

GUIDELINES FOR THE CLASSIFICATION OF USED ELECTRICAL AND ELECTRONIC EQUIPMENT IN MALAYSIA

INTRODUCTION

1. In Malaysia, used electrical and electronic assemblies or otherwise commonly known as e-waste are categorized as scheduled wastes under the code SW 110, First Schedule, Environmental Quality (Scheduled Wastes) Regulations 2005. The SW 110 wastes are defined as wastes from the electrical and electronic assemblies containing 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 biphenyls.
2. The e-wastes are also listed as code A1180 and code A2010 under Annex VIII, List A of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 1989. As Malaysia is one of the Parties to the Basel Convention, the importation and exportation of such wastes must follow the procedures of the Convention. Importation or exportation of the wastes require prior written approval from the Department of Environment as mandated under Section 34B(1)(b)&(c), of the Environmental Quality Act, 1974. Any person who contravenes this section shall be guilty of an offence and shall on conviction be punished with imprisonment for a term not exceeding five years and shall also be liable to a fine not exceeding five hundred thousand ringgit.

SCOPE

4. The scope of these guidelines is to assist all parties concerned in identifying and classifying a used electrical and electronic equipment or component, whether it is categorized as an e-waste and thus prescribed under the First Schedule of the Environmental Quality (Scheduled Wastes) Regulations 2005 or otherwise.

The parties are:

- Waste generators;
- Waste transporters;
- Importers or exporters of wastes; and
- Relevant authorities involved in the management of e-wastes.

DEFINITION

5. The definitions for the purpose of this guideline are:

“Direct re-use” means any operation by which discarded electrical or electronic equipment or components are used for the same purpose for which they were conceived, including the continued use of the whole systems or components.

“Recycling” means removing or using the material from the manufactured equipment as part of raw materials for new products or components.

“Recovery” means any operation for the purpose of retrieval of valuable material or product from e-waste.

“Disposal” means method of final disposition, final placement or destruction of e-waste.

CATEGORY OF E-WASTE

6. The following electrical and electronic equipment or components that are destined for recycling or recovery or disposal are considered as e-waste. This list however is not exhaustive.

- Used television
- Used air-conditioning unit
- Used computer
- Used refrigerator
- Used washing machine
- Used video recorder
- Used pendaflour light / flourescence light
- Used telephone
- Used photostate machine
- Used facsimile machine
- Used microwave / oven
- Used radio
- Used printers
- Used audio amplifier
- Used cathode ray tube (CRT)
- Used electric cable
- Used mobile phone
- Used motherboard
- Used hard disk drive
- Used printed circuit board
- Used waste metal contaminated with heavy metals such as cadmium, mercury, lead, nickel, chromium, copper, lithium, silver and manganese

- Used lead frame
- Used patterned wafer
- Used ink cartridges
- Used or rejected or waste of integrated circuit
- Used electrical and electronic equipment/product imported from other countries
- Wastes or products processed out of the partial recovery facilities

CHARACTERISTICS OF E-WASTE

7. Used electrical and electronic equipment or components is defined as e-waste 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 electronic 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
- (j) 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
- (l) for the importing purposes, the age of the electrical and electronic equipment or components is not more than three years (3) from the date of manufactured; or
- (m) products / goods produced by partially e-waste recovery facilities.

8. The SW110 wastes category under the Regulation do not include the followings:

- Electrical and electronic components which are not contaminated or non-dispersable form such as metal or plastic casing of computer;
- Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) that are functioning and destined for direct re-use, and not for recycling or recovery or final disposal;
- New and unused electrical and electronics equipment or components made in Malaysia that are returned by the importing countries as defectives items;
- New electrical and electronic equipment or components made in Malaysia that are returned to as defective batches for repair to the manufacturer (under warranty) with the intention of re-export;
- Blank wafers or non-patterned wafers or test wafers; and

- Off-cut lead or copper frames not contaminated with heavy metals such as cadmium, mercury, lead, nickel, chromium, copper, lithium, silver and manganese or polychlorinated byphenyl.

CRITERIA FOR THE IMPORT AND EXPORT OF USED ELECTRICAL AND ELECTRONIC EQUIPMENT OR COMPONENTS THAT IS NOT CATEGORIZED AS E-WASTE

9. Table 1 in **Annex A** and Figure 1 in **Annex B** shall be used to determine whether used electrical and electronic equipment or component proposed for export or import is categorized as e-waste.

TABLE 1: CRITERIA FOR THE DETERMINATION OF E-WASTE

QUESTIONS		ANSWER	ACTION
QUESTION 1 (Q1)	Is the equipment or component covered in paragraph 8 of this guideline?	YES	The equipment or component is not categorized as e-waste. The exporter or importer need to submit application with documents listed in ANNEX C to the Department of Environment for decision.
		NO	Go to QUESTION 2
QUESTION 2 (Q2)	Is the equipment or component destined for recycling or recovery or disposal?	YES	The equipment is categorized as e-waste. NOT ALLOWED to be imported. NOT ALLOWED to be exported for the purpose of disposal. Export for the purpose of recycling or recovery may be allowed subject to the following conditions: (a) Receiving facility agree to accept the waste and have a better technology to process the e-waste compared to current practice in Malaysia; (b) The exportation will gain better economic value; (c) The exportation is allowed and comply with the environmental requirement of the importing country; and

			(d) The exportation shall be fully complied with Basel Convention procedure.
		NO	Go to QUESTION 3
QUESTION 3 (Q3)	Is the age of equipment or component more than 3 years from the date of manufactured?	YES	The equipment is categorized as e-waste. NOT ALLOWED to be imported.
		NO	Go to QUESTION 4
QUESTION 4 (Q4)	Is the equipment or component destined for direct re-use?	YES	Go to QUESTION 5
		NO	The equipment is categorized as e-waste. NOT ALLOWED to be imported.
QUESTION 5 (Q5)	Has the equipment or component been tested and found to have any fault as listed in paragraph 7 in this guideline?	YES	The equipment is categorized as e-waste. NOT ALLOWED to be imported.
		NO	Go to QUESTION 6
QUESTION 6 (Q6)	Has the result of the testing been documented and do not indicate any of the fault listed as in paragraph 7, and also certified by a competent authority or certified body or relevant agency in the country of export?	YES	The equipment or component is not categorized as e-waste. The exporter or importer need to submit application with documents listed in ANNEX C to the Department of Environment for decision.
		NO	The equipment is categorized as e-waste. NOT ALLOWED to be imported.

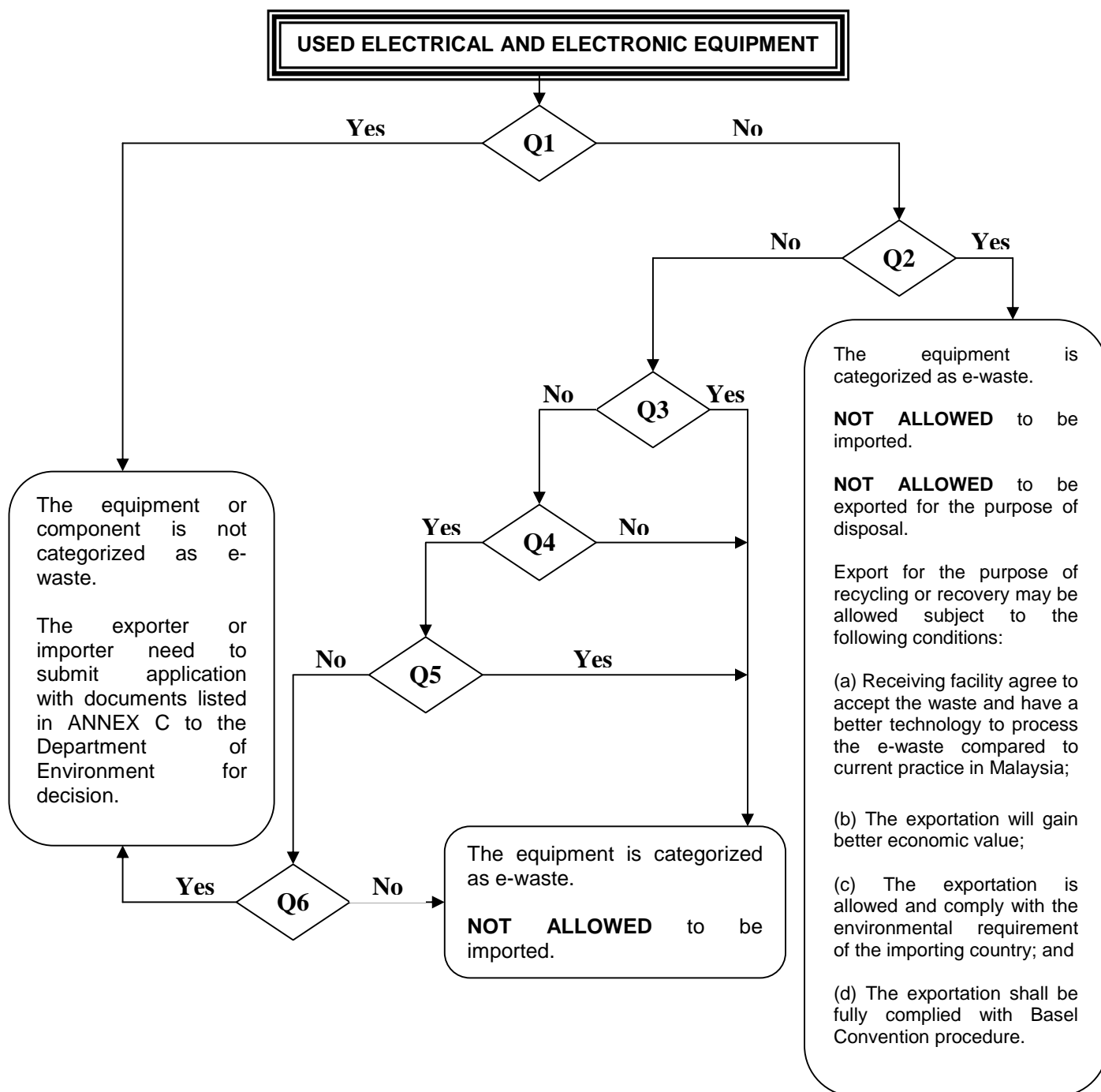


FIGURE 1: CRITERIA FOR THE DETERMINATION OF E-WASTE

CHECKLIST

FOR IMPORTERS AND EXPORTERS OF USED ELECTRICAL
AND ELECTRONIC EQUIPMENT/COMPONENTS

Subject	For Official Use
A. General Information	
Name of Applicant : Applicant Designation Address of Applicant: Telephone : Telefax : E-mail :	
Name of Premise : Address of Premise : Telephone : Telefax : E-mail : Custom Tariff Code(H.S Code) : Port of Entry : Country of Origin :	

B. Operational Information

Justification for application (specify the reasons for import/export *):

Description of production processes and the relevant flow diagrams of the imported material :

List of final products and quantity produced per month:
(Example: recovered precious metal, direct re-use etc)

Operational licenses from relevant agencies, eg. Local Authority, MITI, DOE, ROC/ROB, etc.

List of used electrical and electronic equipment/components and their quantities to be imported/exported * :
(Inventory list should include the brand name, model, serial number, year of manufacturing, status of equipment/component and date of inspection)

Certificate of Inspection from a competent authority or certification body or any other relevant agency for the status of the items to be imported/exported * :

Contractual agreement with concerned parties (for purposes of re-use, recovery or recycling) :

Method of packaging :

Note:

(*) Delete which ever is not applicable

REFERENCES

1. Criteria for the Export and Import of Used Electronic Equipment, Department of the Environment and Heritage, Australia.
1. Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003.
2. Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003.
4. Control on the Import and Export of Waste, Used or Second-hand Computers, Electrical and Electronic Appliances, Environmental Protection Department and Customs and Excise Department of the Hong Kong Special Administrative Region.
5. Correspondents Guideline No 1, interpretation of Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community.
6. Compliance Bulletin: Hazardous Waste Management of Electronic Waste, Colorado Department of Public Health and Environment.

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15 January 2008