

**LEGISLATIVE COUNCIL BRIEF**

**Ozone Layer Protection Ordinance (Cap.403)  
Ozone Layer Protection (Products Containing Scheduled  
Substances)(Import Banning)(Amendment) Regulation 2009**

**Resolution of the Legislative Council**

**INTRODUCTION**

The Secretary for the Environment has given notice to move a resolution at the Legislative Council (“LegCo”) meeting of 8 July 2009. The resolution, which is to be made under section 16 of the Ozone Layer Protection Ordinance (Cap. 403), aims to make the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) (Amendment) Regulation 2009 (“Amendment Regulation”) (**Annex A**) for meeting the new requirements of the Montreal Protocol on Substances that Deplete the Ozone Layer (“Montreal Protocol”).

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**JUSTIFICATIONS**

*Banning the import of products containing Hydrochlorofluorocarbons*

2. To ensure earlier recovery of the ozone layer, which protects all life on earth against harmful ultraviolet radiation, the 19th Meeting of Parties to the Montreal Protocol reached in September 2007 an agreement to accelerate the phasing out of Hydrochlorofluorocarbons (“HCFCs”). The requirements for the Non-Article 5 Parties, with which Hong Kong should comply, are to curtail by 2010 the consumption of HCFCs by 75% of the baseline level of 1989 instead of the original 65% and to advance the completion of the phasing out from 2030

to 2020. The enhanced HCFCs reduction target for 2010 will see a tightening of the ceiling for local HCFCs consumption from 48.6 ODP-tonnes<sup>1</sup> to 34.7 ODP-tonnes. The consumption of HCFCs in 2007 was about 51.1 ODP-tonnes. We need to further reduce the consumption by 16.4 ODP-tonnes for meeting the enhanced reduction target.

3. To ensure full compliance with the accelerated phasing out programme, we have to cut the demand for HCFCs by banning the import of products containing HCFCs. As virtually all HCFCs are used as refrigerants in Hong Kong, this, in practice, means a banning of the import of refrigeration, air conditioning and other products using HCFCs as refrigerants.

4. Among others, chlorodifluoromethane (“HCFC-22”) accounts for about 98.3% of the local HCFCs consumption. As its non-ozone depleting alternatives are readily available, to maximize the reduction effectiveness, products containing HCFC-22 should be the first to be phased out on 1 January 2010. Recognising that suppliers need more time to set up the production lines for HCFC-free room air conditioners in view of the financial tsunami, we agreed to defer the banning of split type and window type room air conditioners, after further consultation with the trade, to 1 July 2010 and 1 July 2012, respectively.

5. As for products containing other types of HCFCs, we propose to ban the import of them from 1 January 2015 except those containing dichlorotrifluoroethane (“HCFC-123”) because it has very low ozone depleting and global warming potentials but high cooling performance. At present, HCFC-123 alone only accounts for 0.3% of the local HCFCs consumption. We propose to ban the import of HCFC-123 products from 1 January 2020.

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1. ODP-tonnes means the tonnage adjusted to the ozone depleting potentials (ODP) of the concerned HCFCs. For example, for HCFC-22, as the ODP is 0.055, 1 tonne HCFC-22 equals to 0.055 ODP-tonne.

6. Similar phasing out schedules have also been implemented in other developed economies, e.g. European Union (EU), Canada and USA.

*Banning of Metered Dose Inhalers containing Chlorofluorocarbons (“CFCs”)*

7. Metered dose inhalers (“MDIs”) are small, pressurized aerosol products that deliver a measured dose of an aerosolized drug into a patient’s airway for inhalation into the lungs for the treatment of asthma and chronic obstructive pulmonary disease. They are required to register under the Pharmacy and Poisons Regulations (Cap. 138 sub. leg. A) before they can be put on the local market.

8. At the 11th and the 12th Meetings of the Parties to the Montreal Protocol held in 1999 and 2000, it was agreed that Non-Article 5 Parties should develop and implement a strategy to phase out the use of CFC-containing MDIs in view of the availability of the economically and technically feasible non-CFC alternatives or substitutes. After consultation with the stakeholders including medical suppliers, health and medical professionals, we have made it a target since 2002 to phase out all CFC-containing MDIs by 1 January 2010. A voluntary phasing out programme has also been launched from 2004. In 2007, about 80% of all MDI models available on local market are CFC-free. They account for 87% of the total consumption of MDIs.

9. To join the international efforts to eliminate ultimately the use of CFCs in MDIs and be in tandem with other advanced countries such as Canada, UK, USA, Australia and Japan, we consider it appropriate to ban the import of CFC-containing MDIs from 1 January 2010.

*Banning of other Products*

10. For sake of completeness, opportunity is also taken to -
- (a) extend the banning of the import of products containing ozone layer depleting substances from countries not being a Party to the Montreal Protocol to all countries to prevent Hong Kong becoming a dumping ground of these products;
  - (b) extend the banning of portable fire extinguishers to those containing other fully halogenated chlorofluorocarbons, HCFCs, and bromochloromethane, which already have economically and technically feasible ozone layer friendly alternatives or substitutes, for consistency with the practice of other advanced countries such as Canada..

11. To ensure strict compliance with the requirements for fulfilling the international obligation, we also propose to increase the penalties of offences under the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation to a fine of \$1,000,000 and imprisonment for 2 years, the same level of penalty for illegal import of a scheduled substance under the Ozone Layer Protection Ordinance.

## **THE AMENDMENT REGULATION**

12. The Amendment Regulation seeks to: -
- (i) amend and expand in phases the definition of “controlled product” under the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation (Cap. 403

- sub. leg. C) (“principal Regulation”) to facilitate banning the import of products containing certain scheduled substances including HCFCs in phases from 1 January 2010 to 1 January 2020;
- (ii) revise the definition of “controlled product” to ban the import of metered dosed inhaler and other aerosol products containing certain scheduled substances ;
  - (iii) extend the banning of products containing certain scheduled substances including CFCs and HCFC-22 from any country, irrespective of whether it is bound by the terms of the Montreal Protocol;
  - (iv) extend the definition of “portable fire extinguisher” to cover those containing other fully halogenated chlorofluorocarbons, HCFCs, and bromochloromethane;
  - (v) increase the penalties for an offence under the principal Regulation to a fine of \$1,000,000 and imprisonment for 2 years; and
  - (vi) make clear that the banning control does not include those products in the course of transshipment or are imported solely for export.

## **LEGISLATIVE TIMETABLE**

13. The Secretary for the Environment will move the resolution at the

LegCo meeting of 8 July 2009. Subject to the passage of the resolution, the proposed Amendment Regulation will take effect on 1 January 2010.

## **IMPLICATIONS OF THE PROPOSAL**

B 14. The proposal has economic, environmental and sustainability implications as set out at **Annex B**. It will not incur additional financial implications for Government. Enforcement of the amendments will be carried out by existing staff. The amendments are in conformity with the Basic Law, including the provisions concerning human rights.

## **PUBLIC CONSULTATION**

15. Major trade associations and concerned product suppliers, including the Air Conditioning and Refrigeration Association of Hong Kong, Hong Kong & Kowloon Electrical Appliances Merchants Association Ltd, major air conditioner suppliers, Hong Kong Association of Property Management Companies Limited, Real Estate Developers Association of Hong Kong, and professional bodies including Hong Kong Institution of Engineers and American Society of Heating, Refrigerating and Air-Conditioning Engineers, Association of Registered Fire Service Installations Contractors of Hong Kong, have been consulted on the proposed bans. They do not object to the proposal, including the level of penalty.

16. For CFC-containing MDIs, we have consulted the concerned product suppliers and the public health care sector and medical professional associations, including the Hospital Authority, Department of Health, Hong Kong Medical Association, Hong Kong Association of Pharmaceutical Industry,

Pharmaceutical Society of Hong Kong, Hong Kong Asthma Society, Hong Kong Lung Foundation and Society for Community Organisation – Patients Rights Association. They have no objection to the proposal, including the level of penalty.

17. We have also consulted the Advisory Council on the Environment and Panel on Environmental Affairs of the Legislative Council and their support to the proposal has been given in November 2008.

## **PUBLICITY**

18. A press release will be issued before the gazettal of the Amendment Regulation. A spokesman will be made available for media enquiries.

## **ENQUIRY**

19. For any enquiry relating to this brief, please contact Mr. W.C. Mok, Assistant Director of Environmental Protection (Air Policy), at 2594-6031.

**Environmental Protection Department**  
**17 June 2009**

## Annex A

**OZONE LAYER PROTECTION (PRODUCTS  
CONTAINING SCHEDULED SUBSTANCES)  
(IMPORT BANNING) (AMENDMENT)  
REGULATION 2009**

(Made by the Secretary for the Environment under section 16 of the Ozone Layer Protection Ordinance (Cap. 403) after consultation with the Advisory Council on the Environment and subject to the approval of the Legislative Council)

**1. Commencement**

- (1) Subject to subsections (2), (3), (4) and (5), this Regulation comes into operation on 1 January 2010.
- (2) Section 2(4) and (5) comes into operation on 1 July 2010.
- (3) Sections 2(6) and (10) and 4 come into operation on 1 July 2012.
- (4) Section 2(7) comes into operation on 1 January 2015.
- (5) Section 2(8) comes into operation on 1 January 2020.

**2. Interpretation**

(1) Section 2 of the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation (Cap. 403 sub. leg. C) is amended by repealing the definition of “controlled product” and substituting –

““controlled product” (受管制產品) means any of the following things that contains a scheduled substance listed in Part 1, 2, 3 or 9 of the Schedule to the Ordinance or Chlorodifluoromethane, as a scheduled substance listed in Part 8 of the Schedule to the Ordinance –

- (a) any air-conditioner or heat pump designed to cool the driver’s or passengers’ compartment of a motor vehicle (whether or not installed in the motor vehicle);



- (b) any refrigeration equipment or air-conditioning or heat pump equipment (whether for domestic or commercial use), other than a room air-conditioner;
- (c) an aerosol product;
- (d) an insulation panel, insulation board or insulation pipe cover;
- (e) a pre-polymer;”.

(2) Section 2 is amended, in the English text, in the definition of “refrigeration equipment”, by repealing the full stop and substituting a semicolon.

(3) Section 2 is amended by adding –

““air-conditioner” (空調機) means an encased assembly or encased assemblies that –

- (a) is or are designed primarily to provide free delivery of conditioned air to an enclosed space, room or zone; and
- (b) has or have a prime source of refrigeration for cooling or heating;

“room air-conditioner” (房間空調機) has the meaning given by section 2A;

“transhipment” (轉運) means the importation of a controlled product that –

- (a) is consigned on a through bill of lading or a through air waybill from a place outside Hong Kong to another place outside Hong Kong; and
- (b) is or is to be removed from the vessel, vehicle or aircraft in which it was

imported, and, before being exported, is either –

- (i) returned to the same vessel, vehicle or aircraft; or
- (ii) transferred to another vessel, vehicle or aircraft, whether it is or is to be transferred directly between the vessels, vehicles or aircraft or whether it is to be landed in Hong Kong after its importation and stored, pending exportation.”.

(4) Section 2 is amended, in the definition of “controlled product”, in paragraph (b), by adding “that is of single package type” after “a room air-conditioner”.

(5) Section 2 is amended by adding –

““single package type” (獨立式), in relation to a room air-conditioner, means a room air-conditioner that consists of components of a refrigeration system fixed on a common mounting to form a discrete unit;”.

(6) Section 2 is amended, in the definition of “controlled product”, in paragraph (b), by repealing “, other than a room air-conditioner that is of single package type”.

(7) Section 2 is amended, in the definition of “controlled product”, by repealing “a scheduled substance listed in Part 1, 2, 3 or 9 of the Schedule to the Ordinance or Chlorodifluoromethane, as a scheduled substance listed in Part 8 of the Schedule to the Ordinance” and substituting “a scheduled substance listed in Part 1, 2, 3, 8 or 9 of the Schedule to the Ordinance, other than Dichlorotrifluoroethane, as a scheduled substance listed in Part 8 of the Schedule to the Ordinance”.

(8) Section 2 is amended, in the definition of “controlled product”, by repealing “, other than Dichlorotrifluoroethane, as a scheduled substance listed in Part 8 of the Schedule to the Ordinance”.

(9) Section 2 is amended by repealing the definition of “portable fire extinguisher” and substituting –

““portable fire extinguisher” (手提式滅火器) means a portable fire extinguisher that contains a scheduled substance listed in Part 1, 2, 3, 8 or 9 of the Schedule to the Ordinance;”.

(10) Section 2 is amended by repealing the definitions of “room air-conditioner” and “single package type”.

### 3. Section added

The following is added –

#### “2A. Room air-conditioner

(1) In this Regulation, “room air-conditioner” (房間空調機), subject to subsection (2), means an air-conditioner that –

- (a) uses mains electricity as the primary power source;
- (b) operates by using the vapour compression cycle;
- (c) is non-ducted;
- (d) is air-cooled;
- (e) is of either cooling only type or reverse cycle type; and
- (f) has a rated cooling capacity not exceeding 7.5 kilowatts.

(2) In this Regulation, “room air-conditioner” (房間空調機) does not include an air-conditioner that is –

- (a) a fan-coil air-conditioning unit;
- (b) a water-cooled unit;

- (c) a multiple split-system air-conditioner;
- (d) a heat pump for heating only;
- (e) a unit designed for use with additional ducting or flexible pipes for air intake or exhaust; or
- (f) of either ceiling-mounted type or floor standing type.

(3) In subsections (1) and (2) –

“air-cooled” (氣冷式) means the employment of air-cooled condensers in an air-conditioner;

“cooling capacity” (製冷量) means the amount of sensible and latent heat that an air-conditioner can remove from the enclosed space, room or zone to which free delivery of conditioned air is provided in a defined period of time;

“fan-coil air-conditioning unit” (盤管式空調機組) means an air-conditioning unit that is equipped with a fan re-circulating air from the enclosed space, room or zone to which free delivery of conditioned air is provided, through the coil that contains either chilled or hot water for cooling or heating;

“heat pump” (熱泵) means an encased assembly or encased assemblies designed as a unit to provide free delivery of heat, and includes an electrically operated refrigeration system for heating;

“mains electricity” (市電) means the electricity that is supplied in Hong Kong at a voltage of 380/220V and a frequency of 50 Hz;

“multiple split-system” (多重分體式系統) means a split system that –

- (a) incorporates a single or multiple refrigerant circuits;
- (b) has one or more compressors;
- (c) has multiple indoor units;
- (d) has one or more outdoor units; and

(e) is capable of operating either as an air-conditioner or a heat pump;

“non-ducted” (非管道式) means not having any additional ducting or pipes required for air intake and exhaust;

“rated cooling capacity” (額定製冷量) means the cooling capacity of an air-conditioner as determined and declared by the manufacturer or importer of the air-conditioner in accordance with the standard and requirements specified in an approved code of practice;

“vapour compression cycle” (蒸氣壓縮循環方式) means a mechanism employed by an air-conditioner throughout which the refrigerant undergoes alternate compression and expansion to achieve the cooling or heating function;

“water-cooled” (水冷式) means the employment of water-cooled condensers in an air-conditioner.

(4) In subsection (1)(e), an air-conditioner is of cooling only type if it is used for cooling, but not for heating.

(5) In subsection (1)(e), an air-conditioner is of reverse cycle type if it can operate in normal or reverse vapour compression cycle, and is used for both cooling and heating.

(6) In subsection (2)(f), an air-conditioner is of ceiling-mounted type if it is of split type and its indoor unit –

(a) is equipped with mounting brackets or hooks on its body at appropriate locations;

(b) is intended to be installed with mounting rods or mounting bolts fastened on the ceiling in accordance with the manufacturer’s installation procedures;

(c) is intended to be installed directly under the ceiling; and

(d) has an intake grille, which may or may not be installed at the same level as the adjacent false ceiling panels (if there are such false ceiling panels).

(7) In subsection (2)(f), an air-conditioner is of floor standing type if it is of split type and its indoor unit is intended to be installed directly on the floor in accordance with the manufacturer's installation procedures.

(8) In subsection (3), "approved code of practice" (經核准實務守則) has the meaning given by section 2 of the Energy Efficiency (Labelling of Products) Ordinance (11 of 2008).

(9) In this section, an air-conditioner is of split type if it has separate indoor and outdoor components, which are connected with each other by the refrigerant piping, and the indoor component usually lies within the enclosed space, room or zone to which free delivery of conditioned air is provided."

#### **4. Room air-conditioner**

Section 2A is repealed.

#### **5. Offence to import certain products**

(1) Section 3(1) is amended by repealing everything after "from any country or place" and substituting ", whether or not the country or place is bound by the terms of the Protocol."

(2) Section 3 is amended by adding –

“(2A) This section does not apply to a controlled product that is –

- (a) in the course of transshipment; or
- (b) imported solely for export.

(2B) In a prosecution for an offence under this section, a controlled product that is found in Hong Kong is presumed, in the absence of evidence to the contrary, to be a controlled product that is not –

- (a) in the course of transshipment; or
- (b) imported solely for export.”.

(3) Section 3(3) is amended by repealing “\$200,000 and to imprisonment for 6 months” and substituting “\$1,000,000 and to imprisonment for 2 years”.

Secretary for the Environment

2009

### **Explanatory Note**

This Regulation amends the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation (Cap. 403 sub. leg. C) (“principal Regulation”) to give effect to initiatives adopted under the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (“Protocol”). The amendments extend the control of import under the principal Regulation by –

- (a) expanding in phases the definition of “controlled product” under the principal Regulation to cover certain products containing certain substances listed in the Schedule to the Ozone Layer Protection Ordinance (Cap. 403);
  - (b) expanding the definition of “portable fire extinguisher” under the principal Regulation; and
  - (c) prohibiting the import of things falling within the definition of “controlled product” from any country or place even if it is bound by the terms of the Protocol.
2. The Regulation also amends the principal Regulation, so that –
- (a) it does not apply to a “controlled product” that is in the course of transshipment or is imported solely for export; and
  - (b) the penalties for an offence under the principal Regulation are increased to a fine of \$1,000,000 and to imprisonment for 2 years.



## **IMPLICATIONS OF THE PROPOSAL**

### **ECONOMIC IMPLICATIONS**

Failure to achieve the accelerated phasing out of HCFCs and comply fully with the requirements of the Montreal Protocol will tarnish our international image on global environmental matters and lead to the possibility of sanction under the Protocol. The resulting economic loss could be significant.

2. The proposed banning of HCFC-containing product, CFC-containing MDIs and other ozone layer depleting products should neither impose any substantial impact on the industrial and commercial sectors nor cause significant distortion of competition in the markets concerned, granting that environmentally friendly alternatives are readily available at comparable prices. As an illustration, the prices for HCFC-free air conditioners on the local market are about 10 to 25% higher than those using HCFC-22. However, the price difference is not only due to a switch of refrigerants but also to enhanced features such as providing heating capability and higher efficiency filter. When more HCFC-free air conditioners are available in the coming years, the price difference would reduce.

### **ENVIRONMENTAL IMPLICATIONS**

3. The proposal will bring about more comprehensive control on products containing ozone layer depleting substances to further reduce unnecessary release of these substances to the atmosphere. It helps us join the international efforts to restore as soon as reasonably practicable the ozone layer which is essential in protecting the life on earth against harmful ultraviolet radiation.

## **SUSTAINABILITY IMPLICATIONS**

4. The statutory controls on the import of controlled products and the ozone layer depleting substances are in line with the sustainability principles of avoiding environmental problems for present and future generations, and seeking to find opportunities to enhance environmental quality.