

# Protect Human Health and the Environment



Examples of CFC packaging for 30 lb. containers



## Customs Checklist

- ✓ Compare the packing list, bill of entry, and the country of origin to make sure they match.
- ✓ Ensure the customs code on the entry matches the description on the invoice.
- ✓ Compare the invoice and the bill of lading to the outward bound ships manifest.
- ✓ Verify the country of origin. Is the country a party of the Montreal Protocol and its amendments?
- ✓ Verify that the importer and place of business actually exist.
- ✓ Contact the licensing agency to verify that the importer is licensed to import that specific material.
- ✓ Note the quantity, source, and destination of ODS. These will serve as important clues that may provide indicators of illegal importations.
- ✓ Verify that the container number actually exists. Discovery of fictitious container numbers has led to the disclosure of illegal trade.
- ✓ Review all the necessary documents, if there is something that doesn't match, it may be an illegal shipment.
- ✓ Inspect the merchandise.
- ✓ Check packaging, size, shape, and label on container.
- ✓ Identify the name and description of the chemical, which should match ALL paperwork.
- ✓ Seize the material if the importer does not have the correct import/export license.
- ✓ Coordinate this seizure with the customs officer, environment agency, and the prosecution agency.



CFCs come in different containers such as 12 oz. cans or 30 lb. cylinders



## Safety

- ✓ Do not vent refrigerants.
- ✓ Do not take samples of refrigerants.
- ✓ Contact designated professional for sampling and analyzing.
- ✓ Use refrigerant identifiers only if you are familiar with their use and authorized to do so.
- ✓ Use leak detectors to inspect refrigerant cylinders for leaks - inspect the cylinders and valves for damage.
- ✓ Use protective clothing (gloves, goggles) when handling CFC containers - CFC may cause frost bite.
- ✓ Store refrigerant cylinders vertically and secure in a protected and well-ventilated area.
- ✓ Do not expose refrigerant cylinders to open flames or direct sunlight - they contain pressurized gases.
- ✓ Handle refrigerant cylinders carefully and do not drop them - this may lead to valve damage.
- ✓ Warnings should be clearly shown in storage areas.
- ✓ Do not dispose of any refrigerant by using methods other than recovery & recycling, reclaim, reuse, adequate storage or destruction.
- ✓ Observe local regulations and standards on handling, transport and storage of refrigerants.

## Import / Export Licensing Systems against:



\*CFCs are used as refrigerants and deplete the ozone layer. The ozone layer protects us against UV radiation. We must protect the ozone layer against CFCs.

## Screening Methods

- ✓ Screening for importers which are not licensed to import ODS refrigerants
- ✓ Screening documentation for consistency of codes & names
- ✓ Screening by quantity of import
- ✓ Screening by producer country
- ✓ Screening by country of origin
- ✓ Screening by transshipment harbour
- ✓ Screening by recovered or recycled ODS shipments
- ✓ Screening by countries with recycling capacity
- ✓ Physical examination of containers & packaging
- ✓ Screening containers & packaging for consistency of codes & names
- ✓ Check consistency of ISO container labelling
- ✓ Consistency check of container type and labelling
- ✓ Consistency check on flammability of refrigerants
- ✓ Consistency check of valve types
- ✓ Direct identification & analysis

## Details of Selected Refrigerants

Refrigerant	CFC-11 (CFCl <sub>3</sub> )	CFC-12 (CF <sub>2</sub> Cl <sub>2</sub> )	HCFC-22 (CHF <sub>2</sub> Cl)	CFC-113 (C <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> )	R-502
Chemical name	Trichlorofluoromethane	Dichlorodifluoromethane	Chlorodifluoromethane	Trichlorotrifluoroethane	R-115/R-22 mixture
ODP <sup>2</sup>	1.0	1.0	0.055	0.8	0.33
GWP 100 <sup>3</sup>	3800	8100	1500	4800	5490
HS Code	2903.41	2903.42	2903.49	2903.43	n.a.
CAS number	75-69-4	75-71-8	75-45-6	354-58-5	n.a.
UN Number	1017	1028	1018	n.a.	1973
ARI Colour Code <sup>4</sup>	Orange	White	Light Green	Dark Purple	Light Purple
Trade names	R-11, Forane 11, Arcton 11, Freon 11, Chill-It X3, Frigen 11, Halon 11	R-12, Allogofrene 12, Freon 12, Frigen 12, Halon 12, RB-276, G-12	R-22, Arcton 22, Flugene 22, Formacel S 22, Forane 22, Freon 22, Allogofrene 22, Frigen 22, Genetron 22	R-113, 407A, Freon 113, Frigen 113, Fronsolve, Genesolve, Halon 113	Allogofrene R-502, Daiflon 502, Freon 502, Forane 502, Arcton 502, Flon Showa 502

<sup>1</sup>These are selected Ozone Depleting Substances. Please refer to UNEP's training manual "Customs Officer Training on Substances Depleting the Ozone Layer" for more detailed information.

<sup>2</sup>ODP is the ozone depleting potential of a substance

<sup>3</sup>GWP 100 is the global warming potential over 100 years

<sup>4</sup>ARI Colour Codes are a US Standard and are not applicable in all countries

<sup>5</sup>CFCs = chlorofluorocarbons deplete the ozone layer and are used as refrigerants.

<sup>6</sup>HCFCs = hydrochlorofluorocarbons deplete the ozone layer but have a lower ODP than CFCs.

<sup>7</sup>The Air-Conditioning and Refrigeration Institute (ARI) in the USA

<sup>8</sup>Contributing to ozone depletion

<sup>9</sup>Contributing to global warming

## Contacts

Customs Supervisor

License Verification

Government Lab

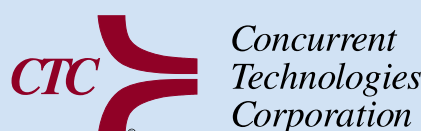
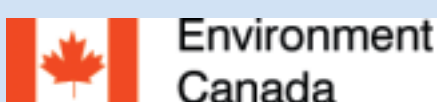
National Ozone Unit

Other

### UNEP DTIE OzonAction Programme

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# Save the Ozone Layer



Ministry of Foreign Affairs of Finland

