

LEGISLATION

The phase-out of CFCs are guided by Ministerial Orders.

Jamaica signed the Montreal Protocol, an agreement between countries to protect the Ozone Layer in 1993.

Under the Ozone Layer Protection Act (Pending) it is illegal to:

- Vent or discharge Ozone Depleting Substances (ODSs) into the atmosphere .
- Fail to dispose of ODSs and equipment in accordance with the National Plan.
- Import CFCs during the phase-out without a licence .
- Import CFCs listed on schedule C, Part 2 after the phase-out without a licence.
- Import CFCs not listed on schedule 2, Part 2 without a licence.
- Handle or Use CFCs without a licence.
- Import methyl bromide during or after the phase-out without a licence.
- Offer a quota allocation or sections of an allocation
- Import Halons (except where recycled)
- Import equipment that contain or use CFCs or Halons (except for metered-dose inhalers)

For information on Jamaica's phase-out of CFCs, recovery and recycling equipment and the Jamaica Country Programme

Contact the:

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**THERE IS NO LONGER ANY
ACCEPTABLE REASON OR EXCUSE
FOR RELEASING FLUOROCARBON
REFRIGERANTS INTO THE
ATMOSPHERE.**



Managing and protecting Jamaica's land wood and water

Produced by the National Environment and Planning Agency (NEPA) .

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NATIONAL ENVIRONMENT
AND PLANNING AGENCY

CFCs

Recover,
Recycle, Reclaim



The release of Chlorofluorocarbons (CFCs) helps to deplete the Ozone Layer. As part of its mandate under the Montreal Protocol, the National Ozone Unit, in the National Environment and Planning Agency (NEPA) is advocating the use of recycling and recovery equipment and the use of the 3Rs process.

RECOVER, RECYCLE AND RECLAIM CFCs

International guidelines resulting from the implementation of the Montreal Protocol on substances that deplete the ozone layer mandate the phase-out of **Chlorofluorocarbons (CFCs)**.

Locally the refrigeration industry has adopted various measures for the phasing out of CFCs and preventing their release into the atmosphere.

One such measure involves the cleaning and re-using of gases through the specific process of **recovery, recycling and reclamation (reclamation is not done in Jamaica)**. The terms are defined as follows:

Recovery: To remove refrigerant in any condition from a system and store it in an external container without recycling.

Recycling: To clean refrigerant for use by oil separation and single or multiple passes through devices, such as replaceable core filter-driers, which reduce moisture, acidity, and matter. This term usually applies to procedures implemented at the field job site or at a local service job.

Reclaim: To reprocess refrigerant to new product specifications by means which may include distillation. This will require chemical analysis of the refrigerant to determine that appropriate product specifications are met. This term usually refers to the use of processes or procedures available only at a reprocessing or manufacturing facility. This also includes on-site or local service shops that are equipped with highly technical equipment.

REFRIGERANT RECOVERY EQUIPMENT

The method of removing refrigerant by some small recovery equipment is the vapour recovery method. Using a refrigerant recovery device, the technician is capable of removing refrigerant from light commercial, automotive, and residential applications.

The containment of refrigerants during servicing and repair operations, with subsequent reuse, recycling or reclamation, is an effective practice in reducing emissions to a minimum.

GOOD REFRIGERATION PRACTICES

- ✓ Recover all refrigerants during service and maintenance
- ✓ Recover all refrigerants when decommissioning for reuse, recycling, reclamation or final disposal and destruction.
- ✓ Use certified R&R equipment which meets relevant specifications
- ✓ Operate and maintain R&R equipment in accordance with the manufacturer's instructions and only when you are trained on how to use it.
- ✓ Use refrigerant containers, cylinders or recovery bags to store refrigerant gases.
- ✓ Use purge compressors or portable evacuation devices to recover refrigerant liquid and vapour from refrigerant drums and cylinders
- ✓ Investigate the economics of the recovery of mixtures of refrigerants before attempting the process.

HANDLING AND STORAGE OF REFRIGERANTS

Refrigerant cylinders need to be handled carefully. These cylinders are pressure vessels and are subject to mandatory safety conditions and inspections.

Good Practices:

- ✓ Follow industry recommended procedures and use approved equipment for handling and storing refrigerants
- ✓ Use closed-loop refrigerant transfer equipment when removing, charging and storing refrigerants.

A recovery unit will remove more fluorocarbon refrigerant from a system than any other method, as such their use should be regarded as **the norm** and not the exception.

Contractors, engineers and equipment owners **MUST** ensure that R&R units are available for use at all times.

As with vacuum pumps, recovery units will work much more efficiently **if connection hoses are kept as short and as large in diameter as possible.**

- ✓ Units should be equipped with hoses of no less than 3/8" (three-eighths of an inch) in diameter although 1/2" (half inch) diameter is preferable.
- ✓ When attempting to recover the gas, the unit must be placed as close as possible to the item from which the gas is being removed. The inability to get the recovery unit close to the item is not an acceptable excuse for not using it.

NOTE: If hoses are too long, recovery will take longer.