

1. The Purpose of this Guidance Document

If you are in possession of halons, you must submit an annual Halon Critical Use return to the Environmental Protection Agency (EPA). You must submit this return for the preceding calendar year between 1st January and 31st March using the *Halon Critical Use Survey Reporting* module within the EDEN platform.

Please note that it is an offence under Regulation 12 of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011) not to submit this information.

Prior to 2023, these annual returns were solicited by the EPA through direct correspondence with relevant parties. However, the EPA developed an application within its EDEN online platform for the submission of these returns in 2022 and, from 2023, all returns must be made using this platform.

The purpose of this guidance document is to aid critical users of halons with the submission of their annual Halon Critical Use survey returns through the EPA's EDEN online platform.

In this guidance document,

- Section 2 provides a brief overview of halons and their regulation;
- Section 3 includes a step-by-step guide on how to complete the survey and highlights the important points to remember when completing the online survey;
- Appendix A lists the key cut-off and end dates relevant to the halon critical users in Ireland;
- Appendix B tells you how to register on the EDEN platform and how to gain access to the Halon Module within the EDEN platform;
- Appendix C provides information on determining the net quantity of halon contained within a cylinder or extinguisher.

2. Background

Halons have been extensively used as fire suppressants either in portable fire extinguishers or as fixed fire flooding systems. They are widely used in the aviation industry for this purpose.

2.1 What are Halons and why are they regulated?

Halons are hydrocarbon chemicals that contain carbon, bromine and fluorine. Because of their bromine content, halons can destroy ozone molecules very effectively, thereby contributing to the depletion of ozone and the creation of holes in the ozone layer of the stratosphere. They are also damaging greenhouse gases if released into the atmosphere.

The types of halons relevant to the Halon Critical Use Survey in Ireland are:

- **Halon 1211:** The chemical name for Halon 1211 is Bromochlorodifluoromethane or BCF. Halon-1211 has an Ozone Depleting Potential (ODP) of 3.0 and an atmospheric lifetime of 11 years. It also has a global warming potential (GWP) of 1930.
- **Halon 1301:** The chemical name for Halon 1301 is Bromotrifluoromethane. Halon-1301 has an ODP of 10.0, an average lifetime of 65 years, and a GWP of 5600 to 6900.
- **Halon 2402:** The chemical name for Halon 2402 is Dibromotetrafluoroethane. Halon-2402 has an ODP of 6.0.

These chemical names may often appear on halon cylinders/extinguishers/systems instead of the term "halon". See Photo 1 for an example of this.

Halon-1211 and halon-1301 are the most common halons in Europe. Halon-2402 is widely used in Russia and some other countries.

2.2 Regulatory Control of Halons

Halons are subject to controls under Regulation (EC) 1005/2009 on substances that deplete the ozone layer (the ODS Regulation). The use of halons in fire protection systems and fire extinguishers is prohibited in the European Union under Article 6 of this regulation except for specified critical uses for time limited periods in, amongst others, aircraft for the protection of normally unoccupied cargo compartments, cabins and crew compartments, engine nacelles and auxiliary power units, fuel tank inerting, lavatory waste receptacles and dry bays.

However, the aim is to achieve the complete phase out of halons and therefore “Cut Off” and “End Dates” dates have been assigned to each of the critical uses of halon. Annex VI of Commission Regulation (EU) No 744/2010 outlines these specific cut off dates and end dates.

For example, the use of halons for the protection of lavatory waste receptacles has been banned since the End Date of 31st December 2020. An alternative non-ODS fire suppressant, HFC227ea, is now available to replace this use of halon. “Cut Off” and “End Dates” dates relevant to Irish users are provided in Appendix A for your reference.

The production of halons in the European Union has been banned since 1994 in line with the requirements of the Montreal Protocol. Existing halon supplies from fire suppression systems are being recycled for critical uses where no alternative exists.

2.3 Why do Critical Users need to Provide Information on Halon Use to the EPA?

Article 26 of the ODS Regulation requires Ireland to report to the EU Commission annually by 30th June on the quantities of halons installed, used, emitted and stored by Irish registered aircraft owners and aviation service companies for the previous calendar year, the measures taken to reduce their emissions and progress in evaluating and using adequate alternatives.

The EPA, which is the Competent Authority for the ODS Regulations in Ireland¹, has been tasked with compiling Ireland’s annual national report to the EU Commission² on behalf of the Department of the Environment, Climate and Communications. In order to prepare this national annual halon critical use report, the EPA undertakes an annual survey of the Registered Owners of aircraft which contain halons, aircraft maintenance and parts suppliers and the Defence Forces, as well as some data verification site visits. The data gathered from these individual surveys and visits is collated into the National Report for Ireland.

Under powers conferred on it by Regulation 10(4) of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011), the EPA requires that Halon Critical Users submit data for the previous calendar year. Please note that, under Regulation 7(1)(g) of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011), producers, undertakings and any other person whose business involves the use of halons shall provide such records, in such format and at such frequency as may be determined by the EPA, to assist the EPA in preparing the annual National Halon Critical Use Reports.

From 2023, Halon Critical Users must submit their data returns through the *Halon Critical Use Survey Reporting* module within the EDEN platform at www.edenireland.ie by the 31st March of the reporting year. The information gathered from this survey will be treated confidentially. Only summary data collated from all the individual surveys will be included in the National Report for Ireland. **Please note that it is an offence under Regulation 12 of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011) not to submit this information.**

¹ Regulation 5(1) of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011).

² Regulations 10(1) and 10(4) of the Control of Substances that Deplete the Ozone Layer Regulations 2011 (S.I. No. 465 of 2011).

³ Regulation (EU) 2024/590 of the European Parliament and of the Council on substances that deplete the ozone layer (7 February 2024), repeals Regulation (EC) No 1005/2009. This guidance will be updated later in 2024 to include updated regulatory information and details of any additional requirements.

2.4 Who Must Make an Annual Halon Critical Use Return to the EPA?

In Ireland there are three sectors who continue to use halons which need to be surveyed: aircraft registered owners, aircraft maintenance/service companies and the Defence Forces.

For aircraft, the registered owners of aircraft, as listed on the Irish Aviation Authority's Aircraft Register on 31st December of the reporting year, must submit a survey return if any of these aircraft contain halons. If the registered aircraft is leased to a third party, the Registered Owner is, nonetheless, responsible for submitting the return and should therefore liaise with the aircraft's leasee as required prior to submitting the return. If you are an aircraft operator who leases an aircraft, you should not make a return for this aircraft unless you are listed as the Registered Owner on the IAA's Register. A parent organisation, for example an aircraft leasing company, may submit data for multiple registered owners which fall under its control.

3. Step by Step Guide to Completion of the Halon Critical Use Survey

This section includes a step-by-step guide on how to submit a halon critical use return for your organisation using the *Halon Critical Use Survey Reporting* module within EDEN and highlights the important points to remember when completing the survey.

You must submit a return for the preceding calendar year, where required, using this module between 1st January and 31st March of the reporting year.

If you do not have an EDEN account or access to the Halon Critical Use Survey Reporting module, refer to Appendix B.

Once you are registered in EDEN for the *Halon Critical Use Survey Reporting* module, the contacts registered against your account for this module will receive automatic email reminders in January to complete the survey return for the previous year. Reminders will issue periodically thereafter until your return has been submitted.

3.1 Log In to the Halon Critical Use Survey Reporting module

Enter www.edenireland.ie into your internet browser and this will bring you to the Welcome to EDEN page.

Sign In to your EDEN account. If you do not have an EDEN account or access to the Halon Critical Use Survey Reporting module, refer to Appendix B.

Click on the *Halon Critical Use Survey Reporting* module to open it.

The *Halon Critical Use Survey Reporting* module consists of three main tabs as follows:

- Overview tab
- Halons Installed on Aircraft:
Aircraft registered owners and the Defence Forces will have to enter data where relevant on this tab. Aircraft maintenance or service or parts companies will most likely have nothing to declare in this tab.
- Usage and Storage:
Enter required data on this tab. Aircraft registered owners, Defence Forces, maintenance or service or parts companies will have to enter data where relevant on this tab.

The survey year is indicated at the top of each page. In the examples below, this is shown as

Halon Declaration for: 2021

You can only submit data for a particular year (i.e. survey year) in the subsequent reporting calendar year (i.e. reporting year). So, you can only submit data for 2022 from 1st January 2023, for 2023 from 1st January 2024 and so forth.

Further information on each of the sub-tabs is provided below.

3.2 Overview Tab

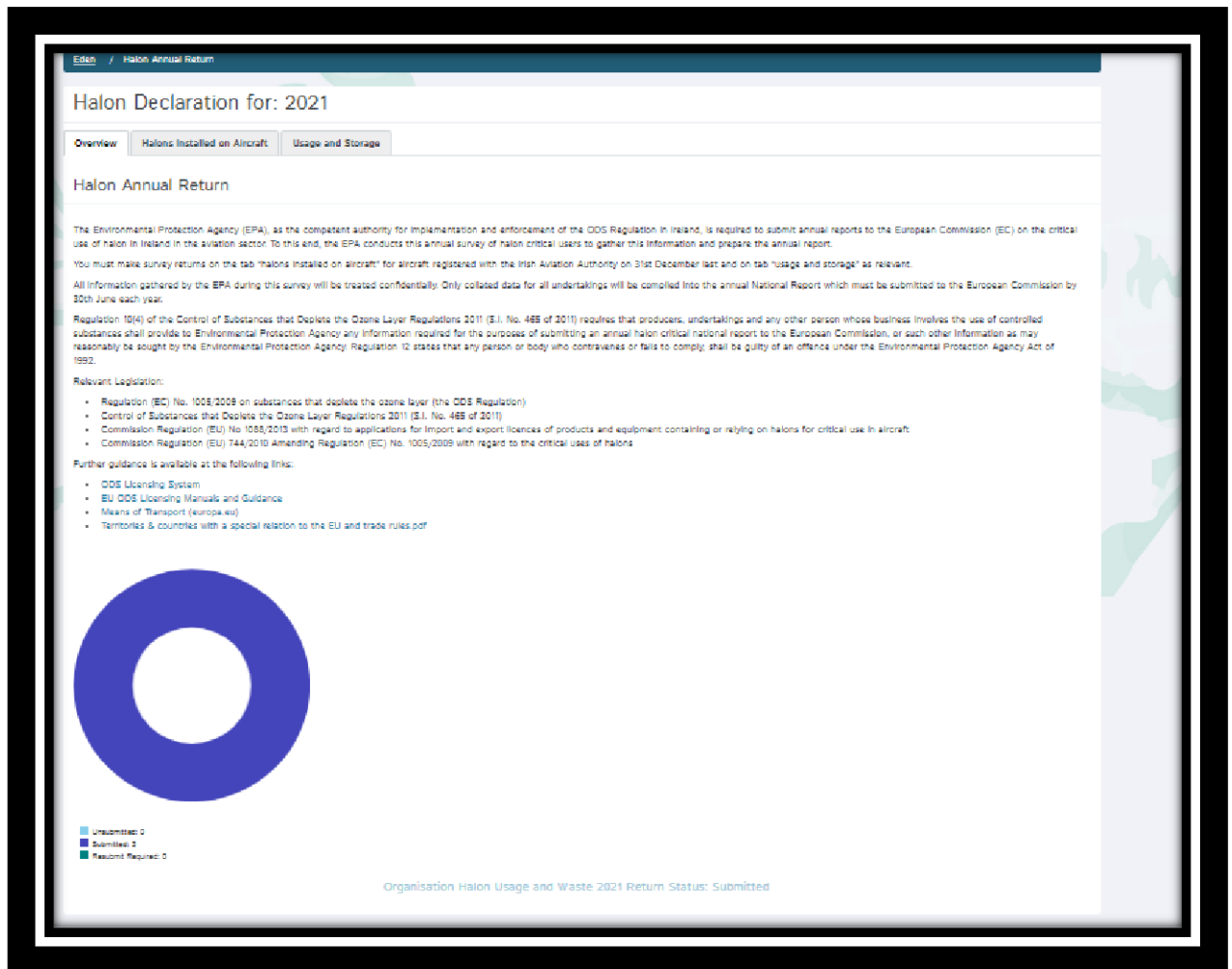
This page provides some background information. It also provides, for your information: _

- A summary graphic of the status of returns for halons installed on aircraft.
- A text line on the status of Halon Usage and Waste returns.

There are three status possibilities for individual components of your return as follows:

- **Submitted** means a return has been made to EDEN.
- **Unsubmitted** means that a return must be finalised and submitted in order to complete the return.
- **Resubmit Required** means that the EPA has reviewed a submission already made and determined that the returned data is unsatisfactory and requires revision before it can be submitted once again.

If an aircraft is leased to a third party, the Registered Owner should request any information required to complete this survey from the leasee so that it can be submitted to the EPA by the annual deadline of 31st March. It is recommended that the provision of this information annually forms part of any lease arrangements.



3.3 Halons Installed on Aircraft Tab

Use the *Halons Installed on Aircraft* tab to record halons which are physically installed on aircraft within portable extinguishers and/or fixed cylinders for:


- Aircraft within your portfolio which were registered with the Irish Aviation Authority on 31st December of the survey year,
- Aircraft within the Defence Forces on 31st December of the survey year.

There are two steps to this process:

- (1) Enter or update your portfolio of aircraft so that all aircraft containing halons on 31st December of the survey year are listed. You may have to add or delete aircraft where applicable; and,
- (2) Submit your survey return for the halons installed on your portfolio of aircraft.

3.3.1 How to Add an Aircraft

On the *Halons Installed on Aircraft* tab, you should ensure that your *Portfolio of Aircraft Registered with IAA on 31st December last year* lists all the aircraft you wish to report for your organisation. An Organisation can list multiple IAA Registered Aircraft Owners for which it is the parent company.

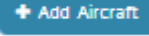
If you have not previously completed this online survey, you will need to enter data for each aircraft registered with IAA on 31st December of the survey year by using the  button.

If you have previously completed this online survey, this page will be prepopulated with the aircraft you listed for




Halon Critical Use Survey Reporting Module in EDEN – Guidance Document (Version 2, EPA, February 2024)

the previous survey year. You can add or remove or edit aircraft from this prepopulated list before submitting your return.

To Add an aircraft, select the  button which will bring you to the *Add Aircraft* form. Then enter the data required for that aircraft.

Record the total net quantity of halons, which are physically installed in the form of portable extinguishers and/or fixed cylinders, for each halon type (1211, 1301 and 2402) at each of the relevant six location categories (Cargo Compartment, Cabin & Crew Compartment (Portable Extinguishers), Engine Nacelles and Aux Power Units, Inerting Fuel Tank/Fixed Systems, Lavatory and Dry Bays) by entering the net amount in kilograms in each relevant cell. Leave non-relevant cells blank. Record the net weight (Kg) of halon gas, not the gross weight of the halon gas plus the cylinder. Appendix C provides information on how to determine the net quantity of halon in a cylinder, extinguisher, or system.

When the required data is entered, use the  button. You will then be returned to your *Portfolio of Aircraft Registered with IAA on 31st December last year* where the aircraft you have just added will then be listed.

Eden / Halon Annual Return

Halon Declaration for: 2021

Overview
Halons Installed on Aircraft
Usage and Storage

Report Halon on Aircraft at last 31st December 2021

Use this page to record halon installed on aircraft within your portfolio which were registered with the Irish Aviation Authority on 31st December last and Defence Force aircraft. Record for each aircraft halon which is physically installed on an aircraft within either portable extinguishers or fixed cylinders. There are two steps to this process: (1) complete or update your portfolio of aircraft, and (2) submit your survey return for halons installed on aircraft.

If you have not previously completed this online survey, you will need to enter your aircraft portfolio for the survey calendar year by using the 'Add Aircraft' button to add each aircraft.

This page is prepopulated, if you have previously completed this online survey, with the aircraft you listed for the previous survey. If no changes have occurred to this list of your aircraft portfolio during the survey year, you can select all the records before clicking the 'Submit Return for Selected Aircraft(s)' button.

You can also individually select aircraft by ticking the 'Select to Include in Submission' tick box against that/those particular aircraft(s). These can then be submitted by selecting the button 'Submit Return for Selected Aircraft(s)'. If you submit a return for only part of your aircraft portfolio in this manner, you will need to complete the return for the non-selected aircraft at a later time.

You must account for changes which may have occurred to your aircraft portfolio during the survey calendar year by either using the 'Add Aircraft' button to add a new aircraft to the List or the 'Remove' button to remove an existing aircraft.

If you do not have aircraft registered to you, as is usually the case for aircraft maintenance companies, then you do not need to record any entries on this tab. However, you must make a return on the Usage and Storage tab.

+ Add Aircraft
→ Submit Return for Selected Aircraft

Portfolio of Aircraft Registered with IAA on 31st December last year

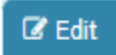
Show 100 entries

<input type="checkbox"/>	Model ▼ ↕	Registration Mark ▼ ↕	Registered Owner ▼	Date Registered ▼ ↕	Leased by Registered Owner ▼	Country of Base Operation	Halon On Board (kg)	Status ▼	Last Submitted ↕	Actions
<input type="checkbox"/>	Boeing - 737	2001	EPA Test	30/11/2022	Yes	Italy	Cargo Compartment 1211 2.00kg Cabins and Crew 1301 3.00kg Engine Nacelles/Aux power 1301 10.00kg Inerting of fuel tanks 1301 5.00kg Lavatory 1301 5.00kg Dry Bays 1301 5.00kg	Unsubmitted	-	✎ Edit ✖ Remove

Showing 1 to 1 of 1 entries.

+ Add Aircraft
→ Submit Return for Selected Aircraft

3.3.2 How to Edit or Delete an Aircraft

To edit the data recorded for an aircraft, use the  button against that aircraft on the *Portfolio of Aircraft Registered with IAA on 31st December last year* located in the *Halons Installed on Aircraft* tab.

To delete an aircraft, select the  button listed against that aircraft on the *Portfolio of Aircraft* listing on the *Report Halon on Aircraft at last 31st December (previous calendar year)* tab.

+ Add Aircraft
→ Submit Return for Selected Aircraft

Portfolio of Aircraft Registered with IAA on 31st December last year

Search...

Show 100 entries

<input type="checkbox"/>	Model ↓	Registration Mark ↓	Registered Owner ↓	Date Registered ↓	Leased by Registered Owner ↓	Country of Base Operation	Halon On Board (kg)	Status ↓	Last Submitted ↓	Actions
<input type="checkbox"/>	Boeing - B787-200	EI-TEST	Environmental Protection Agency	19/02/2024	No	Ireland		Unsubmitted	-	✔ Edit ✖ Remove

Remove Aircraft

Aircraft are listed in the Halon Declaration tab on the basis that it was registered with the IAA at the same time of the previous survey. You must use this tab to remove aircraft from your portfolio if it was deregistered by you from the IAA during the previous calendar year, and thereby you will not have to make a return for this aircraft in the current survey.

Manufacturer Boeing	Aircraft Model B787-200	Irish Registration Mark prior to Deregistration EI-TEST
Manufacturer's Serial Number Test	IAA Registered Owner prior to Deregistration Environmental Protection Agency	
Date Deregistered with IAA <input style="width: 100%;" type="text" value="20/02/2024"/>	New Country of Base Operation <input style="width: 100%;" type="text" value="Ireland"/>	New Country of Registration <input style="width: 100%;" type="text" value="Ireland"/>
New aircraft registration mark <input style="width: 100%;" type="text" value="New aircraft registration mark"/>	New aircraft registered owner <input style="width: 100%;" type="text" value="Test Test Ltd"/> <small>187 chars left</small>	

Please complete if, following deregistration with the IAA, the aircraft was exported to a non-EU customs territory. Consult [EU Custom Territories List](#) to determine if an export is occurring.

EU Country of Export <input style="width: 100%;" type="text" value="EU Country of Export"/>	ODS Export Licence Number <input style="width: 100%;" type="text" value="ODS Export Licence Number"/>
---	---

Save
Cancel

Complete the relevant boxes:

- The Date Deregistered with IAA is the date which the ownership of the aircraft was transferred to the new owner.
- The New Country of Base Operation can be Ireland if the aircraft is to remain in Ireland.
- The New Country of Registration can be Ireland if the aircraft is to continue to be re-registered in Ireland, albeit to a different registered owner.
- New aircraft registration mark – only complete this box if the registration mark is to change.
- New aircraft registered owner is the new owner of the aircraft.

Remove Aircraft

Aircraft are listed in the Halon Declaration tab on the basis that it was registered with the IAA at the same time of the previous survey. You must use this tab to remove aircraft from your portfolio if it was deregistered by you from the IAA during the previous calendar year, and thereby you will not have to make a return for this aircraft in the current survey.

Manufacturer
Boeing

Aircraft Model
B787-200

Irish Registration Mark prior to Deregistration
EI-TEST

Manufacturer's Serial Number
Test

IAA Registered Owner prior to Deregistration
Environmental Protection Agency

Date Deregistered with IAA
20/02/2024

New Country of Base Operation
Ireland

New Country of Registration
Ireland

New aircraft registration mark
New aircraft registration mark

New aircraft registered owner
Test Test Ltd
187 chars left

Please complete if, following deregistration with the IAA, the aircraft was exported to a non-EU customs territory. Consult [EU Custom Territories List](#) to determine if an export is occurring.

EU Country of Export
EU Country of Export

ODS Export Licence Number
ODS Export Licence Number

When the relevant boxes have been completed, click the save button. Once the changes are saved, the record of the aircraft is removed from the list of aircraft in your portfolio.

Portfolio of Aircraft Registered with IAA on 31st December last year

Search...

Show 100 entries

<input checked="" type="checkbox"/>	Model	Registration Mark	Registered Owner	Date Registered	Leased by Registered Owner	Country of Base Operation	Halon On Board (kg)	Status	Last Submitted	Actions
No Halons installed on Aircraft records were found										

Showing 0 to 0 of 0 entries.

3.3.3 Submit Your Survey Return for Halons Installed on Aircraft

When all the aircraft have been listed in your *Portfolio of Aircraft Registered with IAA on 31st December last year* (i.e. the survey year), you must submit the data to the EPA.

First you must select the aircraft to be submitted and then select the **Submit Return for Selected Aircraft** button at the bottom of the page. You can individually list an aircraft or multiple aircraft for submission by ticking the box in the first column listed against an aircraft or if you can select all listed aircraft by ticking the box in the first column/row cell in the listing header banner.

If no changes have occurred to your aircraft portfolio during the survey year, you can select simply all the records before clicking the **Submit Return for Selected Aircraft**.

The EPA will review the data submitted. If there are any queries, you may be asked to review and resubmit the data.

3.4 Usage and Storage Tab

The Usage and Storage Tab has three sub-tabs as follows which you can open by pointing your mouse to and clicking:

- Halon Used or Emitted
- Halon Stored at Year End
- Halon Waste removed Last Year

You must review each of these sub-tabs and enter your data where required. If you have no data to enter on a sub-tab, leave it blank. You must confirm each sub-tab has been reviewed and, if appropriate, any information entered by ticking the box. You should then save each sub-tab.

When all three sub-tabs have been ticked as having been reviewed, you can then submit your Organisation usage and storage return by clicking this button:

→ Submit Organisation Usage and Storage Return

Further information on each of these sub-tabs is provided in the following sections.

3.4.1 Halon Used or Emitted Sub-Tab

Use this tab to record details of any halons used or emitted during the survey year (i.e. the previous calendar year). This requirement applies to owners of aircraft registered with the IAA on 31st December of the survey year, to the Defence Forces and to companies which maintain aircraft or supply parts for aircraft. Enter any relevant data for your entire fleet.

Quantity Emitted: The quantity that is emitted is the amount which was lost to atmosphere due to discharge or leakage of the halon systems or extinguishers, or due to filling, refilling, topping up or recycling processes. Reasons for Halon Emissions include discharge in response to an incident (e.g. use on fire), accidental discharge (e.g. discharge during training event or discharge during cylinder filling) or other (e.g. cylinder found empty).

Quantity Used Definition: The quantity that is used is the amount which was utilised in the filling, refilling or topping up or replacement of portable fire extinguishers or fixed fire protection system cylinders (i.e. new halons added to cylinders). If halons are lost to atmosphere, it would generally be expected that halons are then used to replace the lost halons in order to maintain the operability of the fire protection equipment. If the emitted halons are not replaced, please make a note of this in the *Detailed Reason/Comment* column.

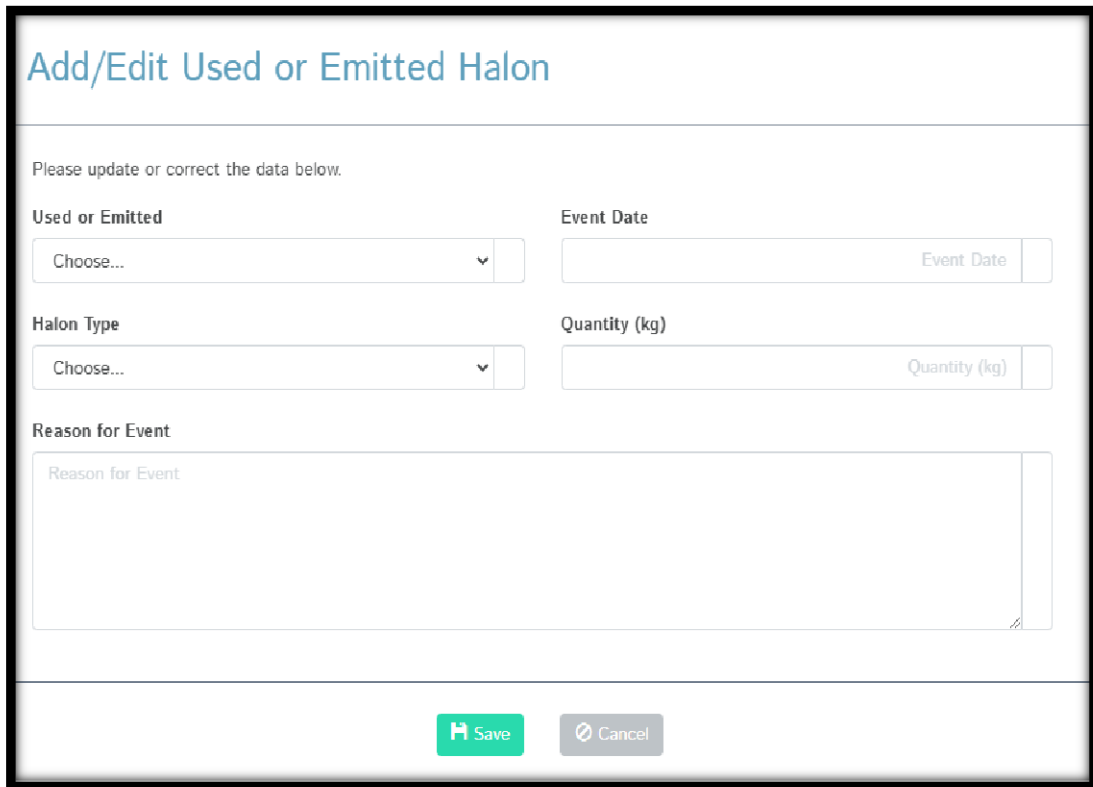
The following example will help to further explain the difference between “Quantity Emitted” and “Quantity Used”:

- A cylinder containing three kilograms of Halon 1211 in a cylinder installed on an aircraft was partially discharged during an incident, yet two kilograms remained in the cylinder. The aircraft operator subsequently swapped out the partially discharged cylinder with a new, fully charged cylinder (i.e. containing three kilograms of Halon 1211).
- Based on the above scenario, one kilogram of halon 1211 was emitted and two kilograms of halon 1211 were used.
- The aircraft operator then sends the partially discharged cylinder containing two kilograms of halon 1211 as waste to a specialist halon cylinder company, who will most likely refurbish it for supply.

+ Add Use / Emission

For each individual Use or Emission, you must make a separate entry. Use the button to enter the details of each use or emission of halon that occurred during the survey year. This will bring you to the following *Add/Edit Used or Emitted Halon* data entry box. When recording the weight of used/emitted halons, only record the net weight of the halons in kilograms. In other words, do not record the total weight of the cylinder (i.e. cylinder weight and halon weight combined). Further information on how to determine the net weight of halons is contained in Appendix C.

You can only select a date from the survey year. For example, if you are completing a return in 2023 for the 2022 survey year, you can only then select a date during 2022.



Add/Edit Used or Emitted Halon

Please update or correct the data below.

Used or Emitted	Event Date
<input type="text" value="Choose..."/>	<input type="text" value="Event Date"/>
Halon Type	Quantity (kg)
<input type="text" value="Choose..."/>	<input type="text" value="Quantity (kg)"/>
Reason for Event	
<input type="text" value="Reason for Event"/>	

+ Add Use / Emission

To make a second, third, etc. entry, just select the **+ Add Use / Emission** button each time. Each time you complete an *Add/Edit Used or Emitted Halon* data entry box, you will be brought back to a summary as follows:

Please add individually the details of each use or emission of halon that occurred last year.

[+ Add Use / Emission](#)

Show entries

Date <small>📅</small>	Emitted / Used <small>▼</small>	Quantity <small>▼</small>	Halon Type <small>▼</small>	Detailed Reason <small>▼</small>	Actions
07/07/2021	Emitted	2.40	1301	Cylinder discharged during a fire	🔍 Edit ✖ Remove
08/07/2021	Used	2.40	1301	replacement cylinder for one discharged 07/07/2021	🔍 Edit ✖ Remove

Showing 1 to 2 of 2 entries.

[+ Add Use / Emission](#)

Please confirm tab has been reviewed and, if appropriate, any information entered

[🏠 Save](#)

Halon Used or Emitted Tab Completion Confirmed: Yes
 Halon Stored Tab Completion Confirmed: Yes
 Halon Waste Removed Completion Confirmed: No

You can review each entry and edit or delete if required. When you are satisfied with your entries, if any, please tick the box to confirm that you have considered this requirement. This is important even if you have not made any entries as it indicates, in such cases, a Nil return.



You should then the data.

3.4.2 Halon Stored at End of Year Sub-Tab

Aircraft operators and aircraft maintenance or supply companies sometimes store halon cylinders as replacements or spares for aircraft. On this page, you must enter details of the net weight in kilograms of any halons stored on 31st December of the survey year.

When reporting the weight of stored halons, only report the net weight of the halons. In other words, do not record the total or gross weight of the cylinder (i.e. cylinder weight and halon weight combined). Appendix C provides information on how to determine the net quantity of halon in a cylinder, extinguisher, or system.

Enter details below of halon by type stored on 31st December last. If no halon was stored, leave the cells blank.

Stored Net Weight on 31st December survey year

Halon 1211 (kg)	Halon 1301 (kg)	Halon 2402 (kg)
3.000	2.000	3.000

Please confirm tab has been reviewed and, if appropriate, any information entered

[🏠 Save](#)

Halon Used or Emitted Tab Completion Confirmed: Yes
 Halon Stored Tab Completion Confirmed: Yes
 Halon Waste Removed Completion Confirmed: No

[➔ Submit Organisation Usage and Storage Return](#)

When you are satisfied with your entries, please tick the box to confirm that you have considered this sub-tab. This is important even if you have not made any entries as it indicates, in such cases, a Nil return.



You should then the data.

3.4.3 Halon Waste Removed Last Year Sub-Tab

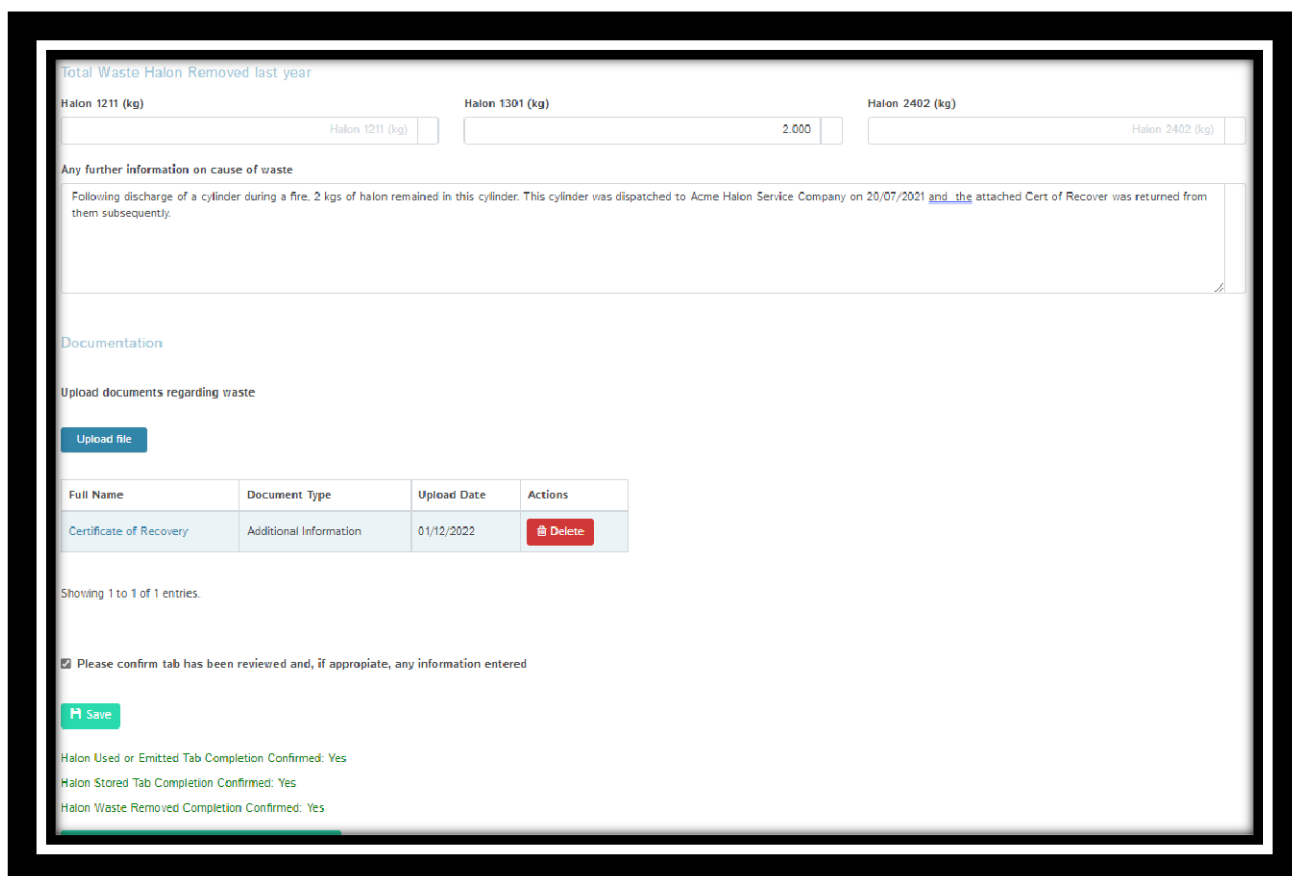
On this sub-tab, you must record details of any Halons dispatched during the entire survey year. For example, if a partially discharged cylinder is replaced by a full cylinder, the partially discharged cylinder is typically dispatched to a specialist company.

This requirement applies to owners of aircraft registered with the IAA, to the Defence Forces and to companies which maintain aircraft or supply parts for aircraft. Enter any relevant data for your entire fleet.

Please provide back-up documentation in the form of Transfrontier Shipment Notes, Certificate/s of Disposal/Recovery from the waste contractor. Please note that only .PDF and .xlsx documents can be uploaded. If documentation is not attached, please enter an explanation in the "Any further information on cause of waste" field.

When reporting the weight of the waste halons, only report the net weight of the halons. In other words, do not record the total weight of the cylinder (i.e. cylinder weight and halon weight combined). If the cylinder is partially discharged, it should be weighed prior to dispatch in order to determine the net weight of halon remaining in the cylinder. Appendix C provides information on how to determine the net quantity of halon in a cylinder, extinguisher, or system.

Please note that waste halons are classified as hazardous waste and should be treated accordingly under the Waste Management Act 1996 (as amended). As halons are no longer being produced (in accordance Article 4 of the ODS Regulation and the Montreal Protocol), it is recommended that dispatched halons should be recovered for reuse wherever possible in order to ensure an ongoing supply is available for use on aircraft fire suppression systems.



total Waste Halon Removed last year

Halon 1211 (kg) Halon 1301 (kg) Halon 2402 (kg)

Halon 1211 (kg) Halon 2402 (kg)

Any further information on cause of waste

Following discharge of a cylinder during a fire. 2 kgs of halon remained in this cylinder. This cylinder was dispatched to Acme Halon Service Company on 20/07/2021 and the attached Cert of Recover was returned from them subsequently.

Documentation

Upload documents regarding waste

Full Name	Document Type	Upload Date	Actions
Certificate of Recovery	Additional Information	01/12/2022	<input type="button" value="Delete"/>

Showing 1 to 1 of 1 entries.

Please confirm tab has been reviewed and, if appropriate, any information entered

Halon Used or Emitted Tab Completion Confirmed: Yes
 Halon Stored Tab Completion Confirmed: Yes
 Halon Waste Removed Completion Confirmed: Yes

When you are satisfied with your entries, please tick the box to confirm that you have considered this sub-tab. This is important even if you have not made any entries as it indicates, in such cases, a Nil return.

You should then save the data.

APPENDIX A: Extract from Annex VI of Commission Regulation (EU) No 744/2010

The key cut-off and end dates relevant to the halon critical use survey in Ireland survey are provided below for your reference.

Cut Off Dates are defined as: 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 Dates are defined as: 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.

Critical Uses of Halon					
Application				Cut-Off date (31 December of the stated year)	End Date (31 December of the stated year)
Category of Equipment or facility	Purpose	Type of Extinguisher	Type of Halon		
1. On Military Ground Vehicles	1.1 For the protection of engine compartments	Fixed System	1301 1211 2402	2010	2035
	1.2 For the purpose of protection of crew compartments	Fixed System	1301 2402	2011	2040
	1.3 For the protection of crew compartments	Portable Extinguisher	1301 1211	2011	2020
4. Aircraft	4.1. For the protection of normally unoccupied cargo compartments	Fixed System	1301 1211 2402	2018	2040
	4.2. For the protection of cabins and crew compartments	Portable Extinguisher	1211 2402	2014	2025
	4.3. For the protection of engine nacelles and auxiliary power units	Fixed System	1301 1211 2402	2014	2040
	4.4. For the inerting of fuel tanks	Fixed System	1301 2402	2011	2040
	4.5. For the protection of lavatory waste receptacles	Fixed System	1301 1211 2402	2011	2020
	4.6. For the protection of dry bays	Fixed System	1301 1211 2402	2011	2040
8. At airfields and airports	8.1. For crash rescue vehicles	Portable extinguisher	1211	2010	2016
	8.2. For the protection of aircraft in hangars and maintenance areas	Portable extinguisher	1211	2010	2016

APPENDIX B: Accessing the EDEN Portal

EDEN provides an online gateway to Environmental Protection Agency reporting applications for organisations to communicate with the EPA. EDEN is based on single sign-on technology to allow users to logon to multiple EPA applications or modules using a single username / password combination.

If you are a new user of EDEN, you must first create an EDEN account for your organisation by undertaking a once-off registration. Once approved, you can then apply for access to the *Halon Critical Use Survey Reporting* module within EDEN. Once approved, you can then proceed to make your halon returns. Further details are provided below.

How to Create an Account on the EDEN Portal

If you are a new user of EDEN, you must first create an EDEN account for your organisation by undertaking a once-off registration.

Enter www.edenireland.ie into your internet browser and this will bring you to the Welcome to EDEN page.

If you do not already have an EDEN account, *Sign Up* for one. This is a once-off activity.

If you already have an EDEN account, you simply select the *Sign In* option at this stage to gain access to your account.

Sign Up to EDEN requests for new organisations are approved by the EPA and the staff member who applies will be assigned the role of Administrator for the account. Requests for additional organisation membership and access to the Halon Critical Use Survey Reporting module are thereafter approved by organisation/module's administrator.

Please remember to tick that you are a Halon Critical User in the section Data Categories when you are inputting your organisation details and to ensure that the at least one contact goes to his/her EDEN profile and ticks that he/she is a Halon Contact. At least one Halon Contact must be nominated by each organisation in order to ensure that notifications by the Halon Critical Use Survey Reporting module will be received by the organisation.

▾ Data Categories

Article 11 Organisation	<input type="checkbox"/>	ELU Organisation	<input type="checkbox"/>	PCB Organisation	<input type="checkbox"/>
Article 27 Organisation	<input type="checkbox"/>	Industrial Emission Directive Repc	<input type="checkbox"/>	POP Organisation	<input type="checkbox"/>
Bathing Water Organisation	<input type="checkbox"/>	IPPC Organisation	<input type="checkbox"/>	Public Body (Excluding LA's) Orga	<input type="checkbox"/>
BMW Organisation	<input type="checkbox"/>	Local Authority Organisation	<input type="checkbox"/>	Submissions Organisation	<input type="checkbox"/>
Comms Organisation	<input type="checkbox"/>	ODS & FGas Organisation	<input type="checkbox"/>	Queries Organisation	<input type="checkbox"/>
DW Organisation	<input type="checkbox"/>	ORP Organisation	<input type="checkbox"/>	Waste Organisation	<input type="checkbox"/>
IED/IPC/Waste Specified Body	<input type="checkbox"/>	ETS Organisation	<input type="checkbox"/>	WEEE Organisation	<input type="checkbox"/>
IPC Organisation	<input type="checkbox"/>	Dumping at Sea Organisation	<input type="checkbox"/>	Abstraction Organisation	<input type="checkbox"/>
Extractive Industries Organisation	<input type="checkbox"/>	MCP Organisation	<input type="checkbox"/>	WFD Organisation	<input type="checkbox"/>
Halon Critical User	<input checked="" type="checkbox"/>				

Visit the [EDEN Portal Help section](#) for more detailed help on the EDEN registration process.

Please email eden@epa.ie for all unresolved technical issues and queries regarding the EDEN system.

How to Request Access to the Halon Critical Use Survey Reporting Module

When you sign into your organisation's EDEN account, your home page will list modules (i.e. applications) available to you.

The *Halon Critical Use Survey Reporting* module is an application within EDEN which, from 1st January each year, provides you a means of making your Halon annual return for the previous calendar year (i.e. the survey year - in the screenshot examples in this guidance note, this is shown as 2021)

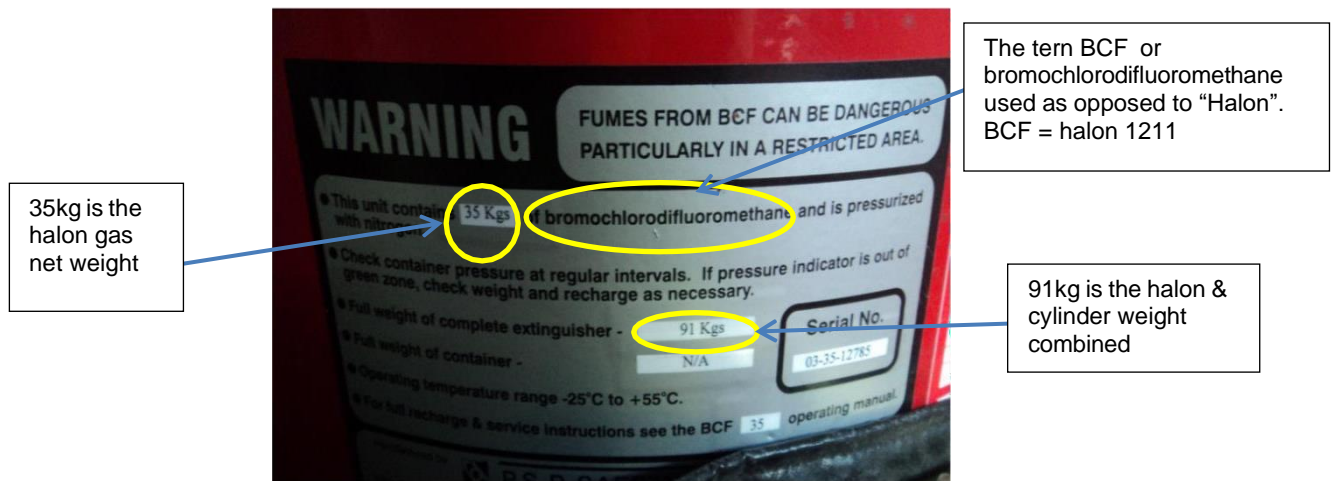
If your organisation already has access to this module, it will appear on your EDEN home page as a blue box.

If your organisation does not yet have access to this module, you must request access to it. The EPA will grant access and the staff member who applies will be assigned the role of Administrator for the account. This is a once-off activity. Requests for additional organisation membership and access to the Halon module are thereafter approved by organisation/module's administrator.

APPENDIX C: Determining the Quantity of Halon in a Cylinder, Extinguisher or System

The quantity of halon is often included on the label of the halon cylinder, extinguisher or system. In the photo below 35kg is the net weight of halon in the cylinder whilst 91kg is the weight of the halon and the cylinder.

Photo 1: Fire Extinguisher Halon Label



Note: It is the halon gas net weight which should be reported rather than the combined halon and cylinder gross weight. Report all weights in kilograms (kg).

A gauge may be included on halon cylinders. In the photo below it clearly shows that the unit is full and therefore the quantity (in kg) on the corresponding label can be verified as being accurate.

Photo 2: Halon Gauge Present on Cylinder



If the quantity of halon gas within a cylinder, extinguisher or system is not provided on a label or is not otherwise evident, then it is advised that you liaise with your halon system maintenance contractor. Service and Inspection Reports on Halon units are the most reliable source for obtaining accurate halon gas quantity data. The example below shows an extract from a Service and

Inspection Report. In this example the quantity of halon in the unit (35 kg of BCF, that is halon 1211) is clearly stated.

Photo 3: Service and Inspection Report Extract

<p><u>Details of work carried out</u> Check system for correct operation Removal of BCF - 35 kg removed Recharge with original BCF Check condition of hoses and applicator Leak Test system</p>
