New Eco Mark Product Category "Ink Cartridge Version1.0" Certification Criteria（Draft）

A. New Ink Cartridge

Japan Environment Association
Eco Mark Office

1. Applicable Scope

New ink cartridge

2. Certification Criteria and Certification Procedure

If the product on which application is filed is to be mounted on a product certified under No. 122 "Printers Version2.0," with regard to certification under Certification Criteria 4-1., (1) through (6), (8), (9), (12)d. through g. and (16) through (18), a description of the "Certification Number" of such product may be used as a substitute for certification of compliance with the criteria.

2-1. Environmental Certification Criteria and Certification Procedure

2-1-1 Ink

(1) With regard to heavy metal contained in the ink, cadmium, lead, mercury, hexavalent chromium, nickel and their compounds shall not be included as prescription constituents. However, this shall not apply to complex compounds of high molecular weight nickel that are included as a coloring agent

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142A-2 issued by the ink supplier shall also be submitted.

(2) With regard to azo colorants in the ink, those which may release amines listed in Table 1 due to the decomposition of one or more azo groups (dyes and pigments) (according to the official test method corpus based on Article 35 of the German law on foods and sundries) shall not be used.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142A-2 issued by the ink supplier shall also be submitted.

Table 1 Amines that should not be released due to the decomposition of azo groups
(according to EU Assembly/Council Directive 2002/61/EC)

	Chemical substances	CAS No.
1	4-aminobiphenyl	92-67-1
2	Benzidine	92-87-5
3	4-chloro-o-toluidine	95-69-2
4	2-naphthylamine	91-59-8
5	o-aminoazotoluene	97-56-3
6	2-amino-4-nitrotoluene	99-55-8

7	p-chloroaniline	106-47-8
8	2,4-diaminoanisole	615-05-4
9	4,4’-diaminodiphenylmethane	101-77-9
10	3,3’-dichlorbenzidine	91-94-1
11	3,3’-dimethoxybenzidine	119-90-4
12	3,3’-dimethylbenzidine	119-93-7
13	3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0
14	*p*-cresidine	120-71-8
15	4,4’-Methylene-bis - (2-Chloroaniline)	101-14-4
16	4,4’-oxydianiline	101-80-4
17	4,4’-thiodianiline	139-65-1
18	*o*-toluidine	95-53-4
19	2,4-toluylene diamine	95-80-7
20	2,4,5-trimethylaniline	137-17-7
21	*o*-anisidine	90-04-0
22	4-amino- azobenzen	60-90-3

(3) Other hazardous substances related to ink shall not contain the following substances (“a.” to “c.”) as prescription constituents:

a. The following substances which need to be labelled as “R” in accordance with Annex I of the EC Commission Directive 67/548/EEC concerning the approximation of laws, regulations and administrative rules on the classifications, packaging, and labelling of hazardous substances in the EU.
   - R40(Limited evidence of a carcinogenic effect)
   - R45(May cause cancer)
   - R46(May cause heritable genetic damage)
   - R49(May cause cancer by inhalation)
   - R60(May impair fertility)
   - R61(May cause harm to the unborn child)
   - R62(Possible risk of impaired fertility)
   - R63(Possible risk of harm to the unborn child)
   - R68(Possible risk of irreversible effects)

b. Substances required to be marked by a specified hazard symbol as a whole product pursuant to Annex II of the EC Commission Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances; and pursuant to Directive 1999/45/EC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous preparations.

c. Substances required to be marked by R43 (May cause sensitization by skin contact) as a whole product pursuant to Annex III of the EC Commission Directive 67/548/EEC concerning the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142A-2 issued by the ink supplier shall also be submitted.

(4) Ink shall give a negative result in the Ames test.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. According to the Law concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances, a report of the results of the Ames test shall be submitted.
The report shall include the following items:
・Name of the testing institute ・Name of the tested substances
・Testing period ・Used strain ・Test result

(5) Products shall be equipped with the ink MSDS (Material Safety Data Sheet).

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and MSDS issued by the toner supplier shall be submitted.

2-1-2 Ink cartridges

(6) Ink cartridges shall comply with the "3R Design Checklist" in Attachment 1.

【Certification Procedure】
Required particulars shall be indicated in 3R Design Checklist in Attachment 1 and submitted.

(7) Ink cartridge containers and plastic parts integrated with such containers shall be made of one homopolymer or copolymer. However, polymer blends (polymer alloys) may be used. Labels, etc. shall be made of the same material as that of the parts to which the labels are to be pasted, or of a material that does not obstruct recycling, if it is difficult to separate the labels.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list of the plastic materials used: Fill-out Form 142A-3 shall also be submitted. If labels, etc. are pasted, whether they can be separated easily and their materials shall be specified in the form.

(8) 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) are not added to plastic parts of ink cartridges as prescription constituents.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(9) Plastic parts of ink cartridges shall not include as their prescription constituents any plastic additives or pigments that contain lead, cadmium or mercury.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(10) Collection systems shall be available for ink cartridges.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. Certificates describing clearly the ink cartridge collection system (number of boxes collected, collection bases and routes, number of collection bases, etc.) shall also be submitted.

(11) Both of recovery rate and reuse/material recycling rate of collected parts shall satisfy table 2. The parts that cannot be recovered shall be processed or disposed of environmentally sound methods.

Table 2 (1) Numerical Threshold Stipulated in (11)

Recovery rate (reused, recycled, energy recovered, conversion to oil, gasification, blast furnace reduction, conversion to chemical material by coke oven)	95% or more
Reuse/material recycling rate	25% or more

*Denominator for calculating rate shall be mass weight of ink cartridge excluding ink.

*”Collected used ink cartridges” means cartridges collected at the responsibility of the applicant or manufacturer.

*The words "shall be processed or disposed of by environmentally sound methods" shall mean that the parts that cannot be recycled are processed or disposed of properly by the business making the application or engaging in manufacture on its own responsibility, and any processing done by a collection system implemented by other business shall not be included (except cases where such processing is done under a contract, agreement, or the like concluded between the businesses).

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. An explanatory sheet describing the ink cartridge material recycling system as well as Fill-out Form 142A-4 shall be submitted.

(12) Either the package of a cartridge product, printed matter to be contained in the same package thereof, or the instruction manual of the main equipment product shall include a description of the details of “a.” through “i.” below so that they can easily be seen by the user.

a. Name of the product for which application is filed
b. Name of the applicant company (it may be the company’s brand name or the like)
c. Telephone number for contact
d. Proper handling method
e. Treatment in cases where the ink has attached to the hand or in the event that it has entered the eyes, mouth, etc.
f. The product should be kept in a place out of reach of children.
g. Collection method after use
h. Information on after-sales service for users
i. The fact that there may be differences in the colors and long-term durabilities of printing, if the ink manufactured by, or manufactured through outsourcing by, the main equipment

manufacturer, is not the same as the ink filled in a new ink cartridge.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and copies of the applicable parts of the documents attached to the products shall be submitted.

(13) Information shall be provided on the series of equipment on which the products can be used in their packages, printed matter for advertisement, or websites so that they can easily be seen by the user. Users shall be provided with a means for obtaining the latest information on the series of equipment on which the products can be used.

【Certification Procedure】
Among the packages, printed matter for advertisement, URLs of the applicable parts of websites, etc. containing a description of the designated information, necessary material shall be submitted.

(14) The main parts of the products shall contain a description of the items “a” and “b” below so that they can easily be seen by the user.

a. Name of the product for which application is filed
b. Name of the applicant company (it may be the company’s brand name or the like)

【Certification Procedure】
Photos, samples, etc. of the applicable parts of the main parts containing the designated information shall be submitted.

2-1-3 Paper

(15) Recycled paper containing 70% or more of recycled pulp shall be capable of being used with the ink cartridge. However, this shall not apply to ink cartridges for thermo-sensitive printers, for printers that can be used with continuous paper, for large-size printers, and for printers that can only be used with photo paper and postcards.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

2-1-4 Packaging materials

(16) As for plastic materials to be used for packaging of products, the specific CFCs (five types), other CFCs, carbon tetrachloride, trichloroethane, and substitute freons (they shall denote HCFCs herein) described in Table 2 shall not be used.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

Table 2 Substances prescribed in (17)

Specific CFCs (five types of CFCs)	Trichlorofluoromethane	Dichlorotetrafluoroethane
	Dichlorodifluoromethane	Chloropentafluoroethane
	Trichlorotrifluoroethane	
Other CFCs	Chlorotrifluoromethane	Pentachlorotrifluoropropane
	Pentachlorofluoromethane	Tetrachlorotetrafluoropropane
	Tetrachlorodifluoroethane	Trichloropentafluoropropane

	Heptachlorofluoropropane	Dichlorohexafluoropropane
	Hexachlorodifluoropropane	Chloroheptafluoropropane
	Carbon Tetrachloride	
	1,1,1-Trichloroethane	
Substitute freons (HCFC)	Dichlorofluoromethane	Dichloropentafluoropropane
	Chlorodifluoromethane	Chlorohexafluoropropane
	Chlorofluoromethane	Pentachlorofluoropropane
	Tetrachlorofluoroethane	Tetrachlorodifluoropropane
	Trichlorodifluoroethane	Trichlorotrifluoropropane
	Dichlorotrifluoroethane	Dichlorotetrafluoropropane
	Chlorotetrafluoroethane	Chloropentafluoropropane
	Trichlorofluoroethane	Tetrachlorofluoropropane
	Dichlorodifluoroethane	Trichlorodifluoropropane
	Chlorotrifluoroethane	Dichlorotrifluoropropane
	Dichlorofluoroethane	Chlorotetrafluoropropane
	Chlorodifluoroethane	Trichlorofluoropropane
	Chlorofluroethane	Dichlorodifluoropropane
	Hexachlorofluoropropane	Chlorotrifluoropropane
	Pentachlorodifluoropropane	Dichlorofluoropropane
	Tetrachlorotrifluoropropane	Chlorodifluoropropane
	Trichlorotetrafluoropropane	Chlorofluoropropane

(17) Plastic materials used for packaging of products shall not include as prescription constituents any halogen elements in their polymer backbones.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(18) The packaging of products shall give consideration to ease of resource conservation, reuse, and recycling.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. In addition, the packaged state of products, packaging materials, raw materials used for these packaging, details for realizing resource saving, reuse, and recycling easily shall be indicated specifically (drawings and photographs can be used).

2-1-5 Criteria concerning manufacturing

(19) There shall not be any violation of relevant environmental regulations, pollution control agreements, etc. for the past five years in manufacturing, with regard to the prevention of air

pollution, water contamination, noise, odor, emission of hazardous materials, etc.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and a certificate issued by the manager of the plant where products are manufactured certifying that relevant environmental regulations, etc. in the area where the plant for the final manufacturing process is located have been observed for the past five years after the filing of application and there has been no violation, or the like: Fill-out Form 142A-5 shall be submitted.

(20) As for solvents, specific chlorofluorocarbons (five types of CFCs), other CFCs, carbon tetrachloride, trichloroethane, and substitute freons (they shall denote HCFCs herein) listed in Table 2 shall not be used in the final manufacturing stage.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

2-2. Quality Certification Criteria and Certification Procedure

(21) If an ink cartridge has not been manufactured by, or manufactured through outsourcing by, the main equipment manufacturer, its printing and processing capacity shall be 90% or more of that of a new model of product of the same type that has been manufactured by, or manufactured through outsourcing by, the main equipment manufacturer.

【Certification Procedure】
Based on ISO/IEC24711 (Method for measurement) and ISO/IEC27412 (Images for measurement), the number of sheets to the service life (yield value) shall be measured and its ratio to the printing and processing capacity shall be described in the Attached Certificate and a quality certificate: Fill-out Form 142A-6 shall be submitted. The test shall be carried out by using printers of the same type.

(22) Quality shall be managed by the manufacturer's own standard, and guarantee for quality shall be provided for any defective quality such as defective printing, leakage of ink, nozzle clogging, and main body breakage. In addition, quality control in the manufacturing stage shall be implemented sufficiently based on the quality control system.

【Certification Procedure】
Copies of documents attached to products describing guarantee for quality shall be submitted. If requested by the Examination Committee, documents for explaining the method of guarantee for quality shall be capable of being submitted together with the inspection data of the products.
A certificate and a declaration sheet issued by the manager of the plant for manufacturing products shall be submitted, certifying that, as for the quality control system in the manufacturing stage, quality control in the manufacturing stage is implemented based on the manufacturer's own standard, and that only the products that have been qualified in quality inspection shall be delivered. In addition, documents certifying that the quality control system is in order shall be submitted (if certified against ISO9001 or 9002, a copy of certificate shall be acceptable).

February 25, 2008 Planned date for establishment (Version1.0)
February 28, 2015 Planned expiry date of the effective period

The certification criteria of this product category will be revised as necessary.

Attachment 1　3R Design Checklist　【A.　New Ink Cartridge】

M-Requirement (Requirements which must be met)

Classification	No.	Requirements	Compliance	Remarks	Purpose
Material selection and marking	1	Coatings on plastic products are kept to the minimum required (e.g.: manufacturer's name). However, laser marking, etc. shall not be included in the "coatings" shown in this item. This item shall not apply to any parts that have been demonstrated to be reused parts.	☐Yes / ☐No	"Coatings" shall include the paint layer, deposition layer and printing.	Promoting reuse and recycling
Use for a prolonged period	2	Ink cartridges can be reused.	☐Yes / ☐No	It denotes the fact that there shall be no obstruction to reuse in terms of design.	Promoting reuse and recycling

S-Requirement （Requirements which should be met）

Classification	No.	Requirements	Compliance	Remarks	Purpose
Material selection and marking	1	Components made of the same type of plastic material are dyed uniformly or compatibly. However, this shall not apply to dying for making the components easier for consumers to identify in universal design or the like.	☐Yes / ☐No	"Compatible dyeing" means the cases having the same color with different brightness.	Promoting reuse and recycling
	2	Partial use of the raw materials of recycled plastics is permitted	☐Yes / ☐No	"Permitted" means that the materials satisfying the requirements can be used if they are available in the specifications of products.　"Partial" means that there exist applicable plastic materials (not all the parts shall necessarily be applicable).	Promoting reuse and recycling
	3	Recycled materials account for at least 5% of the total plastic weight?	☐Yes / ☐No	"Total plastic weight" means the total weight of all applicable plastic parts. "Recycled materials" means, not the plastic parts that include recycled plastics, but recycled pellets themselves.　The source of recycled pellets does not matter.　In other words, the recycled plastics do not have to be recycled pellets obtained from used ink cartridge parts; they may be any other recycled plastics including those from other products on the market.	Promoting reuse and recycling

New Eco Mark Product Category No.142 "Ink Cartridge Version1.0" Certification Criteria（Draft）

B. Recycled Ink Cartridge

Japan Environment Association
Eco Mark Office

1. Applicable Scope

Recycled ink cartridge

2. Certification Criteria and Certification Procedure

2-1. Environmental Certification Criteria and Certification Procedure

2-1-1 Ink

(1) With regard to heavy metal contained in the ink, cadmium, lead, mercury, hexavalent chromium, nickel and their compounds shall not be included as prescription constituents. However, this shall not apply to complex compounds of high molecular weight nickel that are included as a coloring agent

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142B-2 issued by the ink supplier shall also be submitted.

(2) With regard to azo colorants in the ink, those which may release amines listed in Table 1 due to the decomposition of one or more azo groups (dyes and pigments) (according to the official test method corpus based on Article 35 of the German law on foods and sundries) shall not be used.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142B-2 issued by the ink supplier shall also be submitted.

Table 1 Amines that should not be released due to the decomposition of azo groups
(according to EU Assembly/Council Directive 2002/61/EC)

	Chemical substances	CAS No.
1	4-aminobiphenyl	92-67-1
2	Benzidine	92-87-5
3	4-chloro-o-toluidine	95-69-2
4	2-naphthylamine	91-59-8
5	o-aminoazotoluene	97-56-3
6	2-amino-4-nitrotoluene	99-55-8
7	p-chloroaniline	106-47-8
8	2,4-diaminoanisole	615-05-4
9	4,4’-diaminodiphenylmethane	101-77-9
10	3,3’-dichlorbenzidine	91-94-1
11	3,3’-dimethoxybenzidine	119-90-4
12	3,3’-dimethylbenzidine	119-93-7
13	3,3'-dimethyl-4,4'-diaminodiphenylmethane	838-88-0

14	*p*-cresidine	120-71-8
15	4,4'-Methylene-bis - (2-Chloroaniline)	101-14-4
16	4,4'-oxydianiline	101-80-4
17	4,4'-thiodianiline	139-65-1
18	*o*-toluidine	95-53-4
19	2,4-toluylene diamine	95-80-7
20	2,4,5-trimethylaniline	137-17-7
21	*o*-anisidine	90-04-0
22	4-amino- azobenzen	60-90-3

(3) Other hazardous substances related to ink shall not contain the following substances ("a." to "c.") as prescription constituents:

a. The following substances which need to be labelled as "R" in accordance with Annex I of the EC Commission Directive 67/548/EEC concerning the approximation of laws, regulations and administrative rules on the classifications, packaging, and labelling of hazardous substances in the EU.
   - R40(Limited evidence of a carcinogenic effect)
   - R45(May cause cancer)
   - R46(May cause heritable genetic damage)
   - R49(May cause cancer by inhalation)
   - R60(May impair fertility)
   - R61(May cause harm to the unborn child)
   - R62(Possible risk of impaired fertility)
   - R63(Possible risk of harm to the unborn child)
   - R68(Possible risk of irreversible effects)

b. Substances required to be marked by a specified hazard symbol as a whole product pursuant to Annex II of the EC Commission Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances; and pursuant to Directive 1999/45/EC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous preparations.

c. Substances required to be marked by R43 (May cause sensitization by skin contact) as a whole product pursuant to Annex III of the EC Commission Directive 67/548/EEC concerning the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list describing whether applicable substances are included: Fill-out Form 142B-2 issued by the ink supplier shall also be submitted.

(4) Ink shall give a negative result in the Ames test.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. According to the Law concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances, a report of the results of the Ames test shall be submitted.
The report shall include the following items:
・Name of the testing institute ・Name of the tested substances
・Testing period ・Used strain ・Test result

(5) Products shall be equipped with the ink MSDS (Material Safety Data Sheet).

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and MSDS issued by the toner supplier shall be submitted.

2-1-2 Ink cartridges

(6) If any parts of ink cartridges have been replaced, the "3R Design Checklist" in Attachment 1 shall be complied with.

【Certification Procedure】
Required particulars shall be indicated in 3R Design Checklist in Attachment 1 and submitted.

7) Ink cartridge containers that have been replaced and plastic parts integrated with such containers shall be made of one homopolymer or copolymer. However, polymer blends (polymer alloys) may be used. Labels, etc. to be newly pasted shall be made of the same material as that of the parts to which the labels are to be pasted, or of a material that does not obstruct recycling, if it is difficult to separate the labels.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. A list of the plastic materials used: Fill-out Form 142B-3 shall also be submitted. If labels, etc. are pasted, whether they can be separated easily and their materials shall be specified in the form.

(8) 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) are not added to plastic parts of ink cartridges as prescription constituents.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(9) Plastic parts of ink cartridges that have been replaced shall not include as their prescribed any constituents plastic additives or pigments that contain lead, cadmium or mercury.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(10) Collection systems shall be available for ink cartridges.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. Certificates describing clearly the ink cartridge collection system (number of boxes collected, collection bases and routes, number of collection bases, etc.) shall also be submitted.

(11) Both of recovery rate and reuse/material recycling rate of collected parts shall satisfy table 2. The parts that cannot be recovered shall be processed or disposed of environmentally sound methods.

Table 2 (1) Numerical Threshold Stipulated in (11)

Recovery rate (reused, recycled, energy recovered, conversion to oil, gasification, blast furnace reduction, conversion to chemical material by coke oven)	95% or more
Reuse/material recycling rate	25% or more

*Denominator for calculating rate shall be mass weight of ink cartridge excluding ink.

*"Collected used ink cartridges" means cartridges collected at the responsibility of the applicant or manufacturer.

*The words "shall be processed or disposed of by environmentally sound methods" shall mean that the parts that cannot be recycled are processed or disposed of properly by the business making the application or engaging in manufacture on its own responsibility, and any processing done by a collection system implemented by other business shall not be included (except cases where such processing is done under a contract, agreement, or the like concluded between the businesses).

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. An explanatory sheet describing the ink cartridge material recycling system as well as Fill-out Form 142B-4 shall be submitted.

(12) Either the package of a cartridge product, printed matter to be contained in the same package thereof, or the instruction manual of the main equipment product shall include a description of the details of "a." through "j." below so that they can easily be seen by the user.

a. Name of the product for which application is filed
b. Name of the applicant company (it may be the company's brand name or the like)
c. Telephone number for contact
d. Proper handling method
e. Treatment in cases where the ink has attached to the hand or in the event that it has entered the eyes, mouth, etc.
f. The product should be kept in a place out of reach of children.
g. Collection method after use
h. Information on after-sales service for users
i. The fact that the products are recycled ink cartridges
j. The fact that there may be differences in the colors and long-term durabilities of printing,

if the ink filled in a new ink cartridge is not the same as the ink in a recycled ink cartridge.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and copies of the applicable parts of the documents attached to the products shall be submitted.

(13) Information shall be provided on the series of equipment on which the products can be used in their packages, printed matter for advertisement, or websites so that they can easily be seen by the user. Users shall be provided with a means for obtaining the latest information on the series of equipment on which the products can be used.

【Certification Procedure】
Among the packages, printed matter for advertisement, URLs of the applicable parts of websites, etc. containing a description of the designated information, necessary material shall be submitted.

(14) The main parts of the products shall contain a description of the items “a” and “b” below so that they can easily be seen by the user.

a. Name of the product for which application is filed
b. Name of the applicant company (it may be the company’s brand name or the like)

【Certification Procedure】
Photos, samples, etc. of the applicable parts of the main parts containing the designated information shall be submitted.

2-1-3 Paper

(15) Recycled paper containing 70% or more of recycled pulp shall be capable of being used with the ink cartridge. However, this shall not apply to ink cartridges for thermo-sensitive printers, for printers that can be used with continuous paper, for large-size printers, and for printers that can only be used with photo paper and postcards.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

2-1-4 Packaging materials

(16) As for plastic materials to be used for packaging of products, the specific CFCs (five types), other CFCs, carbon tetrachloride, trichloroethane, and substitute freons (they shall denote HCFCs herein) described in Table 2 shall not be used.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

Table 2 Substances prescribed in (17)

Specific CFCs (five types of CFCs)	Trichlorofluoromethane	Dichlorotetrafluoroethane
	Dichlorodifluoromethane	Chloropentafluoroethane
	Trichlorotrifluoroethane	
Other CFCs	Chlorotrifluoromethane	Pentachlorotrifluoropropane
	Pentachlorofluoromethane	Tetrachlorotetrafluoropropane
	Tetrachlorodifluoroethane	Trichloropentafluoropropane

	Heptachlorofluoropropane	Dichlorohexafluoropropane
	Hexachlorodifluoropropane	Chloroheptafluoropropane
	Carbon Tetrachloride	
	1,1,1-Trichloroethane	
Substitute freons (HCFC)	Dichlorofluoromethane	Dichloropentafluoropropane
	Chlorodifluoromethane	Chlorohexafluoropropane
	Chlorofluoromethane	Pentachlorofluoropropane
	Tetrachlorofluoroethane	Tetrachlorodifluoropropane
	Trichlorodifluoroethane	Trichlorotrifluoropropane
	Dichlorotrifluoroethane	Dichlorotetrafluoropropane
	Chlorotetrafluoroethane	Chloropentafluoropropane
	Trichlorofluoroethane	Tetrachlorofluoropropane
	Dichlorodifluoroethane	Trichlorodifluoropropane
	Chlorotrifluoroethane	Dichlorotrifluoropropane
	Dichlorofluoroethane	Chlorotetrafluoropropane
	Chlorodifluoroethane	Trichlorofluoropropane
	Chlorofluroethane	Dichlorodifluoropropane
	Hexachlorofluoropropane	Chlorotrifluoropropane
	Pentachlorodifluoropropane	Dichlorofluoropropane
	Tetrachlorotrifluoropropane	Chlorodifluoropropane
	Trichlorotetrafluoropropane	Chlorofluoropropane

(17) Plastic materials used for packaging of products shall not include as prescription constituents any halogen elements in their polymer backbones.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

(18) The packaging of products shall give consideration to ease of resource conservation, reuse, and recycling.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate. In addition, the packaged state of products, packaging materials, raw materials used for these packaging, details for realizing resource saving, reuse, and recycling easily shall be indicated specifically (drawings and photographs can be used).

2-1-5 Criteria concerning manufacturing

(19) There shall not be any violation of relevant environmental regulations, pollution control agreements, etc. for the past five years in manufacturing, with regard to the prevention of air

pollution, water contamination, noise, odor, emission of hazardous materials, etc.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate and a certificate issued by the manager of the plant where products are manufactured certifying that relevant environmental regulations, etc. in the area where the plant for the final manufacturing process is located have been observed for the past five years after the filing of application and there has been no violation, or the like: Fill-out Form 142B-5 shall be submitted.

(20) As for solvents, specific chlorofluorocarbons (five types of CFCs), other CFCs, carbon tetrachloride, trichloroethane, and substitute freons (they shall denote HCFCs herein) listed in Table 2 shall not be used in the final manufacturing stage.

【Certification Procedure】
Compliance with this item shall be indicated in the Attached Certificate.

2-2. Quality Certification Criteria and Certification Procedure

(21) The printing and processing capacity of a recycled ink cartridge shall be 90% or more of that of a new model of product of the same type.

【Certification Procedure】
Based on ISO/IEC24711 (Method for measurement) and ISO/IEC27412 (Images for measurement), the number of sheets to the service life (yield value) shall be measured and its ratio to the printing and processing capacity shall be described in the Attached Certificate and a quality certificate: Fill-out Form 142B-6 shall be submitted. The test shall be carried out by using printers of the same type.

(22) Quality shall be managed by the manufacturer's own standard, and guarantee for quality shall be provided for any defective quality such as defective printing, leakage of ink, nozzle clogging, and main body breakage. In addition, quality control in the manufacturing stage shall be implemented sufficiently based on the quality control system.

【Certification Procedure】
Copies of documents attached to products describing guarantee for quality shall be submitted. If requested by the Examination Committee, documents for explaining the method of guarantee for quality shall be capable of being submitted together with the inspection data of the products.
A certificate and a declaration sheet issued by the manager of the plant for manufacturing products shall be submitted, certifying that, as for the quality control system in the manufacturing stage, quality control in the manufacturing stage is implemented based on the manufacturer's own standard, and that only the products that have been qualified in quality inspection shall be delivered. In addition, documents certifying that the quality control system is in order shall be submitted (if certified against ISO9001 or 9002, a copy of certificate shall be acceptable).

February 25, 2008 Planned date for establishment (Version1.0)
February 28, 2015 Planned expiry date of the effective period

The certification criteria of this product category will be revised as necessary.

Attachment 1　3R Design Checklist　【B.　New Ink Cartridge】

M-Requirement (Requirements which must be met)

Classification	No.	Requirements	Compliance	Remarks	Purpose
Material selection and marking	1	Coatings on plastic products are kept to the minimum required (e.g.: manufacturer's name). However, laser marking, etc. shall not be included in the "coatings" shown in this item. This item shall not apply to any parts that have been demonstrated to be reused parts.	□Yes / □No	"Coatings" shall include the paint layer, deposition layer and printing.	Promoting reuse and recycling
Use for a prolonged period	2	Ink cartridges can be reused.	□Yes / □No	It denotes the fact that there shall be no obstruction to reuse in terms of design.	Promoting reuse and recycling

S-Requirement （Requirements which should be met）

Classification	No.	Requirements	Compliance	Remarks	Purpose
Material selection and marking	1	Components made of the same type of plastic material are dyed uniformly or compatibly. However, this shall not apply to dying for making the components easier for consumers to identify in universal design or the like.	□Yes / □No	"Compatible dyeing" means the cases having the same color with different brightness.	Promoting reuse and recycling
	2	As for replaced components, partial use of the raw materials of recycled plastics is permitted.	□Yes / □No	"Permitted" means that the materials satisfying the requirements can be used if they are available in the specifications of products. "Partial" means that there exist applicable plastic materials (not all the parts shall necessarily be applicable).	Promoting reuse and recycling
	3	As for replaced components, recycled materials account for at least 5% of the total plastic weight.	□Yes / □No	"Total plastic weight" means the total weight of all applicable plastic parts. "Recycled materials" means, not the plastic parts that include recycled plastics, but recycled pellets themselves. The source of recycled pellets does not matter. In other words, the recycled plastics do not have to be recycled pellets obtained from used ink cartridge parts; they may be any other recycled plastics including those from other products on the market.	Promoting reuse and recycling