Eco Mark Product Category No.122
"Printers"

Japan Environment Association
Eco Mark Office

1. Environmental Background

In recent years, along with the worldwide dissemination of personal computers, the annual output of printers in Japan increased in an accelerated fashion from about 25 million units in 1996 to 29 million in 1997 and further to 32 million in 1998. Japanese manufacturers' share in the world market is particularly large as will be described in more detail below.

There already is an Eco Mark product category applicable to printers, Category No. 53 covering "Low-Waste Printers for Business Machines." Printers requiring replacement of only expendables, such as printing toner, or allowing repeated use of cartridges to reduce wastes are recognized as Category No. 53 printers. However, merely reducing expendable wastes can contribute little to alleviating the environmental load, and it is strongly urged to reduce the overall environmental load of printers, whose use is now dramatically expanding. This calls for consideration of the total lifetime of each printer from the consumption of raw materials till their recycling.

For printers, standardization is already in place with ecolabels prescribed by Germany, Canada and five Scandinavian countries. In Japan, "specific procurement items" under the Law Concerning the Promotion, Etc. of Procurement of Environmentally Sensitive Goods by the National Government, Etc. which came into force in April 2001 include printers, and the law also specifies certification criteria. The Green Purchasing Network has announced its purchasing guidelines (in November 1996), arousing further interest in the ecologically-conscious choice of printers. From the viewpoint of effective utilization of resources, the amended Law Concerning the Promotion of Effective Utilization of Resources, effective April 2001, took up secondary batteries as "designated reusable products," and at the same time designated printers as machines using small secondary batteries, designated reusable products. Arrangements are ready for the collection of used secondary batteries from April this year on.

Japanese-made printers enjoy a dominant share in the world market, about 97% for the wire dot type, 85% for the electrophotographic type and 60% for the ink jet type. Thus, together with copying machines, printers are an international item supplied by Japanese manufacturers to users worldwide. Therefore, it is essential to give due consideration to international conformity in formulating qualification criteria for ecolabels. For "copiers" for which Eco Mark qualification criteria were set forth in November 1999, JEA is making conformity efforts with Nordic White Swan through the GEN (Global Ecolabeling Network), and a similar approach is also likely to be needed for

printers in the future.

In view of these circumstances, it is considered very meaningful, internationally as well, to discard the existing provisions regarding “Low-Waste Printers for Business Machines” and institute anew a product category covering environmentally-friendly printers.

2. Applicable Products

The subject of this new Eco Mark categorization mainly consists of printers commonly used in offices and families and intended for connection to computers. Following the classification by the Japan Electronics and Information Technology Industries Association (JEITA), *Terminology for Printer Catalogs, Fourth Edition* (in Japanese), the category includes printers of the wire dot, thermo sensitive, ink jet and electro photographic types (see the “Coverage” graphic shown in Fig. 1). It also covers multifunctional machines whose main function is printing. Therefore it does not include ticket vending machines in stations of traffic facilities, order ticket issuing machines to serve people waiting in a queue, cash registers and search equipment for use in medical facilities or public libraries.

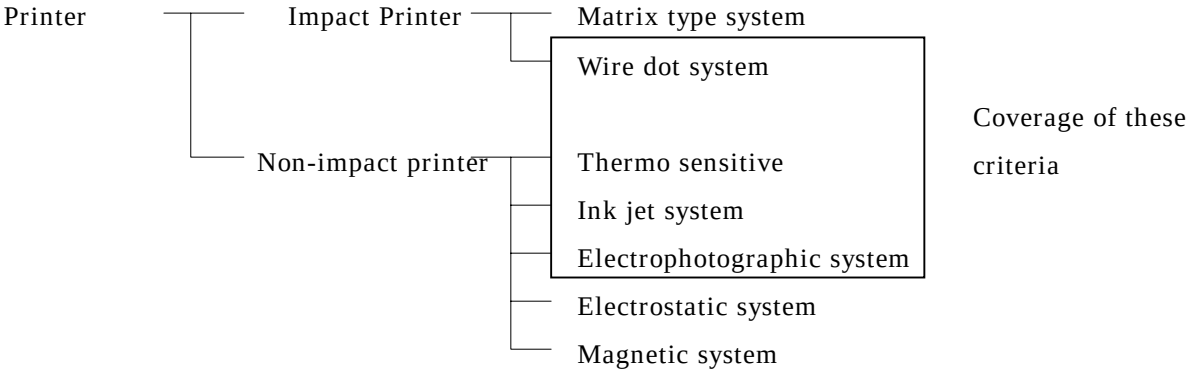

Fig. 1 Coverage

3. Terminology

-Printer: A machine having function as its standard features which presuppose connection to a personal computer via a parallel port, USB interface or network interface. It may also perform direct printing via a memory card or some other medium.

-Component of formula: Any component intentionally added for the purpose of giving a characteristic(s) to the product. Impurities which inevitably come in during the manufacturing process do not fit this definition.

-Plastic: A material consisting of one or more polymers and any additive, filler, etc. added for the purpose of giving a characteristic(s).

-Polymer: A high molecular material constituting a main constituent of a

plastic.

-Homopolymer: A polymer of monomers of a single type.

-Copolymer: A polymer of monomers of two or more types.

-Polymer alloy (polymer blend): A generic term for multiple-component high molecules resulting from the mixture or chemical combination of two or more kinds of high molecules. A polymer blend is a physical mixture of different kinds of high molecules.

-Reclaimed plastic: A plastic consisting of a pre-consumer material and a post-consumer material.

-Pre-consumer material: A material or a rejected item emerging in the manufacturing process of a product, not to be recycled as a raw material in the same process (plant).

-Post-consumer material: A material or a product discarded after being used as a product.

-Reclaimed plastic component: A plastic-made component containing any reclaimed plastic.

-Reused component: A component used in the past and now in use again.

-Back side printing: Printing again on a sheet of paper, of which one side is already printed, on the other side with the same machine by putting it into a paper feed tray or otherwise.

-Double side printing: Automatic printing on both sides of a sheet of paper.

-Multi Functional Printer (MFP): A machine having a printing function as one of its standard features plus one or more of copying, scanning or facsimile functions.

-Printing speed in pages per minute(PPM): For monochrome printers, the number of pages that can be printed per minute as determined according to ISO/IEC 10561:1999, though for color printers the speed is stated by each manufacturer as there is no standardized criterion.

-Large size printer: A printer with a printing function for printing A2 or larger size sheets.

-Vital component: An indispensable component for keeping the product functional.

-Vital component for repair use: A vital component for replacement.

-Recycling: Refers to material recycling only, not to energy recovery (thermal recycling).

-Box: External cover

-Chassis: A component with the core function of securing the main component of the printer per se.

-Large box component: A box component of 25 g or more in weight and 200 mm^2 or more in square measure.

-Battery: A primary or secondary battery. A primary battery is no longer used once its charge is exhausted, while a secondary battery can be recharged for repeated use.

-Stack form: A continuous long strip of paper for computer print-out use. It may be perforated at regular intervals to facilitate folding into a box shape.

4. Certification Criteria

4-1. Environmental Criteria

4-1-1. 3R Design

1) Printer per se

(1) A printer shall satisfy the requirements of the “3R design of the printer per se” in Attachment 1.

(2) The vital components for repair use and expendables shall be kept in stock for at least five years after the manufacture of the relevant product is discontinued.

(3) The arrangements for meeting repair needs shall be adequately developed to enable repairs requested by printer users to be accomplished (repair system). The arrangements shall include adequate supply of information on 1) the availability of repair service and 2) the available range of repair service, required length of time, cost and way of access for printer users.

(4) One or more kinds of recycled paper with 100% used paper content shall be usable, except for thermo sensitive type printers, and printers supporting continuous paper feeders and large printers.

(5) A printer shall be able to reduce the quantity of paper consumption (by double side printing, compressed printing, back side printing or otherwise).

(6) An electro photographic or multifunctional printer (PPM > 24) shall be capable of double side printing as either a standard or an optional function. This provision, however, shall not apply to any printer using a stack form.

2) Components using plastic materials

(7) A plastic-made large box component shall consist of one homopolymer or copolymer. The use of a polymer blend (polymer alloy) is acceptable. This provision, however, shall not apply to components weighing less than 25 g each.

(8) A plastic-made large box component or chassis shall consist of four or fewer kinds of separable polymers or polymer blends. This provision, however, shall not apply to components constituting a component/chassis of less than 25 g.

3) Battery

(9) A battery fitted to a printer shall be replaceable or removable when it has become exhausted, when the printer is to be repaired or in any other like situation without having to replace the whole printed circuit board or the like on which the battery is mounted (this applies to what falls under any of A through F in Attachment 4). A battery fitted to a substrate or the like whose removal by the printer user shall have a useful life of at least 10 years.

(10) The user manual shall contain information on the collection, reuse, recycling or disposal as waste matter of used secondary batteries.

4) Toner cartridge and ink cartridge

(11) For toner cartridges (including toner containers) and ink cartridges manufactured or marketed by the applicant, there shall be a system of collection and recycling.

(12) Collected toner cartridges (including toner containers) or unusable parts of ink cartridges, shall be processed and/or disposed of in a manner harmonious with the environment.

(13) A toner cartridge shall bear a label conforming to the Guidelines on Labeling for Ensuring the Safety of Office Machinery Products of the Japan Business Machine Makers Association.

4-1-2. Chemical Substances

1) Plastic materials

(14) No plastic of 25 g or more in weight shall contain polybrominated biphenyl (PBB), polybrominated diphenyl ether (PBDE) or chlorinated paraffin (having a chain of 10 to 13 carbon atoms and a chlorine concentration of 50% or more) added as a formula component.

(15) No plastic (including any plastic used for packaging) in any box or box component shall have a halogen-containing polymer added as a formula component, except for organic fluorine additives of no more than 0.5 wt% in content used for improving the physical properties of the plastic or components of less than 25 g in weight.

(16) No plastic in any box or box component shall have cadmium or lead added as a formula component. No plastic in any box or box component should have any carcinogenic substance (anything classified by IARC as a carcinogenic substance of Group 1, 2A or 2B), except for titanium yellow, antimony trioxide and carbon black.

2) Battery

(17) No battery shall contain cadmium, lead, mercury or any compound thereof added as a formula component.

3) Chlorofluorocarbons, harmful substances, etc.

(18) Any plastic packaging material to be used by the applicant shall contain no specified chlorofluorocarbon (CFC) (any of the five CFCs; see Attachment 5).

(19) It shall be definitively demonstrated that the final assembly plant or large box components uses any of the specified CFCs (the five CFCs), any other CFC, carbon tetrachloride or trichloroethylene, or discharges any alternative CFC (which refers to HCFC in this context). However, chlorofluorocarbons used for air conditioners shall be excluded, and this only applies to use during the manufacturing stage. It shall also be definitively demonstrated regarding the discharge of harmful substances that the final assembly plant and the manufacturing plant or plants of plastic box components and large box components are observing relevant local environmental laws and regulations, anti-pollution agreements and the like. It shall be definitively demonstrated that the manufacturing factory of the direct supplier for plastic box components or large box

components does not use any of the specified CFCs (the five CFCs) listed on Table 5, any other CFC, carbon tetrachloride or trichloroethylene, or discharge any alternative CFC (which refers to HCFC in this context). However chlorofluorocarbons used for air conditioners shall be excluded, and this only applies to use during the manufacturing stage. A component purchase contract or the like, however, may be substituted for verification by the plant manager of the supplier of plastic box components or large box components to the applicant.

4) Photosensitive unit

(20) The photosensitive unit of an electro photographic type printer shall contain no cadmium, lead, mercury or any compound thereof as a formula component.

5) Toner for electro photographic system, ink for ink jet system and ink ribbon for wire dot system

(21) As a heavy metal content of toner for electro photographic type printers, ink for ink jet type printers and ink ribbon for wire jet type printers, no cadmium, lead, mercury, hexavalent chrome or any compound thereof can be added as a formula component.

(22) Toner for electro photographic type printers, ink for ink jet type printers or ink ribbon for wire jet type printers shall contain none of the substances mentioned in (a) through (d) below as a formula component.

(a) Substances for which labeling of the following R numbers is mandatory under Attachment I (List of hazardous substances and preparations) to the EC Council Directive 67/548/EEC regarding the conformity of EU laws, regulations and administrative rules on the classification, packaging and labeling of hazardous substances.

R26 (Very toxic if inhaled)
R27 (Very toxic in contact with skin)
R40 (Possible risk of irreversible effects)
R42 (May cause sensitization by inhalation)
R45 (May cause cancer)
R46 (May cause heritable genetic damage)
R49 (May cause cancer if inhaled)
R60 (May impair fertility)
R62 (Possible risk of impaired fertility)
R63 (May cause harm to an unborn child)
R64 (May cause harm to breast-fed babies)

(b) Substances classified as carcinogenic substances (Groups 1, 2A, 2B) by the International Agency for Research on Cancer (IARC), except carbon black.

(c) Substances that necessitate labeling of the whole product with the specified hazard symbol under Attachment II to the EC Council Directive 67/548/EEC regarding the conformity to EU laws, regulations and administrative rules on the classification, packaging and labeling of hazardous substances.

(d) Substances that necessitate labeling of the whole product with the specified R43under Attachment III to the EC Council Directive 67/548/EEC regarding the conformity of EU laws, regulations and administrative rules on the classification, packaging and labeling of hazardous substances.

(23) An azo colorant (dye or pigment) of toner for electro photographic type printers, ink for ink jet type printers or ink ribbon for wire dot type printers, azo colorants (dyes or pigments) that degenerate into amines as per Table 6 through decomposition of one or more of the azo compounds (in accordance with official test method compilation based on Article 35 of the German law on foods and sundries) shall not be used.

6) Dust, ozone and styrene

(24) Dust emissions from an electro photographic printer shall satisfy any of the following (a) – (c). This provision, however, shall not apply to printers for printing stacked forms faster than 60 PPM.

(a) Dust emissions from an electro photographic printer shall not exceed a concentration of 0.075 mg/m3 in the case of continuous operation in indoor atmosphere. The dust concentration shall be measured under the test conditions specified in the applicable standard of the Japan Business Machine and Information System Industrial Association (JBMIA-66) or in Attachment 3 to Blue Angel (RAL-UZ-62:2002).

(b) The emission rate during operation shall not exceed 4.0mg/h. The measuring method shall be prescribed in JIS X6936 or in Attachment 4 to Blue Angel (RAL-UZ-62:2003).

(c) The emission rate during operation shall not exceed 4.0 mg/h. The measuring method shall be prescribed in Attachment 2 to Blue Angel (RAL-UZ-122:2005).

In this regard, the expiration date of the aforementioned (b) shall be April 30, 2007.

(25) Ozone emissions from an electro photographic printer shall satisfy any of the following (a) – (c). This provision, however, shall not apply to printers for printing stacked forms faster than 60 PPM.

(a) Ozone emissions from an electro photographic printer shall not exceed a concentration of 0.02 mg/m3 in indoor atmosphere. The ozone concentration shall be measured under the test conditions specified in the applicable standard of the Japan Business Machine and Information System Industrial Association (JBMIA-66) or in Attachment 4 to Blue Angel (RAL-UZ-62:2002).

(b) The emission rate during operation shall not exceed 2.0mg/h. The measuring method shall be prescribed in JIS X6936 or in Attachment 4 to Blue Angel (RAL-UZ-62:2003).

(c) The emission rate during operation shall not exceed 2.0 mg/h. The measuring method shall be prescribed in Attachment 2 to Blue Angel (RAL-UZ-122:2005).

In this regard, the date ended of the aforementioned (b) shall be April 30, 2007.

(26) VOC emissions from an electro photographic printer shall satisfy any of the following (a) – (c). This provision, however, shall not apply to printers for printing stacked forms faster than 60 PPM.

(a) Styrene emissions from an electro photographic printer shall not exceed a concentration of 0.07 mg/m3 in indoor atmosphere. The styrene concentration shall be measured under the test conditions specified in the applicable standard of the Japan Business Machine and Information System Industrial Association (JBMIA-66) or in Attachment 5 to Blue Angel (RAL-UZ-62:2002).

(b) The emission rate of total volatile organic compounds (TVOC), styrene and benzene during operation shall not exceed 10mg/h, 1.0mg/h and 0.05mg/h, respectively. The emission rate of total volatile organic compounds (TVOC) in ready mode prior to printing shall not exceed 1.0mg/h for tabletop units and 3.0mg/h for floor-mounted units. The measuring method shall be prescribed in JIS X6936 or Attachment 4 to Blue Angel (RAL-UZ-62:2003).

(c)The emission rate of total volatile organic compounds (TVOC), styrene and benzene during operation shall not exceed 10 mg/h, 1.0 mg/h, 0.05 mg/h, respectively. The emission rate of total volatile organic compounds (TVOC) in a ready mode prior to printing shall not exceed 1.0 mg/h for tabletop units and 3.0 mg/h for floor-mounted units. The measuring method shall be prescribed in Attachment 4 to Blue Angel (RAL-UZ-122:2005).

In this regard, the expiration date of the aforementioned (b) shall be April 30, 2007.

The TVOC, here, is the total quantity of volatile organic compounds, which gas chromatograph analysis detects during gas chromatographic separation on a non-polar column including from n-hexane to n-hexadecane, based on Attachment 4 to the RAL -UZ-62:2003, JIS X6936, or Attachment 4 to the RAL -UZ-122:2006.

4-1-3. Energy Consumption

(27) Electric power consumption shall conform to (1) through (4) in Attachment 6 based on the International Energy Star Program (hereinafter referred to as Energy Star).

(28) A main power switch shall be provided. Power consumption with the main power switch off shall not exceed 2 W.

(29) No function of the printer shall be adversely affected by keeping it unplugged from an A.C. outlet for a relatively long period (at least four weeks) (any loss of timer information including the date and hours is not deemed to be an adverse effect in this context).

(30) The user manual provided by the supplier for an electro photographic type printer shall contain information on the maximum power

consumption in the operating state.

(31) The applicant shall state in the user manual detailed information on the consumption of energy in the mode of “power off” and, if any energy is consumed in this mode, expressly indicate that this energy consumption cannot be avoided unless the printer is unplugged from an A.C. outlet.

4-1-4. Noise

(32) Noise shall be measured in the best quality mode in accordance with ISO 7779: 1999 (the Japanese Industrial Standards include an identical standard - JIS X 7779: 2001). On the basis of the actual measurement thereby obtained, the value of the A Designation Characteristic Sound Power Level L_{WAd} under 3.2.5 of ISO 9296: 1988 shall not exceed the applicable value in Attachment 7.

4-1-5. Safety and Electromagnetic Compatibility

(33) The printer shall be a product conforming to the safety requirements of IEC60950. For example, it shall satisfy the ‘Standards of Section 2 of the Technological Standard Ordinance on Electric Products (J60950)’.

(34) The printer shall be a product satisfying the electromagnetic compatibility requirements of the voluntary regulatory measures of the Voluntary Central Council for Interference by Information Technology (VCCI).

4-1-6. User Manual

(35) The user manual provided by the applicant shall be compatible with the Eco Mark Certificate Criteria “Paper Printed Matter”. However, use of hot-melt adhesive shall be approved. What is printed overseas shall be made of used paper and bound in a manner posing no impediment to recycling.

4-1-7. Packaging Materials

(36) Any plastic material used for packaging shall be labeled in conformity with JIS K 6899-1: 2000. However, labeling of the material may be dispensed with in conformity to “Measures Concerning Plain Containers and Packaging,” “Measures Concerning Containers and Packaging with Physical Constraints Including Labeling Space, etc.,” “Labeling Requirements and Labeling Method for Multi-layered Containers and Packaging,” “Measures Concerning Packaging Marked with Company Name, Brand Name, etc.” and “Measures Concerning Imported Items” on identification marks in the Report of the Container and Packaging Recycling Subcommittee of the Ministry of International and Trade and Industry (predecessor of the present Ministry of Economy, Trade and Industry) (July 2000).

(37) Any packaging material shall be compatible with the “Guidelines on the Preparation of Advance Assessment Manuals in Product Designing to Contribute to the Promotion of the use of Recycled Resources, etc.” (July 1994, Waste Matter Disposal and Recycling Subcommittee, Industrial Structure Council).

4-1-8. Conditions of Installation

(38) If there is any matter to be specifically stated regarding the conditions of installation, it shall be expressly stated in the user manual.

4-2. Quality criteria
None.

5. Certification Procedure

The applicant (in the case of a raw material, the supplier thereof) shall submit as a seal-bearing document each of the certificates listed in Table 1. A duplicate copy of each certificate shall be acceptable.

Compatibility with other certification criteria stated in 4-1 (e.g., “Paper Printed Matter”, “Energy Star” and so forth) shall be deemed to be certified if the relevant item is compatible with the current version of the applicable certification criteria at the time of applying for an Eco Mark.

(1) Regarding certification criterion 4-1. (1), submit Attachment 1, “3R design of the printer per se,” properly filled out.
(2) Regarding certification criterion 4-1. (2), submit a certificate regarding the minimum stock period for vital components for repair use and expendables. In addition, submit a user manual or the like expressly stating this fact.
(3) Regarding certification criterion 4-1. (3), submit a certificate regarding the availability of repair service as requested by the user of the printer. In addition, submit a user manual or the like expressly stating that arrangements are well developed for the purpose (with reference to the processing capacity, particulars of information supply as prescribed by the criteria, etc.).
(4) Regarding certification criterion 4-1. (4), submit a certificate that a 100% used paper content is compatible. Also submit a raw material certificate stating the name of the manufacturer of the printing paper to be used, brand name of the product and that the used paper content is 100%.
(5) Regarding certification criterion 4-1. (5), describe if there is a function to reduce the quantity of paper consumption provided (for example, by double side printing, compressed printing, back side printing or otherwise). Also submit a user manual or the like expressly stating this fact.
(6) Regarding certification criterion 4-1. (6), submit a relevant part of the user manual.
(7) Regarding certification criteria 4-1. (7) and (8), describe expressly that these criteria are observed. In addition, submit a list of the plastic materials used (Attachment 3).
(8) Regarding certification criterion 4-1. (9), submit a certificate regarding the position where the battery is used, the method of removing it in accordance with Attachment 4 (specify the section sign) and so forth.
(9) Regarding certification criterion 4-1. (10) submit a manual regarding the arrangements developed for collection, reuse, recycling or processing and/or

disposal (collection system, processing capacity, particulars of processing, etc.).

(10) Regarding certification criterion 4-1. (11), submit a description of the mechanism of the recovery system (collection system, processing capacity, particulars of processing, etc.).

(11) Regarding certification criterion 4-1. (12), submit a manual regarding the arrangements developed for collection, reuse, recycling or processing and/or disposal (collection system, processing capacity, particulars of processing, etc.).

(12) Regarding certification criterion 4-1. (13), submit a certificate that the product is labeled in conformity with the Guidelines on Labeling for Ensuring the Safety of Office Machinery Products.

(13) Regarding certification criterion 4-1. (14), make it definitively clear by a component purchase contact or the like that no PBB, PBDE or chlorinated paraffin is added.

(14) Regarding certification criterion 4-1. (15), submit a list of the plastic materials used on the form in Attachment 3, expressly stating the names of the manufacturers of the raw materials and whether or not there is the addition of any polymer containing halogen and/or any organic halogen compound.

(15) Regarding certification criteria 4-1. (16) and (17), submit a list stating the presence or absence of any relevant substance contained therein.

(16) Regarding certification criterion 4-1. (18), submit a certificate issued by the manufacturer of the packaging material, the person responsible for the management of the business establishment or the manager of the plant where the product is assembled to the effect that the plastic packaging material used in the packaging done on the applicant's responsibility contains no specified CFC.

(17) Regarding certification criterion 4-1. (19), submit a certificate issued by the manager of the final assembling plant where the product is manufactured to the effect that relevant local environmental laws, regulations and the like have been observed with no violation for the last five years before the filing of the application. A component purchase contract or the like may be substituted for certification by the plant manager of the supplier of plastic box components or large box components to the applicant.

(18) Regarding certification criteria 4-1. (20) through (23), submit a list stating the presence or absence of any relevant substance contained therein.

(19) Regarding certification criterion 4-1. (24)-(a), submit a certificate that the method of measurement meets the relevant standard in JBMS-66 or Attachment 3 to RAL-UZ-62, together with actually measured data. Regarding certification criterion 4-1. (24)-(b), submit a certificate that the method of measurement meets the relevant standard in JIS X6936 or Blue Angel (RAL-UZ-62:2003), together with actually measured data. Regarding

certification criterion 4-1. (24)-(c), submit a certificate stating that the method of measurement meets the relevant standard (RAL-UZ-122:2005) of Blue Angel, together with actually measured data.

(20) Regarding certification criterion 4-1. (25)-(a), submit a certificate that the method of measurement meets the relevant standard in JBMS-66 or Attachment 4 to RAL-UZ-62, together with actually measured data. Regarding certification criterion 4-1. (25)-(b), submit a certificate that the method of measurement meets the relevant standard in JIS X6936 or Blue Angel (RAL-UZ-62:2003), together with actually measured data. Regarding certification criterion 4-1. (24)-(c), submit a certificate stating that the method of measurement meets the relevant standard (RAL-UZ-122:2005) in the Blue Angel, together with actually measured data.

(21) Regarding certification criterion 4-1. (26)-(a), submit a certificate that the method of measurement meets the relevant standard in JBMS-66 or Attachment 5 to RAL-UZ-62, together with actually measured data. Regarding certification criterion 4-1. (26)-(b), submit a certificate that the method of measurement meets the relevant standard in JIS X6936 or Blue Angel (RAL-UZ-62:2003), together with actually measured data. Regarding certification criterion 4-1. (24)-(c), submit a certificate stating that the method of measurement meets the relevant standard (RAL-UZ-122:2005) in the Blue Angel, together with actually measured data.

(22) Regarding certification criterion 4-1. (27), submit a certificate (a certificate of compliance with Energy Star program or a report of test results) that states criteria (1) through (4) in Attachment 7 are in conformance.

(23) Regarding certification criteria 4-1. (28) and (29), submit a certificate that these requirements are fully met.

(24) Regarding certification criterion 4-1. (30), submit a relevant part of the user manual stating the maximum power consumption measured under the applicant's own conditions.

(25) Regarding certification criterion 4-1. (31), submit a relevant part of the user manual.

(26) Regarding certification criterion 4-1. (32), conduct measurement in the best quality mode of ISO 7779: 1999, and submit data indicating the value of the A Designation Characteristic Sound Power Level L_{WAd} under 3.2.5 of ISO 9296: 1988.

(27) Regarding certification criterion 4-1. (33), submit a certificate that the product satisfies standards in compliance with IEC60950 such as the 'Standards of Section 2 of the Technological Standard Ordinance on Electric Products (J60950)' shall be submitted. If submission of such certificate is difficult, a written declaration to confirm that "a certificate will be submitted before concluding a contract to use the Eco-Mark, and if the product does not comply with the IEC60950 standards, the Eco-Mark usage contract will not be concluded" shall be submitted.

(28) Regarding certification criterion 4-1. (34), submit a certificate (a copy of

written notification confirming that the product complies with the VCCI or the like) that the product is compatible with the voluntary regulatory measures of VCCI. If submission of such a certificate is difficult, a written declaration to confirm that “a written notification confirming that the product complies with the VCCI will be submitted before concluding a contract to use the Eco-Mark, and if the product does not comply with the VCCI, the Eco-Mark usage contract will not be concluded” shall be submitted.

(29) Regarding certification criterion 4-1. (35), submit information material certifying compatibility with the items of the Eco Mark Certificate Criteria “Paper Printed Matter”. Where printing is done overseas, it has to be explained that used paper is employed and no material identified as an inhibitory factor to the recycling of used paper is employed.

(30) Regarding certification criterion 4-1. (36), submit a certificate regarding the presence or absence of material labeling.

(31) Regarding certification criterion 4-1. (37), explain compatibility with the guidelines; more specifically, 1. Explain that the packaging material is selected in accordance with a packaging material assessment manual prepared in accordance with the guidelines [submit an information material (a list of contents or the like) which reveals the contents of the manual], and 2. state the name(s) of the packaging material(s) used.

(32) Regarding certification criterion 4-1. (38), submit a relevant part of the user manual if there is any matter specifically stated regarding the conditions of installation.

6. Other Requirements

(1) In principle, the products to be applied shall be free of “flame retardant”, “antibacterial agent” materials and “biodegradable plastic” indication. When using these materials reasoning special circumstances, however, the products shall satisfy the provisions contained in the “Eco Mark Business Execution Guideline” concerning “flame retardant”, “antibacterial agent” and “indication of biodegradable plastic”. Specifically, the use of these materials shall be described in the form “Application for Eco Mark Product Certification/Use” with documents stipulated in the form to be attached.

(2) A product category shall consist of a product model or a series of models. One application may cover a whole series, but each model of the series should be compatible with the relevant criteria.

(3) Name of the Eco Mark user and address shall be indicated on the product or its package/container. (Article 7, Eco Mark Usage Regulations)

(4) The statement in the lower part of the mark contains the following environmental information. In this case, it shall be a 2-line statement within a rectangular box. The 1st line shat state “低電力モード消費電力○W” (“Low electricity mode: Power consumption xx W”), or “低電力モード消費電力○W以下” (“Low electricity mode: Power consumption below xx W” (“where below xx W” shall be the maximum power consumption in the low electricity mode)).

Either one shall be selected and indicated by the applicant. The 2nd line shall state “リサイクル設計” (“Recyclable design”), and the 3rd line shall state “トナー容器引取ルート確立” (“Toner container collection route is established”) (“インク容器引取ルート確立” “Ink container collection route is established” shall be stated for ink cartridge cases.)). However, printers not using toners or ink cartridges need not state this 3rd line, only the first tow lines.

ちきゅうにやさしい
Friendly to the Earth
Earth-friendly

Electric consumption in the low mode XX W
Recyclable design
Collection route of toner containers established

Established : October 1, 2001
Revised: June 6, 2002 (Discharge of harmful substances, verification method etc)
Revised: July 25, 2002 (Article 6. (3))
Revised: November 28, 2003 (4-1-5. (33) Attachment 8)
Revised: Dec. 26, 2003 (Eco Mark Usage)
Revised: November 1, 2004 (statements below Eco Mark)
Revised: April 20, 2005 (definition of terminology added)
Revised: Feb. 21, 2006 (testing method added)
Revised: March 15, 2006 (extension of validity period)
Revised: October 19, 2006 (testing method added)
Term of Validity: May 31, 2008

These certification criteria for the product category will be reviewed in five years after the date of enactment, and the certification criteria and/or the product category will be revised or abolished.

Attachment 8　Permissible Limits of Noise

Printing speed (PPM: No. of printed pages/minute)	Thermosensitive type Ink jet type L_{WAd}	Electrophoto-graphic type L_{WAd}	Wire dot type L_{WAd}
0< PPM ≤ 7	5.9B	6.6B	7.2B
7< PPM ≤14	6.3B		
14< PPM ≤30	6.7B		
30< PPM ≤50	7.1B	7.1B	
50< PPM ≤70	7.8B	7.8B	
70<PPM	Not prescribed	Not prescribed	Not prescribed

Color electrophotographic printers should be measured in the best quality monochrome mode.
The printing speed of large paper size printers should be measured in an A4 size equivalent.
The printing speed of printers which can print on media less than A4 in size should be converted to PPM with a length percentage of less than A4 media based on the A4 longitudinal length of the form, which has higher paper feeding speed. The length of media less than A4 in size should be based on the length of the conveyed form, and the number of paper picks should not be included in the printing conditions.
The printing speed of printers which can print on media less than A4 in size should be converted to PPM with a length percentage of less than A4 media based on the A4 longitudinal length of the form, which has higher paper feeding speed. The length of media less than A4 in size should be based on the length of the conveyed form, and the number of paper picks should not be included in the printing conditions.
Where the indicated characteristic A sound power level L_{WAd} ［unit：B］ is to be calculated from the actual measurement L_{WA} per printer, the following equation shall apply.

L_{WAd} [B] = 1/10×(L_{WA} + 3.0)

where L_{WA} is the measured characteristic A sound power level (dB)

Printing speed classification for equipment with a number of printing speeds shall be setup using the quickest printing speed mode.