7.E.8 - USE OF HALOCARBONS

1 PURPOSE

a) To ensure that equipment using halocarbons is maintained so as to prevent releases of halocarbon.

b) To ensure that halocarbon used at Canadian Coast Guard (CCG) sites or on board CCG vessels complies with the *Federal Halocarbon Regulations 2003 (FHR)*.

2 RESPONSIBILITIES

2.1 GENERAL

a) For the purpose of the FHR, the owner of all systems containing halocarbon onboard any CCG vessel is the Commissioner of the CCG. The Commissioner is represented onboard the vessel by the Commanding Officer.

2.2 COMMANDING OFFICER

a) The Commanding Officer shall ensure that this procedure is followed aboard the vessel and that halocarbon releases are properly reported using the Incident Investigation Report (IIR).

2.3 CHIEF ENGINEER WHO ENGAGES THE SERVICES OF A CONTRACTOR

a) The Chief Engineer who engages the services of a contractor is responsible to assure that the contractor fully complies with the requirements of this procedure.

2.4 CHIEF ENGINEER

a) The Chief Engineer shall be the sole authority for granting permission to work on equipment containing halocarbon on board the vessel or station. The Chief Engineer is also responsible for the maintenance of the equipment, the service logs and the inventory of halocarbon onboard the vessel

2.5 CERTIFIED PERSON

a) Only a certified person shall install, service, leak test or charge a halocarbon into a refrigeration, air conditioning, or fire extinguishing system.

b) A certified person is a person holding a valid third class marine engineering certificate or higher and has completed the Environmental Awareness Course for the Environmentally Safe Handling of Refrigerants (previously for handling Ozone Depleting Substances) for the purpose of the FHR.

2.6 SUPERINTENDENT FLEET SAFETY AND SECURITY (SFSS)

a) The SFSS is responsible to send copies of all halocarbon release reports to the Regional Environment Coordinator.

3 INSTRUCTION

3.1 GENERAL

a) FHR – shall be referenced for all equipment that uses halocarbon either onboard a CCG vessel or at a CCG station

3.2 MAINTENANCE AND LEAK TESTING

a) Maintenance and inspection of equipment containing halocarbon must be integrated into the vessels operational maintenance routine so that all systems are maintained and inspected as defined in the FHR and amplified in the *Environmental Code of Practice for Elimination of Fluorocarbon Emissions from Refrigeration and Air Conditioning Systems*.

b) Site specific work instructions that show the proper sequence for changing over refrigeration plants and air conditioning must be posted in the proper area to prevent accidental halocarbon release.

c) Refrigeration or air conditioning systems larger then 19 kW operating with a halocarbon, shall be leak tested at least once every twelve (12) months.

d) All leaks should be repaired immediately, whenever possible. In the event that it is not possible to effect repairs within seven (7) days following detection, the unit must be pumped down and isolated until suitable repairs are completed.

e) No person shall charge a refrigeration system or an air conditioning system with a halocarbon for the purpose of leak testing the system, except when recommended in the *Refrigerant Code of Practice*.

f) No person shall charge a refrigeration system or an air-conditioning system unless it has been leak tested.

g) Anyone who proposes to destroy, disassemble, or remove from service a system must, in advance, recover all halocarbons in a container designed for the reuse of halocarbons and must, in advance, complete a notice with all the required information in Annex D - Forms. A copy of this notice shall be kept on file for five (5) years and a copy sent to regional environmental coordinator to update the inventory (see section 3.5).

h) Environment Canada maintains the position that any decommissioned system that still contains any halocarbon quantity must still be maintained and leak-tested as if it was still operational.

3.3 SERVICE LOGS

a) A service log containing as a minimum the information outlined in Annex D – Forms, must be maintained for all systems and equipment using halocarbons.

b) This service log must be on board. Charging and discharging of equipment must be recorded in the service log.

c) Maintenance on all systems must be recorded in a service log.

3.4 MARKINGS REQUIRED ON SYSTEMS

a) A label indicating that the system has been leak tested (for refrigeration or A/C systems larger than 19 kW) or that the system has been serviced has to be placed near the system in a readily visible location. Details to be included on the labels are stated in Annex D - Forms.

b) Systems that have been decommissioned must be tagged and marked with the information contained in Annex D - Forms. Note that when the equipment has been removed from the vessel, the records must indicate final disposition of the system.

3.5 INVENTORY

a) An inventory of all systems containing halocarbon must be maintained aboard. All the information shown under inventory in Annex D - Forms must be included. Annually a copy of the inventory must be sent to the Regional Environmental Coordinator through the SFSS. Any changes to the reported inventory (Acquisition or disposal of systems) must be reported to the Regional Environmental Coordinator through the SFSS within thirty (30) days of the change.

b) All systems in inventory shall be marked by a unique numbered tag. The inventory tags are available through the Regional Environment Coordinator.

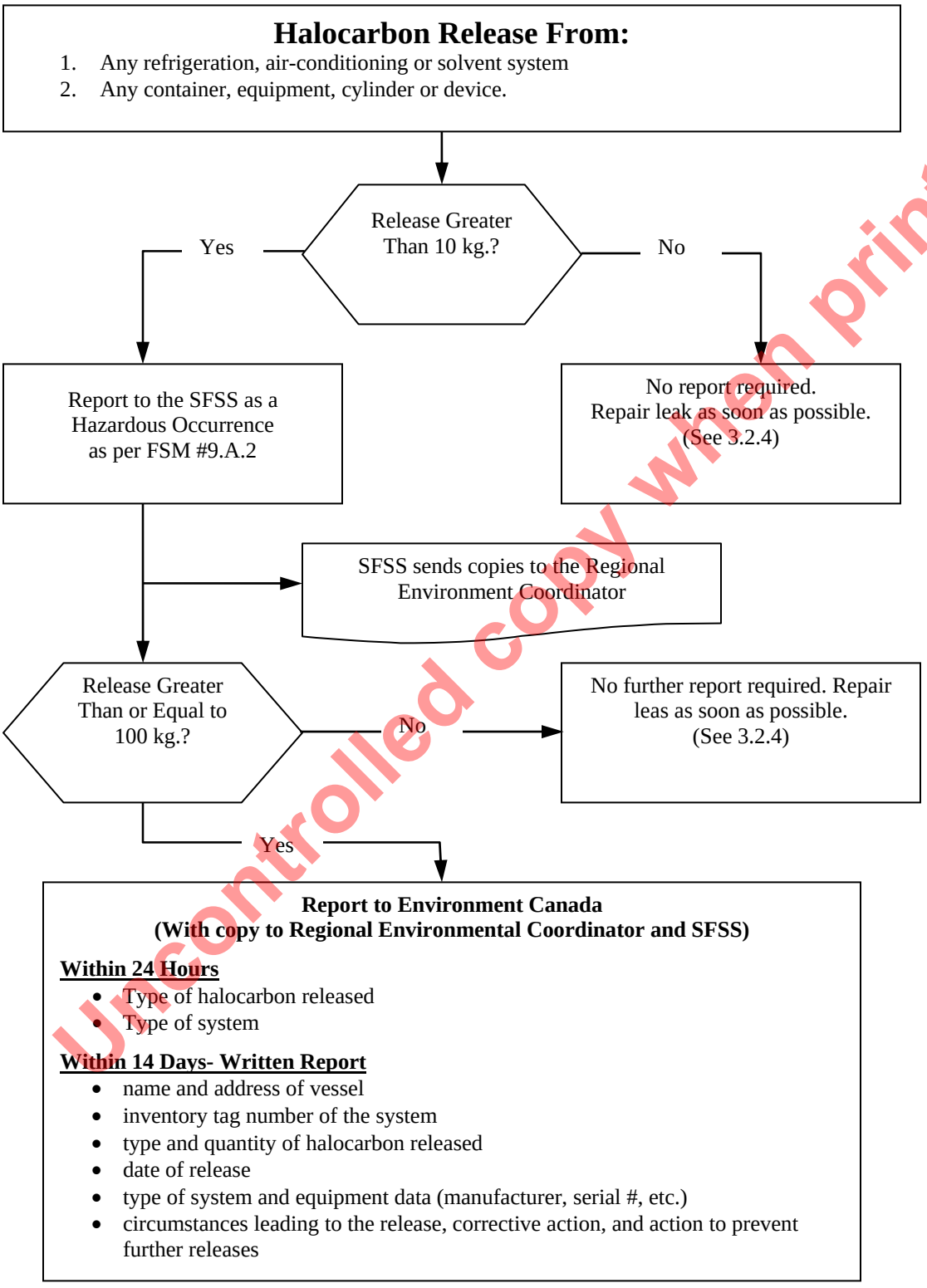
3.6 MAINTENANCE OF RECORDS

a) All records, reports, leak tests and notices required by this procedure, shall be kept onboard for a period of five (5) years beginning on the date of their issuance and shall be made available to Environment Canada upon request.

4 DOCUMENTATION

- Service Records
- Record Of Inventory
- Log Book Entries
- Reports Of Releases
- Federal Halocarbon Regulations 2003
- DFO kW Calculations

ANNEX A – RELEASES OF HALOCARBON FLOWCHART



ANNEX B – RELEASES OF HALOCARBON – MAILING ADDRESSES FOR REPORTS TO ENVIRONMENT CANADA REGIONS

Mailing Addresses for Reports to Environment Canada Regions

Geographic Region	Emergency Reporting	
	Emergency Number	**Mailing Address**
Province of British Columbia and Yukon Territory	**(604) 666-6100** Fax: 604-666-9059 E-mail: FHR.PYR@ec.gc.ca	Manager of Inspection Program Pacific & Yukon Region, Environment Canada #201 - 401 Burrard St Vancouver, BC V6C 3S5
Province of Alberta	**(780) 499-2432** *Alberta Division 24-hour spill line* Fax: 780-495-2451 E-mail: FHR2003.EED-PNR@ec.gc.ca	Manager of Inspection Program – Prairie & Northern Region, Environment Canada Twin Atria 2 Room #200 4999-98 Avenue NW Edmonton, AB T6B 2X3
Province of Saskatchewan	**(306) 536-9991** *Saskatchewan Division 24-hour spill line*	
Province of Manitoba	**(204) 981-7111** *Manitoba Division 24-hour spill line*	
Northwest Territory Nunavut Territory	**(867) 920-8130** *Northern Division 24-hour spill line*	
Province of Ontario	**(416) 346-1971** *Call forwarded to Provincial Spills Action Centre* Fax: 905-333-3952 E-mail: FHR.Ontario@ec.gc.ca	Manager of Inspection Program – Ontario Region, Environment Canada, 845 Harrington Court. Burlington, Ontario L7N 3P3
Province of Quebec	**(514) 283-2333** Fax: 514-496-2087 E-mail : InstalFed.Dale-RQ@ec.gc.ca	Manager of Inspection Program –Quebec Region Environment Canada 105 Rue McGill, 4th Floor Montreal, Quebec H2Y 2E7
Province of New Brunswick Province of Prince Edward Island Province of Nova Scotia	**1-800-565-1633** Fax: 902-426-7924 E-mail: fhr2003@ec.gc.ca	Manager of Inspection Program Environment Canada 16th Floor, Queen Square 45 Alderney Drive Dartmouth, Nova Scotia B2Y 2N6