

立法會 *Legislative Council*

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Bills Committee on Hazardous Chemicals Control Bill

Background brief prepared by the Legislative Council Secretariat

Purpose

This paper gives a summary of discussion by the Panel on Environmental Affairs (the Panel) regarding the proposals to control and regulate the import, export, manufacture and use of non-pesticide hazardous chemicals^{Note1} that impose potentially harmful or adverse effects on human health or the environment, including those that are subject to the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention) and the Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention).

Introduction

2. The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POPs)^{Note2} by restricting the manufacture and use of POPs with a view to ultimately eliminating them. The Rotterdam Convention 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. A mandatory PIC Procedure has been introduced to monitor and control the import and export of certain hazardous chemicals and disseminate national importing decisions to the contracting parties.

^{Note1} Non-pesticide hazardous chemicals refer to chemical, other than a pesticide, that has potentially harmful or adverse effect on human health or the environment.

^{Note2} Persistent Organic pollutants are chemicals that remain intact in the environment for long periods, move long distances in global environment, accumulate in fatty tissue of living organisms. POPs are carcinogenic and could cause damage to the human nervous system, reproductive system and immune system. The extent of damage would depend on the contamination levels of POPs, the frequency and duration of exposure.

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. While the Rotterdam Convention became applicable to PRC on 20 June 2005, this has not been applied to HKSAR because the latter is not in a position to comply with the Rotterdam Convention without the necessary legislation. In order for HKSAR to comply with the Stockholm Convention and the Rotterdam Convention, the Administration proposes to introduce a Bill to regulate non-pesticide hazardous chemicals that are subject to either Convention, in a way similar to how hazardous pesticides are regulated under the Pesticides Ordinance (Cap. 133) and the Import and Export Ordinance (Cap. 60).

The Bill

4. The main objective of the Bill is to prohibit the import, export, manufacture and use of non-pesticide hazardous chemicals except under and in accordance with an activity-based permit.

Major issues raised by the Panel

5. On 27 February 2006, the Panel received a briefing on the draft Hong Kong Implementation Plan (HKIP), which would form part of the National Implementation Plan to be submitted by the Central People's Government under the Stockholm Convention. In the course of preparation of HKIP, the Administration had conducted a review of the current POP issues in Hong Kong and had identified action items in order for HKSAR to comply with the Stockholm Convention. This included the need for strengthening the institutional and regulatory systems through the introduction of the Bill.

6. Members generally had no objection to the proposed control over POPs given their adverse effect, but were concerned about the impact of the regulatory regime on importers/exporters. They asked if the Administration had notified the affected trades about the proposed control regime, and whether assistance would be provided to facilitate them in customs clearance. The Administration's explanation was that according to the survey conducted by the Environmental Protection Department (EPD) on the impact of the Stockholm Convention in early 2005, there had not been any current trading and/or domestic use of chemicals covered by the Stockholm Convention in Hong Kong. The trades which might be affected by the proposed regulatory regime would be carriers involved in the transportation of chemicals on account of the need to comply with the Rotterdam Convention. EPD had held a consultation workshop on the preparation of the draft HKIP with stakeholders in November 2005. The logistics trade, including carriers involved in the transport of chemicals, would be further consulted on the Bill.

7. Given the health hazards associated with the exposure to POPs and its cumulative effect, question was raised as to why the action plans on the control of POPs had to span over a period of between five to 10 years. According to the Administration, the priority of implementation of the action plans could be categorized as high, medium and low, based on a five-year planning to tie in with the review of the Stockholm Convention conducted every five years. Although a five-year term was set for the action plans, not all of these would take five years to complete. By way of illustration, the enactment of the Bill was expected to take place by the end of this year. Given that dietary intake was the major route of exposure to POPs, the Food and Environmental Hygiene Department had initiated a population-based food consumption survey and the results were expected to be available in 2008. The Total Diet Studies would be conducted when additional resources were available. The Agriculture, Fisheries and Conservation Department had also started the studies of POPs in local water birds and marine mammals on a basis with the available funding. The Administration had also undertaken to provide a progress report on the action plans on the control of POPs to the Panel in due course.

8. The relevant extracts from the minutes of the Panel meeting on 27 February 2006 are given in the **Appendix**.

Council Business Division 1
Legislative Council Secretariat
20 June 2006

**Extracts from the minutes of the
Environmental Affairs Panel meeting on 27 February 2006**

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Action

IV Draft Hong Kong implementation plan under the Stockholm Convention on Persistent Organic Pollutants

(LC Paper No. CB(1) 950/05-06(03) — Paper provided by the Administration

10. The Deputy Director of Environmental Protection (4) (DDEP(4)) gave a power-point presentation on the draft Hong Kong Implementation Plan (HKIP) in relation to the Stockholm Convention on Persistent Organic Pollutants (POPs). The Administration planned to submit HKIP to the Central People's Government in April 2006.

11. Ms Audrey EU enquired about the trades which would be affected by HKIP. Expressing similar view, Mr SIN Chung-kai said that he was not opposed to the introduction of control on POPs, but was concerned about the impact of the proposed regulatory regime on importers/exporters. He asked if the Administration had notified the affected trades about the proposed control regime, and whether assistance would be provided to facilitate them in their customs clearance.

12. DDEP(4) advised that in early 2005, the Environmental Protection Department (EPD) conducted a survey to ascertain the impact of the Stockholm Convention in Hong Kong. Results of the survey indicated that there had not been any current trading and/or domestic use of chemicals covered by the Stockholm Convention in Hong Kong. The trades which might be affected by the proposed regulatory regime would be carriers involved in the transportation of chemicals on account of the need to comply with the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. In November 2005, EPD held a consultation workshop on the preparation of the draft HKIP with stakeholders, such as academics, green groups, professional institutions, trade associations, importers/exporters, public utilities companies and transport corporations. The logistics trade, including carriers involved in the transport of chemicals, would be further consulted on the legislative proposals in the Hazardous Chemicals Control Bill to be introduced in 2006, which aimed to control and regulate the import, export, manufacture and use of non-pesticide hazardous chemicals that were subject to the Stockholm Convention. The control on non-pesticides hazardous chemicals under the Bill would be similar to that of hazardous pesticides under the existing Pesticides Ordinance (Cap. 133) and the Import and Export Ordinance (Cap. 60) (IEO). The Director of Environmental Protection and his staff would be delegated under IEO to deal with the issue of

licences and imposition of conditions. Importers/exporters would be required to apply for import/export licences under IEO in respect of hazardous chemicals controlled by the Bill.

13. In response to Ms Audrey EU's further question on the adverse effects of POPs, DDEP(4) said that POPs were hazardous chemicals which were carcinogenic and could cause damage to the human nervous system, reproductive system and immune system. The extent of damage would depend on the contamination levels of POPs, and the frequency and duration of exposure.

14. Given the adverse effects of POPs, Mr WONG Yung-kan questioned the propriety of disposing of dredged sediments at East Sha Chau, which was designated as a contaminated mud disposal facility since 2004. As these sediments would likely be contaminated with POPs, they would have impact on the marine environment and hence the livelihood of fishermen. However, the affected fishing industry had never been consulted before approval on the designation was given by the Government. As marine sediments were a possible source of POPs, he considered it necessary for the Administration to conduct study on the levels of POPs in marine sediments with a view to ascertaining the impact of the disposal of dredged sediments on the marine environment.

15. DDEP(4) said that most POPs pesticides were detected in a variety of marine fish and shellfish sampled at various sites throughout Hong Kong. DDT, endrin and heptachlor were found to be the major POPs pesticide contaminants in both marine fish and shellfish, while aldrin was prominent only in marine fish. 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, United States and Australia. 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. On the impact of disposal activities at East Sha Chau, DDEP(4) said that the designation of the site as a disposal facility had undergone the mandatory environmental impact assessment. While the site posed no immediate threats to the environment or human health, this would be kept under surveillance through environmental monitoring and auditing. Mr WONG Yung-kan however said that he was not aware of any findings of the aforesaid environmental monitoring and auditing at East Sha Chau, which revealed the lack of coordination on the part of the Administration. He reiterated his objection to the continuation of disposal activities at East Sha Chau given the adverse effect of the contaminated mud on the marine environment.

16. Noting that dietary intake was the major route of exposure to POPs, Ms Audrey EU enquired about the dietary exposure of local residents. DDEP(4) said that the Food and Environmental Hygiene Department (FEHD) had initiated a population-based food consumption survey and the results were expected to be

available in 2008. Based on the outcome of the study, the Administration would be able to estimate the dietary exposure of local residents to POPs and assess the risks involved. Apart from the survey, the Water Supplies Department would consider including all 12 Convention POPs in the routine drinking water surveillance programme. FEHD would also consider setting Food Safety Acton levels on POPs specific to Hong Kong with reference to national and international food safety authorities.

17. The Chairman queried why the population-based food consumption survey had to take three years to complete. The Senior Environmental Protection Officer (SEPO) said that while the ongoing food surveillance programme undertaken by FEHD on the eight food groups (which included cereals, fruits, dairy products, seafoods, meats, poultry, vegetables and eggs) had provided measurements on some of the more common POPs such as dioxin, furans and DDT, no assessment had been made on the levels of all the 12 Convention POPs in all of the eight food groups. In order to assess the dietary exposure of local residents to POPs, FEHD had been requested to include assessment on the levels of all the 12 Convention POPs in its food surveillance programme.

18. The Chairman enquired if there were similar controls on POPs in the highly industrialized Pearl River Delta (PRD) Region and the means of control on the release of unintentionally produced by-products, such as dioxins/furans. DDEP(4) said that a National Implementation Plan was being prepared by the State Environmental Protection Administration in the Mainland for submission to the Stockholm Convention in November 2006. More details on the control of POPs in the Mainland could be made available upon completion of the Plan. In the meantime, there was an academic exchange between Hong Kong and Guangdong in late December 2005 on the control of POPs in the PRD Region. On the control of release of unintentionally produced by-products, DDEP(4) said that actions plans were in place to optimize the use of existing generating capacity of gas-fired power plants and to progressively phase out old coal-fired plants. In addition, dioxin emission standards for crematoria were being tightened and old cremation units were being replaced. More stringent motor vehicle emission standards were being introduced. As at 1 January 2006, Euro IV emission standards were introduced in phases for motor vehicles in Hong Kong. The territory-wide sewage improvement programme, including the Harbour Area Treatment Scheme Stage 2A, would reduce the emission of dioxins/furans to the marine environment. SEPO supplemented that pollutant emissions for crematoria were being controlled under the Air Pollution Control Ordinance (Cap. 311). Consideration was being given to reducing the dioxin/furan emission standard from crematoria from the present one nanogramme per cubic metre to 0.1 nanogramme per cubic metre, which was so far the most stringent standard in the world.

19. Given the health hazard associated with exposure to POPs and its cumulative effect, the Chairman questioned why the actions plans on the control on POPs had to span over a period between five to 10 years. DDEP(4) said that the priority of implementing the action plans to control POPs could be categorized as high, medium

and low, based on a five-year planning to tie in with the review of the Stockholm Convention conducted every five years. Although a five-year term was set for the action plans, not all of these would take five years to complete. By way of illustration, the enactment of legislation on the control of POPs was expected to take place by the end of this year. FEHD had already started the population-based food consumption survey. The Total Diet Studies would be conducted when additional resources were available. The Agriculture, Fisheries and Conservation Department had also started the studies of POPs in local water birds and marine mammals on a project basis with the available funding. At members' request, DDEP(4) agreed to provide a progress report on the action plans on the control of POPs.

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