM requirements for PSS. Such requirements **must** include the need to for a supplier to provide essential information on the HSRM present, including any environmental impact information and **should** differentiate requirements between Hazardous Substances and Restricted Materials.

c. **Policy Statement 3 (Page 8)**. For Defence to deliver operational capability, some UK HSRM legislation allows Defence to apply Disapplications, Exemptions or Derogations (DEDs), however:

(1) Those DEDs **must** only be used when operational capability cannot be practicably met by any other means.

(2) Where these DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by UK legislation[2].

[2] In line with SofS's Environmental Protection Policy Statement.

d. **Policy Statement 4 (Page 9)**. Where no suitable alternatives are available or replacement of the HSRM is not practicable, then the environmental impacts **must** be:

(1) Considered, assessed, and minimised through design and delivery of appropriate processes and procedures through life or until technology enables suitable alternatives that can be used where reasonably practicable.

(2) Documented, including any mitigations, with a robust case prepared describing why the solution supports Sound Environmental Performance.

(3) Communicated to the Accountable Person, including through inclusion in the relevant building or system environmental case.

e. **Policy Statement 5 (Page 9)**. Defence Organisations **must** ensure the use of HSRM in their projects is actively managed and investigations into alternatives **must** continue throughout its service life.

f. **Policy Statement 6 (Page 10)**. Defence Organisations **must** ensure that their plan for disposal for HSRM identifies the correct disposal route whether through consumption or at end of Service, and associated financial provision is managed for both the equipment and any HSRM.

g. **Policy Statement 7 (Page 10)**. Defence Organisations **must** ensure that staff involved in the procurement, management, support, handling and use of PSS containing HSRM have suitable training on the management of HSRM.

h. **Policy Statement 8 (Page 10)**. Defence Organisations **must** ensure that any reporting obligations regarding the use of Restricted Materials is made in full and on time to the appropriate statutory body. Organisational guidelines **should** be consulted to determine the process through which this reporting is to be conducted.

Policy Statement 1

Defence Organisations and staff procuring PSS on behalf of the MOD **must** ensure that:

(1) It is compliant with applicable legislation, regulations, and statutory requirements for the management of HSRM through life.

(2) The Accountable Person for staff handling, using, and disposing of PSS containing HSRM ensures the activity is compliant with applicable legislation, regulations, and statutory requirements.

18. When contracting for PSS, contracting staff **must** ensure contracts include the obligation to ensure all materiel meets UK legislation, regulations, and statutory requirements as a minimum standard, and host nation legislative requirements where these are more stringent, for the management of HSRM through life.

19. Before accepting materiel or services, the Accountable Person **must** ensure all contractual requirements for legal compliance of HSRM have been met, and if not reject the goods or service in accordance with DEFCON 524 (Rejection).

20. If legal compliance is claimed through use of a DED, refer to Policy Statement 3.

21. The Accountable Person for staff transporting, storing, handling, using and disposing of Defence PSS containing HSRM **must** ensure, the activity is compliant with applicable legislation, regulations and statutory requirements.

22. Environmental Impacts and Management activities identified and documented in Policy Statement 4 and Policy Statement 5 **must** be communicated to end users, providing sufficient information to enable the activity to be conducted in accordance with applicable legislation, regulations and statutory requirements.

23. Personnel and end users **must** follow the processes and procedures implemented to ensure the activity is compliant with applicable legislation, regulations and statutory requirements.

Policy Statement 2

Defence Organisations **must** assess their obligations when interpreting and specifying HSRM requirements for PSS. Such requirements **must** include the need to for a supplier to provide essential information on the HSRM present, including any environmental impact information and **should** differentiate requirements between Hazardous Substances and Restricted Materials.

24. The Accountable Person **must** assess their obligations when interpreting and specifying HSRM requirements for PSS, as manufacturers, importers, and suppliers of military PSS have legal duties, which may vary with the place of manufacture, supply, or operation.

25. Such requirements **must** include the need to for a supplier to provide essential information on the HSRM present, including any environmental impact information and **should** differentiate requirements between Hazardous Substances and Restricted Materials.

26. Policy Statement 1 ensures that UK legislation is met. More specific obligations **should** be placed by use of DEFCONs, Def Stans and equivalent. Government-to-Government procurement Memorandums of Understanding (MOU), e.g., Foreign Military Sales (FMS), **should** ensure that the bespoke nature of these agreements does not lessen these requirements.

27. Provision of environmental impact information **should** be sought from suppliers through application of Def Stan 00-051 and other contractual requirements.

Policy Statement 3

For Defence to deliver operational capability, some UK HSRM legislation allows Defence to apply Disapplications, Exemptions or Derogations (DEDs), however:

(1) Those DEDs **must** only be used when operational capability cannot be practicably met by any other means.

(2) Where these DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by UK legislation.

28. Aspects of legislation acknowledge limitations on Defence and their ability to fully comply with all outlined requirements, in accordance with Policy Statement 1. As a result, DEDs were built into legislation to limit required compliance for Defence and preserve military capability where no practicable alternative means is available. DEDs can be written into legislation in a variety of ways, meaning compliance can be met through the following means:

a. HSRM currently compliant with all UK legislation and MOD Policy;

b. HSRM DED is written into legislation, is not specific to Defence, and **does not** require external approval;

c. HSRM DED, specific to Defence, is written into legislation and **does not** require external approval;

d. HSRM DED is written into the legislation and **does** require external approval, or the use of the substance requires a change in legislation.

29. Annex B provides further guidance on the application of DEDs in Defence. It is MOD policy to exert maximum efforts to comply with the full intent of legislation; DEDs **must** only be employed when necessary to deliver or maintain an operational capability.

30. Where legislative DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by the underlying legislation. Where Defence specific DEDs are available, Defence Regulations may exist to ensure these outcomes are met.

Policy Statement 4

Where no suitable alternatives are available or replacement of the HSRM is not practicable, then the environmental impacts **must** be:

(1) Considered, assessed, and minimised through design and delivery of appropriate processes and procedures through life or until technology enables suitable alternatives that can be used where reasonably practicable.

(2) Documented, including any mitigations, with a robust case prepared describing why the solution supports Sound Environmental Performance.

(3) Communicated to the Accountable Person, including through inclusion in the relevant building or system environmental case.

31. The Accountable Person **must** ensure potential impacts to the environment caused by the use of HSRM are assessed and appropriate actions taken to minimise these impacts to support the claim of Sound Environmental Performance.

32. All potential environmental impacts of using HSRM **must** be recorded in the system Environmental Management System (EMS).

33. The system or building environmental case **must** include all potential environmental impacts and demonstrate how the solution supports Sound Environmental Performance.

34. Where Restricted Materials are used the compliance status **must** be documented. This document **should** also describe the plan for monitoring, managing and replacement of the Restricted Material with a less environmentally impactful alternative, and for its ultimate disposal. The plan may describe a scenario where the lowest risk solution is to maintain the Restricted Material in service until its ultimate disposal. In all cases, reference **must** be made to the disposal plan (refer to Policy Statement 6).

35. A Hazardous Substances and Restricted Materials Register **should** be produced and maintained, documenting the presence of HSRM within the PSS.

36. Residual environmental impacts as a result of HSRM use **must** be communicated to the Accountable Person. Formal acceptance of that risk **should** be recorded in the respective environmental case.

Policy Statement 5

Defence Organisations **must** ensure the use of HSRM in their projects is actively managed and investigations into alternatives **must** continue throughout its service life.

37. If the case has been made to continue using HSRM within Defence materiel, the use **must** be actively managed throughout its life and critically in its disposal phase.

38. Investigations into less impactful and legally compliant alternatives **must** continue throughout its service life and implemented where practicable. This **should** include the introduction of alternatives that minimise the use of Defence DEDs.

Policy Statement 6

Defence Organisations **must** ensure that their plan for disposal of HSRM identifies the correct disposal route whether through consumption or at end of Service, and associated financial provision is managed for both the equipment and any HSRM.

39. The disposal plan **must** cover disposal as a result of damage, deterioration, normal consumption, including consumables, and retirement from Service and **must** explicitly include disposal of HSRM contained therein.

40. Financial provision **must** be included for each type of disposal covering the equipment as a whole and any special requirement for HSRM, including sampling and testing. For Defence equipment, the Accountable Person **must** have a funded disposal plan in accordance with Support Solutions Envelope (SSE) 21 Core Development Area 19 and GEAR (Guide to Engineering Activities & Review) prior to initial delivery of the subject materiel.

41. Where disposal involves sale of equipment or infrastructure at the end of its Service life, legal obligations involving putting equipment / buildings containing HSRM on the market and informing the recipient of such HSRM **must** be considered by the responsible person. Provision **should** be made for a scenario where sale is not possible, with alternative solutions included in the disposal plan.

42. JSP 418 Leaflet 3 (Waste Management) **must** be followed to ensure compliance with waste management legislation and the safe and sound environmental management of waste.

Policy Statement 7

Defence Organisations **must** ensure that staff involved in the procurement, management, support, handling and use of PSS have suitable training on the management of HSRM.

43. Appropriate training on the management of HSRM through-life **must** be provided to all staff involved in HSRM management.

44. Training **should** include generic hazards; environmental impacts; legal context; roles and responsibilities; process and procedure; and where to obtain help.

Policy Statement 8

Defence Organisations **must** ensure that any reporting obligations regarding the use of Restricted Materials are made in full and on time to the appropriate statutory body. Organisational guidelines **should** be consulted to determine the process through which this reporting is to be conducted.

45. Defence is required to report types and quantities held or consumed of certain classes of Restricted Materials to Government bodies on a routine basis. Defence Organisations **must** ensure that any reporting obligations regarding the use of Restricted Materials are made in full and on time to the appropriate statutory body.

46. Reporting of holdings and / or consumption of asbestos, halon, and F-gas **must** be reported to the appropriate statutory body via 'DESEngSfty-QSEESSA-HazMat@mod.gov.uk' on an annual basis[3].

47. The holder of a stockpile of POPs >50kg shall provide the appropriate Statutory Body (e.g. the Environment Agency in England or the Scottish Environment Protection Agency in Scotland) with information concerning the nature and size of the stockpile annually.[4]

[3] Information on the halon and F-gas reporting process is provided in JSP 418 Leaflets 6. Requests for information on asbestos usage within Defence equipment is promulgated in January, with submission made to the HSE by March.

[4] Further guidance on POPs stockpiles can be found at https://www.gov.uk/government/publications/persistent-organic-pollutants-notifying-pops-stockpiles/persistent-organic-pollutants-pops-how-to-notify-a-stockpile

Part 2: Guidance

This part provides the guidance and best practice that **should** be followed and will help you meet HSRM management policy.

This part includes the following annexes:

Annex A: Legislation and Regulation
Annex B: Derogations, Exemptions and Disapplications
Annex D: Per- and Polyfluoroalkyl Substances (PFAS)

Roles and Responsibilities

1. Defence Organisations and staff procuring Defence PSS on behalf of the MOD **must** ensure that any equipment brought into service meets UK legislative requirements and MOD policy through life.

2. As PSS progresses through the lifecycle, responsibility for management of PSS will change. The DSA mandate general and domain specific regulatory requirements that support the management process. This document refers to the Accountable Person as the person(s) with the appropriate delegated authority, e.g., Commanders, Managers, and Duty Holders, for authorisations or approvals.

HSRM Management

3. Procurement of PSS that contain or use HSRM (including use in the manufacturing or maintenance processes) can impact the environment and through life costs. However, replacement of these HSRM with less impactful alternatives may reduce military capability or reliability. Therefore, effective HSRM management is imperative within Defence to maintain capability, environmental performance and reliability. Environmental Management of HSRM **should** be reflected in, but not limited to, the following management tools:

a. Legislation Registers;

b. HSRM Registers;

c. Environmental Management Systems;

d. Disposal Plans[5];

e. Configuration Management Plans;

f. Obsolescence Plans;

g. Command Environmental Summaries;

h. User and Maintenance Publication;

4. The Accountable Person **must** be able to demonstrate that the environmental impacts of HSRM are being effectively managed either separately or together as part of an

[5] At an establishment level, materials must be included in the Establishment Waste Management Plan, in line with JSP 418 Leaflet 3.

Environmental Management System (EMS). This **should** start from the earliest opportunity in the lifecycle, developing through-life and harnessing current acquisition systems guidance principles.

5. Incorporation of HSRM into new designs and equipment **should** be avoided where practicable. Consultation with industry to identify safer and more environmentally friendly alternatives **should** be undertaken at the earliest opportunity and, where identified and proven to meet MOD specifications and/or performance requirements, they **should** be substituted.

6. Where quality standards, requirements, framework agreement or contract specifications require the use of specific HSRM, additional actions are necessary. When a Restricted Material is specified, robust justification **must** be provided, such as in an MOD Technical Dossier, for the continued need to use it. Where possible, the standard, requirement or contract specification **should** be amended or the use of the quality standard appropriately qualified. Design Organisations and Product Suppliers **should** provide appropriate justification for the use of Restricted Materials in the PSS they provide.

7. Where HSRM legislation allows for Defence DEDs, the Accountable Person **must** ensure that they agree the use of the DED only where it is essential to sustain the military capability and appropriate authorisation has been granted. The decision to enact a DED and the authorisation approvals process undertaken, **must** be well documented and robust enough to withstand scrutiny from a regulator or regulator approved auditor. Further guidance on HSRM DEDs can be found in Annex B. JSP 815 and JSP 816 provide additional information on the application of DEDs for Safety and Environmental legislation respectively.

8. Military PSS are usually procured in small quantities compared with commercial ventures and the lifecycle can extend over several decades. Due to this extended lifecycle and the variety and nature of the MOD's activities, legislative changes may affect sustainment of UK military capabilities. This has been specifically evident in recent years with significant changes to regulations and directives enacted to manage and reduce use of HSRM. The MOD **must** continue to manage legislation and work collaboratively with suppliers to identify and mitigate any impact on the PSS.

9. To aid identification and documentation of legislative compliance, the MOD has implemented the Defence Legislation Support Tool (DLST) (sharepoint.com) (DLST) a cross-Defence tool managed by the Defence Maritime Regulator. In addition, the MOD has a subscription to Barbour Consolidated, a service providing current legislation with amendments consolidated into a single document, removing the requirement to parse amendments into the original Regulation. In addition to this, it provides a summary of the legislation in 'plain English' and highlights recent changes. Information on how to obtain an account can be found on the Defence Intranet.

10. Particular care **should** be taken when purchasing Military or Commercial Off the Shelf (MOTS & COTS) equipment sourced from outside the UK, as legislative and safety/environmental standards may not be as stringent. Manufacturers, importers, and suppliers of military PSS have legal duties, which may vary with the place of manufacture, supply or operation. MOD staff **must** take account of their locational obligations when interpreting and applying requirements. Where the MOD are the importer, the legal obligations fall to the MOD and not the Supplier.

11. The Accountable Person **must** ensure the use of HSRM is actively managed. Design Organisations **should** be contracted to continue investigation into alternatives throughout the PSS service life. Where alternatives are identified, they **should** satisfy the appropriate MOD safety and performance criteria and **should** not be incorporated until such time that agreed tests are successfully completed and written approval is obtained from the MOD and certified and signed off by the Design Organisation. Once approved, the alternative solution **should** be implemented as soon as possible, so far as is reasonably practicable.

12. The Accountable Person is to ensure effective management of configuration control to enable tracking of original and alternative parts. When less impactful alternatives are supplied, the inventory manager is responsible for ensuring that the inventory management system identifies the product difference, i.e., specific part and NATO Stock Numbers that differentiate between the products including a statement of preference for the less impactful alternative, where practicable. See JSP 515 for additional information.

13. Redundant stocks of HSRM **must** be disposed of in accordance with MOD disposal policy delivered through Defence Regulatory Publications or the Defence Logistics Framework (DLF). The Defence Recycling & Disposals Team (DRDT) has the delegated authority to dispose of all MOD surplus equipment in the UK and overseas with the exception of nuclear, domestic and infrastructure wastes. Where contractors use or supply the original and alternative parts, the inventory managers **must** ensure parts containing HSRM are not inadvertently procured or used. See JSP 418 Leaflet 3 for further policy and guidance on the management of waste.

14. Where equipment is subject to International Traffic in Arms Regulations (ITAR) or is planned to be returned, outside of the UK, to the Original Equipment Manufacturer (OEM) at end of use, refer to JSP 418 Leaflet 3 on transboundary waste.

15. The Accountable Person has a responsibility to ensure appropriate end of use planning is in place for a project as early as is practicable. This planning **should** account for foreseeable scenarios giving a framework of the work, information and funding required. Disposal plans **should** align with the waste hierarchy. All end of use plans **should** be regularly reviewed to consider the impact of new legislation, policies, techniques, and markets. Engagement with DRDT and any domain specific specialists is recommended.

16. Acquisition organisations **must** provide assurance of HSRM compliance in line with the MOD assurance requirements as laid down in Defence Regulatory Publications and in JSP 815 and JSP 816.

Persistent Organic Pollutants

17. Persistent Organic Pollutants (POPs) present Defence with a particular challenge as they are banned under the Stockholm Convention and there is no provision in UK legislation for any form of DED. POPs are organic chemical substances, that is, they are carbon-based. They possess a particular combination of physical and chemical properties such that, once released into the environment, they:

a. remain intact for exceptionally long periods of time (many years);

b. become widely distributed throughout the environment as a result of natural processes involving soil, water and air;

c. accumulate in living organisms including humans, and are found at higher concentrations at higher levels in the food chain; and

d. are toxic to both humans and wildlife.

18. Not all international partners have ratified the Stockholm Convention, the United States being a significant example. When PSS is procured from countries that are not signatories, particular care should be taken to ensure the requirements specify POPs **must** not be present.

19. It is illegal to import or use substances prohibited under the POPs regulation, whether on their own, in mixtures, or in articles that have been manufactured after the date of restriction. Equipment containing POPs manufactured after their date of restriction **must** not be used or imported.

20. In England, the Environment Agency (EA) is the enforcement agency for the purposes of the POPs regulation. As such they can decide what enforcement activity they wish to undertake against the regulations.

21. In certain limited cases, Defence has difficulty in evidencing fully its compliance with the POPs regulation. In these cases, the EA has agreed to adopt a regulatory position with respect to Defence activities under a formal Regulatory Position Statement (RPS). This RPS specifies that the EA will not normally take enforcement action relating to the supply and use of POPs where compliance cannot be evidenced in full, subject to a series of conditions:

a. The Defence activity meets the description set out in the RPS;

b. The Defence organisation complies with the conditions set out in the RPS;

c. The Defence activity does not cause (and is not likely to cause) pollution of the environment or harm to human health.

22. Further information on the Regulatory Position Statement and how to qualify for inclusion under the RPS can be found in Annex C.

Reporting Requirements

23. Where legislation contains reporting obligations for HSRM, these obligations must be captured within the EMS, and processes established to enable the relevant data to be collected. Depending on the arrangement, this may require input from suppliers or contractors, and if this is the case, these requirements **must** be identified and included in any contractual arrangements to ensure this information is provided.

24. JSP 418 Leaflet 3 should be consulted for details on the reporting requirements for any material disposed of as waste.

25. The Defence Equipment & Support (DE&S) Quality, Safety, Environment and Engineering (QSEE) Team holds the delegation to report the use of Ozone Depleting Substances. This is reported to the EA on an annual basis. Any use of Halon **must** be reported annually to QSEE. Further information on the reporting process can be found in JSP 418 Leaflet 7.

26. Information on the use of F-gases across Defence **must** be reported annually to QSEE. The MOD has a legal responsibility to record this information and be able to provide it to the EA on request. Further information on the reporting process can be found in JSP 418 Leaflet 6.

27. QSEE provide an annual report on the use of asbestos within Defence Equipment to the Health and Safety Executive (HSE) annually. QSEE request provision of information to produce this report in January of each year.

28. The holder of a stockpile of POPs >50kg (where such use is permitted) **must** provide the competent authority (e.g., Environment Agency or Scottish Environment Protection Agency) with information concerning the nature and size of the stockpile annually. This information should be reported directly to the Environment Agency[6] and DESEngSfty-QSEESSA-HazMat@mod.gov.uk copied into the notification.

29. Other reporting obligations should be made directly by the Accountable Person to the competent authority (e.g., the HSE or the EA).

30. There will often be requests for information on the use of HSRM across the MOD made to teams within Defence. These will often be to support Freedom of Information requests, or Parliamentary Questions. These typically have tight deadlines, and best endeavours **should** be made to provide the information in the timescale requested.

Technical Dossiers

31. The primary purpose of an MOD HSRM Technical Dossier is to record the information necessary to support the justification for the use of a Restricted Material and demonstrate that the mitigation measures in place are suitable and proportionate to ensure safe and environmentally sound use of the substance.

32. Where a Hazardous Substance is not a Restricted Material, but nonetheless exhibits a higher degree of risk due to either it's inherent chemical or physical properties, or due to the nature of its use, a Technical Dossier can be a beneficial document to capture the reasoning for its use, and the measures implemented to reduce the risk.

33. Many of the Policy Statements within Part 1 of this document require production of documentation such as risk assessments for the use of HSRM, elimination plans, disposal plans, evidencing the environmental impacts from the use of HSRM and more. A Technical Dossier provides a single document that can be used to demonstrate that the activities required for the sound management of HSRM have been completed, and to pull these disparate documents and work packages into a single body of evidence supporting the justification for the continued use of the HSRM. This Technical Dossier can then aid inclusion of this information into the relevant environmental case.

34. HSRM can impact safety and environmental aspects of PSS. The Technical Dossier template provides a format whereby the impact of HSRM on both safety and the environment can be combined into a single document allowing greater clarity of the management requirements and prevent duplication of effort in communicating the risks of HSRM to the Accountable Person.

[6] Information on how to notify the Environment Agency can be found at https://www.gov.uk/government/publications/persistent-organic-pollutants-notifying-pops-stockpiles/persistent-organic-pollutants-pops-how-to-notify-a-stockpile

35. A Technical Dossier template, and additional guidance on how to complete a Technical Dossier can be found on the Defence Intranet.

Retention of Records

36. All records including the establishment / unit / platform register, risk assessments, etc. **must** be kept in accordance with JSP 418 Leaflet 11 Retention of Environmental Protection Records. Consideration **should** also be made to JSP 375, Volume 1, Chapter 39 Retention of Records.

Related Documents

37. The following documents should be consulted in conjunction with this chapter:

a. **Joint Service Publications:**
JSP 418, JSP 375 Chapter 11 and Chapter 36, JSP 376, JSP 816, JSP 850.

b. **Other Defence Publications:**
MOD Acquisition Safety and Environmental Management System (ASEMS)
Knowledge In Defence: Sustainable Procurement
Defence Safety Authority Regulations

Annex A: Legislation and Regulation

Introduction

1. An awareness of legislative requirements is vital to ensure sustained performance and reliability of military capability through life. The requirements imposed through legislation often result in the control or limitation of material availability essential for the manufacture and operational use of PSS. Therefore, it is important that those responsible identify all relevant legislation to prevent compromising military capabilities.

2. Effective compliance management, including forecasting, ensures PSS maintain their capability with changing legislative requirements. An awareness of the forthcoming changes in legislation, allows those responsible time to assess and plan for product environmental performance, obsolescence, and disposal.

3. This Annex provides a high-level introduction to a selection of legislation applicable to universal hazardous materials. It is important to note that this is not an exhaustive list of legislation for the PSS procured for Defence. It is the responsibility of the individual delivery teams to ensure all applicable legislation has been identified and assessed for compliance.

4. Since the UK separated from the EU, many EU Regulations were retained in UK law and are now referred to as Assimilated Regulations. Relevant examples include REACH, CLP, Biocides and PIC Regulations. EU legislation still applies to Northern Ireland and should therefore continue to be considered when applicable.

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation 1907/2006

5. Assimilated Regulation 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) provides a comprehensive and unified regulatory framework for the control and safe use of chemical substances to protect people and the environment. REACH requires manufacturers and importers to register information on the properties and uses of their substances. It also calls for the progressive substitution of the most high-risk substances with suitable alternatives. REACH empowers the HSE to ban or restrict the use of these high risk substances, or make their use subject to authorisation.

Classification, Labelling and Packaging (CLP) Regulation 1272/2008

6. CLP is based on the United Nations' Globally Harmonised System (GHS) with a purpose to ensure a high level of protection of health and the environment, as well as the free movement of substances, mixtures, and articles. It establishes the system of classifying and labelling hazardous substances and mixtures, and the packaging of these.

The Persistent Organic Pollutants (POPs) Regulation 2019/1021

7. The objective of the POPs Regulation is to protect human health and the environment from POPs by prohibiting, phasing out, or restricting the manufacturing, placing on the market and use of substances listed in the Stockholm Convention. Enforced through POPs Regulations SI 2007/3106.

The Export and Import of Hazardous Chemicals Regulation 649/2012, ('the PIC Regulation')

8. The PIC Regulation implements the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides. It requires exports of listed chemicals to be notified to the importing country, with some chemicals requiring consent from the importing country before an export can proceed.

The Biocides Regulation 528/2012

9. Assimilated Regulation 528/2012 on the making available on the market and use of biocidal products harmonises the rules on the making available, and the use, of biocidal products, whilst ensuring a high level of protection of both human and animal health and the environment.

Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations (RoHS) S.I. 2012/3032

10. RoHS restricts the use of ten hazardous substances in certain categories of electrical and electronic equipment (EEE). There are specified categories of equipment to which the regulation does not apply. Where one of these out-of-scope categories is claimed as applicable, suitable justification must be evidenced and documented.

The Waste Electrical and Electronic Equipment (WEEE) Regulations S.I. 2013/3113

11. These Regulations aim to minimise the disposal of WEEE and its impact on the environment due to its hazardous content. Measures are established for its treatment, reuse, recovery, and recycling. As is the case for RoHS, there are specified categories of equipment to which the regulation does not apply. Care must also be taken to consider the presence of any POPs, and, if POPs are present then the POP Regulations will take precedence.

Control of Substances Hazardous to Health (COSHH) Regulations S.I. 2002/2677

12. COSHH imposes duties on employers to protect employees and other persons who may be exposed to substances hazardous to health within the workplace. To support employers with the protection of personnel Workplace Exposure Limits (WELs) for Hazardous Substances were introduced, documented within EH40. Any substance with a recorded WEL is subject to the requirements established by COSHH. It should be noted that the WELs are not managed within COSHH and therefore place an obligation on employers to maintain visibility of changes to EH40. For more information on COSHH see JSP 375 Chapter 11.

The Hazardous Waste (England and Wales) Regulations S.I. 2005/894

13. These Regulations make provision for the controlled management of hazardous waste from the point of production to the final point of disposal or recovery. JSP 418 Leaflet 3 Waste Management should be consulted for Policy on the management of waste, including hazardous waste.

Annex B: Derogations, Exemptions and Disapplications

Introduction

1. The MOD SofS's Policy Statement reinforces the requirement for Defence to comply with UK; EP legislation. Where legal requirements have the potential to adversely impact operations, there are some provisions that allow Defence specific DEDs from legislation. Where Defence benefits from DEDs regarding statutory HS&EP requirements, the Defence Safety Authority (DSA) is required to have in place Defence Regulators to provide regulation, assurance, and enforcement in order to comply with the SofS's Policy Statement.

2. It should be noted that terminology within legislation can differ, and often derogations, exemptions and disapplications are used interchangeably across different bodies of legislation. The types of DEDs are defined within MOD Policy as follows:

a. **Derogations**. A lessening of the statutory requirement for justifiable practical or operational reasons that can have a caveat (e.g., **must** be solely for a specific purpose and not used for any dual purpose).

b. **Exemption**. A legislative clause that identifies that the SofS for Defence may authorise an exemption from specific or all requirements under a piece of legislation in recognition of a Defence imperative. However, exemptions are not guaranteed and **must** be applied for on a case-by-case basis.

c. **Disapplication**. A statement within the legislation, which states that it is not applicable to certain Defence related activities or platforms and therefore does not fall under the legislative remit for enforcement by the statutory enforcing body. It should be noted that often disapplications apply to specific parts of the legislation, meaning the remaining statutory requirements are not part of the disapplication and **must** be complied with as normal.

3. There are typically four scenarios which may be encountered when assessing HSRM legislative compliance:

a. HSRM currently compliant with all UK legislation and MOD Policy;

b. HSRM DED is written into legislation, is not specific to Defence, and **does not** require external approval;

c. HSRM DED, specific to Defence, is written into legislation and **does not** require external approval;

d. HSRM DED is written into the legislation and **does** require external approval, or the use of the substance requires a change in legislation.

4. Legislation often contains DEDs that acknowledge sectors, or applications which are either specifically excluded from the scope of the legislation or contain a lessening in the requirements of the legislation.

5. When utilising a DED for a Restricted Material, whether specific to Defence or not, it is important that the applicability of the DED is evidenced and captured in documentation. A Technical Dossier is recommended for this purpose, and, for some DEDs that require

approval, is mandated. The following table is recommended as an appropriate level of sign-off when using a DED:

Scenario	Approving Authority
HSRM currently compliant with all UK legislation and MOD Policy	Environmental Responsible / Safety Responsible / Project Manager
HSRM DED is written into legislation and **does not** require external approval	Senior Environmental Responsible / Senior Safety Responsible / Project Team Leader
HSRM DED is written into the legislation and **does** require external approval, or the use of the substance requires a change in legislation	Project Team 2* or equivalent approves application to external approval body (e.g., SofS Defence or Defra)

DEDs specific to Defence

6. Legislation can acknowledge the limitations on Defence in preserving military capability whilst maintaining compliance. As such some Regulations include Defence specific DEDs. It is important to note that although DEDs exist under legislation for Defence purposes, the MOD are still required to follow the original intent of the legislation, as far as reasonably practicable, and produce outcomes at least as good as those otherwise required by legislation. Defence DEDs **must** only be employed when necessary to deliver or maintain an operational capability.

7. Where legislative DEDs are employed, departmental arrangements **must** be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by the legislation. These arrangements include the introduction of regulatory policy that requires managers to ensure process and procedures are suitable and sufficient such as, risk assessment, management controls, use of personal protective equipment (PPE) and compliance with the hazardous materials management process.

8. Where DEDs are written into legislation and do not require approval prior to use, evidence of the applicability of the DED must be documented. Where the DED is Defence specific, additional processes or Defence regulations may have been implemented by the Defence Regulators. The Defence Regulatory Publications should be consulted to advise if any additional measures are required.

DEDs requiring approval

9. Certain provisions in legislation allow a SofS to exempt a person or class or persons from parts of its requirements by issuing an exemption certificate. JSP 815 and JSP 816 provide additional information on the process for applying for such a certificate for Safety and Environmental legislation respectively.

10. The Defence Equipment & Support (DE&S) Quality, Safety, Environment and Engineering (QSEE) Head is delegated to manage and implement the Defence exemption process for the REACH Regulations, the CLP Regulations, and the Biocides Regulations. Additional guidance on the application process for a REACH Defence Exemption is outlined in Appendix 1 to this Annex. The process is similar for a CLP or Biocide Defence Exemption, but please contact DESEngSfty-QSEESSA-HazMat@mod.gov.uk for additional details.

11. Some legislation permits, by way of Secondary Legislation, the granting of derogations against specific Articles or Regulations within. One example is the ability for a Statutory Instrument to be laid before Parliament to grant a derogation against the cut-off date for the use of Halon in Critical Applications. Process for derogations requiring a change in the law will vary on a case-by-case basis. Further advice should be sought from DESEngSfty-QSEESSA-HazMat@mod.gov.uk or from the DEEI Group Mailbox Transformation-DEEI-EP@mod.gov.uk.

Appendix 1 to Annex B – Reach Defence Exemption Guidance

Background

1. The hazardous chemicals identified, evaluated, and restricted under REACH are applicable to all industries. However, it has been acknowledged that following REACH restrictions in their entirety may have a negative effect on military capabilities. As a result, an exemption was included within the Regulations to allow for defence exemptions under extenuating circumstances. The exemption can be found within Article 2(3) and states:

> *"The Secretary of State may allow for exemptions from this Regulation in specific cases for certain substances, on their own, in a mixture or in an article, where necessary in the interests of Defence."*

2. Therefore, exemptions may be granted by the SofS in the event that military capabilities are compromised by replacing their Restricted Materials with less effective alternatives. When a Contractor, Supplier or Project Team identifies that it is not possible to comply with REACH and sustain a military capability, they can apply for a REACH Defence Exemption.

3. The Head of the Quality, Safety, Environment and Engineering Team (QSEE) is delegated the responsibility to manage and implement the MOD Defence Exemption process for REACH. The subject matter expertise (SME) review is conducted by QSEE and the process reflects the REACH regulation provisions and is designed to produce outcomes that are, so far as is reasonably practicable, at least as good as those required by legislation.

Departmental Arrangements for REACH Exemption

4. The MOD's REACH Defence exemption process reflects the REACH Regulation provisions and DES Hd-QSEE is responsible for assuring that these Departmental arrangements are maintained and achieve the same outcomes as the regulation. Evidence supporting Defence exemption applications need to robustly justify that it is in the interest of Defence, and to demonstrate that the risk to people or the environment are minimised to as low as is reasonably practicable. It should demonstrate that the outcomes are, so far as is reasonably practicable, at least as good as those required by legislation.

5. Granting of a REACH Defence Exemption is through the provision of an exemption certificate signed by the Secretary of State (SofS). It is not guaranteed that an exemption will be granted and should be deemed as a last resort when the use of alternatives is technically or economically unfeasible, or if there is a requirement under National Security where the use of a substance or its use is classified and which use should not be published in the public domain.

REACH Defence Exemption Application Review Process

6. The REACH Defence Exemption application process is designed to mirror the requirements under REACH for Authorisation of a Substance of Very High Concern (SVHC) and requires submission of a series of supporting documents alongside an application form that details the justification on why a Defence Exemption is required.

7. A fixed application fee is payable on submission of the exemption application. This fee is currently £25,000. The Application Form can be downloaded from https://www.gov.uk/government/publications/reach.

8. QSEE performs a substantial review of the application and associated supporting documentation to ensure the following impacts have been appropriately considered as part of the application.:

a. Risk assessment including hazard identification;

b. Impact to safety and associated mitigations;

c. Impact to the environment and associated mitigations;

d. Evidence of risk communication;

e. Impact on wider society;

f. Evidence of elimination or disposal plans;

g. Demonstration of analysis of alternatives;

h. Timelines for REACH Defence Exemption requirement.

9. Following the review, an Impact Assessment Summary is written for each of the above criteria, along with a summary of the application as a whole.

10. It is recommended that the following documentation is provided to support the application, and ensure that sufficient evidence is provided to meet the impacts listed above have been considered and mitigated:

a. Defence Exemption Application form;

b. MOD Technical Dossier;

c. Safety Data Sheet;

d. Chemical Risk Assessment / Chemical Safety Report;

e. Socio-economic Assessment;

f. Analysis of Alternatives;

g. Elimination Plan (in timelines);

h. Any additional evidence/documentation.

REACH Defence Exemption Application Stakeholder Review

11. Once QSEE have completed its SME review and QSEE Hd has endorsed the application the stakeholder review begins, prior to Ministerial Submission.

12. The stakeholder review currently consists of the following stages:

a. Consultation for “No Regulatory Objection” from the DSA, with input from all applicable Defence Regulators;

b. Review by Corporate Secretariat;

c. Review by Corporate Communications Team (as appropriate);

d. Legal consultation (as appropriate);

e. Financial consultation (as appropriate);

f. Clearance process for Ministerial Submission.

The Exemption Certificate

13. The exemption certificate will show:

a. The identify of the individual(s) or organisation(s) benefiting from the exemption;

b. The substance, mixture, or article(s) to which the exemption applies;

c. Any conditions which must be met for the exemption to be valid;

d. The Articles of REACH from which the exemption is valid.

14. The exemption certificate can be revoked at any time in writing by the SofS.

15. The HSE will, in the normal course of duty, monitor implementation of the REACH Regulation, and will expect to find demonstratable evidence of compliance with all appropriate legislation, including the conditions detailed in the SofS’s certificate of exemption. All recipients of exemption certificates must provide a sanitised copy (to ensure security classification is not compromised) to the HSE upon request.

Annex C: Regulatory Position Statement on POPs

Introduction

1. In accordance with the SofS's Environmental Protection (EP) Policy Statement within the UK, Defence is to comply with all applicable legislation (which includes legislation giving effect to the UK's international obligations). In the case of Persistent Organic Pollutants, the UK is a signatory to the Stockholm Convention, in the UK implemented by the POPs Regulations.

2. It is necessary to refer to the relevant Competent Authority for the area the activity is being conducted. In England, the Environment Agency is the Competent Authority for the purposes of the POPs Regulations[7]. As the enforcement agency they can decide what of enforcement activity they wish to undertake against the regulations.

3. In certain limited cases Defence has difficulty in evidencing fully its compliance with the POPs regulations. In these cases, in England, the EA has agreed to adopt a regulatory position with respect to Defence activities under a formal Regulatory Position Statement (RPS), which can be found at Appendix 1. This RPS specifies that the Environment Agency will not normally take enforcement action relating to the supply and use of POPs provided:

   a. The Defence activity meets the description set out in the RPS;

   b. The Defence Organisation complies with the conditions set out in the RPS;

   c. The Defence activity does not cause (and is not likely to cause) pollution of the environment or harm to human health.

4. To qualify for inclusion under the RPS Defence Organisations must:

   a. Make every reasonable effort to eliminate the use of POPs from the identified products and to demonstrate their absence;

   b. Ensure that any product/piece of equipment which may contain POPs and is required by the MOD as part of the UK Defence programme is clearly identified and listed in a register which will be maintained, held and kept up to date by the MOD and made available for Environment Agency inspection within 24 hours written notice;

   c. Ensure systems and procedures are in place to manage risks posed by products containing POPs or that may contain POPs and will also be made available to the Environment Agency alongside the register identified above;

   d. Receive the Environment Agency's agreement by email before you rely on this RPS.

5. The conditions above must be demonstrated to the Environment Agency through the preparation of a supporting Annex to the RPS. A template for the Annex can be found at Appendix 3.

[7] For Scotland it is the Scottish Environment Protection Agency and in Wales it is the Natural Resources Body for Wales.

6. The regulatory position statement does not change Defence`s legal requirement to comply with the POPs Regulations. Its purpose is to provide reassurance to the Environment Agency that where Defence is unable to demonstrate full compliance all practicable steps have been taken to protect human health and the environment. In turn the Environment Agency undertakes to not normally take enforcement action.

7. The RPS applies to the MOD (Ministry of Defence) and the suppliers and contractors, named in the register, of products supporting the UK Defence programme.

8. All information must be handled in accordance with JSP440. Documented records of the RPS process should be kept in line with JSP441.

Governance Arrangements

9. Appendix 2 set out the full lifecycle of the Defence POPs RPS process. The following paragraphs further detail the governance arrangements and the roles and responsibilities herein.

10. The MOD's POPs RPS process seeks to provide coordinated, effective, and authorised engagement with the Environment Agency. This process will ensure that the rationale for engagement with the Defence POPs RPS is justified and that the evidence provided in support is robust.

11. The Directorate of Energy, Environment & Infrastructure (D-EEI) is responsible for setting the governance framework for Environmental Protection in Defence and will manage the Defence POPs RPS process.

12. During Stage 1, applicant Defence organisations are responsible for a complete assessment of their ability to demonstrate and evidence full legislative compliance. This assessment must be able to demonstrably prove that inclusion under the RPS is the only practicable route to ensure the delivery of essential military capability. Inclusion in the RPS is not an alternative to full legal compliance with the POPs Regulations. The RPS must be viewed as a last resort option once all other practicable options have been explored. If this process is not robust it will the undermine the latter stages of the process and the Environment Agency are liable to refuse application.

13. At Stage 2, Defence organisations must engage with D-DEEI via the Group Mailbox Transformation-DEEI-EP@mod.gov.uk. Defence organisations are encouraged to do so as early possible. Early engagement will allow D-EEI to provide advice, guidance and best practise to Defence organisations engaging in the Defence RPS process. This support will be available through Stages 1 to 7.

14. At Stage 3, Defence organisations are responsible for the preparation of an RPS Annex in a manner that demonstrates the conditions of the RPS can be met. This RPS must be undertaken using the Appendix 3 template. Where necessary applicants should call on SME support where needed to develop the Annex.

15. At Stage 4, applicant organisation should be submitted to D-EEI via the DEEI-EP mailbox alongside any supporting information.

16. At Stage 5, D-EEI will undertake a non-technical review of the submitted Annexes in advance of onward submission to the Environment Agency. D-EEI will consult relevant DSA regulators at this stage. At Stage 6 D-EEI will request further information from the applicant organisation where necessary. Request for information will be made on the basis of best practise and an understanding of the Environment Agencies requirements.

17. At Stage 7 nominated D-EEI representatives will approve submission of the Annex to the Environment Agency. Submission will be undertaken by D-EEI at Stage 8.

18. At Stage 9 on receiving the application, the Environment Agency will email to confirm receipt. At Stage 10 the Environment Agency will undertake an assessment of the submitted Annex against the conditions laid out in the RPS. Further information at this stage is likely to be requested to supplement the annex or clarify any areas of concern.

19. At Stage 11 the Environment Agency will form a decision on the basis of the evidence submitted. Their decision will be communicated to the applicant Defence Organisation and D-EEI alongside any specific conditions associated with the decision.

20. D-EEI and the EA will jointly review, on an annual basis, the register of approved RPS Annexes.

Appendix 1 to Annex C – POPs Regulatory Position Statement

Title: RPS Concerning use of Persistent Organic Pollutants substances in defence equipment.

This regulatory position statement (RPS) does not change your legal requirement to comply with the Persistent Organic Pollutants Regulations 2007 (as amended). (the Regulations) https://www.gov.uk/guidance/using-persistent-organic-pollutants-pops#legislation

However, the Environment Agency will not normally take enforcement action relating to the production, use and stockpiling of Persistent Organic Pollutants (POPs) (regulations 5 and 6 of the Regulations) provided:

- your activity meets the description set out in this RPS
- you comply with the conditions set out in this RPS
- your activity does not cause (and is not likely to cause) pollution of the environment or harm to human health

When this RPS applies

This RPS only applies to the MOD (Ministry of Defence) and their suppliers and contractors It only applies where the following conditions are met.

Conditions you must comply with

You must:

1) Make every reasonable effort to eliminate the use of POPs and to demonstrate their absence where possible.

2) Ensure that any product/piece of equipment which may contain POPs and is needed by the MOD as part of the UK Defence programme is clearly identified and listed, with the prior written agreement of the Environment Agency in a register.

3) Ensure the register in clause 2 above is maintained, held, and kept up to date by the MOD and made available for Environment Agency inspection within 24 hours written notice.

4) Ensure systems and procedures are in place to manage risks posed by products and equipment containing POPs or that may contain POPs. These must also be made available to the Environment Agency alongside the register identified in clause 2 above.

5) You must get the Environment Agency's agreement by email before you rely on this RPS, using the contact details below.

When you must check back

The Environment Agency will review this RPS on 08 July 2025. You will need to check back then to see if it still applies or if you need to take appropriate alternative action.

The Environment Agency can withdraw or amend this enforcement position before it expires if they consider it necessary. This includes where the circumstances that this RPS relates to have not changed.

If you cannot comply with this RPS

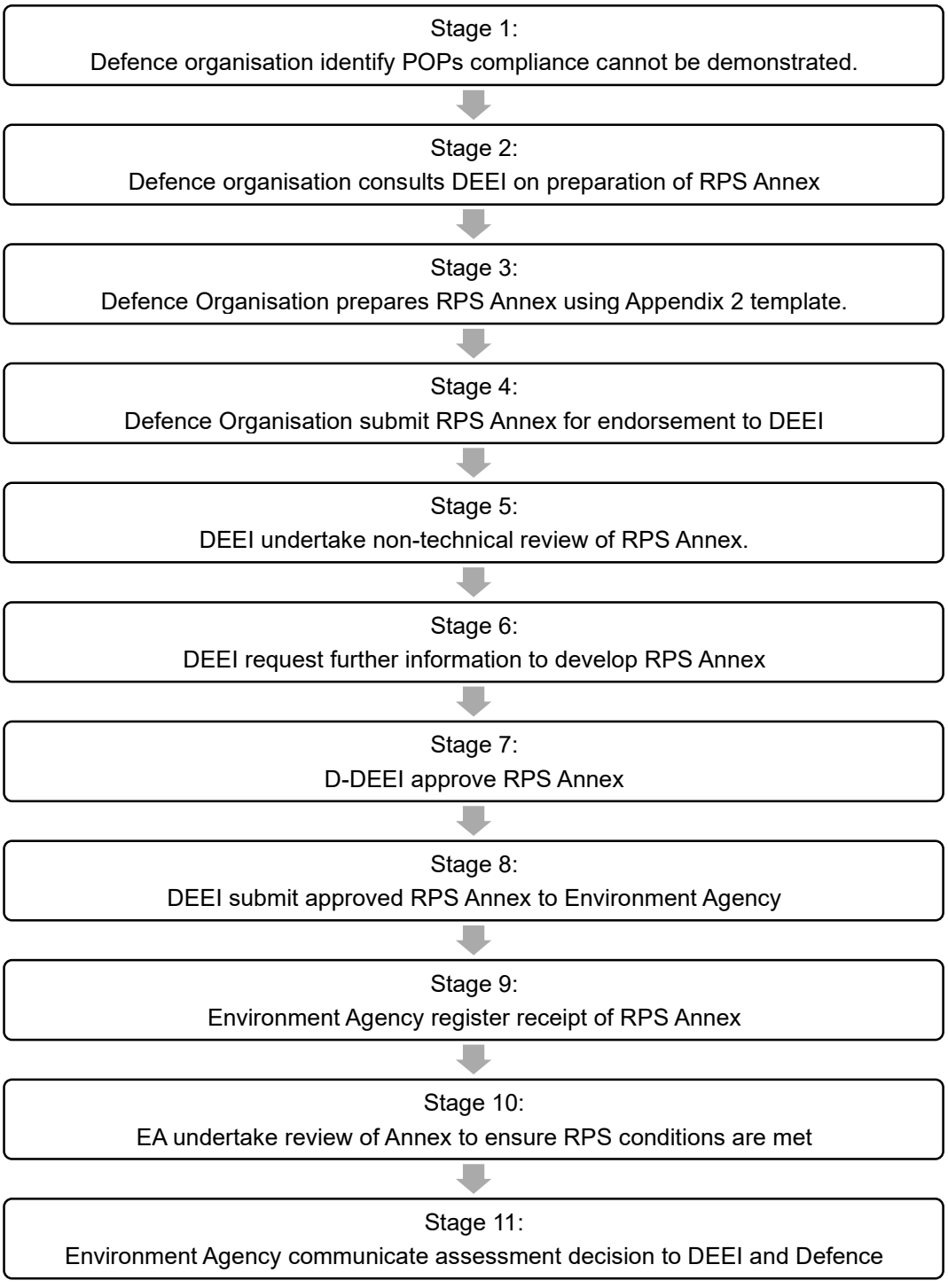
If you operate under this RPS but think you may no longer be able to comply with its conditions, you must tell the Environment Agency immediately in writing.

Contact the Environment Agency

If you choose to e-mail the Environment Agency in the first instance please contact your assigned single point of contact, or in their absence:

chemicalrestrictions@environment-agency.gov.uk

Appendix 2 to Annex C – Defence RPS Governance Process



Appendix 3 to Annex C – MOD POPs RPS Annex Template

PROGRAMME NAME	SRO/ACCOUNTABLE PERSON	PROJECT TEAM	TLB
BACKGROUND			
Describe the equipment programme, its context within Defence and any information pertinent to application to use the MOD POPs RPS			
APPLICABILITY OF PERSISTENT ORGANIC POLLUTANTS 2007 LEGISLATION TO PROGRAMME			
Describe the applicability of the PERSISTENT ORGANIC POLLUTANTS 2007 regulations to the delivered equipment inclusive of scale of equipment within scope, component parts etc.			
IMPACT OF PERSISTENT ORGANIC POLLUTANTS 2007 LEGISLATION TO PROGRAMME			
Document how that legislation impacts on the delivery of the equipment programme			
JUSTIFICATION			
A summary of evidence here outlining the need for access to the RPS inclusive of the assessment undertaken to demonstrate compliance.			
RISK ASSESSMENT			
Outline the risk assessment encompassing human and environmental health undertaken applicable to use of the RPS. This must be documented and referenced. Include any cost benefit analysis, limitations to use and all measures implemented to prevent harm.			
CONTROL MEASURES			
Detail how the prevention of harm to Human Health and Environment is to be managed through life of the project. This must be documented and referenced.			
ELIMINATION PLAN			
Detail the Elimination Plan that should identify Platform, Equipment, Component (by Line Item NSN or Part Number), Location, Key Dates (eg date estimated removal/replacement, reviews or end of life) and Justified Use			
OTHER PLANS			
Identify and outline other relevant plans such as Configuration Management and Disposal Plans of relevance to the RPS			
AUDIT PLAN			
Identify any assurance regimes that will encompass the RPS Annex			
REPORTING			
Identify reporting requirements, eg dates, specific formats and at specific timescales relevant to the RPS			
EXTENT OF RPS ANNEX			
Identify to whom the RPS annex will apply.			
APPLICANT AUTHORISATION	**Post Title**		**Name**
I authorise the submission of this Annex to D-EEI subject to the following constraints			
D-EEI AUTHORISATION	**Post Title**		**Name**
I authorise the submission of this Annex to the EA subject to the following constraints			
ENVIRONMENT AGENCY AUTHORISATION	**Post Title**		**Name**
I authorise the use of this Annex as confirmation the requirements of the RPS have been met subject to the following constraints			

Annex D – Per- and Polyfluoroalkyl Substances (PFAS).

Overview

1. Per- and polyfluoroalkyl substances (PFAS) are a large, complex group of thousands of synthetic chemicals containing at least one fully fluorinated carbon.

2. PFAS are commonly termed 'forever chemicals' due to their ability to persist in the natural environment. This property arises due to the presence of strong carbon-fluorine bonds in the chemical composition of PFAS. This persistence results in contamination of land, soils and water. Given that PFAS are known to bioaccumulate (build up) in animal tissue, this poses a risk of long-term exposure affecting both people and wildlife. Long term exposure to PFAS has been associated with a range of significant adverse health effects including cancer.

3. A hazardous substance is a substance that has the potential to cause harm to human health and/or impact to the environment. Thus, many PFAS must be considered as hazardous substances.

4. A restricted material is one that has any legislative control on the importing, manufacture, use or placing on the market of the material. In some cases, the material can continue to be used for specific uses or where the substance is below a certain concentration in a mixture or article. Various PFAS are regulated, restricted or under review for restriction or authorisation in current UK, EU and global legislation[8] and thus fall under the definition of restricted materials.

> The policy statements in this leaflet provide direction on the management of Hazardous Substances and Restricted Materials (HSRM) that **must** be followed. PFAS **must** be treated as HSRM and therefore fall within the scope of this leaflet and the detailed policy statements.

Example Scenario

5. The following section outlines some guidance actions that may be taken in the following example scenario*; 'A Defence Organisation is planning to procure Products, Systems and Services (PSS) in which a key component contains PFAS'.* This example illustrates how procurement of PSS containing PFAS should be considered within the scope of this leaflet but is **not** an exhaustive list of appropriate actions and in real life scenarios, the policy contained in this leaflet should be considered in full, not limited to the actions below.

Guidance actions:

6. In the first instance, the Defence Organisation must assess their obligations when interpreting and specifying HSRM requirements for PSS. Such requirements are outlined in **Policy Statement 2** and include the need for a supplier to provide essential information on the HSRM present, including any environmental impact information.

[8] Further information regarding current relevant regulation and policy can be found in Appendix 1 to Annex D, or on the DE&S SharePoint.

7. In setting these requirements, as per **Policy Statement 1**, the Defence Organisation and staff procuring the PSS must ensure that procurement is compliant with applicable legislation, regulations, and statutory requirements for the through-life management of HSRM. Applicable legislation, regulations, and statutory requirements may vary between different devolved administrations. Relevant legislation could include, for example, the UK Persistent Organic Pollutants (POPs) Regulation. Further legislative information can be found in Appendix 1.

8. In this example, as several PFAS sub-groups are restricted and there is widespread concern about the environmental impacts of other currently unrestricted PFAS sub-groups, it is expected that Design Organisations would include a requirement for PFAS-free alternatives to be explored. All individuals within Defence have a duty of care to protect the environment and support the implementation of environmentally sound performance and effective MOD HSRM management policies. Ideally, products containing PFAS should only be procured if no suitable alternatives are available

9. In a scenario where no suitable alternative is available, the environmental impacts of procuring and using the PFAS containing product **must** be considered, assessed, and minimised through the design and delivery of appropriate processes and procedures through life or until technology enables suitable alternatives that can be used where reasonably practicable. This requirement is outlined in **Policy Statement 4,** as is the requirement for the environmental impacts to be documented, including any mitigations. A Technical Dossier[9] provides an ideal template to capture the requirements under this Policy Statement. The use of PFAS should also be included in a HazMat or HSRM Register, alongside other hazardous substances present in the PSS.

10. As per **Policy Statement 7,** in the scenario where procurement of the PFAS product occurs, the Defence Organisations must ensure that staff involved with the procurement, management, support, handling and use of PSS containing HSRM have suitable training.

11. As outlined in **Policy Statement 3** the procurement faces legislative complications, there may be the opportunity for Defence to apply Dis-applications, Exemptions or Derogations (DEDs)[10]. However, in the case of PFAS, there are no Defence Exemptions available for the POP Regulations, therefore the application of DEDs is currently limited.

12. Despite the decision to procure the PFAS containing product being made, the use of PFAS in the Defence Organisations projects must be actively managed throughout its service life, and investigations into alternatives must continue. This is outlined in **Policy Statement 5**. The regulatory landscape around PFAS is rapidly evolving, and more PFAS sub-groups are being prohibited. It is essential that changes in legislation are captured, and steps taken to ensure the PSS remains compliant throughout its service life and can meet any impacts made on the supply chain.

[9] See DE&S Guidance in Technical Dossiers. DE&S SharePoint

[10] As outlined in Policy Statement 3, DEDs must only be used when operational capability cannot be practicably met by any other means and, where employed, departmental arrangement must be introduced to produce outcomes which are, so far as is reasonably practicable, at least as good as those required by UK legislations.

13. In the scenario where the PFAS containing PSS component is procured, **Policy Statement 8** applies in that the Defence Organisation must ensure that any relevant reporting obligations are met on time and in full to the appropriate statutory body. For example, holders of a stockpile of POPs listed in the POP Regulations >50kg, in England, shall provide the Environmental Agency with information concerning the nature and size of the stockpile annually.

14. Finally, as part of the management of HSRM, the Defence Organisation must ensure that their plan for the disposal of the PFAS containing product identifies the correct disposal route, whether through consumption or at end of Service, and the associated financial provision is managed for both the equipment and any HSRM. Disposal plans should be kept under review and updated at appropriate intervals. This requirement is outlined in **Policy Statement 6**. Additional guidance and policy on waste management legislation and the safe management of waste can be found in JSP 418 Leaflet 3 (Waste Management).

Appendix 1 to Annex D – Summary of Legal and Regulatory Position regarding PFAS

Background

1. Per- and poly-fluoroalkyl substances (PFAS) are a broad group of thousands of synthetic fluorinated organic chemicals. Many PFAS cause concern as they are known to be environmentally persistent and bioaccumulate (build up) in animal tissue. Since their first commercial production in the late 1940s, they have found a range of applications including as heat-resistant non-stick cookware, pesticides, food packaging, and insulation of electrical wire. In Defence, they can, or might be, found in some firefighting foams, lubricants, and water and oil repellent coatings for example.

> There is no single universal definition of PFAS. This complicates the regulatory landscape. Whilst there is growing interest and concern about both environmental contamination and human health risks resulting from PFAS exposure, the depth and breadth of substances covered by the definition of PFAS means there is a scarcity of information in many areas on which to base policy and guidance"

2. The regulatory landscape for PFAS is changing and both the UK and EU have new restriction proposals under consideration. Therefore, it is recommended that the below is used only as a guide, and legislation.gov.uk or eur-lex.europa.eu are checked for up-to-date information.

UK Legislation

UK Persistent Organic Pollutants (POPs) Regulation[11]

3. The UK POPs Regulations derive from the Stockholm Convention on Persistent Organic Pollutants and bans or restricts the use of persistent organic pollutants that are harmful to health and the environment.

UK POPs Regulation: Summary

The following PFAS are included in Annex I Part A and thus manufacturing, placing on the market, and use is prohibited.

- PFOS (perfluorooctane sulfonic acid) and its derivatives.
- PFOA (perfluorooctanoic acid), its salts, and related substances.
- PFHxS (perfluorohexane sulphonic Acid) its salts and related substances.
- LC-PFCAs (long-chain perfluorocarboxylic acids), their salts and related compounds have been adopted by the Stockholm Convention (May 2025) and will shortly be added to UK POPs.

Refer to the legislation for more information, including alternative end-dates that apply to some uses of PFOA and details on substances currently under review.

[11] UK POPs Regulation

UK Registration, Evaluation, Authorisation and Restriction of Chemical Substances (REACH)[12]

4. The EU REACH Regulation has been brought into UK Law under the European Union (Withdrawal) Act 2018. REACH, and related legislation, has been replicated in the UK via UK REACH with the necessary changes to make it operable in a domestic context, with key principles retained.

5. Hazardous substances are covered by several lists and Annexes within UK REACH. The key lists include, but are not limited to:

- Candidate List of Substances of Very High Concern (SVHCs) for Authorisation.
- Annex 14 (Authorisation List)
- Annex 17 (Restriction List).

6. Substances on the Candidate List will be considered for inclusion in Annex 14 where, after the sunset date, they cannot be used or placed on the market without a granted authorisation.

UK REACH: Summary

PFOA is restricted under Annex 17.

Several subgroups in the PFAS family have been identified as SVHCs and thus are subject to obligations such as communication of safety information. These are:

- PFBS (perfluorobutane sulfonic acid) and its salts
- PFHxS (perfluorohexane-1-sulphonic acid) and its salts
- Some certain perfluorocarboxylic acids and their salts
- 2,3,3,3-tetrafluroro-2-(heptafluoropropoxy)propionic acid, its salts, and some related compounds.

Refer to the legislation itself for further information and complete lists of regulated substances.

EU Legislation

EU Registration, Evaluation, Authorisation and Restriction of Chemical Substances (REACH)[13]

5. Whilst UK REACH derives from EU REACH, the two are starting to diverge; it is important to have an awareness of proposals and restrictions under EU REACH as these could have an impact on supply chains and may be incorporated into UK REACH in the future.

[12] UK REACH
[13] EU REACH

EU REACH: Summary

- C9-C14 Perfluorocarboxylic acids are listed in Annex XVII (Restriction List) thus their use within the EU is prohibited.
- PFHxA (undecafluorohexanoic acid), its salts and related substances were added to Annex XVII of EU REACH on with the first restrictions in force from 10 October 2026.
- Restrictions on the manufacture, placing on the market and use of PFAS in fire-fighting foams were added to EU REACH on 2 October 2025 with several time-limited derogations available. See EU REACH Annex XVII Entry 82 for details.

The registry of restriction intention until outcome lists the restriction proposals received by ECHA and are under consideration.