

PCD/ODS/2.6

28 Aug 2012

To: All HCFC Licence Holders and Stakeholders

Dear Sir/Mdm

## **HYDROCHLOROFLUOROCARBONS (HCFCs) PHASE-OUT MANAGEMENT PLAN IN SINGAPORE**

This circular seeks to inform all local traders and importers of HCFCs about Singapore's implementation of HCFCs Phase-Out Management Plan.

2. Singapore becomes a Party to the Montreal Protocol on Substances that Deplete the Ozone Layer (hereby known as the Montreal Protocol) on 5 Jan 1989. The National Environment Agency (NEA) is the Designated National Authority administering the Montreal Protocol. At the 19<sup>th</sup> Meeting of the Parties (MOP-19) to the Montreal Protocol held in Sep 2007, Parties agreed to adjust their commitments relating to the phase out of HCFCs.

3. As an Article-5 Party to the Montreal Protocol, Singapore is obliged to implement control measures to freeze the consumption of HCFCs on 1 Jan 2013 and to completely phase out HCFCs by 1 Jan 2030. For information on the HCFC Phase-out schedule, you may visit the following websites:

- NEA's Circular on the HCFC phase-out schedule - <http://app2.nea.gov.sg/data/cmsresource/20090817681730597925.pdf>
- 19th MOP (Decision XIX/6: Adjustments to the Montreal Protocol) - [http://ozone.unep.org/new\\_site/en/Treaties/treaties\\_decisions-hb.php?dec\\_id=614](http://ozone.unep.org/new_site/en/Treaties/treaties_decisions-hb.php?dec_id=614)

4. NEA will be adopting a Cap and Allocation Framework for the freeze and phase-out of HCFCs consumption in Singapore. A factsheet on the phase-out management plan is attached below for reference. NEA will also be conducting a briefing session on the detailed phase-out approach for all licence holders and relevant stakeholders in Sep/Oct 2012. Details of the briefing session will be provided to you shortly.

5. For further enquiries, please contact Ms Tan Hwee Hong at Tel: 6731 9377 or Ms Kee Su Yin at Tel: 6731 9054. Thank you.

Yours faithfully

KEE SU YIN (Ms)  
for DIRECTOR  
POLLUTION CONTROL DEPARTMENT  
NATIONAL ENVIRONMENT AGENCY

This is a computer-generated letter and requires no signature

# FACTSHEET

## HYDROCHLOROFLUOROCARBONS PHASE-OUT MANAGEMENT PLAN IN SINGAPORE

### What are Hydrochlorofluorocarbons (HCFCs)?

HCFCs, with their lower Ozone Depleting Potential (ODP)<sup>1</sup>, were introduced as interim substitutes to Chlorofluorocarbons (CFCs) and were listed as Ozone Depleting Substances (ODS) in Annex C of the Montreal Protocol on Substances that Deplete the Ozone Layer.

HCFCs are commonly used as refrigerants (in the refrigeration and air-conditioning sectors), foam-blowing agent, industrial solvent and fire extinguishing agent. HCFCs are also used as feedstock in the production for other chemical products.

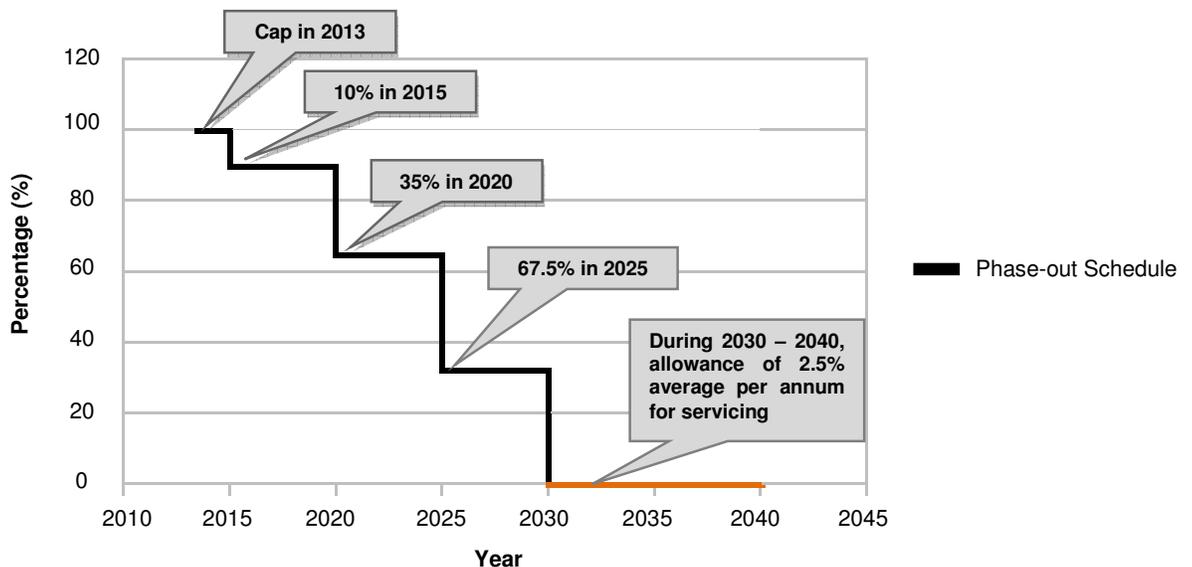
### Why is there a need to phase out HCFCs?

Like CFCs, HCFCs deplete the ozone and allow more ultraviolet rays to enter our atmosphere. This in turn increases the risk of skin cancer and cataracts in people, as well as damage to plant life. As alternatives to HCFCs become technically and economically viable, the Montreal Protocol coordinates a global effort to reduce and eventually phase out the use of HCFCs.

### Why is there a cap on production and import of HCFCs in Singapore?

At the 19<sup>th</sup> Meeting of the Parties to the Montreal Protocol held in Sep 2007, Parties agreed to adjust their commitments to accelerate the phase out of HCFCs. Article-5 Parties, which include Singapore are obliged to freeze the production and consumption of HCFCs in 2013, followed by subsequent reduction from 2015 to 2030.

Singapore does not produce HCFCs. All HCFCs used in Singapore are imported from overseas. The use of HCFCs for local industries and end-users is still allowed till 2030, subject to the following stepwise phase-out schedule:



<sup>1</sup> The ozone depletion potential (ODP) is the relative amount of degradation to the ozone layer relative to that for a unit mass emission of CFC-11

### **What is the baseline cap for Singapore?**

In accordance to the Montreal Protocol, baseline for the freeze of HCFCs is capped at the annual average production and consumption<sup>2</sup> in 2009 and 2010. For Singapore, the baseline cap is calculated to be 216.1 ODP tonnes<sup>3</sup>.

### **What framework is NEA using to control HCFC use in Singapore?**

The NEA will be implementing a Cap and Allocate system to regulate the HCFC usage in Singapore. A cap and allocation framework would ensure certainty in the supply of HCFCs to industries and end-users. This would also provide flexibility for industries to continue operating smoothly, and allow time for Singapore to adjust and switch to alternatives.

### **Can I continue to use HCFC-based equipment after NEA implements the HCFCs Freeze in 2013?**

Yes. There is no requirement for users to replace existing HCFC-based equipment. The phase-out schedule allows sufficient time for users to switch to ozone-friendly alternatives. As more ODS-free equipment is introduced into the market, it is expected that the demand for HCFC-containing equipment would decrease overtime.

### **Would HCFCs be available for servicing and maintenance of existing equipment after 2013?**

HCFCs are still available for servicing and maintenance of existing equipment after 2013. However, the supply of HCFCs will be reduced progressively from 2013 to 2040.

### **When should local industries and end-users switch to HCFCs-free processes and equipment?**

In view of the coming HCFCs freeze in 2013 and its subsequent reduction, NEA encourages companies that are currently using HCFCs to evaluate their business needs and manufacturing processes, and explore technically proven, economically viable and environmentally benign HCFCs alternatives that would meet their business requirements.

As the supply of HCFCs will be gradually decreased over time, businesses may wish to take the availability of HCFCs into account for long-term planning purposes.

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<sup>2</sup> Consumption of HCFCs is defined as imports minus exports.

<sup>3</sup> Consumption of a type of HCFC in ODP tonnes is calculated by multiplying the amount of a type of HCFC consumed in tonnes by its ODP value.