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# Report of the Project on 'the Import/Export Management of E-waste and Used EEE'

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Basel Convention Coordinating Center for Asia and the Pacific

(Asia-Pacific Regional Centre for Hazardous Waste Management Training and Technology Transfer)

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# LEGAL DISCLAIMER

International and country national laws shall take precedent where discrepancies regarding the control of UEEE and WEEE may exist between this report and the direction of these laws.

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#### **1** Introduction

1. Globally large quantities of used and waste electrical and electronic equipments (UEEE / WEEE) are generated each year. UEEE and WEEE diverted from final disposal are generally sent to refurbishing and recycling operations. In particular, recycling WEEE has become a lucrative business because electronic products consist of valuable (e.g. gold, copper, etc.) and other (plastic, glass, etc.) materials.

2. However, the associated cost of managing this material in an environmentally sound manner in accordance with stringent laws for environmental protection and occupational health and safety, coupled with the strong foreign demand to purchase this material for resource recovery, has contributed to the movement of this material from developed countries to developing countries, where it may not undergo environmentally sound management and pose an elevated risk to the local environment and human health.

3. Furthermore, some developing countries restrict or prohibit the import of certain types of used and waste electrical and electronic equipment, creating a situation whereby the transboundary movement of this waste or material may be deemed to be illegal.

4. At the Regional Workshop on Preventing of Illegal Transboundary Movement for Hazardous Waste in Asia held in Beijing in March 2007, participants shared a perception that illegal traffic of hazardous waste, especially UEEE and WEEE, could be partly attributed to a different interpretation and the lack of mutual understanding among Asian (and other) countries regarding the concept of "reusable" products and/or "hazardous" waste and material. So participants agreed it is necessary for exporting countries to respect the importing control of the destination countries regarding used/waste electrical and electronic equipment.

5. To facilitate the ability of participated countries to identify and respect the controls of importing Asian countries applicable to UEEE and WEEE, this report was undertaken by Asia-Pacific Regional Centre for Hazardous Waste Management Training and Technology Transfer (BCRC China) within the framework of the Basel Convention Partnership on the environmental sound management of E-waste in Asia-Pacific region

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which was launched in November 2005 in Tokyo, Japan.

6. This report reviews country approaches to controlling the import and export of UEEE and WEEE in 10 Asian countries, namely: Cambodia, China (including Hong Kong SAR), Indonesia, Japan, Malaysia, the Philippines, Republic of Korea, Singapore, Thailand and Vietnam. The types of products investigated as part of this project includes TVs (CRT, LCD and plasma displays), air conditioners, refrigerators, washing machines, personal computers and mobile phones. Other countries' approaches to controlling the import and export of UEEE and WEEE are also included for Australia, Canada and European Union.

7. In January 2008, BCRC China and Ex Corporation which was the consulting company to Ministry of the Environment of Japan designed the project framework including the development of a questionnaire to the 10 participating countries. Country responses to the questionnaire are included in the Annex of this report. In addition, accompanying desk studies, country communications, and domestic field investigations included a review of identification criteria for waste/non-waste and hazardous waste/non-hazardous waste. To determine the identification method and criteria used in China, a meeting was held in June 2008 with relevant government ministries of China, including Ministry of Environmental Protection, Administration of Quality Supervision, Inspection and Quarantine, the General Administration of Customs. During this meeting, the regulations and criteria related to the import/export of hazardous waste, especially UEEE and WEEE were discussed as well as the project's framework, methodology and progress.

8. The Regional Workshop on E-waste Identification toward the Prevention of Illegal Transboundary Movement for Hazardous Waste and Other Wastes in Asia was held in Beijing, China during 3-4 November 2008. The workshop was attended by 15 delegates from the competent authorities and/or focal points to the Basel Convention from 9 countries or administrative regions, including Canada, China, China Hong Kong SAR, Indonesia, Japan, Malaysia, the Philippines, Singapore and Thailand. In addition, representatives from the following organizations attended: the Secretariat of the Basel Convention (SBC), Basel Convention Regional Centre for Southeast Asia (BCRC-SEA), General Administration of Quality Supervision, Inspection and Quarantine of China

(AQSIQ), the General Administration of Customs of China (GACC), National Center for Solid Waste Management (NCSWM) of China, National Institute for Environment Studies(NIES) of Japan, Basel Convention Coordinating Center for Asia and the Pacific (BCRC China), and Tsinghua University. The main purpose of this meeting was to share country reports regarding the control of UEEE and WEEE, and to discuss next steps which led to the finalization of this report.

9. The participants acknowledged that the workshop provided useful information that should be included in the final report to further assist countries in identifying and understanding the different national approaches to controlling and preventing the illegal transboundary movement of UEEE and WEEE. It was also recognized that the project report will make a useful contribution to the anticipated work programme of the Basel Convention Partnership for Action on Computer Equipment (PACE) initiative upon its finalization.

10. Participants also acknowledged the importance for all Basel Parties to inform the Secretariat of the Basel Convention of the wastes considered or defined as hazardous under its national legislation and of any requirements concerning transboundary movement procedures applicable to such wastes, including UEEE and WEEE where appropriate. It was also suggested that the information identified in this report be kept up-to-date and made available to Parties in the region with the regional BCRCs coordinating this activity.

# 2 Import and Export Control of UEEE and WEEE in the Ten Studied Asian Countries

#### 2.1 Relevant Control and Administration Bodies

11. There are 32 countries (or regions) that have ratified the Basel Convention among 46 countries (or regions) in Asia-Pacific Region as of July 2008. All 10 countries that participated in this study are Parties to the Basel Convention and have implemented laws and regulations on the control of hazardous waste and e-waste. Control measures applicable to the import and export of UEEE and WEEE in these counties are summarized in Table 1 and briefly discussed in the paragraphs that follow. Generally, hazardous waste and e-waste are controlled by the Environment Administration authority of each country. In Thailand however, the Ministry of Natural Resources and Environment as well as the Ministry of Industry are administrative authorities of hazardous waste and e-waste. And in Japan, hazardous waste and e-waste are jointly controlled by Ministry of the Environment and Ministry of Economy, Trade and Industry

12. According to the provisions of laws and regulations of each country, all countries allow export of hazardous waste and e-waste and generally require permission from designated authorities prior to export. Some countries prohibit import of hazardous waste and e-waste; where import is not prohibited prior informed consent is required for hazardous waste shipments as per the Basel Convention procedures.

#### 2.2 Country Control Practices

#### 2.2.1 Cambodia

13. Cambodia currently does not manufacture EEE products. The import of both new EEE and UEEE is allowed for import to Cambodia for domestic consumption. Under the provisions of 'Sub-Decree on Solid Waste Management', the exportation of the household waste and hazardous waste from the Kingdom of Cambodia to abroad could not be conducted unless there are approval from the Ministry of Environment, and export license from the Ministry of Trade, and permit from the import country; the importation of the household waste and hazardous waste from abroad to the Kingdom of Cambodia shall be strictly prohibited <sup>[1]</sup>.

#### 2.2.2 China

14. China has banned the import of WEEE since 2002. On July 3, 2002, the Ministry of Foreign Trade and Economic Cooperation, Customs General Administration and State Environment Protection Administration (SEPA) jointly issued Notice No. 25 which lists types of goods prohibited for import. The list contains 21 kinds of e-wastes banned for import, including Large House Appliances, Information and Communication Technologies and consumer electronics. In 2008, the Notice No. 25 was replaced by the Catalogue of Solid Waste Forbidden to Import in China (Announcement No. 11, 2008), which prohibits the import of waste mechanical and electronic apparatus

(including their parts and components, scraps, unless exempted by other laws) <sup>[2]</sup>. All UEEE with the exception of used TVs is allowed for import to China. But, all imported UEEE must undergo inspection after arriving at the port of China and require 3C certification (to certify that the equipment is comparable to brand new EEE) from General Administration of Quality Supervision, Inspection and Quarantine. The General Administration of Customs of China and General Administration of Quality Supervision, Inspection and Quality Supervision, Inspection Authority for UEEE in China (3).

#### 2.2.3 Hong Kong Special Administrative Region (HKSAR), China

15. HKSAR has begun its waste import and export control through the 'Waste Disposal Ordinance (WDO)' since 1996. Import and export of hazardous waste, including waste electrical and electronic appliances containing hazardous constituents or components, are control through a permit system. For genuine secondhand electrical and electronic appliances which are imported / transshipped for direct re-use are not subject to the permit control. In light of the global concern of illegal transboundary movements of electronic waste, the Environment Protection Department (EPD) of Hong Kong has been exercising stringent import/export control on such waste in recent years. Suspected waste cargoes coming to or leaving Hong Kong will be fully inspected and offenders of the WDO will be prosecuted. Importers and exporters of used electrical or electronic appliances with hazardous components or constituents are advised to confirm whether their shipments will require a waste import/export permit from the EPD before shipment. However, importers and exporters are strongly advised to take the following measures before importing or exporting into/from Hong Kong any such appliances to facilitate the import/export compliance checking:

(i) Select only those used appliances of reasonably new models and ages with genuine demand in the second-hand market of the importing countries. In any case, it is advisable to avoid any unit with over 5 years from the date of manufacturing;

(ii)Arrange examination, repairing, retrofitting and testing of the used computer monitors and televisions to ensure that these used appliances are in good conditions meeting both the technical specifications and safety standard of the destined countries and suitable for reuse as such direct by consumers before they are exported. In any case, no damaged or non-working items should be allowed in the shipment;

(iii)Properly record the examination, repairing and testing results of each of the used appliances, which should include their brand names, models and serial numbers, years of manufacturing, problems/damages found and fixed, dates and results of compliance testing conducted. Testing should be done not more than 2 years before shipment to the importing country. All the above information should be made available to the concerned control authority for inspection and checking upon request;

(iv)Provide proper and sufficient individual protective packaging to each of the used appliances to protect the whole unit from damage during transportation and the associated loading and unloading operations. There should not be any direct physical contact between each unit and the packaging should be able to withstand the weight of the units placed on it. There should be legible labels or signs (e.g. with unique serial numbers) on the packaging to identify each item. The photos of the packaging should be provided, if considered necessary, to the relevant control authority for advice; and

(v)Make prior contractual arrangement with concerned parties in the importing countries to secure proper second-hand outlet. Confirm with the control authorities of the importing countries on whether import of used appliances is allowable and whether the consignee or buyer is permitted to import them for sale as second-hand commodities <sup>[4]</sup>.

#### 2.2.4 Indonesia

16. WEEE is only allowed for export but prohibited for import in Indonesia. To address UEEE, the Minister of Industry and Trade of Indonesia issued the 'Decree No. 756/MPP/Kep/12/2003 on Import of Non-new Capital Goods' and 'Decree No. 610/MPP/Kep/10/2004 Regarding Amendment of No. 756/MPP/Kep/12/2003'. The non-new capital goods listed in its annex are prohibited for import in Indonesia, including refrigerators, washing machines, TV, phones, air conditioners, printed circuit, valve and thermion tube, cold cathode or photo cathode tube, etc <sup>[5,6]</sup>. Importation of used EEE and e-waste for direct (individual) consumption by consumer is prohibited <sup>[7]</sup>.

#### 2.2.5 Japan

17. Japan has enforced the Fundamental Law for Establishing a Sound Material-Cycle Society to promote comprehensively and systematically the policies for

realizing a Sound Material-Cycle Society and thereby helps ensure healthy and cultured living for both the present and future generations of the nation since January 2001. It provides an umbrella framework of the relevant waste management laws of the country. The Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes was entered into force in 1993, which stipulates the necessary import/export procedures of hazardous waste to comply with the Basel Convention requirements <sup>[8]</sup>. The Waste Management and Public Cleansing Law was (originally enacted in 1970) also amended and put into force to regulate import and export of waste in 1993 <sup>[9]</sup>.

#### 2.2.6 Republic of Korea

18. In Republic of Korea, specific regulations applicable to UEEE and WEEE do not currently exist, however a related law, entitled "Waste Control Act", enacted in December 1986 and was amended several times until 2007. According to Articles 24, any person who desires to export or import general wastes shall notify the Minister of Environment; Wastes imported must be disposed by the importers themselves, or consigned to treat by those who install and operate waste treatment facilities, or authorized waste-handlers; Information on transferring imported wastes must be input to the electronic processing system; Imported wastes are prohibited from re-importing just the way they are <sup>[10]</sup>.

#### 2.2.7 Malaysia

19. Malaysia has formulated and enforced the Environmental Quality Act, 1974 (EQA 1974). Under this Act, several regulations for the control of scheduled wastes (hazardous wastes) management in Malaysia were enacted. The Guidelines for the Classification of Used Electrical and Electronic Equipment entered into force in January 2008, which prohibits the import of WEEE and export for the purpose of disposal. Waste generators are allowed to export waste for recycling, recovery or treatment provided prior written consent are obtained from the importing state <sup>[11]</sup>.

#### 2.2.8 The Philippines

20. In the Philippines, DENR (Department of Environment and Natural Resources) Administrative Order (DAO) 94-28 "Interim guidelines for the importation of recyclable materials containing hazardous substances" allows the import of electronic assemblies and scrap with the condition that residuals from recycling of materials which contain hazardous substances without any acceptable method of disposal in the Philippines must be shipped back <sup>[12]</sup>.

#### 2.2.9 Singapore

21. In Singapore, export, import or transit waste requires a permit from the Pollution Control Department (PCD) of Singapore. According to the provisions of the 'Hazardous Waste (Control of Export, Import, and Transit) Act', import and export of waste should follow the following procedures. A person who has one or more import/export proposals in relation to hazardous or other waste may apply to the Director for a permit authorizing the import/export of the waste. The application shall be in the form approved by the Director and set out, or be accompanied by; such information related the proposals as is required by the form. The application may deal with 2 or more import/export proposals in relation to hazardous or other waste only if the following matters are common to each proposal: (i) The physical and chemical characteristics of the waste; (ii) The route over which the waste is to be transported; and (iii) The sender/receipt of the waste. Import/export of UEEE are allowed if there are documents to support appliances are in working condition and suitable for reuse. Export of UEEE that are not suitable for re-use are prohibited. Import of UEEE for the purpose of dismantling and re-export of the dismantled components are prohibited <sup>[13]</sup>.

#### 2.2.10 Thailand

22. Both UEEE and WEEE are controlled under Hazardous Substance Act B.E. 2535 in Thailand. UEEE can be imported only under a subordinate law for import control of UEEE. Import of UEEE in Thailand is allowed only for activities of reuse, repair/ refurnish as its original purposes, disassembly and recycle/ recovery with different conditions from Parties. 32 items of UEEE require import permits from Ministry of Industry <sup>[14]</sup>. WEEE can be imported and exported under a subordinate law and Basel procedures.

#### 2.2.11 Vietnam

23. In January 2006, Vietnam promulgated the Implementation Rules for the Law on Trade (No.12/2006/ND CP) and ban import of waste materials, toxic chemical substances and second-hand commodities, including electronic, cooling and home

appliances <sup>[15]</sup>. In Circular No. 12/2006/TT-BTNMT, export of hazardous waste shall follow Basel Convention procedure. In 2006, the Vietnamese Ministry of Post and Telecommunications issued a decree, banning the import of seven categories of second hand electronic and communications products, including computers, CD duplicators and copiers, data processors, calculators, ticket issuing equipments, automatic data processing devices and other intelligence devices, transmitting devices for wireless telephones, telegrams and audiovisuals, cameras and voice recorders. The decree also prohibits the import of spare and component parts for the aforesaid products.

| Country/               | Administration                                     |   |  |   | UEEE   |  |
|------------------------|--|---|--|---|--|--|
| Region                 | bodies   | ImportApplicable lawsControl                              |  | Import Control  | Applicable laws  |  |
| Cambodia               | Ministry of<br>Environment                         | Banned  | <ul> <li>Sub-Decree on Solid Waste Management</li> <li>Inter Ministerial Declaration on SWM In Cities and<br/>Provinces</li> </ul>   | Allowed   | No   |  |
| China                  | Ministry of<br>Environmental<br>Protection         | onmental of Environmental Pollution Caused by Solid Waste |  | Allowed except used<br>TV, UEEE requires 3C<br>certification    | <ul> <li>Administrative Method on Inspection and<br/>Supervision of Imported Used Mechanical<br/>and Electrical Products</li> <li>Measures for Administration of Import of<br/>Specified Used Mechanical and Electrical<br/>Products (Order No.5, 2008)</li> <li>Catalogue of Import of Specified Used<br/>Mechanical and Electrical Products<br/>(Announcement No. 37, 2008)</li> </ul> |  |
| Hong<br>Kong,<br>China | Environment<br>Protection<br>Department            | Permit<br>system  | <ul> <li>Waste Disposal Ordinance 1980 (WDO)</li> <li>Advice on import and export of used electrical and electronic appliances having hazardous components or constituents</li> </ul>  | For the purpose of<br>import, all UEEE is<br>classified as WEEE | • Advice on import and export of used electrical and electronic appliances having hazardous components or constituents   |  |
| Indonesia              | Impact<br>Management<br>Agency, Ministry<br>of the |   | <ul> <li>Act Number 23 Year 1997 Regarding Environmental<br/>Management, Article 20 &amp; 21</li> <li>Presidential Decree Number 61 /1993 Basel<br/>Convention Ratification</li> <li>Ministerial Decree Number 231/MPP/Kp/07/1997<br/>regarding Import Procedure of Waste</li> </ul> | Banned  | <ul> <li>Decree No. 756/MPP/Kep/12/2003 on<br/>Import of Non-new Capital Goods'</li> <li>Decree No. 610/MPP/Kep/10/2004<br/>Regarding Amendment of No.<br/>756/MPP/Kep/12/2003'</li> </ul>   |  |
| Japan                  | Ministry of the<br>Environment                     | PIC procedure   | <ul> <li>Waste Management and Public Cleansing Law</li> <li>Law for the Control of Export, Import and Others of<br/>Specified Hazardous Wastes and Other Wastes</li> </ul>   | Allowed   | No   |  |

## Table 1 Overview of country control measures applicable to the import and export of UEEE and WEEE

| Republic<br>of Korea   | Resource<br>Recirculation<br>Policy Division,<br>Ministry of<br>Environment          | License<br>from MOE   | <ul> <li>Waste Control Act</li> <li>Act on the Control of Transboundary Movement of<br/>Hazardous Wastes and Their Disposal (Basel Convention)</li> <li>Act for Resource Recycling of Electrical and<br/>Electronic Equipment and Vehicles</li> </ul>  | Allowed   | No  |
|------------------------|--|---|--|---|---|
| Malaysia               | Department of<br>Environment,<br>Ministry of<br>Natural Resources<br>and Environment | Banned  | <ul> <li>Environmental Quality Act, 1974</li> <li>Environmental Quality (Scheduled Wastes)<br/>Regulation 2005</li> <li>Guidelines for the Application of Special Management<br/>of Scheduled Waste</li> </ul>   | Consent by DOE  | • Guidelines for the classification of used<br>electrical and electronic equipment in<br>Malaysia, January 2008                               |
| The<br>Philippine<br>s | Department of<br>Environment and<br>Natural Resources                                | Permit<br>needed• Toxic Substances and Hazardous and Nuclear Wastes<br>Control Act of 1990 (Republic Act No. 6969)• DENR Administrative Order 2004-36 (Implementing<br>Rules and Regulations for RA 6969)• DENR Administrative Order 1994-28 (Interim<br>Guidelines for the Importation of Recyclable Materials<br>Containing Hazardous Substances)• DENR Administrative Order 1997-28 (Amending<br>Annex A of DAO 1994-28)• DENR Administrative Order 2004-27 (Amending<br>Annex A of DAO 1994-28) |  | Permit needed   | • DENR Administrative Order 1994-28<br>(Interim Guidelines for the Importation of<br>Recyclable Materials Containing Hazardous<br>Substances) |
| Singapore              | National<br>Environment<br>Agency  | Permit from<br>PCD  | • Hazardous Waste (Control of Export, Import, and<br>Transit) Act and Hazardous Waste (Control of Export,<br>Import and Transit) Regulation  | Permit from PCD   |   |
| Thailand               | Ministry of<br>Industry<br>Ministry of<br>Natural Resources<br>and Environment       | PIC<br>procedure  | <ul> <li>Hazardous Substance Act B.E. 2535</li> <li>Restriction on the import of waste for 3Rs</li> <li>Notification of Department of Industrial Works<br/>Regarding Condition Imposed on Import Permission of<br/>Chemical Wastes, Listed Hazardous Substances, into the<br/>Kingdom of Thailand</li> </ul> | Import of UEEE is<br>allowed only for<br>activities of reuse,<br>repair/ refurnish as its<br>original purposes,<br>disassembly and<br>recycle/ recovery | used EEE and its parts/ components  |

|         |  |        |  |        | • Notification of Department of Industrial<br>Works Regarding Importing Condition for<br>Used Electrical and Electronic Equipment<br>which is Hazardous Substance into the<br>Kingdom of Thailand |
|---------|--|--------|--|--------|---|
| Vietnam | Hazardous Waste<br>Management<br>Division, Waste<br>Management and<br>Environment<br>Promotion Agency<br>(WEPA), Vietnam<br>Environment<br>Administration<br>(VEA), Ministry<br>of Natural<br>Resources and<br>Environment | Banned | <ul> <li>Implementation Rules for the Law on Trade<br/>(No.12/2006/ND CP)</li> <li>The Regulation of Management of Hazardous<br/>Waste(Decision No. 155/1999/QD-TTg)</li> <li>Decision No.23/2006/QD-BTNMT on the List of<br/>Hazardous Waste</li> </ul> | Banned | Implementation Rules for the Law on Trade<br>(No.12/2006/ND CP)   |

### **3** Criteria for distinguishing UEEE from brand new EEE

24. The following general observations were noted regarding country criteria to distinguish UEEE from brand new EEE:

- some countries (regions) have specific definitions or standards to classify UEEE, such as Indonesia, Japan and Thailand, which are listed in detail;
- some countries (regions) have no specific but related definitions to distinguish UEEE, such as China, which are listed in detail;
- others countries (regions) have no criteria for UEEE, such as Cambodia, Republic of Korea, the Philippines, Singapore and Vietnam;

25. In Cambodia, there is no legal criterion to distinguish UEEE.

26. In China, a specific definition for UEEE does not exist, however related provisions concerning used mechanical and electrical products exist under its 'Administrative Measure on Inspection and Supervision of Imported Used Mechanical and Electrical Products', if any of the following qualifications are met:

(i) the item has been used, but maintains original function and value;

(ii) the item has not been used, but its storage time has exceeded the quality guarantee time;

(iii) the item has not been used, but assemblies have degraded due to long-term storage;

(iv) the item is equipped (both new and worn assemblies);

(v) the item is a large-scale secondhand complete equipment <sup>[3]</sup>.

27. In China, all imported UEEE requires 3C certification (which indicates that is comparable to brand new EEE). In addition the UEEE which are of higher value and environmental risk requires pre-inspection before shipping. Criteria for pre-inspection include the following:

(i) Examine whether the goods are approved by the Chinese government;

(ii) Examine whether the number, specification, and quality of condition are the same as those listed in contract;

(iii) Assessment of security, sanitation and environment requirements.

All UEEE require inspection after arriving at the port of China. Criteria for inspection after arriving China include the following:

(i) Opening-box inspection: Examine name, brand, specification, number, quality and packaging conditions;

(ii) Security inspection: Comply with compulsion standard related to EEE;

(iii) Environmental inspection: Comply with compulsion requirement related to environmental protection <sup>[3]</sup>.

28. Japan adopted a domestic HS coding system to differentiate between UEEE and brand new EEE in January 2008 to monitor statistically the amount and destination of their import and export. Brand new EEE is categorized under "unused EEE packaged for retail sale" and UEEE under "other", respectively <sup>[16]</sup>.

29. In Malaysia, the following criteria has been adopted for brand new EEE:

- recently manufactured; having warranty from the manufacturer;
- not been used;
- properly packed to protect the product from damage during transportation, loading and unloading.

The criteria for UEEE are as follows:

- the date of manufacture should not be more than 3 years (for the purpose of importation);
- still functioning and have certificate of inspection from competent authority or testing body and destined for direct re-use, and not for recycling or recovery or final disposal;
- no physical damage that impairs its functionality or safety a specified in the product specification;

- sufficiently packed to protect the product from damage during its handling <sup>[11]</sup>.

30. In Indonesia, non-new capital goods are capital goods, which are still suitable for reuse or reconditioning (i.e. non-scrap) according to Article 1 of Indonesian 'Decree No. 756/MPP/Kep/12/2003 on Import of Non-new Capital Goods'. Provisions under No. 7/MPP/KEP/1/2000 require producers or importers to register Bahasa language versions of their manuals and warranties for their products with the Ministry of Industry and Ministry of Trade, and to provide the following materials in each package of registered product:

1 Manuals:

- To operate the product;

- To repair or maintaining the product;
- Product specification.

2 Warranty card:

- Free of charge for repair during warranty period;
- Guaranty availability of spare parts;
- Time limit for warranty one year at minimum <sup>[7]</sup>.

31. In the Philippines, there is no specific definition or criteria for distinguishing UEEE from brand new EEE.

32. In Singapore, National Environment Agency has started controlling the import/export of UEEE through its TRADENET system since March 2008. Under TRADENET control system, all declarations for import/export of UEEE will be routed to NEA for processing and clearance. Third-party surveyor certification is required for the import of UEEE. Prior informed consent is required for import/export of EEE that are not suitable for reuse and intended for recycling/recovery. Requirements for import/export of UEEE are identified in Figures 1 and 2<sup>[17]</sup>.

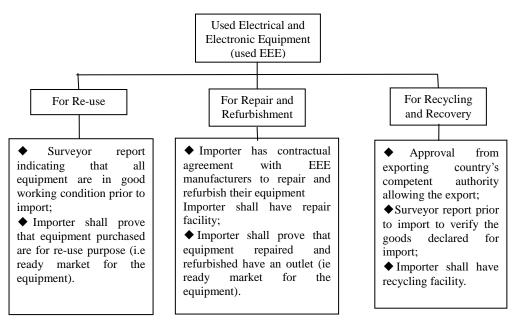


Fig. 1 Import requirements of used EEE in Singapore

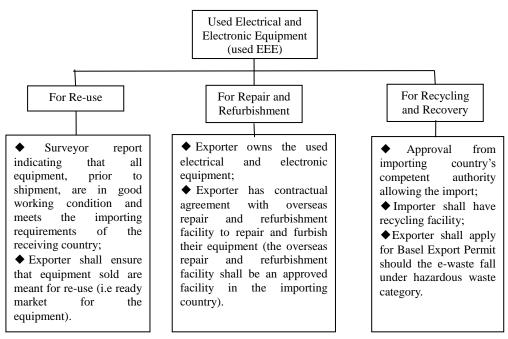


Fig. 2 Export requirements of used EEE in Singapore

33. In Thailand, for import, brand new EEE shall meet compulsory standards (e.g. Thai Industrial Standard and/or energy-efficiency standards). UEEE shall comply with the domestic permit system. Under the 'Criterion for the Import of Used Electrical and Electronics Equipment Considered as Hazardous Substances into the Kingdom of Thailand B.E.2550', defines UEEE as 'Electric and Electronic Equipments which were used but still be workable and keep as its original form or can be repaired, modified, reconditioned in order to be used same as original purposes'. In addition, the Criteria include provisions for 32 types of UEEE and impose requirements on importers of this equipment. Generally, UEEE are allowed for import for the following purposes: re-using, repairing, modification or improving to be used as original purpose, sorting or recycling. The corresponding criterion is as follows:

#### For re-using:

- Special qualifications necessary for unique purpose;
- kept as original manufactured form and spare parts for replacement the broken part;
- equivalent standard to Thailand Industrial Standard for standard industrial product.

For repairing:

- a copy of re-entry paper or a copy of exporting from Customs;
- guarantee paper sending the products out.

For modification or improving to be used as original purpose:

- economic value;
- not over 5 years for copying machine and not over 3 years for others;
- equivalent standard to Thailand Industrial Standard for standard industrial product.

For sorting or recycling:

- follow the Basel Convention<sup>[14]</sup>.

34. In Vietnam, no official information is available to distinguish UEEE from brand new EEE.

| Country/<br>Region     | Criteria                                       | Summary   |
|------------------------|--|---|
| Cambodia               | No   |   |
| China                  | No<br>specific<br>but<br>related<br>definition | Used Mechanical and Electrical Products is one met any of the<br>following qualifications:<br>(i) the item has been used, but maintains original function and value;<br>(ii) the item has not been used, but its storage time has exceeded the<br>quality guarantee time;<br>(iii) the item has not been used, but assemblies have degraded due to<br>long-term storage;<br>(iv) the item is equipped (both new and worn assemblies);<br>(v) the item is a large secondhand whole-set equipment.                                  |
| Hong<br>Kong,<br>China | No   | For the purpose of import, all UEEE is classified as WEEE   |
| Indonesia              | Yes  | Still proper to be used or to be reconditioned for re-function  |
| Japan                  | Yes  | Using domestic HS coding system to differentiate  |
| Republic of Korea      | No   |   |
| Malaysia               | Yes  | <ul> <li>(i) the date of manufacture should not be more than 3 years (for the purpose of importation);</li> <li>(ii) still functioning and have certificate of inspection from competent authority or testing body and destined for direct re-use, and not for recycling or recovery or final disposal;</li> <li>(iii) no physical damage that impairs its functionality or safety a specified in the product specification;</li> <li>(iv) sufficiently packed to protect the product from damage during its handling.</li> </ul> |
| The                    | No   |   |

Table 2 Criteria for distinguishing UEEE from brand new EEE

| Philippines |     |   |
|-------------|-----|---|
| Singapore   | No  |   |
| Thailand    | Yes | which were used but still be workable and keep as its original form or<br>can be repaired, modified, reconditioned in order to be used same as<br>original purposes |
| Vietnam     | No  |   |

## 4 Criteria for distinguishing WEEE from UEEE

35. To distinguish WEEE from UEEE, some countries (regions) have adopted specific definitions or criteria for WEEE, including China, Hong Kong SAR of China, Japan, Republic of Korea, Malaysia and Thailand. Other countries (regions), such as Cambodia, Indonesia, Singapore and Vietnam, have definitions on waste, which could be used to distinguish WEEE. There is no definition on waste in the Philippines.

36. Cambodia currently does not have any regulations related to e-waste and does not distinguish between WEEE and UEEE. In the 'Sub-decree on Solid Waste Management', solid waste is defined as 'hard objects, hard substances, products or refuse which are useless, disposed of, are intended to be disposed of, or required to be disposed of'<sup>[1]</sup>.

37. In China, the 'Administrative Measure on Pollution Prevention and Control of E-waste' (MEP, 2007) defines WEEE as waste electrical and electric products, equipments and its waste assemblies and substances and materials managed as e-waste regulated by Chinese government. It includes discarded products or equipment from industry; discarded products and scraps; waste products or equipment from repairing, reproducing and daily activities; and products or equipments forbidden to produce or import by law <sup>[18]</sup>. The State Environment Protection Administration (SEPA), National Development and Reform Commission, Ministry of Commerce, Customs General Administration and General Administration of Quality Supervision, Inspection and Quarantine jointly issued 'Notice No. 11 in 2006 Identification Guideline of Solid Waste'. According to its identification procedure, two methods can be used to distinguish waste from non-waste.

(1) Distinguish according to treatment operations listed in Table 3 and reasons in Table 4. The substance or material is classified as waste if it must be treated by the operations listed in Table 3 and accord with the reasons listed in Table 4. Table 3 and Table 4 are not irrespective, must combined to distinguish waste.

| No. | Storage or disposal operations   | No. | Utilization operations  |
|-----|--|-----|---|
| D1  | Deposit into or onto land (e.g. landfill, etc.)  | R1  | Use as a fuel (other than in direct incineration) or other means to generate energy |
| D2  | Land treatment   | R2  | Solvent reclamation/regeneration  |
| D3  | Deep injection   | R3  | Recycling/reclamation of metals and metal compounds                                 |
| D4  | Surface impoundment  | R4  | Recycling/reclamation of other inorganic materials                                  |
| D5  | Specially engineered landfill (e.g.<br>placement into lined discrete cells<br>which are capped and isolated from<br>one another and the environment, etc.) | R5  | Regeneration of acids or bases  |
| D6  | Release into a water body including sea-bed insertion  | R6  | Recovery of components used for pollution abatement                                 |
| D7  | Incineration on land   | R7  | Recovery of components from catalysts   |
| D8  | Permanent storage (e.g. emplacement of containers in a mine, etc.)   | R8  | Used oil re-refining or other reuses of previously used oil                         |
| D9  | Blending or mixing prior to submission<br>to any of the operations in this table   | R9  | Land treatment resulting in benefit to agriculture or ecological improvement        |
| D10 | Physicochemical and biological<br>treatment which results in final<br>compounds or mixtures which are<br>discarded by any of the operations                | R10 | Uses of residual materials obtained from<br>any of the operations numbered R1-R10   |
| D11 | Production exposed to natural environment  | R11 | Exchange of wastes for submission to any of the operations numbered R1-R11          |
| D12 | Other storage or disposal operations<br>regulated by law or Chinese<br>government  | R12 | Other utilization operations regulated by<br>law or Chinese government              |

## Table 3 Treatment operations

# Table 4 Reasons why materials are intended for disposal

| Q1 | Production or consumption residues  |  |  |  |  |
|----|---|--|--|--|--|
| Q2 | Off-specification products  |  |  |  |  |
| Q3 | Penalized counterfeit products  |  |  |  |  |
| Q4 | Products whose date for appropriate use has expired   |  |  |  |  |
|    | Materials spilled, lost or having undergone other mishap including any materials, equipment etc. contaminated as a result of the mishap       |  |  |  |  |
| Q5 | Materials contaminated or soiled as a result of planned actions (e.g. residues from cleaning operations, packing materials, containers, etc.) |  |  |  |  |
| Q6 | Contaminated substances or material during production   |  |  |  |  |
| Q7 | Materials, substances or products resulting from remedial actions with respect to contaminated land   |  |  |  |  |
| Q8 | Products losing original function (e.g. exhausted catalysts)  |  |  |  |  |
| Q9 | Substances which no longer perform satisfactorily (e.g. contaminated acid, contaminated solvents, exhausted tempering salts, etc.)            |  |  |  |  |

| Q10 | Residues from pollution abatement processes (e.g. scrubber sludge, bag house dusts, spent filters, etc.) |
|-----|--|
| Q11 | Machining/finishing residues   |
| Q12 | Residues from raw materials processing   |
| Q13 | Other reasons regulated by law or Chinese government   |

(2) Distinguish by characteristics and impact. The following factors need to be considered:

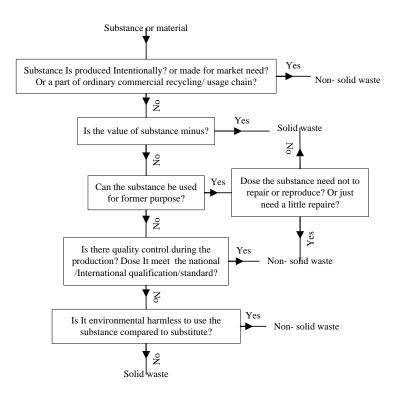
(i) General considerations include: Is the material produced intentionally? Is the material made in response to market demand? Is the overall economic value of the material positive? Is the material part of the normal commercial cycle or chain of utility?

(ii) Characteristics and Specification include: Is the production of the material subject to quality control? Does the material meet well developed nationally and internationally recognized specifications/standards?

(iii) Environmental Impact include: Is the use of the material as environmentally sound as that of a primary product? Does the use of the material in a production process cause any increased risks to human health or the environment greater than the use of the corresponding raw material? Dose the material has environmental harm components which cannot reuse effectively during recycling, while the substitutes don't have these components.

(iv) Use and Destination of the Material include: Is further processing required before the material can be directly used in a manufacturing/commercial application? Is this processing limited to minor repair? Is the material still suitable for its originally intended purpose? Can the material be used for another purpose as a substitute material? Will the material actually be used in a production process? Does the material have an identified use? Can the material be used in its present form or in the same way as a raw material without being subjected to a recovery operation? Can the material be used by its current form or not by the operations listed in Table 3?

38. The flow chart of identification on waste and non-waste as follows can be used on distinguishing waste and non-waste, but the characteristics and impact of each material need to be considered <sup>[19]</sup>.



39. In Hong Kong SAR, China, the 'Waste Disposal Ordinance (WDO)' defines "waste" as any substance or article which is banned. It also stipulates that any substance or article which is discarded or otherwise dealt with as waste is presumed to be waste until the contrary is proved <sup>[20]</sup>. It has recently been ruled by the court that for the purpose of waste import and export control, any article or substance once given up by its original user is considered as waste under the WDO, irrespective whether it is still workable or can be sold for a value. As such, used electrical and electronic appliances having hazardous components or constituents (e.g. CRT, batteries) will likely be regarded as waste and fall within the said control unless they will be re-used for their originally intended purpose without repair. To distinguish disguised WEEE from secondhand EEE, the following aspects should would be considered:

(i) Genuine demand in HK;

(ii) Good conditions and meeting both the technical specifications and safety standard;

(iii)Compliance testing results and certificates;

(iv)Proper and sufficient individual protective Packaging;

(v) Prior contractual agreement with concerned parties<sup>[4]</sup>.

40. In Republic of Korea, "waste" means materials which have ceased to be useful

for the human living or business activities (Article 1 of 'Waste Control Act') <sup>[10]</sup>; WEEE means electrical and electronic equipment which is classified as waste in accordance with the above provision under the provision of Act for Resource Recycling of Electrical and Electronic Equipment and Vehicles <sup>[21]</sup>.

41. In Indonesia, the regulations have no definition of WEEE. However, with interpretation to the current existing regulation on hazardous waste, e-waste might be interpreted as any obsolete electronic and electrical goods or components or parts. Act No. 23/97 regarding Environmental Management and Governmental Regulation Number 18/1999 and Governmental Regulation Number 85/1999 regarding hazardous waste management define 'waste' as the residue of a business and/ or activity <sup>[22]</sup>.

In Japan, the 'Law for the Control of Export, Import and Others of Specified 42. Hazardous Wastes and Other Wastes' and the 'Waste Management and Public Cleansing Law' define waste in different ways, and control transboundary movement of waste independently. Under the former law, "hazardous waste" is defined exactly the same as the definition of hazardous wastes under the Basel Convention from the viewpoints of hazardousness and disposal operations. In addition, the Waste Management Law defines "waste" as "refuse, bulky refuse, ashes, sludge, excreta, waste oil, waste acid and alkali, carcasses and other filthy and unnecessary matter, which are in solid or liquid state (excluding radioactive waste and waste polluted by radioactivity)" from the viewpoint of commercial value. Identification of UEEE from WEEE is based on whether the EEE is destined for direct reuse, not for recycling or final disposal. In practice, Ministry of the Environment and Ministry of Economy, Trade and Industry screen the following documents from importers or exporters in the pre-application consultation services they provide: level of physical damage, loading condition (package), proof of contract, price, HS code, existence of second-hand markets in importing countries, name, address and pictures of retailers in importing countries<sup>[16]</sup>.

43. In Malaysia, WEEE is defined as waste from the assembly of electrical or electronic appliances that consist of components such as accumulators, mercury-switches, glass from cathode ray tubes and other activated glass or polychlorinated biphenyl-capacitors, or contaminated with cadmium, mercury, lead, nickel, chromium, copper, lithium, silver, manganese or polychlorinated biphenyl. WEEE also represents components of waste from the following appliances that can no

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longer be used if the electrical or electronic components are separated from the casing, the casing itself does not fall under the Scheduled Waste category: televisions, radios, air-conditioners, computers, printers, photostat machines, facsimile machines, washing machines, telephones, refrigerators, etc.. UEEE or components are defined as WEEE if it has any of the following criteria:

(a) A defect that materially affects its functionality. For example it does not:

- power up; or
- have a functioning motherboard; or
- perform Basic Input/Output System(BIOS) or internal set-up routines.
- or self-checks fail; or
- communicate with the host; or
- print/scan/copy a test page or the page is not identifiable or readable
- or is blurred or lined; or
- read, write or record/burn.

(b) Physical damage that impairs its functionality or safety, as defined in the specification. Physical damage includes, but not limited to:

- a screen that has physical damage, such as burn marks, or is broken, cracked heavily scratched or marked, or that materially distorts image quality; or
- a signal (input) cable has been cut off or cannot be easily replaced without recourse to opening the case.

(c) a faulty hard disc drive and a faulty Random Access Memory (RAM) and a faulty Video Card; or

(d) batteries made with lead, mercury or cadmium or lithium or nickel that are unable to be charged or to hold power; or

(e) insufficient packaging to protect it from damage during transportation, loading and unloading operations; or

(f) the appearance of the equipment or components are generally worn or damaged, thus reducing the marketability of the equipment; or

(g) the electrical and electrollic equipment or components are destined for recycling or recovery or disposal; or

(h) the electrical and electronic equipment or components are discarded, or are intended or are required to be discarded; or

(i) there is no regular market for the used electrical and electronic equipment or components; or the used equipment or components are old and out dated, and destined for salvaging purpose; or

(k) end-of-life electrical and electronic equipment; or

(1) for the importing purposes, the age of the electrical and electronic equipment or components is not more than three years from the date of manufactured; or

(m) products/goods produced by partially e-waste recovery facilities <sup>[11]</sup>.

44. Under the present Philippine policies, rules and regulations, no definitions exist for either WEEE or UEEE.

45. In Singapore, regulations do not define WEEE. However, "waste" means a substance or object that is proposed to be disposed of; or required by any written law to be disposed of <sup>[23]</sup>.

46. In Thailand, WEEE can be divided by source into 2 categories: industrial waste and household waste. WEEE from industry sector can be generated from the following sources: (1) Production process: WEEE from production process consists of off-spec and scrap waste. Both are either sent to recycle plants or sent overseas for treatment. (2) Used or low–quality components or parts imported from overseas. (3) Off-spec products returned from domestic and oversea customers. When household EEE become obsolete, these products become WEEE when gathered by various collectors. The categories of WEEE mainly include: large home appliances, small home appliances, IT equipments, consumer products, lighting equipments, monitoring & control instruments, electrical & electronic tools, medical instruments, electrical & electronic toys, automatic dispensers <sup>[24]</sup>.

47. In Vietnam, there is currently no official national definition of WEEE, nor any specific regulations and guidelines on e-waste management and disposal. Law on Environmental Protection - amended in 2005 (enter into force in 1 July 2006) defines that wastes are substances in form of solid, liquid, gas, which are discharged production, service, living or other activities <sup>[25]</sup>.

#### Table 5 Criteria for distinguishing WEEE from UEEE

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| Country/<br>Region     | Criteria     | Summary  |  |  |  |  |
|------------------------|--------------|--|--|--|--|--|
| Cambodia               | Not specific | Solid waste is defined as 'hard objects, hard substances, products<br>or refuse which are useless, disposed of, are intended to be<br>disposed of, or required to be disposed of'  |  |  |  |  |
| China                  | Yes          | include discarded products or equipments from industry, discarded<br>products and scraps, waste products or equipments from the<br>repairing, reproducing and daily activities, and products or<br>equipments forbidden to produce or import by law  |  |  |  |  |
| Hong<br>Kong,<br>China | Yes          | 1) Genuine demand in HK; 2) Good conditions meeting both the technical specifications and safety standard; 3) Compliance testing results and certificates; 4) Proper and sufficient individual protective Packaging; 5) Prior contractual agreement with concerned parties.  |  |  |  |  |
| Indonesia              | Not specific | Waste is defined as the residue of a business and/ or activity.  |  |  |  |  |
| Japan                  | Yes          | Identification of UEEE from WEEE is based on whether the EEE is destined for direct reuse, not for recycling or final disposal.  |  |  |  |  |
| Republic<br>of Korea   | Yes          | "waste" means materials which have ceased to be useful for the<br>human living or business activities; WEEE means electrical and<br>electronic equipment which is classified as waste in accordance<br>with the above provision  |  |  |  |  |
| Malaysia               | Yes          | E-waste is defined as waste from the assembly of electrical or<br>electronic appliances that consist of components such as<br>accumulators, mercury-switches, etc.   |  |  |  |  |
| The<br>Philippines     | No           |  |  |  |  |  |
| Singapore              | Not specific | "waste" means a substance or object that is proposed to be<br>disposed of; or required by any written law to be disposed of  |  |  |  |  |
| Thailand               | Yes          | WEEE can be divided by source into 2 categories: industrial waste<br>and household waste. WEEE from industry sector can be<br>generated from the following sources: (1) Production process:<br>WEEE from production process consists of off-spec and scrap<br>waste. (2) Used or low-quality components or parts imported<br>from overseas. (3) Off-spec products returned from domestic and<br>oversea customers. When household EEE become obsolete, these<br>products become WEEE when gathered by various collectors. The<br>categories of WEEE mainly include: large home appliances, small<br>home appliances, it equipments, consumer products, lighting<br>equipments, monitoring & control instruments, electrical &<br>electronic tools, medical instruments, electrical & electronic toys,<br>automatic dispensers. |  |  |  |  |
| Vietnam                | Not specific | 'wastes' are substances in form of solid, liquid, gas, which are<br>discharged production, service, living or other activities   |  |  |  |  |

# 5 Criteria for distinguishing between hazardous and non-hazardous forms of WEEE

48. Normally, WEEE is differentiated as hazardous WEEE and non-hazardous WEEE based on the materials or chemicals it contains. As parties of the Basel Convention, most countries (regions) have regulated or listed some WEEE as being

hazardous under their regulations. Some countries (regions) have modeled definitions to coincide with the Basel Convention, and others have their developed their own definitions.

49. In Cambodia, under the 'Sub-decree on Solid Waste Management', hazardous waste refers to radioactive substances, explosive substances, toxic substances, inflammable substances, pathogenic substances, irritating substances, corrosive substances, oxidizing substances, or other chemical substances which may cause the danger to human (health) and animal or damage plants, public property and the environment. In the annex of this Sub-decree, hazardous waste also includes the following types of WEEE: 1)PCB waste from use of PCB contained in discarded air conditioners, TVs and microwaves; 2) Metal waste and their compounds: Zinc (Zn), Seleninium (Se,) Tin (Sn), Vanadium (V), Copper (Cu), Arsenic (As), Barium (Ba), Cobalt (Co), Nickel (Ni), Antimony (Sb), Berullium (Be), Tullurium(Te), Lead (Pb), Ttanium (Ti),Uranium (U), Silver (Ag); 3) wastes from used or discarded electricity lamps; and 4) Wastes from the production or use of batteries <sup>[1]</sup>.

50. In China, the 'Administrative Measure on Pollution Prevention and Control of E-waste' (MEP, 2007) states that wastes and WEEE can be determined whether or not they are hazardous by using one of the following two methods: the 'National Catalogue of Hazardous Wastes' (MEP, revised in 2008), or 'Identification Standards for Hazardous Wastes' (GB5085.1~ GB5085.7, revised in 2007). Several kinds of hazardous e-waste are listed in the 'National Catalogue of Hazardous Wastes' including WEEE generated from industrial production and other activities; electronic components including lead acid batteries, Ni-Cd batteries, mercuric oxide (HgO) batteries, mercury switches, CRTs, and capacitors which contain polychlorinated biphenyls, and waste printed circuit boards. The previous State Environmental Protection Administration issued 'Notice on Strengthening the Environmental Management of E-waste' (Notice 143, 2003) also identifies many of these devices as hazardous waste. Identification for extraction toxicity is an analysis methodology commonly used for identification of hazardous waste. A criterion for hazardous waste that is employed in this methodology is identified in Table 6<sup>[26]</sup>. Currently, there are three identification laboratories of solid waste in China, which are listed in Table 7<sup>[27]</sup>.

| Items                | Lead | Arsenic | Barium | Beryllium | Cadmium | Chromium<br>VI | Mercury | Nickel | Selenium | Zinc |
|----------------------|------|---------|--------|-----------|---------|----------------|---------|--------|----------|------|
| Concentration (mg/l) | 5.0  | 5.0     | 100    | 0.02      | 1       | 5.0            | 0.1     | 5.0    | 1        | 100  |

Table 6 Criteria of hazardous waste using identification for extraction toxicity

#### Table 7 identification laboratories of solid waste in China

| Name                              | Address                   | Administration            |
|-----------------------------------|---------------------------|---------------------------|
| Chinese Research Academy of       | No. 8, Anwai Dayangfang,  | Ministry of Environmental |
| Environmental Sciences            | Beijing                   | Protection                |
| Laboratory of Customs General     | No. Jia 10, Guanghua      | Customs General           |
| Administration                    | Road, Beijing             | Administration            |
| Regeneration Material Inspection  | Inspection and Quarantine | General Administration of |
| Laboratory of Shenzhen Entry-Exit | Building, No. 1011,       | Quality Supervision,      |
| Inspection and Quarantine Bureau  | Fuqiang Road, Shenzhen    | Inspection and Quarantine |

51. In Hong Kong SAR, China, the Waste Disposal Ordinance (WDO) controls the import and export of waste electrical and electronic appliances containing hazardous constituents or components through a permit system. The control is in line with the Basel Convention. Common types of such controlled waste include waste cathode ray tubes (CRTs) used in computer monitors and televisions, accumulators, batteries, mercury-switches and capacitors containing polychlorinated biphenyl<sup>[20]</sup>.

52. In Indonesia, a definition and criteria for hazardous WEEE is still under consideration. However, national definition of hazardous waste used for the purpose of transboundary movements of waste exists in Indonesia. Act No. 23/97 and Governmental Regulation No. 18/1999 and Governmental Regulation Number 85/1999 regarding Hazardous Waste Management define 'hazardous waste' as the residue of a business and/or toxic material which due to its nature and/or concentration and/or amount, directly as well indirectly, can pollute and/or damage the environment, and/or endanger the environment, health, the continuation of human life and other living creatures <sup>[22]</sup>.

53. Hazardous wastes defined by the 'Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes' in Japan are as follows <sup>[8]</sup>:

A. The following materials which are exported or imported for the disposal operations listed in Annex IV of the Basel Convention

(1) Materials listed in Annex I of the Convention and having one or more

hazardous characteristics listed in Annex III of the Convention;

(2) Materials listed in Annex II of the Convention;

(3) Materials to be notified to the Secretariat of the Convention by the Government of Japan through the designation by the Cabinet Order in accordance with Section 1 or 2 of Article 3 of the Convention; and

(4) Materials informed by the Secretariat of the Convention in accordance with Section 3 of Article 3 of the Convention.

<u>B. Materials, exportation, importation, transportation (including storage) and</u> <u>disposal of which must be regulated based on bilateral, multilateral or regional</u> <u>agreements or arrangements defined in Article 11 of the Basel Convention</u>.

That is, hazardous e-waste subject to the law is interpreted as "waste electrical and electronic assemblies or scraps containing components such as accumulators and other batteries, mercury-switches, glass from CRTs and other activated glass and PCB capacitors, or contaminated with Annex I constituents (e.g., cadmium, mercury, lead, PCB) to an extent that they possess any of the characteristics contained in Annex III as listed in A1180 of Annex VIII of the Basel Convention. In General, waste TVs, computers and mobile phones are hazardous e-waste since they contains hazardous materials such as lead to an extent that exhibits the Annex III characteristics, while waste air conditioners, refrigerators and freezers and washing machines are not hazardous e-waste. The identification standards on hazard is based on the Notification No.1 of Ministry of the Environment (November 6, 1998) that stipulates the Content Standards, Leaching Standards, and pH<2 (acid) or 11.5<pH (alkaline). Some examples of those standards are listed in Table 8.

Table 8 Examples of content and leaching standards on hazard identification inJapan

| Constituents  | Content | Leaching   |
|---|---------|--|
| Lead (Pb, PbO, etc)                                 | 0.1 wt% | 0.01 mg/l  |
| Mercury (Hg, Hg <sub>2</sub> Cl <sub>2</sub> , etc) | 0.1 wt% | 0.0005 mg/l  |
| РСВ   | 50 ppm  | Solid: not detectable<br>Liquid: 0.0005 mg/l or 0.003 mg/l * |

\* Leaching standards for liquid PCB is 0.0005 mg/l for D1-D4 or R10 disposal operations and 0.003 mg/l for other disposal operations.

54. In Korea, pursuant to provisions in Article 2 of the Presidential Decree of the Act on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal, hazardous waste is defined as: (1) Waste listed in Annex I or Annex VIII that exhibit any of the hazardous characteristics listed in Annex III; (2) Waste listed in Annex II; (3) Waste that Korea has notified to the convention secretariat as being hazardous pursuant to Article III Paragraph I and II and Article XI<sup>[28]</sup>.

55. Currently Malaysia does not have any specific criteria to differentiate hazardous WEEE from non-hazardous WEEE.

56. The present Philippine reference in determining hazardous WEEE is included in the prescribed list of categories of hazardous wastes under Table 1-1, Chapter 1 of DAO 2004-36 to include the basic characteristics such as ignitability, corrosivity, reactivity, and toxicity and also under Basel Convention Annexes I, II, III, and VIII (List A)<sup>[29]</sup>.

57. In Singapore, UEEE are classified as hazardous wastes if they are not in working order and cannot be reused. UEEE in working condition and meant for reuse are not classified as hazardous waste <sup>[30]</sup>.

58. In Thailand, UEEE and its parts imported for dismantling, disposal or recycling is hazardous waste and the importation must follow the procedure of Basel Convention<sup>[14]</sup>.

59. Vietnam issued Decision No. 23/2006/QD-BTNMT of Ministry of Natural Resources and Environment (dated 26th December 2006) on issuance of List of Hazardous waste, in which, WEEE is considered as hazardous waste<sup>[31]</sup>.

 Table 9 Criteria for distinguishing between hazardous and non-hazardous forms

 of WEEE

| Country/<br>Region | Criteria | Summary   |
|--------------------|----------|---|
| Cambodia           | Yes      | PCB waste from use of PCB contained in discarded air conditioners,<br>TVs and microwaves; 2) Metal waste; 3) Wastes from production or<br>use of battery  |
| China              | Yes      | Waste electronic and electric products and equipments generated from<br>industrial production and other activities; the electronic components,<br>including lead acid battery, Ni-Cd Battery, mercuric coxide (HgO),<br>mercury switch, CRT, and the capacitors which contains<br>polychlorinated biphenyls, are collected from dismantling, crushing |

|                        |                 | and separating processes, and waste printed circuit boards  |
|------------------------|-----------------|---|
| Hong<br>Kong,<br>China | Yes             | waste cathode ray tubes (CRTs) used in computer monitors and<br>televisions, accumulators, batteries, mercury-switches, transformers<br>and capacitors containing polychlorinated biphenyl and electronic and<br>electrical assemblies contaminated with any substance to an extent<br>which renders the waste as chemical waste. |
| Indonesia              | Not<br>specific | the residue of a business and/or toxic material which due to its nature<br>and/or concentration and/or amount, directly as well indirectly, can<br>pollute and/or damage the environment, and/or endanger the<br>environment, health, the continuation of human life and other living<br>creatures                                |
| Japan                  | Yes             | Follow the definitions of hazardous wastes under the Basel Convention. The identification standards on hazard is based on the Notification No.1 of the Ministry of the Environment (November 6, 1998) that stipulates the Content Standards, Leaching Standards, and $pH<2$ (acid) or 11.5 <ph (alkaline).<="" td=""></ph>        |
| Republic<br>of Korea   | Not<br>specific | 1. Waste listed in Annex I or Annex VIII that exhibit any of the hazardous characteristics listed in Annex III; 2. Waste listed in Annex II; 3. Waste that Korea has notified to the convention secretariat as being hazardous pursuant to Article III Paragraph I and II and Article XI.   |
| Malaysia               | Not<br>specific | Hazardous characteristics of waste include corrosivity, ignitability, reactivity, and toxicity  |
| The<br>Philippines     | Not<br>specific | Include the basic characteristics such as ignitability, corrosivity, reactivity, and toxicity and also under Basel Convention Annexes I, II, III, and VIII  |
| Singapore              | Not<br>specific | used EEE are classified as hazardous wastes if they are not in working order and cannot be reused   |
| Thailand               | Not<br>specific | Used EEE and its parts imported for dismantling, disposal or recycling  |
| Vietnam                | Yes             | WEEE is considered as hazardous waste   |

# 6 Other countries' experience on distinguishing waste/non-waste and hazardous waste/non hazardous waste

#### 6.1 Organization for Economic Cooperation and Development

60. The Organization for Economic Co-operation and Development (OECD) defined 'Waste' in the OECD Decision C(2001)107/FINAL (as amended in 2001 and 2002) as: substances or objects, other than radioactive materials covered by other international agreements, which: (i) are disposed of or are being recovered; or (ii) are intended to be disposed of or recovered; or (iii) are required, by the provisions of national law, to be disposed of or recovered. "Hazardous wastes" are defined as: (i) Wastes that belong to any category contained in Appendix 1 to this Decision unless they do not possess any of the characteristics contained in Appendix 2 to this Decision; and (ii) Wastes that are not covered under sub-paragraph 2. (i) but are defined as, or

are considered to be, hazardous wastes by the domestic legislation of the Member country of export, import or transit. Member countries shall not be required to enforce laws other than their own <sup>[32]</sup>.

#### 6.2 The Council of the European Union

61. The Council of the European Union promulgated Directive 2006/12/EC of 5 April 2006 on waste. In its Article 1, 'waste' shall mean any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard. The European Union promulgated Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment. In which, waste electrical and electronic equipment' or 'WEEE' means electrical or electronic equipment which is waste within the meaning of Article 1(a) of Directive 75/442/ EEC, including all components, subassemblies and consumables which are part of the product at the time of discarding <sup>[33]</sup>.

62. Regulation (EC) No 1013/2006 of 14 June 2006 on shipments of waste was also promulgated subsequently, which establishes procedures and control regimes for the shipment of waste, depending on the origin, destination and route of the shipment, the type of waste shipped and the type of treatment to be applied to the waste at its destination. The regulation (1013/2006/EC) was amended on regulation (1418/2007/EC), which provides control measures for the export of green list waste and came into force on 29 November 2007. Amendment was also made in July 2008 by the regulation EC 740/2008. Under its annex III ('GREEN' LISTED WASTE), some wastes was listed which should be subject to the general information requirements laid down in its article 18, including electrical assemblies consisting only of metals or alloys, electronic scrap (e.g. printed circuit boards, electronic components, wire, etc.) and reclaimed electronic components suitable for base and precious metal recovery <sup>[34]</sup>.

#### 6.3 Australia

63. Australia published the fourth edition of its "Information Paper No 2 Distinguishing Wastes from Non-Wastes under Australia's Hazardous Waste Act" in 2001 to provide guidance to industry and organizations intending to export, import or transit hazardous or other wastes, in which, OECD definition and criteria on distinguishing waste and non-waste was introduced and several typical examples were brought forward for reference. Under 'the Hazardous Waste (Regulation of Exports and Imports) Act 1989', Wastes are substances or objects that are to be disposed of by recycling or final disposal; hazardous wastes are wastes listed in the Basel Convention and other international agreements. Used electronic equipment proposed to be exported or imported may be considered a hazardous waste. The Act regulates the export and import of hazardous wastes, including: waste electrical and electronic assemblies or scrap containing components such as accumulators and other batteries, mercury switches, glass from cathode ray tubes and other activated glass and polychlorinated biphenyl capacitors, or contaminated with constituents such as cadmium, mercury, lead, or polychlorinated biphenyl to an extent that they possess any hazardous characteristics. Use the following Table 10 or Fig. 3 with Annex A and B to help determine whether used electronic equipment, proposed for export, is or is not hazardous waste <sup>[35]</sup>.

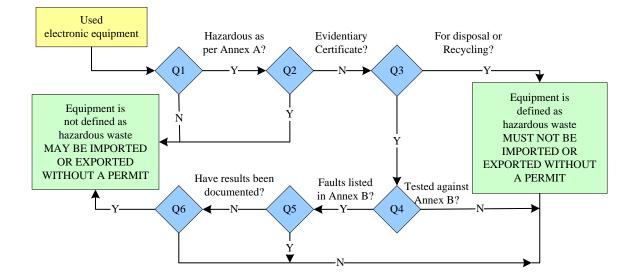


Fig. 3 Flowchart to determine whether UEEE is or is not hazardous waste

| Questions                          | Q1 | Is the equipment potentially hazardous, as defined in Annex A?  |  |  |
|------------------------------------|----|---|--|--|
| relating to status<br>as hazardous | Q2 | Has the Minister made an evidentiary certificate that the equipment in question is not a waste?                   |  |  |
| waste                              | Q3 |   |  |  |
| Questions                          | Q4 | Has the equipment been tested in accordance with Annex B?   |  |  |
| relating to test<br>status         | Q5 | Do the results of testing in accordance with Annex B define the equipment as waste, and hence as hazardous waste? |  |  |
|                                    | Q6 | Have the results of the testing been documented and labeled in a way that conforms to Annex B?                    |  |  |

#### 6.4 Canada

64. In Canada, international obligations under the Basel Convention are met through its *Import and Export of Hazardous Waste and Hazardous Recyclable Material Regulations* (EIHWHRMR) pursuant to the *Canadian Environmental Protection Act 1999* (CEPA 1999). An onus is placed on Canadian exporters and Canadian importers to ensure compliance with this regulation.

65. Definitions for hazardous waste and hazardous recyclable material are identified in Section 1 and Section 2 of the EIHWHRMR respectively. In general, hazardous waste and hazardous recyclable material includes waste or material that:

(a) is destined for disposal operations or recycling operations;

(b)produces leachant exceeding prescribed limits for various substances (determined in accordance with US EPA SW-846, Test Method 1311, Toxicity Characteristic Leaching Procedure);

(c) meets hazard classes as prescribed under the Canadian federal *Transportation of Dangerous Goods Regulations* (e.g. flammable, corrosive);

(d)meets additional criteria for hazardous waste or hazardous recyclable materials as prescribed in various Schedules of the EIHWHRMR; or

(e) according to information Canada has received from the USA or in accordance with the Basel Convention, is defined to be hazardous under the laws of the receiving country and is prohibited for entry by that country.

66. In addition, exclusions under the EIHWHRMR exist for the following types of hazardous waste and hazardous recyclable material:

(a) anything that is exported, imported or conveyed in transit in a quantity of less than 5 kg or 5 L per shipment or, in the case of mercury, in a quantity of less than 50 mL per shipment, other than anything that is included in Class 6.2 of the *Transportation of Dangerous Goods Regulations* is destined for disposal operations or recycling operations;

(b) anything that is collected from households in the course of regular municipal waste collection services;

(c) anything that is part of the exporter's or importer's personal effects or household effects not resulting from commercial use. 67. Additional exclusions under the EIHWHRMR also exist for hazardous recyclable material that is exported to, imported from, or conveyed in transit through a country that is a party to OECD Decision C(2001)107/Final.

68. In general, used and waste electrical and electronic equipment are not subject to control under Canada's EIHWHRMR, unless the following conditions are met:

(a) it is physically broken, shredded or reduced in size, and thereby may produce a toxic leachant subject to the regulations;

(b) it contains used batteries or broken leaded glass;

(c) it contains excessive amounts of other controlled substances (e.g. PCB, mercury)<sup>[36]</sup>.

#### 7 Conclusions

69. The countries in Asia-Pacific Region are aware of the pollution and serious problems caused by e-waste. All participating countries have enacted laws or regulations related to hazardous waste and several countries have specific rules corresponding to e-waste, such as Thailand and China. All participating countries control import of e-waste either banned or permit needed; several countries allowed import of used electric and electronic equipments for the purpose of resale, reuse, recycling etc. For the purpose of import control, most countries have no specific identification rules or standards between waste EEE and used EEE. Only Thailand has issued legal documents, in which detailed import purposes and requirements to the equipments and importers have been described.

70. In order to strengthen management and effectively prevent illegal transboundary movement of e-waste, capacity building of countries in Asia-Pacific countries needs to be enhanced and improved strongly, such as establishment of legal framework, training of customs and enforcement agencies.

71. The regulations or criteria in each country are of great difference, so a common guidance document on distinguishing waste from non-waste, hazardous e-wastes from non-hazardous e-waste might be necessary for the control of illegal traffic of e-wastes. The experiences in some countries or institutions such as OECD, Australia, Japan, Thailand and China might be referred as basis to achieve such as an objective. The Basel Convention Partnership for Action on Computer Equipment

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(PACE) has established an interim project group on environmental sound management criteria. The common guidance document maybe gives certain contribution to the criteria.

72. It is important for all Basel Parties to inform the Secretariat of the Basel Convention of the wastes considered or defined as hazardous under its national legislation and of any requirements concerning transboundary movement procedures applicable to such wastes, including UEEE and WEEE where appropriate. Specifically, providing very clear and detailed information concerning the types of UEEE and WEEE subject to national control will greatly facilitate the ability of other Basel Parties to identify, respect and enforce these provisions.

#### 8 Suggested follow-up activities

73. A common guidance document needs to be developed for the control of illegal traffic and ESM of e-wastes and for contributions to PACE, including criteria on distinguishing waste from non-waste, hazardous e-wastes from non-hazardous e-waste.

74. "National Policy Assessment for ESM of E-waste in Asia-Pacific Countries" needs to be carried out to find out what kind of priority concrete actions each Asian country needs to take for ESM of e-waste.

75. A regional information network on e-wastes needs to be established through the Basel Convention Regional Centers if possible to promote the information exchange among Asia-Pacific countries.

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# Acronyms

| BCRC | China Basel Convention Coordinating Center for Asia and the Pacific |
|------|---|
| CA   | Competent authority   |
| CRT  | Cathode ray tube  |
| EEE  | Electrical and electronic equipment                                 |
| НК   | Hong Kong   |
| HW   | Hazardous waste   |
| LCD  | Liquid crystal display  |
| LHA  | Large Home Appliance  |
| ICT  | Information and Communications Technology                           |
| IT   | Information Technology  |
| OECD | Organisation for Economic Cooperation and Development               |
| PACE | The Basel Convention Partnership for Action on Computer Equipment   |
| PCB  | Printed circuit board   |
| PDP  | Plasma display panel  |
| SAR  | Special administration region                                       |
| STLC | Soluble Threshold Limit Concentration                               |
| TCLP | Toxic characteristics leaching procedure                            |
| TTLC | Total Toxic Threshold Concentration                                 |
| TV   | Television  |
| UEEE | Used electrical and electronic equipment                            |

WEEE Waste electrical and electronic equipment

## Annex: Answer of "Questionnaire Survey on Criteria" from participated countries

#### (1) Questionnaire answer from Cambodia

Cambodia has still not developed all regulation related to EEE waste and still not separate waste and secondhand. It have only sub-decree on solid waste management which provide definition of general waste and hazardous waste and Cambodia is not the country of Export of UEEE.

## (2) Questionnaire answer from China

# Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

| Identification<br>method | Factors to be considered  | Example of answer   | Criteria applicable to<br>all type of EEE   | Reference   |
|--------------------------|---|---|---|---|
| Visual<br>inspection     | Physical damage<br>Packaging condition                                    | <ul> <li>Typical appearance of defect items</li> <li>Example</li> <li>➢ Essential parts are missing (<i>e.g., cables being cut off</i>)</li> <li>➢ Broken, worn, cracked, scratched etc</li> <li>Typical poor packaging condition that its contents</li> </ul>  | China has bannedned importing e-waste since 2002. All imported<br>UEEE are required inspection after arriving at the port of China<br>and need 3C certification as same as brand new EEE.<br>All UEEE are required inspection after arriving at the port of<br>China. Items of inspection after arriving China include the<br>following feature:  | Administrative<br>Measure on<br>Inspection and<br>Supervision of<br>Imported Used<br>Mechanical<br>and Electrical<br>Products,<br>enacted by<br>General<br>Administration<br>of Quality<br>Supervision, |
|                          | Others  | are considered as waste         Example         ➤ No packaging         ➤ Cannot support the weight of items         ➤ Worn-out or torn         ➤ Cannot protect items from damage         If any, describe other typical appearance of items  | <ul> <li>following factors:</li> <li>(i) Opening-box inspection: Examine name, brand, specification, number, quality and packaging conditions;</li> <li>(ii) Security inspection: Comply with compulsion standard related to EEE;</li> <li>(iii) Environmental inspection: Comply with compulsion requirement related to environmental protection</li> </ul>  |   |
| Document<br>check        | Years after being<br>manufactured.<br>Model or technical<br>specification | considered as WEEE         Years after being manufactured considered as obsolete or unmarketable         Example         > 3 years for TV         Technical specification or model considered as obsolete (or inappropriate) in your country         Example         > Monochrome TV         > Computer with Pentium II         > Refrigerator using CFCs | <ul> <li>Some UEEE need pre-inspection before shipping. Items of pre-inspection before shipping include the following factors:</li> <li>(i) Examine whether the goods is the approved one by Chinese government ;</li> <li>(ii) Examine whether the number, specification, quality condition is the same with that listed in contract;</li> <li>(iii) Assess security, sanitation and environment factors primarily.</li> </ul> | Inspection and<br>Quarantine of<br>China on 2002<br>(Chinese only)  |

| Identification<br>method        | Hactors to be considered Hyample of answer                                     |   | Criteria applicable to<br>all type of EEE | Reference |
|---------------------------------|--|---|---|-----------|
|                                 | Record of functionality<br>test or pre- inspection at<br>the country of origin | <ul> <li>Contents of record required (or recommended) to be included</li> <li>Example</li> <li>➤ Kind of functionality test performed</li> <li>➤ Result of test or pre-inspection</li> <li>➤ Name of company responsible for evidence of functionality</li> </ul> |   |           |
|                                 |  | If your country designates or authorizes<br>organization at the country of origin conducting<br>functionality test or pre-shipment inspection, provide<br>information   |   |           |
|                                 | Information of<br>secondhand shops   | <ul> <li>Information that guarantees imported items to be sold for reuse purpose</li> <li>Example</li> <li>➤ Copy of invoice or contract relating sales or transfer of ownership</li> <li>➤ Letter by the owner of shop</li> </ul>                                |   |           |
|                                 | Labeling or signs  | Labels or signs required (or recommended) being<br>put on items or containers for identification<br>Example<br>> Serial number of items in a container  |   |           |
|                                 | Others   | If any, describe other information your country<br>requires (or recommends) being included in attached<br>information document.<br>Example<br>> Photos of items contained in a container  |   |           |
| Simple<br>testing at<br>seaport | Function loss  | <ul> <li>Functions to be tested and its testing method conducted on site to identify waste.</li> <li>Example</li> <li>Power up test</li> <li>Check of functioning of motherboard (PC)</li> <li>Check of internal set up routine (PC)</li> </ul>                   |   |           |
| Others                          | _  | If any, describe any other factors to be considered for distinguishing WEEE from reusable EEE   |   |           |

| Items under exporting regulation and the condition, |  | Type of regulation (bannedned, or requiring written | Procedure requirement for obtaining               | Applicable law or other     |
|---|--|---|---|-----------------------------|
| if any  |  | notification, permission or consent from country of | permission  | regulation                  |
|   |  | origin or importing country)                        |   |                             |
| >   | <ul> <li>Hazardous waste regulated by China;</li> </ul>          | Require written notification and permission or      | Exporters submit required materials to            | Approval for Hazardous      |
| >   | <ul> <li>Hazardous waste and other waste regulated by</li> </ul> | consent from country of origin or importing country | Authority of Environmental                        | Waste Export, enacted by    |
|   | Basel Convention;  |   | Protection $\rightarrow$ Examination by Authority | Ministry of Environmental   |
| >   | <ul> <li>Hazardous waste regulated by importing or</li> </ul>    |   | of Environmental Protection $\rightarrow$ notify  | Protection of China on 2007 |
|   | transiting countries.  |   | the importing country for                         | (Chinese only)              |
|   |  |   | permission $\rightarrow$ Subscribe approval       |                             |
|   |  |   | notification to exporters                         |                             |

### Part II. Criteria for Identification of Hazardous substances contained in WEEE for the Purpose of Import Control

|  | Example of answer  | Criteria applicable to<br>all type of EEE  | Reference   |
|--|--|--|---|
| (1) Controlled<br>hazardous / toxic<br>chemical substances | Hazardous substances contained in WEEE actually<br>controlled as hazardous or toxic.<br>Example<br>> Lead<br>> Cadmium<br>> Mercury<br>> PCB   | <ul> <li>lead,</li> <li>mercury,</li> <li>cadmium,</li> <li>chromium VI,</li> <li>polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDE),</li> <li>other hazardous or toxic substances regulated by government</li> </ul> | Administrative Measure on<br>Pollution Prevention and<br>Control of E-waste,<br>enacted by Ministry of<br>Environmental Protection<br>of China on 2007 (Chinese<br>only)  |
| (2) Analysis<br>methodology                                | <ul> <li>Analysis methodology commonly used for<br/>identification of hazardous substances contained in<br/>WEEE.</li> <li>Example</li> <li>TCLP (Toxicity Characteristic Leaching<br/>Procedure)</li> <li>TTLC (Total Threshold Limit Concentration)</li> <li>STLC (Soluble Threshold Limit<br/>Concentration)</li> </ul> | Identification for extraction toxicity is an analysis methodology commonly<br>used for identification of hazardous waste   | Identification Standards<br>for Hazardous Waste GB<br>5805.1~7-2007, enacted by<br>Ministry of Environmental<br>Protection and General<br>Administration of Quality<br>Supervision, Inspection<br>and Quarantine of China<br>on 2007 (Chinese only) |

|  | Example of answer   | Criteria applicable to<br>all type of EEE   | Reference   |
|--|---|---|---|
| (3) Criteria for<br>hazardous<br>characteristics | Criteria for judging WEEE contains substantial<br>hazardous substances answered in (1) based on the<br>analysis methodology answered in (2)<br>Example<br>(In case of lead) | <ul> <li>Lead: 5.0mg/l;</li> <li>Arsenic: 5.0mg/l;</li> <li>Barium: 100mg/l;</li> <li>Beryllium: 0.02mg/l;</li> <li>Cadmium: 1mg/l;</li> <li>Chromium VI: 5mg/l;</li> <li>Lead: 5.0mg/l;</li> <li>Mercury: 0.1mg/l;</li> <li>Nickel: 5.0mg/l;</li> <li>Selenium: 1mg/l;</li> <li>Zinc: 100mg/l</li> </ul> | Identification Standards<br>for Hazardous Waste-<br>Identification for<br>Extraction Toxicity GB<br>5805.3-2007, enacted by<br>Ministry of Environmental<br>Protection and General<br>Administration of Quality<br>Supervision, Inspection<br>and Quarantine of China<br>on 2007 (Chinese only) |
| (4) Sampling                                     | Parts or components actually sampled for testing<br>hazardous substances.<br><i>Example</i><br>> Batteries<br>> Accumulators<br>> Switches<br>> Capacitors<br>> Glasses     | <ul> <li>Cathode Ray Tube (CRT),</li> <li>Liquid Crystal Display (LCD),</li> <li>Printed Circuit Boards (PCB),</li> <li>wines, cable and plastic case containing PBBs and PBDEs probably</li> <li>Batteries, Accumulators, etc.</li> </ul>  | Technical Policy on Waste<br>Home Electric Appliances<br>and Electric Products,<br>enacted by Ministry of<br>Environmental Protection<br>of China on 2006 (Chinese<br>only)   |

|                | Example of answer   | Cı  | riteria applicable to all type of EEE  |  | Reference  |
|----------------|---|---|--|--|--|
| (5) Laboratory | If your country has laboratories for testing hazardous properties contained WEEE, provide               | Name  | Address  | Administration   | Notification on the<br>Institution List and  |
|                | <ul> <li>relevant information.</li> <li>Name</li> <li>Address and contact info</li> </ul>               | Chinese Research<br>Academy of<br>Environmental Sciences  | No. 8, Anwai<br>Dayangfang,<br>Beijing   | Ministry of<br>Environmental<br>Protection   | Procedure of Character<br>Identification for<br>Hazardous Waste,<br>enacted by Ministry of<br>Environmental Protection |
|                | <ul> <li>Tested items</li> <li>Testing method</li> <li>Approval (or licensing) by government</li> </ul> | Laboratory of Customs<br>General Administration   | No. Jia 10,<br>Guanghua Road,<br>Beijing   | Customs General<br>Administration  | of China on 2007<br>(Chinese only)   |
|                |   | Regeneration Material<br>Inspection Laboratory of<br>Shenzhen Entry-Exit<br>Inspection and Quarantine<br>Bureau | Inspection and<br>Quarantine<br>Building, No.<br>1011, Fuqiang<br>Road, Shenzhen | General<br>Administration of<br>Quality Supervision,<br>Inspection and<br>Quarantine |  |

Note: Brand new EEE, second hand EEE and waste EEE are administrated by different competent authorities separately in China. In order to acknowledge the identification method and criteria in China, a consulting meeting on identification of e-waste transboundary movement participated by related ministries of China was held on June, 2008, including Ministry of Environmental Protection, Administration of Quality Supervision, Inspection and Quarantine, Ministry of Commerce. The regulations and criteria related to import/export of hazardous waste, especially e-waste were consulted and discussed as well as the consultation for the framework and progress of the project. This questionnaire is filled up by BCRC China according to the output of the consulting meeting.

## (3) Questionnaire answer from Hong Kong SAR China

## Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

| Identification           | Easters to be                             |  | Criteria Criteria applicable to specific items   |           |
|--------------------------|---|--|--|-----------|
| Identification<br>method | Factors to be considered                  | Example of answer  | applicable toTVAir<br>all type of EEETVAir<br>LCDWashing<br>conPCMobile<br>  | Reference |
| Visual<br>inspection     | Physical damage<br>Packaging<br>condition | <ul> <li>Typical appearance of defect items</li> <li>Example</li> <li>Essential parts are missing (e.g., cables being cut off)</li> <li>Broken, worn, cracked, scratched etc</li> <li>Typical poor packaging condition that its contents are considered as waste</li> <li>Example</li> <li>No packaging</li> <li>Cannot support the weight of items</li> <li>Worn-out or torn</li> </ul> | Importers and exporters are strongly advised to take the following measures before<br>importing or exporting into/from Hong Kong any such appliances:<br>Provide proper and sufficient individual protective packaging to each of the used<br>appliances to protect the WHOLE unit from damage during transportation and the<br>associated loading and unloading operations. There should not be any direct physical<br>contact between each unit and the packaging should be able to withstand the weight<br>of the units placed on it. There should be legible labels or signs (e.g. with unique<br>serial numbers) on the packaging to identify each item. Photos of the packaging<br>should be provided, if considered necessary, to the relevant control authority for<br>advice; and<br>Select only those used appliances of reasonably new models and ages with genuine<br>demand in the second-hand market of the importing countries. In any case, it is<br>advisable to avoid any unit with over 5 years from the date of manufacturing; |           |
|                          | Others                                    | <ul> <li>Cannot protect items from<br/>damage</li> <li>If any, describe other typical<br/>appearance of items considered<br/>as WEEE</li> </ul>  |  |           |

| Identification    | Factors to be                          |  | Criteria Criteria applicable to specific items   |           |
|-------------------|--|--|--|-----------|
| method            | considered                             | Example of answer  | $ \begin{array}{c c c c c c c c c c c c c c c c c c c $  | Reference |
| Document<br>check | Years after being manufactured.        | Years after being manufactured<br>considered as obsolete or<br>unmarketable<br>Example<br>➤ 3 years for TV | Importers and exporters are strongly advised to take the following measures before<br>importing or exporting into/from Hong Kong any such appliances:<br>Arrange examination, repairing, retrofitting and testing of the used computer<br>monitors and televisions to ensure that these used appliances are in good conditions<br>meeting both the technical specifications and safety standard of the destined<br>countries and suitable for reuse as such direct by consumers before they are exported.<br>In any case, no damaged or non-working items should be alloweded in the shipment; |           |
|                   | Model or<br>technical<br>specification | Technical specification or<br>model considered as obsolete<br>(or inappropriate) in your<br>country        | Properly record the examination, repairing and testing results of each of the used 2 appliances, which should include their brand names, models and serial numbers, years of manufacturing, problems/damages found and fixed, dates and results of compliance testing conducted. Testing should be done not more than 2 years before shipment to the importing country. All the above information should be made available to the concerned control authority for inspection and checking upon request;  |           |
|                   |  | Example<br>➤ Monochrome TV<br>➤ Computer with Pentium II<br>➤ Refrigerator using CFCs                      | Make prior contractual arrangement with concerned parties in the importing countries<br>to secure proper second-hand outlet. Confirm with the control authorities of the<br>importing countries on whether import of used appliances is allowedable and whether  |           |

| Identification<br>method | Factors to be considered   | Example of answer   |   | Reference |
|--------------------------|--|---|---|-----------|
|                          | Record of<br>functionality test<br>or pre-<br>inspection at the<br>country of origin | Contents of record required (or<br>recommended) to be included<br>Example<br>➤ Kind of functionality test<br>performed<br>➤ Result of test or<br>pre-inspection<br>➤ Name of company<br>responsible for evidence<br>of functionality<br>If your country designates or<br>authorizes organization at the<br>country of origin conducting<br>functionality test or<br>pre-shipment inspection,<br>provide information | the consignee or buyer is permitted to import them for sale as second-hand commodities. |           |
|                          | Information of<br>secondhand<br>shops<br>Labeling or signs                           | Information that guarantees<br>imported items to be sold for<br>reuse purpose<br>Example<br>➤ Copy of invoice or contract<br>relating sales or transfer<br>of ownership<br>➤ Letter by the owner of shop<br>Labels or signs required (or<br>recommended) being put on<br>items or containers for<br>identification<br>Example   |   |           |
|                          |  | <ul> <li>Serial number of items in a container</li> </ul>   |   |           |

| Identification                  | Factors to be |   | Criteria Criteria applicable to specific items |                 |     |                   |                 |                      |                 |           |  |
|---------------------------------|---------------|---|--|-----------------|-----|-------------------|-----------------|----------------------|-----------------|-----------|--|
| method                          | considered    | Example of answer   | applicable to all type of EEE                  | TV<br>CRT   LCD | PDP | Air<br>con Refrig | Washing machine | PC<br>Desktop Laptop | Mobile<br>phone | Reference |  |
|                                 | Others        | If any, describe other<br>information your country<br>requires (or recommends) being<br>included in attached<br>information document.                     |  |                 |     |                   |                 |                      |                 |           |  |
|                                 |               | Example<br>➤ Photos of items contained<br>in a container  |  |                 |     |                   |                 |                      |                 |           |  |
| Simple<br>testing at<br>seaport | Function loss | Functions to be tested and its testing method conducted on site to identify waste.  |  |                 |     |                   |                 |                      |                 |           |  |
|                                 |               | <ul> <li>Example</li> <li>➢ Power up test</li> <li>➢ Check of functioning of motherboard (PC)</li> <li>➢ Check of internal set up routine (PC)</li> </ul> |  |                 |     |                   |                 |                      |                 |           |  |
| Others                          | _             | If any, describe any other<br>factors to be considered for<br>distinguishing WEEE from<br>reusable EEE  |  |                 |     |                   |                 |                      |                 |           |  |

| Items under exporting         | Type of regulation (bannedned, or requiring written | Procedure requirement for obtaining | Applicable law or other regulation |
|-------------------------------|---|-------------------------------------|------------------------------------|
| regulation and the condition, | notification, permission or consent from country of | permission                          |                                    |
| if any                        | origin or importing country)                        |                                     |                                    |
| Please refer to the Waste D   | visposal Ordinance Chapter 354 in Hong Kong.        |                                     |                                    |
| A guide to the control on in  | mport and export of waste:-                         |                                     |                                    |
| http://www.epd.gov.hk/epd     | l/english/environmentinhk/waste/guide_ref/files/0   | 7ie_english.pdf                     |                                    |

|                             |  | Criteria applicable |                  | Crite    | eria applica | ble to specific ite | ms         |          |           |
|-----------------------------|--|---------------------|------------------|----------|--------------|---------------------|------------|----------|-----------|
|                             | Example of answer                                | to                  | TV               | Air      | Refrig       | Washing             | P          |          | Reference |
|                             |  | all type of EEE     | CRT LCD          | con      | Reing        | machine             | Desktop    | Laptop   |           |
| (1) Controlled              | Hazardous substances contained in WEEE           |                     |                  |          |              |                     |            |          |           |
| hazardous / toxic           | actually controlled as hazardous or toxic.       | Sample analysis of  | or any other fo  | ollow up | actions v    | would be taken      | if necessa | ry. Each |           |
| chemical substances         | Example  | case must be cons   | sidered on its o | wn mer   | its and de   | cided as the cir    | cumstance  | requires |           |
|                             | > Lead   | at the time.        |                  |          |              |                     |            | •        |           |
|                             | > Cadmium  |                     |                  |          |              |                     |            |          |           |
|                             | <ul> <li>Mercury</li> <li>PCB</li> </ul>         |                     |                  |          |              |                     |            |          |           |
| (2) Analysis                | Analysis methodology commonly used for           |                     |                  |          |              |                     |            |          |           |
| (2) Analysis<br>methodology | identification of hazardous substances contained |                     |                  |          |              |                     |            |          |           |
| methodology                 | in WEEE.   |                     |                  |          |              |                     |            |          |           |
|                             | Example  |                     |                  |          |              |                     |            |          |           |
|                             | > TCLP (Toxicity Characteristic Leaching         |                     |                  |          |              |                     |            |          |           |
|                             | Procedure)                                       |                     |                  |          |              |                     |            |          |           |
|                             | ➢ TTLC (Total Threshold Limit                    |                     |                  |          |              |                     |            |          |           |
|                             | Concentration)                                   |                     |                  |          |              |                     |            |          |           |
|                             | STLC (Soluble Threshold Limit                    |                     |                  |          |              |                     |            |          |           |
|                             | Concentration)                                   |                     |                  |          |              |                     |            |          |           |
| (3) Criteria for            | Criteria for judging WEEE contains substantial   |                     |                  |          |              |                     |            |          |           |
| hazardous                   | hazardous substances answered in (1) based on    |                     |                  |          |              |                     |            |          |           |
| characteristics             | the analysis methodology answered in (2)         |                     |                  |          |              |                     |            |          |           |
|                             | Example  |                     |                  |          |              |                     |            |          |           |
|                             | (In case of lead)                                |                     |                  |          |              |                     |            |          |           |
|                             | > 5.0mg/l (TCLP)                                 |                     |                  |          |              |                     |            |          |           |
|                             | > 1,000mg/kg (TTLC)                              |                     |                  |          |              |                     |            |          |           |
|                             | > 5mg/l (STLC)                                   |                     |                  |          |              |                     |            |          |           |

## Part II. Criteria for Identification of Hazardous substances contained in WEEE for the Purpose of Import Control

|                |  | Criteria applicable |         | Crite | eria applicat | ole to specific ite | ems            |           |
|----------------|--|---------------------|---------|-------|---------------|---------------------|----------------|-----------|
|                | Example of answer                            | to                  | TV      | Air   | Refrig        | Washing             | PC             | Reference |
|                |  | all type of EEE     | CRT LCD | con   | Reing         | machine             | Desktop Laptop |           |
| (4) Sampling   | Parts or components actually sampled for     |                     |         |       |               |                     |                |           |
|                | testing hazardous substances.                |                     |         |       |               |                     |                |           |
|                | Example                                      |                     |         |       |               |                     |                |           |
|                | ➤ Batteries                                  |                     |         |       |               |                     |                |           |
|                | Accumulators                                 |                     |         |       |               |                     |                |           |
|                | > Switches                                   |                     |         |       |               |                     |                |           |
|                | Capacitors                                   |                     |         |       |               |                     |                |           |
|                | ➤ Glasses                                    |                     |         |       |               |                     |                |           |
| (5) Laboratory | If your country has laboratories for testing |                     |         |       |               |                     |                |           |
|                | hazardous properties contained WEEE, provide |                     |         |       |               |                     |                |           |
|                | relevant information.                        |                     |         |       |               |                     |                |           |
|                |  |                     |         |       |               |                     |                |           |
|                | □ Name                                       |                     |         |       |               |                     |                |           |
|                | □ Address and contact info                   |                     |         |       |               |                     |                |           |
|                | □ Tested items                               |                     |         |       |               |                     |                |           |
|                | □ Testing method                             |                     |         |       |               |                     |                |           |
|                | □ Approval (or licensing) by government      |                     |         |       |               |                     |                |           |

## (4) Questionnaire answer from Japan

#### Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

|                          |   |  | Criteria Criteria applicable to specific items   |   |  |   |  |  |  |   |           |
|--------------------------|---|--|--|---|--|---|--|--|--|---|-----------|
| Identification<br>method | Factors to be considered  | Example of answer  | applicable to<br>all type of<br>EEE  | CRT   | LCD  | Air<br>con  | Refrig   | Washing machine  | Desktop  | C<br>Laptop   | Reference |
| Visual<br>inspection     | Physical<br>damage<br>Packaging<br>condition<br>Others                          | <ul> <li>Typical appearance of defect items</li> <li>Example</li> <li>➤ Essential parts are missing (e.g., cables being cut off)</li> <li>➤ Broken, worn, cracked, scratched etc</li> <li>Typical poor packaging condition that its contents are considered as waste</li> <li>Example</li> <li>➤ No packaging</li> <li>➤ Cannot support the weight of items</li> <li>➤ Worn-out or torn</li> <li>➤ Cannot protect items from damage</li> <li>If any, describe other typical appearance of</li> </ul> | Identification of<br>direct reuse, n<br>Environment an<br>documents from<br>they provide: 1<br>contract, price,<br>name, address an<br>Level of physi<br>upgrading but r<br>footnote listed in<br>Loading conditi<br>enough to preve | ot for n<br>nd Minis<br>n import<br>evel of<br>HS code<br>nd pictur<br>ical dar<br>najor rea<br>n Annex<br>on (pacl | recycling<br>stry of E<br>ers or ex<br>physical<br>e, existen<br>res of reta<br>nage: Ef<br>assembly<br>IX of the<br>kage): UI | or final<br>conomy, '<br>porters in<br>damage,<br>ice of seco<br>ailers in in<br>EE which<br>is catego<br>Basel Co<br>EEE requi | disposal.<br>Trade and<br>the pre-ap<br>loading of<br>ond-hand m<br>porting co<br>requires<br>orized as W<br>nvention. | In practice<br>Industry sc<br>oplication co<br>condition (<br>markets in i<br>untries.<br>not repair,<br>VEEE based<br>packaged at | e, Ministry<br>creen the f<br>onsultation<br>package),<br>mporting c<br>, refurbish<br>d on B1110<br>nd loaded | y of the<br>following<br>services<br>proof of<br>countries,<br>ament or<br>0 and its<br>carefully |           |
| Document<br>check        | Years after<br>being<br>manufactured.<br>Model or<br>technical<br>specification | items considered as WEEE<br>Years after being manufactured considered<br>as obsolete or unmarketable<br>Example<br>> 3 years for TV<br>Technical specification or model considered<br>as obsolete (or inappropriate) in your<br>country<br>Example<br>> Monochrome TV<br>> Computer with Pentium II<br>> Refrigerator using CFCs   | CRT monitors n   | eed to be   | e covered  | by cardbo   | bard, etc.   |  |  |   |           |

|                |                              |  | Criteria           |          |                                       | Criteria a | oplicable to | specific ite | ems         |          |           |
|----------------|------------------------------|--|--------------------|----------|---------------------------------------|------------|--------------|--------------|-------------|----------|-----------|
| Identification | Factors to be                | Example of answer  | applicable to      |          | ГV                                    | Air        |              | Washing      | P           | С        | Reference |
| method         | considered                   |  | all type of<br>EEE | CRT      | LCD                                   | con        | Refrig       | machine      | Desktop     | Laptop   | Kelefenee |
|                | Record of                    | Contents of record required (or                              |                    |          |                                       |            |              |              |             |          |           |
|                | functionality                | recommended) to be included                                  |                    |          |                                       |            |              |              |             |          |           |
|                | test or pre-                 | Example  |                    |          |                                       |            |              |              |             |          |           |
|                | inspection at the country of | Kind of functionality test performed                         |                    |          |                                       |            |              |              |             |          |           |
|                | origin                       | Result of test or pre-inspection                             |                    |          |                                       |            |              |              |             |          |           |
|                | ongin                        | Name of company responsible for<br>evidence of functionality |                    |          |                                       |            |              |              |             |          |           |
|                |                              | If your country designates or authorizes                     |                    |          |                                       |            |              |              |             |          |           |
|                |                              | organization at the country of origin                        |                    |          |                                       |            |              |              |             |          |           |
|                |                              | conducting functionality test or pre-shipment                |                    |          |                                       |            |              |              |             |          |           |
|                |                              | inspection, provide information                              |                    |          |                                       |            |              |              |             |          |           |
|                | Information                  | Information that guarantees imported items                   |                    |          |                                       |            |              |              |             |          |           |
|                | of                           | to be sold for reuse purpose                                 |                    |          |                                       |            |              |              |             |          |           |
|                | secondhand                   | Example  |                    |          |                                       |            |              |              |             |          |           |
|                | shops                        | Copy of invoice or contract relating                         |                    |          |                                       |            |              |              |             |          |           |
|                |                              | sales or transfer of ownership                               |                    |          |                                       |            |              |              |             |          |           |
|                |                              | Letter by the owner of shop                                  |                    |          |                                       |            |              |              |             |          |           |
|                | Labeling or                  | Labels or signs required (or recommended)                    |                    |          |                                       |            |              |              |             |          |           |
|                | signs                        | being put on items or containers for                         |                    |          |                                       |            |              |              |             |          |           |
|                |                              | identification   |                    |          |                                       |            |              |              |             |          |           |
|                |                              | Example  |                    |          |                                       |            |              |              |             |          |           |
|                |                              | > Serial number of items in a container                      |                    |          |                                       |            |              |              |             |          |           |
|                | Others                       | If any, describe other information your                      |                    |          |                                       |            |              |              |             |          |           |
|                |                              | country requires (or recommends) being                       |                    |          |                                       |            |              |              |             |          |           |
|                |                              | <i>included in attached information document.</i> Example    |                    |          |                                       |            |              |              |             |          |           |
|                |                              | <ul> <li>Photos of items contained in a container</li> </ul> |                    |          |                                       |            |              |              |             |          |           |
| Simple         | Function loss                | Functions to be tested and its testing method                | Customs condu      | ict an i | nspection                             | of decla   | red cargo    | iointly wit  | th Ministry | v of the |           |
| testing at     | i unetion 1005               | conducted on site to identify waste.                         | Environment by     |          |                                       |            |              |              |             | , 01 110 |           |
| seaport        |                              | Example  | ·                  |          | · · · · · · · · · · · · · · · · · · · |            |              | 0            |             |          |           |
| Ĩ              |                              | $\rightarrow$ Power up test                                  |                    |          |                                       |            |              |              |             |          |           |
|                |                              | <ul> <li>Check of functioning of motherboard</li> </ul>      |                    |          |                                       |            |              |              |             |          |           |
|                |                              | (PC)   |                    |          |                                       |            |              |              |             |          |           |
|                |                              | Check of internal set up routine (PC)                        |                    |          |                                       |            |              |              |             |          |           |

|                |               |  | Criteria           |     |     | Criteria aj | oplicable to | specific ite | ems     |        |           |
|----------------|---------------|--|--------------------|-----|-----|-------------|--------------|--------------|---------|--------|-----------|
| Identification | Factors to be | Example of answer  | applicable to      | ]   | ΓV  | Air         |              | Washing      | P       | С      | Reference |
| method         | considered    |  | all type of<br>EEE | CRT | LCD | con         | Refrig       | machine      | Desktop | Laptop | Reference |
| Others         | _             | <i>If any, describe any other factors to be considered for distinguishing WEEE from reusable EEE</i> |                    | L   |     |             |              |              | L       |        |           |

| Items under exporting regulation and the condition,  | Type of regulation (banned, or requiring                             | Procedure requirement for obtaining   | Applicable law or other  |
|--|--|---|--|
| if any   | written notification, permission or consent                          | permission  | regulation   |
|  | from country of origin or importing country)                         |   |  |
| Materials stipulated in Item 1 (a) of Section 1 of<br>Article 2 of the Law for the Control of Export,<br>Import and Others of Specified Hazardous Wastes<br>and Other Wastes | Require written notification and consent from<br>the State of import | Exporters submit application documents to<br>the Ministry of Economy, Trade and Industry<br>(METI)→METI submits the copy of<br>application documents to the Ministry of the<br>Environment (MOE)→MOE notifies the<br>importing country for consent and receives<br>consent if approved→MOE sends the consent<br>to METI→METI issues export approval and<br>issues export movement documents to<br>exporters<br>Under the Basel Law, MOE needs to confirm<br>that recycling and disposal of exported wastes<br>will be executed in a manner that meets the<br>relevant environmental management<br>standards applicable in Japan. Thereafter<br>MOE notifies METI of the result of its<br>examination. METI is not able to issue export<br>approval without the notification by MOE. | Law for the Control of<br>Export, Import and Others of<br>Specified Hazardous Wastes<br>and Other Wastes<br>Waste Management and<br>Public Cleansing Law |

## Part II. Criteria for Identification of Hazardous Properties contained in WEEE for the Purpose of Import Control

|   |  | Criteria   |  |   | Criteria a   | pplicable t  | o specific iten  | 15  |   |   |
|---|--|--|--|---|--|--|--|---|---|---|
|   | Example of answer  | applicable to  | Т  | TV  |  |  | Washing  | ]]  | PC  | Reference   |
|   | Example of answer  | all type of<br>EEE   | CRT  | LCD   | Air con  | Refrig   | machine  | Desktop   | Laptop  |   |
| (1) Controlled<br>hazardous /<br>toxic chemical<br>substances | Hazardous substances contained in WEEE<br>actually controlled as hazardous or toxic.<br>Example<br>> Lead<br>> Cadmium<br>> Mercury<br>> PCB   | Hazardous wast<br>Specified Hazar<br>hazardous waste<br>interpreted as "<br>such as accumu<br>activated glass an<br>mercury, lead, F<br>Annex III as liste | dous Wa<br>s under the<br>waste eleculators and<br>nd PCB c<br>PCB) to a | stes and C<br>ne Basel Co<br>ctrical and<br>ad other ba<br>apacitors, c<br>an extent th | ther Waste<br>nvention. 7<br>electronic<br>atteries, ma<br>r contamin<br>nat they po | es are exa<br>That is, ha<br>assemblic<br>ercury-swi<br>ated with<br>possess any | actly the sam<br>zardous e-was<br>so or scraps of<br>tches, glass<br>Annex I const<br>of the chara | e as the de<br>ste subject t<br>containing of<br>from CRTs<br>ituents (e.g<br>ccteristics c | efinition of<br>o the law is<br>components<br>and other<br>., cadmium,<br>ontained in | Law for th<br>Control c<br>Export, Impor<br>and Others c<br>Specified<br>Hazardous<br>Wastes an<br>Other Wastes |
| (2) Analysis<br>methodology                                   | <ul> <li>Analysis methodology commonly used for identification of hazardous properties contained in WEEE.</li> <li>Example</li> <li>➤ TCLP (Toxicity Characteristic Leaching Procedure)</li> </ul> | EEE is consider<br>subject to the E<br>hazardous substa<br>of the Ministry o   | red as haz<br>Basel Cor<br>inces thar<br>in the Env                      | zardous wa<br>nvention. If<br>n the conten<br>ironment (N                               | ste listed i<br>not, it al<br>t and elutio<br>November 6                             | n A1180<br>so needs<br>on standard<br>5, 1998)                                   | of Annex VII<br>to prove that  | I, import p<br>WEEE cc<br>n the Notifi  | rocedure is<br>ontains less<br>cation No.1  | Notification<br>No.1 of th<br>Ministry of th<br>Environment<br>(November 6<br>1998)                             |
|   | <ul> <li>TTLC (Total Threshold Limit<br/>Concentration)</li> <li>STLC (Soluble Threshold Limit</li> </ul>  | Constitu   | ents   | Conter  | ıt   | Lead   | ching  |   |   |   |
| (3) Criteria for  | Concentration)<br>Criteria for judging WEEE contains substantial   | Lead (Pb, P  | bO, etc)   | 0.1 wt  | 6  | 0.01   | mg/l   |   |   |   |
| hazardous<br>property.  | hazardous substances answered in (1) based on<br>the analysis methodology answered in (2)  | Mercury (Hg, H   | Hg <sub>2</sub> Cl <sub>2</sub> , et                                     | c) $0.1 \text{ wt}^2$   | 6  | 0.000  | 5 mg/l   |   |   |   |
|   | Example<br>(In case of lead)   | PCB  |  | 50 ppr  | 1  |  | detectable<br>g/l or 0.003 m   | ng/l*   |   |   |
|   | <ul> <li>&gt; 5.0mg/l (TCLP)</li> <li>&gt; 1,000mg/kg (TTLC)</li> <li>&gt; 5mg/l (STLC)</li> </ul>   | * Leaching star<br>disposal operati  |  | -   |  | 0  |  | 0   |   |   |

|                |   | Criteria  |                        |                             | Criteria ap                | oplicable t | o specific iten    | 18           |              |           |
|----------------|---|---|------------------------|-----------------------------|----------------------------|-------------|--------------------|--------------|--------------|-----------|
|                | Example of answer   | applicable to<br>all type of<br>EEE                                       | CRT                    | TV<br>LCD                   | Air con                    | Refrig      | Washing<br>machine | ]<br>Desktop | PC<br>Laptop | Reference |
| (4) Sampling   | <ul> <li>Parts or components actually sampled for testing hazardous properties.</li> <li><i>Example</i></li> <li>&gt; Batteries</li> <li>&gt; Accumulators</li> <li>&gt; Switches</li> <li>&gt; Capacitors</li> <li>&gt; Glasses</li> </ul> | Analytical met<br>Japanese Standa<br>13) for leaching<br>Standard (JIS) H | ardized l<br>g test ar | Leaching Testing the Testin | st No. 13 (l<br>ng Methods | Ministry o  | of the Environ     | ment Notif   | fication No. |           |
| (5) Laboratory | If your country has laboratories for testing<br>hazardous properties contained WEEE, provide<br>relevant information.<br>Address and contact info<br>Tested items<br>Testing method<br>Approval (or licensing) by government                |   |                        |                             |                            |             |                    |              |              |           |

## (5) Questionnaire answer from the Philippines

## Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

Note: This is also aimed for collecting information on Criteria for Distinguishing Secondhand EEE from brand new EEE. So specify if your country banned all importation of the second-hand EEE.

#### For the Bureau of Customs:

| Idantification | Identification Factors to be Criteria applicable to |   |     |     |     | Crite | eria applio | cable to specif | fic items |        |        |           |
|----------------|---|---|-----|-----|-----|-------|-------------|-----------------|-----------|--------|--------|-----------|
| method         | considered  | all type of EEE                               |     | TV  |     | Air   | Refrig      | Washing         | PC        | 5      | Mobile | Reference |
| method         | considered  |   | CRT | LCD | PDP | con   | Kenng       | machine         | Desktop   | Laptop | phone  |           |
| Document       | Information on the                                  | Declaration on the Bill of Lading should be   |     |     |     |       |             |                 |           |        |        |           |
| Review         | Bill of Lading                                      | indicative of whether the materials are brand |     |     |     |       |             |                 |           |        |        |           |
|                |   | new EEE or secondhand EEE                     |     |     |     |       |             |                 |           |        |        |           |

#### For the Environmental Management Bureau:

|                    |                                       | Criteria                 |               |   |     | Crite      | ria applic | able to speci   | fic items   |                   |                 |           |
|--------------------|---------------------------------------|--------------------------|---------------|---|-----|------------|------------|-----------------|---|-------------------|-----------------|-----------|
| Identification     | Factors to be                         | applicable               | TV            |   |     |            |            | PC              | 1   |                   |                 |           |
| method             | considered                            | to<br>all type of<br>EEE | CRT           | LCD   | PDP | Air<br>con | Refrig     | Washing machine | Desktop   | Laptop            | Mobile<br>phone | Reference |
| Document<br>Review | Information on<br>secondhand<br>shops |                          | items to be s | Information that guarantees imported<br>items to be sold for reuse purposes (i.e.<br>contract with shops that will resell the<br>items) |     |            |            |                 | Information that gu<br>items to be sold for<br>(i.e. contract with<br>resell the items) | or reuse purposes |                 |           |

#### NOTES:

1) The Bureau of Customs may conduct physical inspection on any shipment on a random basis or if there is a discrepancy between the items declared and the items that are actually imported.

2) DENR Administrative Order (DAO) 92-28 (Interim Guidelines for the Importation of Recyclable Materials Containing Hazardous Substances) do not allowed the

importation of hazardous waste for disposal. Thus, importation of WEEE for disposal is not alloweded. However, importation of some recyclable materials for recovery, recycling, reprocessing, and reuse may be alloweded only upon obtaining an Importation Clearance from the Environmental Management Bureau.

#### Please specify any exporting criteria and its procedure requirement for export permission.

| Items under exporting regulation and<br>the condition, if any  | Type of regulation (bannedned, or<br>requiring written notification,<br>permission or consent from<br>country of origin or importing<br>country  | Procedure requirement for obtaining permission  | Applicable law or other regulation   |
|--|--|---|--|
| -Wastes classified as hazardous<br>wastes under DENR Administrative<br>Order (DAO) 36, Series of 2004<br>(Procedural Manual for Hazardous<br>Waste Management) | Follows the Basel Convention<br>procedure of notifying the<br>importing country and transit<br>countries, if applicable, of the<br>proposed transboundary<br>movement of hazardous wastes. | Hazardous wastes are alloweded to be exported for<br>treatment/disposal only to countries which are<br>Parties to the Basel Convention on the<br>Transboundary Movement of Hazardous Wastes<br>unless otherwise a bilateral agreement between the<br>Philippines and concerned countries has been | DENR Administrative Order (DAO) 36, Series of<br>2004, "Revising DAO 29 to Further Strengthen<br>the Implementation of RA 6969 (Toxic<br>Substances and Hazardous and Nuclear Wastes<br>Control Act of 1990) and Prescribing the Use of<br>the Procedural Manual for Hazardous Waste |
| -Wastes categorized as<br>hazardous/controlled under the Basel<br>Convention   | Upon receipt of EMB of the<br>consent of the importing<br>country/transit countries, as well<br>as other documentary<br>requirements, the EMB then issue<br>an Export Clearance.           | established.<br>Import and export of hazardous substances are<br>approved by the DENR through the EMB when all<br>the requirements are met. The Export Clearance<br>shall be issued after the consent of the importing<br>country/transit countries have been received by the<br>EMB.             | Management"<br>Basel Convention on the Control of<br>Transboundary Movements of Hazardous Wastes<br>and Their Disposal   |

## (6) Questionnaire answer from Thailand

## Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

| Identification    | Factors to be          |   | Critorio applicable to  |     |     |     | Criteri | ia applica | able to speci | ific items |        |        |           |
|-------------------|------------------------|---|---|-----|-----|-----|---------|------------|---------------|------------|--------|--------|-----------|
| method            | considered             | Example of answer   | Criteria applicable to all type of EEE  |     | ΤV  |     | Air     | Refrig     | Washing       | PO         |        | Mobile | Reference |
|                   |                        |   |   | CRT | LCD | PDP | con     | Kenng      | machine       | Desktop    | Laptop | phone  |           |
| Visual inspection | Physical damage        | Typical appearance of defect items  | Check against invoice and details of documents  |     |     |     |         |            |               |            |        |        |           |
|                   |                        | <ul> <li>Example</li> <li>➤ Essential parts are missing (e.g., cables being cut off)</li> <li>➤ Broken, worn,</li> </ul>  |   |     |     |     |         |            |               |            |        |        |           |
|                   |                        | cracked, scratched<br>etc   |   |     |     |     |         |            |               |            |        |        |           |
|                   | Packaging<br>condition | Typical poor packaging<br>condition that its contents<br>are considered as waste<br>Example<br>> No packaging<br>> Cannot support the<br>weight of items<br>> Worn-out or torn<br>> Cannot protect items<br>from damage | Should be firm and strong<br>and we have the<br>Notification for the<br>transport of dangerous<br>goods which assign types<br>of packagings |     |     |     |         |            |               |            |        |        |           |
|                   | Others                 | If any, describe other<br>typical appearance of<br>items considered as<br>WEEE  |   |     |     |     |         |            |               |            |        |        |           |

| Identification    | Factors to be                          |   | Critorio applicable to                    |     |     |     | Criteri | ia applica | able to speci | fic items |        |        |           |
|-------------------|--|---|---|-----|-----|-----|---------|------------|---------------|-----------|--------|--------|-----------|
| method            | considered                             | Example of answer   | Criteria applicable to<br>all type of EEE |     | TV  |     | Air     | Refrig     | Washing       | PO        |        | Mobile | Reference |
| method            |  |   |   | CRT | LCD | PDP | con     | Kenng      | machine       | Desktop   | Laptop | phone  |           |
| Document<br>check | Years after being manufactured.        | Years after being<br>manufactured considered<br>as obsolete or<br>unmarketable<br>Example<br>➤ 3 years for TV   | Not more than 3 years                     |     |     |     |         |            |               |           |        |        |           |
|                   | Model or<br>technical<br>specification | Technical specification or<br>model considered as<br>obsolete (or<br>inappropriate) in your<br>country<br>Example<br>> Monochrome TV<br>> Computer with<br>Pentium II<br>> Refrigerator using<br>CFCs | No CFCs for cooling<br>equipment          |     |     |     |         |            |               |           |        |        |           |

|                          |  |   |  |     |     |     | Criter | ia applica | able to spec | ific items |          |        |           |
|--------------------------|--|---|--|-----|-----|-----|--------|------------|--------------|------------|----------|--------|-----------|
| Identification<br>method | Factors to be considered   | Example of answer   | Criteria applicable to<br>all type of EEE  |     | TV  |     | Air    | Refrig     | Washing      | PC         | <u> </u> | Mobile | Reference |
| method                   | considered   |   | an type of EEE   | CRT | LCD | PDP | con    | Kenng      | machine      | Desktop    | Laptop   | phone  |           |
|                          | Record of<br>functionality test<br>or pre- inspection<br>at the country of<br>origin | Contents of record<br>required (or<br>recommended) to be<br>included<br>Example<br>> Kind of functionality<br>test performed<br>> Result of test or<br>pre-inspection<br>> Name of company<br>responsible for<br>evidence of<br>functionality<br>If your country designates<br>or authorizes organization<br>at the country of origin<br>conducting functionality<br>test or pre-shipment<br>inspection, provide<br>information | Should segregate some<br>defects out from the<br>merchandises imported<br>into Thailand, we are now<br>amending the Notfication<br>for assignment percentage<br>of recycling of imported<br>products |     |     |     |        |            |              |            |          |        |           |
|                          | Information of secondhand shops  | Information that<br>guarantees imported items<br>to be sold for reuse<br>purpose<br>► Copy of invoice or<br>contract relating<br>sales or transfer of<br>ownership<br>► Letter by the owner of<br>shop  |  |     |     |     |        |            |              |            |          |        |           |

| Identification                  | Factors to be     |   | Criteria applicable to  |     |     |     | Criteri | a applica | ble to speci | ific items |        |        |           |
|---------------------------------|-------------------|---|---|-----|-----|-----|---------|-----------|--------------|------------|--------|--------|-----------|
| method                          | considered        | Example of answer   | all type of EEE   |     | TV  |     | Air     | Refrig    | Washing      | PC         |        | Mobile | Reference |
| ······                          | 1                 |   | •••   | CRT | LCD | PDP | con     | Reing     | machine      | Desktop    | Laptop | phone  |           |
|                                 | Labeling or signs | Labels or signs required<br>(or recommended) being<br>put on items or containers<br>for identification<br>Example<br>➤ Serial number of<br>items in a container   | Should have clear<br>labeling. We have the<br>Notification of<br>Transportation of<br>Dangerous Goods which<br>assign the types of<br>labelling |     |     |     |         |           |              |            |        |        |           |
|                                 | Others            | If any, describe other<br>information your country<br>requires (or recommends)<br>being included in attached<br>information document.<br>Example<br>➤ Photos of items<br>contained in a<br>container  |   |     |     |     |         |           |              |            |        |        |           |
| Simple<br>testing at<br>seaport | Function loss     | <ul> <li>Functions to be tested and its testing method conducted on site to identify waste.</li> <li>Example</li> <li>➢ Power up test</li> <li>➢ Check of functioning of motherboard (PC)</li> <li>➢ Check of internal set up routine (PC)</li> </ul> | Check against documents   |     |     |     |         |           |              |            |        |        |           |

| Identification | Factors to be |   | Critoria applicable to                    |     |     |     | Criteri | a applica | ble to speci | fic items |        |        |           |
|----------------|---------------|---|---|-----|-----|-----|---------|-----------|--------------|-----------|--------|--------|-----------|
| method         | considered    | Example of answer                                   | Criteria applicable to<br>all type of EEE |     | ΤV  |     | Air     | Refrig    | Washing      | PC        | 2      | Mobile | Reference |
| method         | considered    |   | an type of EEE                            | CRT | LCD | PDP | con     | Kenng     | machine      | Desktop   | Laptop | phone  |           |
| Others         | _             | If any, describe any other factors to be considered |   |     |     |     |         |           |              |           |        |        |           |
|                |               | for distinguishing WEEE<br>from reusable EEE        |   |     |     |     |         |           |              |           |        |        |           |
|                |               |   |   |     |     |     |         |           |              |           |        |        |           |

| Items under exporting regulation and the condition, if any     | Type of regulation (bannedned, or requiring written notification, permission or consent from country of origin or importing country) | Procedure requirement for obtaining permission | Applicable law or other regulation |
|--|--|--|------------------------------------|
| In corresponse to List A in Annex 8 of<br>the Basel Convention | Notification of Ministry of Industry Subject: List of Hazardous Substances B.E. 2535   |  |                                    |

### Part II. Criteria for Identification of Hazardous substances contained in WEEE for the Purpose of Import Control

|                   |  | Critaria annliashla ta                    |     | С   | riteria | applicab | le to specif | ïc items |        |           |
|-------------------|--|---|-----|-----|---------|----------|--------------|----------|--------|-----------|
|                   | Example of answer                          | Criteria applicable to<br>all type of EEE | Т   | 'V  | Air     | Refrig   | Washing      | PC       |        | Reference |
|                   |  | all type of EEE                           | CRT | LCD | con     | Kenng    | machine      | Desktop  | Laptop |           |
| (1) Controlled    | Hazardous substances contained in WEEE     | On the process to develop the levels      |     |     |         |          |              |          |        |           |
| hazardous / toxic | actually controlled as hazardous or toxic. | of hazardous substances and include       |     |     |         |          |              |          |        |           |
| chemical          |  | in the law                                |     |     |         |          |              |          |        |           |
| substances        | Example                                    |   |     |     |         |          |              |          |        |           |
|                   | > Lead                                     |   |     |     |         |          |              |          |        |           |
|                   | ➤ Cadmium                                  |   |     |     |         |          |              |          |        |           |
|                   | ➤ Mercury                                  |   |     |     |         |          |              |          |        |           |
|                   | ➢ PCB                                      |   |     |     |         |          |              |          |        |           |
|                   |  |   |     |     |         |          |              |          |        |           |

|  |   | Criterie applicable to   |     | С   | riteria | applicab | le to specif | fic items |        |           |
|--|---|--|-----|-----|---------|----------|--------------|-----------|--------|-----------|
|  | Example of answer   | Criteria applicable to<br>all type of EEE  |     | V   | Air     | Refrig   | Washing      | PO        |        | Reference |
|  |   |  | CRT | LCD | con     | Reing    | machine      | Desktop   | Laptop |           |
| (2) Analysis<br>methodology                      | <ul> <li>Analysis methodology commonly used for identification of hazardous substances contained in WEEE.</li> <li>Example</li> <li>➤ TCLP (Toxicity Characteristic Leaching Procedure)</li> <li>➤ TTLC (Total Threshold Limit Concentration)</li> <li>➤ STLC (Soluble Threshold Limit</li> </ul> | Methods according to IEC 62321<br>(Draft) coupled with USEPA methods<br>depending on the types of the WEEE |     |     |         |          |              |           |        |           |
| (3) Criteria for<br>hazardous<br>characteristics | Concentration)<br>Criteria for judging WEEE contains substantial<br>hazardous substances answered in (1) based on<br>the analysis methodology answered in (2)<br>Example<br>(In case of lead)<br>> 5.0mg/1 (TCLP)<br>> 1,000mg/kg (TTLC)<br>> 5mg/1 (STLC)  | The levels of all those hazardous<br>substances corresponding to EU<br>Directive and customer requirements |     |     |         |          |              |           |        |           |
| (4) Sampling                                     | <ul> <li>Parts or components actually sampled for testing hazardous substances.</li> <li><i>Example</i></li> <li>&gt; Batteries</li> <li>&gt; Accumulators</li> <li>&gt; Switches</li> <li>&gt; Capacitors</li> <li>&gt; Glasses</li> </ul>   | No criteria yet  |     |     |         |          |              |           |        |           |

|                |  | Critoria annliashla ta                    |     | С   | riteria | applicab | le to specif | ïc items |        |           |
|----------------|--|---|-----|-----|---------|----------|--------------|----------|--------|-----------|
|                | Example of answer                            | Criteria applicable to<br>all type of EEE | Т   | 'V  | Air     | Refrig   | Washing      | PC       |        | Reference |
|                |  | an type of EEE                            | CRT | LCD | con     | Kenng    | machine      | Desktop  | Laptop |           |
| (5) Laboratory | If your country has laboratories for testing | Electrical and Electronic Institute       |     |     |         |          |              |          |        |           |
|                | hazardous properties contained WEEE, provide | under the MOI                             |     |     |         |          |              |          |        |           |
|                | relevant information.                        | www.thaieei.com                           |     |     |         |          |              |          |        |           |
|                |  | Hazardous Substances according to         |     |     |         |          |              |          |        |           |
|                | □ Name                                       | RoHs Directive                            |     |     |         |          |              |          |        |           |
|                | □ Address and contact info                   | Approval for ISO 17025 by Thai            |     |     |         |          |              |          |        |           |
|                | □ Tested items                               | Industrial Standards Institue             |     |     |         |          |              |          |        |           |
|                | □ Testing method                             |   |     |     |         |          |              |          |        |           |
|                | □ Approval (or licensing) by government      |   |     |     |         |          |              |          |        |           |

# (7) Questionnaire answer from Vietnam

## Part I. Criteria for Distinguishing Waste EEE from Secondhand (Reusable) EEE for the Purpose of Import Control

|                      |                     |   | Criteria           |     |     |          | Criter | ia applica | able to speci   | fic items |        |        |           |
|----------------------|---------------------|---|--------------------|-----|-----|----------|--------|------------|-----------------|-----------|--------|--------|-----------|
| Identification       | Factors to be       |   | applicable         |     | TV  | <b>.</b> |        |            |                 | P         | С      |        |           |
| method               | considered          | Example of answer   | to                 | CRT | LCD | PDP      | Air    | Refrig     | Washing machine | Desister  | Lonton | Mobile | Reference |
|                      |                     |   | all type of<br>EEE | CKI | LCD | PDP      | con    |            | machine         | Desktop   | Laptop | phone  |           |
| Visual<br>inspection | Physical damage     | Typical appearance of defect items                                      |                    |     |     |          |        |            |                 |           |        |        |           |
| inspection           |                     |   |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | Example   | .1                 |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | Essential parts are missing<br>(e.g., cables being cut off)             | Ň                  |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | <ul><li>➢ Broken, worn, cracked,</li></ul>                              |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | scratched etc   |                    |     |     |          |        |            |                 |           |        |        |           |
|                      | Packaging condition | Typical poor packaging condition<br>that its contents are considered as |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | waste   |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     |   |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | Example<br>➤ No packaging   | 1                  |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | <ul> <li>Cannot support the weight of</li> </ul>                        | v                  |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | items   |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | > Worn-out or torn  |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | Cannot protect items from<br>damage                                     |                    |     |     |          |        |            |                 |           |        |        |           |
|                      | Others              | If any, describe other typical  |                    |     |     |          |        |            |                 |           |        |        |           |
|                      |                     | appearance of items considered as WEEE                                  | N/A                |     |     |          |        |            |                 |           |        |        |           |

|                          |   |   | Criteria                        |     |           |     | Criter     | ia applic | able to speci   | fic items     | <br>,               |           |
|--------------------------|---|---|---------------------------------|-----|-----------|-----|------------|-----------|-----------------|---------------|---------------------|-----------|
| Identification<br>method | Factors to be considered  | Example of answer   | applicable<br>to<br>all type of | CRT | TV<br>LCD | PDP | Air<br>con | Refrig    | Washing machine | Po<br>Desktop | <br>Mobile<br>phone | Reference |
| Document<br>check        | Years after being manufactured.   | Years after being manufactured<br>considered as obsolete or<br>unmarketable<br>Example<br>> 3 years for TV  | EEE<br>√                        |     |           |     |            |           |                 |               |                     |           |
|                          | Model or technical specification  | Technical specification or model<br>considered as obsolete (or<br>inappropriate) in your country<br>Example<br>> Monochrome TV<br>> Computer with Pentium II<br>> Refrigerator using CFCs   | N/A                             |     |           |     |            |           |                 |               |                     |           |
|                          | Record of<br>functionality test or<br>pre- inspection at the<br>country of origin | <ul> <li>Contents of record required (or recommended) to be included</li> <li>Example</li> <li>➤ Kind of functionality test performed</li> <li>➤ Result of test or pre-inspection</li> <li>➤ Name of company responsible for evidence of functionality</li> <li>If your country designates or authorizes organization at the country of origin conducting functionality test or pre-shipment inspection, provide information</li> </ul> | N/A                             |     |           |     |            |           |                 |               |                     |           |

|                              |                                    |   | Criteria                 |     |     |     | Criter     | ia applica | able to speci      | ific items |        |                 |           |
|------------------------------|------------------------------------|---|--------------------------|-----|-----|-----|------------|------------|--------------------|------------|--------|-----------------|-----------|
| Identification               | Factors to be                      |   | applicable               |     | ΤV  |     | I          | ļ          | Washing<br>machine | PC         |        |                 |           |
| method                       | considered                         | Example of answer   | to<br>all type of<br>EEE | CRT | LCD | PDP | Air<br>con | Refrig     |                    | Desktop    | Laptop | Mobile<br>phone | Reference |
|                              | Information of<br>secondhand shops | Information that guarantees<br>imported items to be sold for reuse<br>purpose<br>Example<br>➤ Copy of invoice or contract<br>relating sales or transfer of<br>ownership<br>➤ Letter by the owner of shop  | N/A                      |     |     |     |            |            |                    |            |        |                 |           |
|                              | Labeling or signs                  | Labels or signs required (or<br>recommended) being put on items<br>or containers for identification<br>Example<br>Serial number of items in a<br>container  | N/A                      |     |     |     |            |            |                    |            |        |                 |           |
|                              | Others                             | If any, describe other information<br>your country requires (or<br>recommends) being included in<br>attached information document.<br>Example<br>➤ Photos of items contained in a<br>container  | N/A                      |     |     |     |            |            |                    |            |        |                 |           |
| Simple testing<br>at seaport | Function loss                      | <ul> <li>Functions to be tested and its testing method conducted on site to identify waste.</li> <li>Example</li> <li>Power up test</li> <li>Check of functioning of motherboard (PC)</li> <li>Check of internal set up routine (PC)</li> </ul> | N/A                      |     |     |     |            |            |                    |            |        |                 |           |

|                |               |   | Criteria    |     |     |     | Criteria applicable to specific items |        |         |         |        |       |           |
|----------------|---------------|---|-------------|-----|-----|-----|---------------------------------------|--------|---------|---------|--------|-------|-----------|
| Identification | Factors to be |   | applicable  |     | ΤV  |     |                                       |        |         | PO      | 2      |       |           |
| method         | considered    | Example of answer   | to          |     |     |     | Air                                   | Refrig | Washing |         |        |       | Reference |
|                |               |   | all type of | CRT | LCD | PDP | con                                   | 8      | machine | Desktop | Laptop | phone |           |
|                |               |   | EEE         |     |     |     |                                       |        |         |         |        |       |           |
| Others         | _             | If any, describe any other factors to<br>be considered for distinguishing | N/A         |     |     |     |                                       |        |         |         |        |       |           |
|                |               | WEEE from reusable EEE  |             |     |     |     |                                       |        |         |         |        |       |           |

| Items under exporting regulation<br>and the condition, if any |   | Procedure requirement for obtaining permission    | Applicable law or other regulation |
|---|---|---|------------------------------------|
| All Hazardous EEE Wastes                                      | Requiring permission from importing country | Notification through Basel<br>Competent Authority | Circular<br>12/2006/TT-BTNMT       |

## Part II. Criteria for Identification of Hazardous substances contained in WEEE for the Purpose of Import Control

|  |   | Critoria applicable to   |     | C   | riteria |        |         |         |        |           |
|--|---|--|-----|-----|---------|--------|---------|---------|--------|-----------|
|  | Example of answer   | Criteria applicable to<br>all type of EEE                                      | TV  | TV  |         | Refrig | Washing | P       | С      | Reference |
|  |   |  | CRT | LCD | con     | Kenig  | machine | Desktop | Laptop |           |
| (1) Controlled<br>hazardous / toxic<br>chemical substances | <ul> <li>Hazardous substances contained in WEEE actually controlled as hazardous or toxic.</li> <li>Example</li> <li>&gt; Lead</li> <li>&gt; Cadmium</li> <li>&gt; Mercury</li> <li>&gt; PCB</li> </ul> | N/A<br>(because Vietnam<br>bannedned all<br>importation of<br>second-hand EEE) |     |     |         |        |         |         |        |           |

|  |  | Critaria applicable to   |     |     |     |        |         |         |        |           |
|--|--|--|-----|-----|-----|--------|---------|---------|--------|-----------|
|  | Example of answer  | Criteria applicable to<br>all type of EEE                                      | TV  |     | Air | Refrig | Washing |         |        | Reference |
|  |  |  | CRT | LCD | con | nonig  | machine | Desktop | Laptop |           |
| (2) Analysis<br>methodology                      | <ul> <li>Analysis methodology commonly used for<br/>identification of hazardous substances contained in<br/>WEEE.</li> <li>Example</li> <li>➤ TCLP (Toxicity Characteristic Leaching<br/>Procedure)</li> <li>➤ TTLC (Total Threshold Limit Concentration)</li> <li>➤ STLC (Soluble Threshold Limit Concentration)</li> </ul> | N/A<br>(because Vietnam<br>bannedned all<br>importation of<br>second-hand EEE) |     |     |     |        |         |         |        |           |
| (3) Criteria for<br>hazardous<br>characteristics | Criteria for judging WEEE contains substantial<br>hazardous substances answered in (1) based on the<br>analysis methodology answered in (2)<br>Example<br>(In case of lead)  | N/A<br>(because Vietnam<br>bannedned all<br>importation of<br>second-hand EEE) |     |     |     |        |         |         |        |           |
| (4) Sampling                                     | <ul> <li>Parts or components actually sampled for testing hazardous substances.</li> <li><i>Example</i></li> <li>&gt; Batteries</li> <li>&gt; Accumulators</li> <li>&gt; Switches</li> <li>&gt; Capacitors</li> <li>&gt; Glasses</li> </ul>  | N/A<br>(because Vietnam<br>bannedned all<br>importation of<br>second-hand EEE) |     |     |     |        |         |         |        |           |
| (5) Laboratory                                   | If your country has laboratories for testing hazardous properties contained WEEE, provide relevant information.         Image         Address and contact info         Tested items         Testing method         Approval (or licensing) by government   | N/A<br>(because Vietnam<br>bannedned all<br>importation of<br>second-hand EEE) |     |     |     |        |         |         |        |           |