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For discussion

**Draft Hong Kong Implementation Plan under the
Stockholm Convention on Persistent Organic Pollutants**

PURPOSE

This paper seeks views of the Council on the draft Hong Kong Implementation Plan (HKIP) that we need to submit to the Central People's Government (CPG) in April 2006 in relation to the Stockholm Convention on Persistent Organic Pollutants (POPs).

BACKGROUND

2. The Stockholm Convention is a global treaty to protect human health and the environment from POPs, i.e. chemicals that remain intact in the environment for long periods, move long distances in the global environment, accumulate in the fatty tissue of living organisms and are toxic to humans and the wildlife. At present, the Stockholm Convention controls 12 POPs including pesticides (aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, hexachlorobenzene (HCB), mirex and toxaphene), industrial chemicals (HCB and polychlorinated biphenyls (PCBs)) and unintentionally produced by-products (polychlorinated dibenzo-p-dioxins/polychlorinated dibenzofurans (dioxins/furans). In implementing the Stockholm Convention, governments will take measures to eliminate or reduce the release of POPs into the environment.

3. The Stockholm Convention became effective to the People's Republic of China (PRC) (including the Hong Kong Special Administrative Region (HKSAR)) on 11 November 2004. Under the Convention, the CPG needs to submit a National Implementation Plan, which includes the HKIP, to the Conference of the Parties of the Stockholm Convention in November 2006. We are working on the basis that the HKIP should be submitted to the CPG in April 2006.

Draft Hong Kong Implementation Plan

4. We have conducted a thorough review on current POPs issues in Hong Kong. The overall assessment of the current POPs pollution in Hong Kong's environment is as follows –

- (a) On a “per capita” basis, the current (2003) annual dioxin/furan release in Hong Kong was generally similar to that of Asian countries, Canada, the US and Australia, and was the 2nd lowest in air emission.
- (b) The level of POPs contamination in the local environment (ambient air, marine water, marine sediment, marine fish and shellfish) was generally comparable to the range reported in most other urban locations in Asia Pacific, Europe, the US and Australia.
- (c) Assessment based on available data indicated that overall, there was unlikely to be any ecological risk of toxicological significance associated with exposure of local marine life to the current level of POPs contamination in the marine environment of Hong Kong.
- (d) Total daily exposure of local residents to dioxins/furans was estimated to be 0.927 pg TEQ/kg bw/day¹, a value falling at the lower end of the World Health Organization's Tolerable Daily Intake of 1-4 pg TEQ/kg bw/day. Dietary intake was the major route, accounting for 98.2% of total exposure of local residents to dioxins/furans.
- (e) Results of human health risk assessment indicated that there was no inhalation nor dietary chronic/carcinogenic risk of toxicological concern associated with a lifetime exposure of Hong Kong residents to current levels of POPs contamination in the local environment and locally consumed foods.
- (f) Levels of POPs in local marine biota were found to be well below national and overseas Food Safety Standards/Action Levels of the Mainland, the US and the EC.

¹ picogram Toxicity equivalents per kilogram body weight per day

5. We have also identified action items in order for the HKSAR to comply with the Stockholm Convention. On the strengthening of the institutional and regulatory systems, we intend to introduce the Hazardous Chemicals Control Bill in 2006 to control and regulate the import, export, manufacture and use of non-pesticide hazardous chemicals that impose potentially harmful or adverse effects on human health or the environment, including those that are subject to the Stockholm Convention or the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade².

6. The Bill prohibits the import, export, manufacture or use of non-pesticide hazardous chemicals, except in accordance with an activity-based permit. The Environmental Protection Department is responsible for processing applications for the issue and renewal of such permits and related matters. Non-pesticide hazardous chemicals to be controlled under the Bill are listed in two schedules to the Bill, as follows -

(a) Schedule 1 Chemicals

Item	Chemical	CAS Registry Number
1.	Hexachlorobenzene (HCB)	118-74-1
2.	Polychlorinated biphenyls (PCB)	1336-36-3

² The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade aims to promote shared responsibility and cooperative efforts among the contracting parties in the international trade of certain hazardous chemicals and pesticides in order to protect human health and the environment from potential harm. The Convention has introduced a mandatory PIC Procedure to monitor and control the import and export of certain hazardous chemicals and disseminate national importing decisions to the contracting parties. The Convention was adopted at the Diplomatic Conference held in Rotterdam on 10 September 1998. It entered into force on 24 February 2004, on the 90th day of deposition of the 50th instrument of ratification. The Convention has become applicable to the PRC since 20 June 2005. The Convention will not apply to the HKSAR until further notice. The Rotterdam PIC procedure applies to 24 pesticides, 4 severely hazardous pesticide formulations and 11 industrial chemicals.

(b) Schedule 2 Chemicals

Item	Chemical	CAS Registry Number
1.	Asbestos - (a) actinolite; (b) anthophyllite; (c) amosite; (d) crocidolite; and (e) tremolite.	77536-66-4 77536-67-5 12172-73-5 12001-28-4 77536-68-6
2.	Polybrominated biphenyls (PBB) – (a) hexabrominated biphenyl; (b) octabrominated biphenyl; and (c) decabrominated biphenyl.	36355-01-8 27858-07-7 13654-09-6
3.	Polychlorinated terphenyls (PCT)	61788-33-8
4.	Tetraethyl lead	78-00-2
5.	Tetramethyl lead	75-74-1
6.	Tris (2,3 dibromopropyl) phosphate	126-72-7

7. The proposed prohibitions are as follows -

- (a) The manufacture of any Schedule 1 chemicals shall be prohibited except for use in laboratory-scale research or as a reference standard, in which case a permit shall be required.
- (b) A permit shall be required for the import into Hong Kong, export from Hong Kong or use of any Schedule 1 chemical.
- (c) A permit shall be required for the import into Hong Kong, export from Hong Kong, manufacture or use of any Schedule 2 chemical.

Each permitted activity (i.e. import, export, manufacture or use) will be specified in a permit which is valid for 12 months.

8. When non-pesticide hazardous chemicals enter or leave Hong Kong, they also need to be covered by an import/export licence issued under the consignment-based licensing system under the Import and Export Ordinance (Cap 60), in the same way as pesticides which are controlled under the Pesticides Ordinance (Cap 133) (administered by the Agriculture, Fisheries and Conservation Department) and the Import and Export Ordinance (Cap 60). For the purpose of complying with the Stockholm Convention, we need to put in place an effective import/export regulatory system for non-pesticide hazardous chemicals, including those that are in transit. In this regard, the Import and Export (General) Regulations (Cap 60A) will be amended as part of the Bill. Authority will be delegated under the Import and Export Ordinance (Cap 60) to the Director of Environmental Protection and his staff so that they can deal with the issue of licences and imposition of conditions.

9. On the validation and refinement of the POPs inventories, we consider it vital that the inventories are robust and reliable. A number of proposed action items have been identified to address data gaps in source inventories on POPs, environmental levels of POPs, dietary exposure to POPs, and human body burden of POPs.

10. On measures to reduce emission of unintentionally produced POPs, i.e. dioxins/furans, we are pursuing various measures as part of the HKSARG's environmental portfolio in accordance with the established timetable. These measures address emission of dioxin/furans to air, emission of dioxins/furans to the marine environment, and integrated environmental waste management.

11. On public awareness, we have proposed action items to raise the local awareness of POPs-related issues.

12. On regional collaboration with the Mainland, Hong Kong is significantly influenced by the movement of toxic pollutants, POPs in particular, within the Pearl River Delta region via both the atmospheric and water pathways. In this regard, we have proposed action items to strengthen such collaboration.

13. Details are set out in the draft HKIP at the Annex.

PUBLIC CONSULTATION

14. An initial survey conducted by EPD in early 2005 indicates little current trading and/or domestic use of the chemicals covered by the Stockholm Convention in Hong Kong. We held a stakeholder consultation workshop on the preparation of the draft HKIP on 18 November 2005. In gist, the stakeholders appreciated the quality of the work that underpinned the preparation of the draft HKIP, and considered that the Government should focus on (a) improving the routine food surveillance programme and assessing the dietary exposure of the local population to POPs; (b) strengthening regional collaboration with the Mainland on the POPs front; and (c) facilitating capacity building by working with the local academics. Separately on the Hazardous Chemicals Control Bill, we are consulting the relevant trade and stakeholders before finalizing the Bill for introduction into the Legislative Council.

15. Council Members are invited to comment on the draft HKIP.

Environmental Protection Department
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