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**Subcommittee on Genetically Modified Organisms
(Control of Release) (Exemption) Notice**

Background brief prepared for the meeting on 15 May 2012

Purpose

This paper gives a summary of discussions by the Panel on Environmental Affairs (the Panel) on the proposed exemption of genetically modified (GM) papaya and genetically modified organism (GMO) contained in a veterinary vaccine.

Introduction

2. Genetically modified organism (GMO) refers to any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology. The Cartagena Protocol on Biosafety (the Protocol) under the Convention on Biological Diversity was adopted in 2000 to provide for the safe transfer, handling and use of GMOs that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health.

3. The Genetically Modified Organisms (Control of Release) Ordinance (Cap. 607) (the Ordinance) was enacted in March 2010 to give effect to the Protocol, and to control the import and export of GMOs as well as their release into the environment. The Ordinance came into effect on 1 March 2011. Under the Ordinance, release of a GMO or import/export of a GMO that is intended for release into the environment requires prior approval from the Director of Agriculture, Fisheries and Conservation unless exemption from

application of sections 5, 7 or 23¹ of the Ordinance is granted.

The Exemption Notice

4. The objectives of the Exemption Notice are to exempt –

- (a) GM papaya and any GMO that is contained in a veterinary vaccine from the application of section 5 of the Ordinance; and
- (b) two varieties of GM papaya and any GMO that is contained in a veterinary vaccine from the application of section 7 of the Ordinance.

5. According to the Administration, the Agriculture, Fisheries and Conservation Department (AFCD) has conducted a risk assessment on GM papaya given the prevalence of GM papaya growing in the local environment. The risk assessment concludes that it is highly unlikely for GM papaya to pose any adverse biosafety effect to the biological diversity of the local environment mainly because papaya is an exotic species, and that it does not have any close relatives in Hong Kong. As the continued planting of GM papaya by the general public would have no adverse effect on the local biological diversity, it is considered logical and sensible to exempt GM papaya from the application of section 5 of the Ordinance so that any member of the public who wants to grow or maintain GM papaya will not be subject to threats of enforcement. The proposed exemption from section 7 of the Ordinance would also address the main concerns of some local organic farmers as prior approval from AFCD shall be obtained for importing any unexempted varieties of GM papaya for planting in Hong Kong.

6. In view of the recent development in the production of live recombinant veterinary vaccines² and the potential application of such vaccines in Hong

¹ Section 5 provides that a person must not knowingly cause a GMO to be released into the environment or maintain the life of a GMO that is in a state of being released into the environment (subject to conditions specified in section 5(4)).

Section 7 provides that a person must not knowingly import a GMO that is intended for release into the environment (subject to conditions specified in section 7(2)(a) to (c)).

Section 23 provides that a person must not knowingly export a GMO that is intended for release into the environment (subject to conditions specified in section 23(a) and (b)).

² Recombinant veterinary vaccines refer to veterinary vaccines contain one or more GMOs. Live recombinant veterinary vaccines could be imported into Hong Kong for vaccination of pet animals against diseases such as rabies. They could also be used on farm animals (such as poultry or horse) to prevent outbreak of diseases like avian flu and equine influenza.

Kong, AFCD has also conducted a risk assessment on the possible biosafety effect of these vaccines on the local natural environment. It is concluded that the possible adverse effect to the biological diversity of the natural environment posed by live recombinant veterinary vaccines is acceptable, mainly because the recombinant micro-organisms of such vaccines are non-pathogenic in nature and the possibility for the recombinant micro-organisms to spread to the environment is very low. To cater for the need of application of live recombinant veterinary vaccines in emergency situations (such as an outbreak of a pandemic disease), it is considered necessary to grant exemption to live recombinant veterinary vaccines from the application of sections 5 and 7 of the Ordinance.

Major issues raised by the Panel

7. The proposal to exempt GM papayas and GMO contained in live recombinant veterinary vaccine was first discussed at the Panel meeting on 28 November 2011. The Panel generally supported the proposed exemption of GMOs contained in live recombinant veterinary vaccines. However, some members had expressed reservation on the proposed exemption of all kinds of GM papayas, including new varieties of GM papayas to be developed in future. These members pointed out that as the effects of new GM papayas on the biological diversity of local environment were unknown, the proposed blanket exemption would have safety implications and risks. Instead, more specific provisions on the exemption for GM papayas should be set out in the relevant subsidiary legislation. Consideration should also be given to imposing a labeling requirement for GM papayas.

8. In response to comments from the Panel and some interested groups, the Administration had further consulted relevant parties and revised the exemption arrangement to exempt GM papaya from the application of section 5 of the Ordinance, and to exempt only two commercialized varieties of GM papaya from the application of section 7 of the Ordinance. The revised proposal was discussed at the Panel meeting on 26 March 2012. Some members remained concerned about the potential biosafety risk of existing and new varieties of GM papayas to the local biological diversity. Instead of exempting all varieties of GM papayas from the application of section 5 of the Ordinance, these members considered it more prudent for the Administration to include in the relevant subsidiary legislation a schedule of GM papayas such that the schedule could be updated as and when necessary.

Relevant papers

9. A list of relevant papers is in the **Appendix**.

Council Business Division 1
Legislative Council Secretariat
14 May 2012

**Genetically Modified Organisms
(Control of Release) (Exemption) Notice**

List of relevant papers

Council/ Committee	Date of meeting	Paper
EA Panel	28 November 2011	<p>Information paper on "Proposed Exemption under the Genetically Modified Organisms (Control of Release) Ordinance (Cap. 607)" provided by the Administration (LC Paper No. CB(1) 424/11-12(07)) http://www.legco.gov.hk/yr11-12/english/panels/ea/papers/ea1128cb1-424-7-e.pdf</p> <p>Minutes of meeting (LC Paper No. CB(1) 853/11-12) http://www.legco.gov.hk/yr11-12/english/panels/ea/minutes/ea20111128.pdf</p>
EA Panel	26 March 2012	<p>Information paper on "Proposed Exemption under the Genetically Modified Organisms (Control of Release) Ordinance (Cap. 607)" provided by the Administration (LC Paper No. CB(1) 1370/11-12(03)) http://www.legco.gov.hk/yr11-12/english/panels/ea/papers/ea0326cb1-1370-3-e.pdf</p>