

Marine Notice No. 01 of 2007

Control of substances that deplete the ozone layer

Marine Notice 38 of 2003 gave advice and instruction on EU Regulation 2037/2000 regarding the requirement to decommission existing halon fire fighting systems on board Irish ships and fishing vessels. That Marine Notice is still relevant and further guidance notes are available on the EPA website.

Owners and operators of ships, fishing vessels *and* pleasure craft are reminded that it is no longer permitted to have halon fire fighting equipment on board and that this must be decommissioned and removed.

Ozone Depleting substances

Regulation 2037/2000 is implemented in Ireland by the Control of Substances that Deplete the Ozone Layer Regulations 2006 (S.I. No. 281 of 2006) and the Environmental Protection Agency is the competent authority for implementation and enforcement, supported by the Maritime Safety Directorate, among others.

This Marine Notice gives some basic guidance on the use and maintenance of equipment using ozone depleting substances found on ships, fishing vessels and pleasure craft. More comprehensive guidance notes are available from the Environmental Protection Agency <http://www.epa.ie/TechnicalGuidanceandAdvice/ODS/> and users are advised to read these.

Many of the refrigerating gases commonly found in the past on ships, fishing vessels and pleasure craft are controlled substances. The following were the most common and these may occasionally still be found on some vessels

CFC-11	R11 or Arcton/Freon 11
CFC-12	R12 or Arcton/Freon 12
CFC-502	R502 or Arcton/Freon 502
HCFC 22	R22 or Arcton/Freon 22

All CFCs are now prohibited. HCFCs may continue to be used but will be phased out gradually until full prohibition by 1 January 2015 at the latest. Users of controlled substances are required to:

- Comply with the Regulation 2037/2000 and SI 281 of 2006;
- Take measures to prevent and minimise leakage of controlled substances;
- Ensure that persons involved in servicing, maintenance and installation of refrigeration, air-conditioning or heat pump equipment in which controlled substances are used are qualified to City & Guilds Certificate in Handling Refrigerants Scheme 2078 or equivalent, as per Article 9(2) of S.I. No. 281 of 2006.
- Ensure that waste controlled substances are managed in accordance with relevant waste legislation;
- Keep records to demonstrate compliance with the regulations;
- Comply with the EPA Guidance Notes
- Check fixed equipment with a refrigerating fluid charge of more than 3kg annually for leakages.

What this means

From 31st December 2006 refrigeration and air conditioning equipment using controlled substances on board ships and fishing vessels may only be serviced and maintained by someone who has the City & Guilds Certificate 2078, or be supervised by such a person. It is not permissible to have a cylinder of refrigerant on board for 'topping up' purposes by unqualified persons.

It is likely that suppliers of controlled substances will only supply to someone who has the City and Guilds qualification.

Where it is apparent that equipment is leaking the leak must be repaired by a person qualified to City & Guilds Certificate 2078 and the system topped up by them.

Records of servicing and topping up must be kept – keeping records will help to show that you are complying with the Regulations.

Any equipment containing more than a 3kg refrigerating fluid charge must be leak tested every year by a person qualified to City & Guilds Certificate 2078 and records kept of the check. Any maintenance must be carried out by a qualified person.

City & Guilds Certificate in Handling Refrigerants Scheme 2078

City & Guilds 2078 has been developed to reflect the standards of BS4434 (Safety Aspects in the Design, Construction and Installation of Refrigerating Appliances) and the similar European standard EN378.

Candidates for assessment for C&G2078 must demonstrate that they are competent to handle refrigerants, including both charging and recovery. They must also show their awareness of the hazards of using such refrigerants to themselves, to other people and to the environment.

There is no base qualification / minimum entry requirement. However, it is assumed that candidates who are put forward for assessment will have a good understanding of the fundamentals of the refrigeration vapour compression cycle. They will have had previous training and hands on experience of both charging and recovering refrigerant.

Preparation for the assessment consists of a distance learning pack followed by an intensive training session and assessment in one day.

Refrigeration Skillnet administers admission onto the course and may be contacted at:

refskill@eircom.net

Enda Hogan
Network Manager
Refrigeration Skillnet
PO Box 389
Dungarvan
Co Waterford

Ph: 058 – 44211
Fax: 058 – 45724 / 01 633 5233

HCFC phase-out

Since 1st January 2001 CFC's such as R-12 are banned. Those systems still in use may remain in use until such time as they require maintenance and topping up, using non-CFC refrigerant.

From 1st January 2010 it will not be allowed to use 'virgin' HCFC such as R-22 for maintenance of refrigerating units

From 1st January 2015 all HCFC including reclaimed HCFC will be banned. Those systems still in use may remain in use until such time as they require maintenance and topping up, at which point non-HCFC/non-CFC refrigerant must be used.

All users of refrigerating systems are advised to ensure that new systems being installed are filled with non-CFC/non-HCFC products. Further guidance on acceptable products is available on the EPA website.

Disposal

CFC's and HCFC's must never be vented to atmosphere. They must be recovered using dedicated recovery equipment and put into sealed containers by qualified personnel.

Waste refrigerant gases are considered to be hazardous waste. Therefore, their collection and management must comply with national waste legislation for collection and management of hazardous waste

Empty containers that previously held CFC/HCFC are also classified as hazardous waste and may only be collected and managed by operators with the appropriate authorisations.

Further guidance on ODS waste management is provided in the EPA guidance notes available on the EPA website.

Further advice on ozone depleting substances may be obtained from the Environmental Protection Agency or the Marine Survey Office of the Maritime Safety Directorate.

Director General
Maritime Safety Directorate
Department of Transport, Leeson Lane,
Dublin 2.

03/01/2007

For any technical assistance in relation to this Marine Notice please contact
The Marine Survey Office, Leeson Lane , Dublin 2 at 01-678 3400.

Any enquiries concerning Marine Notices should be addressed to:
Maritime Safety Directorate, Department of Transport, Leeson Lane, Dublin 2
Email: marinenotices@transport.ie
Or phone : 01-678 3418