

**For discussion on
24 March 2014**

Legislative Council Panel on Environmental Affairs

**Proposed Amendments to the Schedules to
the Hazardous Chemicals Control Ordinance (Cap. 595)**

This paper briefs Members of our plan to amend the Schedules to the Hazardous Chemicals Control Ordinance, Cap. 595 (the Ordinance) with a view to giving effect to the recent amendments of the Stockholm Convention on Persistent Organic Pollutants (the Stockholm Convention) and reducing the potential risks posed by hazardous chemicals.

BACKGROUND

2. At present, two international conventions address the potential risks posed by hazardous chemicals. The Stockholm Convention aims to reduce releases from production and use of listed chemicals with a view to ultimately eliminating them. The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (the Rotterdam Convention) seeks to regulate international trade of another list of hazardous chemicals through a prior informed consent (PIC) system. The Stockholm Convention and the Rotterdam Convention entered into force in China in 2004 and 2005 respectively. The Central People's Government applied the Stockholm Convention and the Rotterdam Convention to the Hong Kong Special Administrative Region (HKSAR) in 2004 and 2008 respectively.

3. In December 2011, the Stockholm Convention covered a total of 22 persistent organic pollutants, including 10 newly listed hazardous chemicals which can be placed in three categories, namely, pesticides, industrial chemicals and unwanted by-products of industrial processes. There are a total of 43 chemicals listed in the Rotterdam Convention, 32 are pesticides (including 4 severely hazardous pesticide formulations) and 11 industrial chemicals.

4. To fulfil our obligations under the two Conventions, the Hazardous Chemicals Control Ordinance (the Ordinance) was enacted in Hong Kong in 2008 to regulate the manufacture, export, import and use of non-pesticide hazardous chemicals¹ through a permit system. The hazardous chemicals currently listed in the Schedules of the Ordinance are mainly used as reference standards in local laboratories. Section 50 of the Ordinance stipulates that any amendment to the list of Convention-regulated chemicals² in the Schedules to the Ordinance is to be made by the Secretary for the Environment by order published in the Gazette.

PROPOSED AMENDMENTS

5. At the 4th and 5th meetings of the Conference of the Parties to the Stockholm Convention held in 2009 and 2011, the Parties adopted amendments to list 10 new chemicals in the elimination and restriction lists (i.e. Annex A and Annex B respectively) of the Convention. Of these 10 new chemicals, 5 are non-pesticide industrial chemicals as shown below:

- (i) Hexabromobiphenyl (HBB) - Appendix 1, Item 1.1;
- (ii) Hexabromodiphenyl ether and heptabromodiphenyl ether (commercial octaBDE) - Appendix 1, Item 1.2;
- (iii) Pentachlorobenzene (PeCB) - Appendix 1, Item 1.3;
- (iv) Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial pentaBDE) - Appendix 1, Item 1.4; and
- (v) Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF) - Appendix 1, Item 2.1.

Details of the changes are at **Appendix 1**

6. HBB and PeCB were used as flame retardants but are no longer produced or used in most countries. Commercial octaBDE and pentaBDE are still used as additive flame retardants. PFOS is produced in several countries and has wide applications like electric and electronic parts, fire fighting foam, photo imaging and hydraulic fluids and textiles.

¹ Pesticides controlled under the two Conventions are regulated by the Pesticides Ordinance (Cap. 133).

² Under the Hazardous Chemicals Control Ordinance, a chemical is a Convention-regulated chemical if the chemical is subject to the regulation of the Rotterdam Convention or the Stockholm Convention.

7. The Office of the Commissioner of the Ministry of Foreign Affairs informed us that China, as a Party to the Stockholm Convention, tendered its acceptance to the above amendments on 26 December 2013. The amendments will enter into force in China including HKSAR on 26 March 2014 (i.e. the ninetieth day after the date of the said acceptance). To give effect to the amendments to the Stockholm Convention in Hong Kong, we need to amend Part 1 of Schedule 1 and Part 1 of Schedule 2 to the Ordinance accordingly. The amendment of the Schedules does not change the existing permit control mechanism of the Ordinance. Once the new non-pesticide hazardous chemicals are included into the Schedules, they will be subject to the control mechanism currently applied to the existing hazardous chemicals listed in the Ordinance.

EXPECTED BENEFITS

8. The Ordinance contains provisions for prohibiting or restricting the manufacture, import, export and use of those listed hazardous chemicals subject to the regulation of the two Conventions. By taking forward the above amendments, the newly listed hazardous chemicals which are classified as persistent organic pollutants, will be subject to control under the Ordinance with a view to ultimately eliminating them. We can therefore better protect the general public and the environment against the potential health or pollution problems due to exposure to such chemicals.

CONSULTATION

9. We conducted two briefing sessions in July 2010 for the traders on the possible listing of the new chemicals in the Schedules to the Ordinance. About 100 participants from local chemical traders, fire service contractors, academia, trade and industry associations attended the briefing sessions. They raised no objection to the proposed new control as such control would be required under the Stockholm Convention. In a local survey on the uses of the 5 new non-pesticide chemicals conducted in May 2012 covering about 350 institutions, the traders were again reminded that the Schedules to the Ordinance would be amended once the Central People's Government accepted the subject amendments. In mid-January 2014, we issued letters to keep the traders informed of China's acceptance of the amendments to the Stockholm Convention.

10. Our survey found that the 5 newly listed non-pesticide hazardous chemicals were mainly used in local laboratories as reference standards for equipment calibration, as in the case of other hazardous chemicals currently listed in the Ordinance. There was also one record of import and export of PFOS in Hong Kong in 2010. No report on the use of these hazardous chemicals in local manufacturing industry was noted from the survey. Since the non-pesticide

hazardous chemicals are mainly used as reference standards, it is expected that the present amendment to the Schedules to the Ordinance would have minimal impact to the trade and industry.

WAY FORWARD

11. Members are invited to note the proposed amendments to the Ordinance. We plan to table the proposed amendments to the Schedules to the Ordinance at the Legislative Council for negative vetting in May 2014. The new requirements will take effect in January 2015 and we shall publicize the new control regime in the coming months.

Environmental Protection Department
March 2014

**Proposed Amendments to the Schedules to
the Hazardous Chemicals Control Ordinance (HCCO) (Cap. 595)**

Inclusions of new non-pesticide chemicals in the Annexes of the Stockholm Convention

1. Annex A

Item	Chemical	CAS Registry Number
1.1	Hexabromobiphenyl (HBB)	36355-01-8
1.2	Hexabromodiphenyl ether and heptabromodiphenyl ether (commercial octa-BDE):	
	(a) 2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153)	68631-49-2
	(b) 2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154)	207122-15-4
	(c) 2,2',3,3',4,5',6-heptabromodiphenyl ether (BDE-175)	446255-22-7
	(d) 2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183)	207122-16-5
	(e) other hexa- and heptabromodiphenyl ethers present in commercial octabromodiphenyl ether	
1.3	Pentachlorobenzene (PeCB)	608-93-5
1.4	Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial penta-BDE):	
	(a) 2,2',4,4'-tetrabromodiphenyl ether (BDE-47)	5436-43-1
	(b) 2,2',4,4',5-pentabromodiphenyl ether (BDE-99)	60348-60-9
	(c) other tetra- and pentabromodiphenyl ethers present in commercial pentabromodiphenyl ether	

Note: Part 1 of Schedule 1 to the HCCO will be amended to include the above chemicals listed in Annex A of the Stockholm Convention.

2. **Annex B**

Item	Chemical		CAS Registry Number
2.1	Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride:		
	(a)	perfluorooctane sulfonic acid (PFOS)	1763-23-1
	(b)	salts of perfluorooctane sulfonic acid, for example:	
	(i)	potassium perfluorooctane sulfonate	2795-39-3
	(ii)	lithium perfluorooctane sulfonate	29457-72-5
	(iii)	ammonium perfluorooctane sulfonate	29081-56-9
	(iv)	diethanolammonium perfluorooctane sulfonate	70225-14-8
	(v)	tetraethylammonium perfluorooctane sulfonate	56773-42-3
	(vi)	didecyldimethylammonium perfluorooctane sulfonate	251099-16-8
	(c)	perfluorooctane sulfonyl fluoride (PFOSF)	307-35-7

Note: Part 1 of Schedule 2 to the HCCO will be amended to include the above chemicals listed in Annex B of the Stockholm Convention.