

# **GREEN PROCUREMENT GUIDELINES**

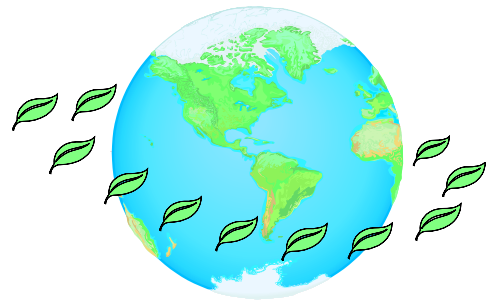
**(FOR SUPPLIERS)**

**Ver. 3 December 2004**

**NEC Corporation**

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# 1. Introduction

In recent years, there has been increased importance placed in the role of corporations in environmental conservation with the trend towards creating a recycling-oriented society. At NEC, environmental soundness is ranked as one of the top priority items in business management. As part of our top priority activities for environmental conservation, we are currently promoting a program of providing “products that reduce environmental impact”. To succeed in this endeavor, it is essential to reduce environmental impact of the components and materials constituting such products.

Furthermore, the management stance of the manufacturer toward environmental conservation is also a major factor in implementing green procurement activities. We are committed to procuring environmentally sound products from companies that take a positive stance toward environmental conservation on a priority basis.

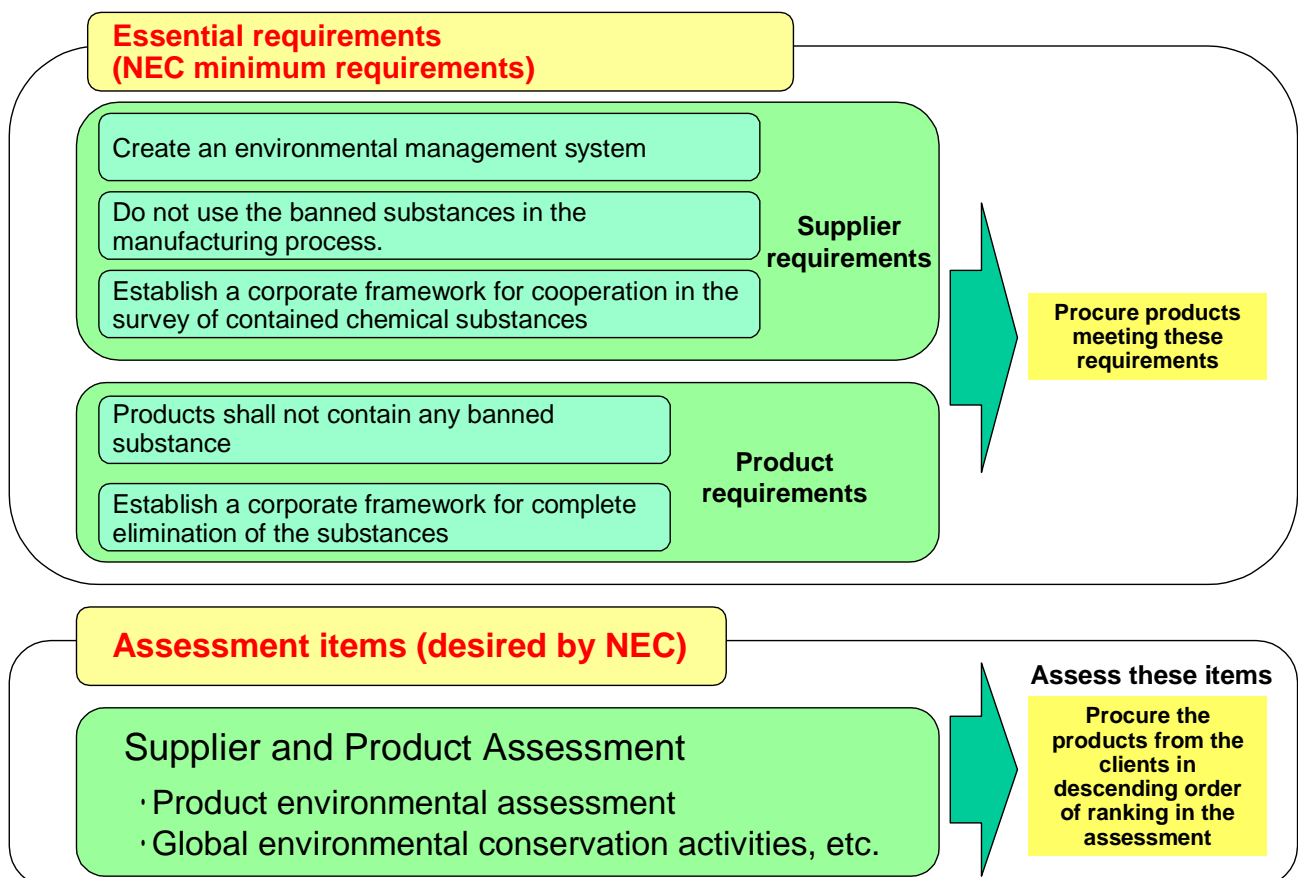
These guidelines present the requirements for green procurement activities in two categories; (1) “Essential requirements” as the minimum requirements to be observed, and (2) “Assessment items” to be taken into account.

When the “essential requirements” are not met, we may have to discontinue our business relationship. For the “assessment items”, we will evaluate your products and give priority to procurement of the products with reduced environmental impact.

When a standard other than those set forth in these guidelines is required due to product specification requirements, NEC will specify such a standard in the purchase specifications, which will be determined separately.

It should be noted that the green procurement standard is subject to revision due to subsequent changes in laws and regulations, and social trends.

## Outline of Standard for Green Procurement



## 2. Scope of Application

These guidelines cover all the products to be procured by NEC.

The following describes all the products referred to in these guidelines:

Units, parts, materials, chemicals, gas, software, services, etc.

## 3. Essential Requirements for Suppliers

NEC's major consideration when determining which products to purchase is the degree to which the product in question reduce environmental impact, and whether the companies engaged in the manufacturing and marketing of the products are taking an active stance toward environmental conservation. We will examine the policies of the vendors toward environmental conservation and purchase products from the companies that:

Create an environmental management system

That is, create an environmental management system in the factory and office where the products are developed, manufactured and marketed. (For details, see (1) in paragraph 6).

Do not use banned substances in the manufacturing process (does not apply to software and service companies)

That is, do not use substances banned by NEC in the manufacturing process. (For details, see (2) in paragraph 6).

Establish a corporate framework for cooperation in the survey of contained chemical substances (does not apply to software and other companies that do not deliver hardware products)

That is, respond to the questions raised in the survey of chemical substances contained in the product.

## 4. Essential Requirements for Products (does not apply to software and other companies that do not deliver hardware products)

Production goods (units, parts and materials to be incorporated in the NEC products) are required to have low environmental impact.

To avoid environmental contamination and harm to human health, measures must be taken to prevent hazardous substances from being released when products are used, scrapped or disposed of. By ensuring that the production goods do not contain any substance that may cause damage to the environment or human health, we hope to further promote greener design and disposal activities at NEC. Thus, we will only procure goods from companies that fulfill the following requirements:

- Shall not contain banned substances nor conditionally banned substances

Substances that are stipulated by NEC to be banned or conditionally banned shall not be contained in products. (For details, see <1> of (1) in paragraph 7).

## 5. Definition of Green Procurement Products

- (1) Procured parts incorporated in NEC Products (does not apply to software and other companies that do not deliver hardware products)

The units, parts and materials incorporated in the NEC products will be procured from the suppliers meeting the requirements set forth under “3. Essential supplier requirements.” Products meeting the requirements set forth in “4. Essential product requirements” are called “green procurement products.”

- (2) Other procured products

The procurement of chemicals, gas, facilities, software and services are determined following consideration of the environmental management stance of suppliers. The environmental assessment of chemicals, gas and facilities will be made according to a pre-procurement assessment (preliminary assessment of chemical substances and facilities), as usual. When considering purchase of intangible products such as software and services, we believe that procurement from the suppliers with an active environmental management system will help in reducing the overall impact on the environment. Consequently, products for which suppliers have developed an environmental management system as set forth in “3. Essential supplier requirements” are considered to be “green procurement products.”

## 6. Supplier Assessment Items

- (1) Creation of an environmental management system (essential requirement)

The factories and offices in charge of final production and packaging of the product are required to create an environmental management system (EMS) by March 2005. Priority will be given to the environmental management systems that have been certified by a third party e.g. ISO14001, EMAS (EU “Eco-Management and Audit Scheme,” KES (Kyoto Environmental Standards), Eco Action 21 (Ministry of Environment) and Eco Stage. If you create your own system, create an environmental management system which includes the following six items by March 2005.

Develop environmental policies.

Set up an environmental management organization and appoint an environmental representative.

Identify and comply with environmental laws and regulations.

Carry out environmental objectives, targets and plans.

Conduct environmental education and training for employees.

Periodically confirm the status quo of legal compliance and environmental activities.

NEC will check the management of chemical substances in products in product design and manufacturing companies.

- (2) Environmental pollutants used in manufacturing process (does not apply to software, service and other such companies that are not engaged in the manufacturing process)

Environmental pollutants used in the manufacturing process should be managed according to the following two categories and :

Table 1 specifies the environmental pollutants.

**Banned substances:**

That is, substances that may not be used the manufacturing process by laws and regulations. NEC, in principle, does not purchase any product from the suppliers which use such substances in the production. (Essential requirement).

Refrigerants and other substances used in fire extinction are excluded in the scope of these substances.

**Substances to be avoided:**

That is, substances that should be avoided or minimized in the manufacturing process according to a discretionary target. If you still use such substances in your production line, you are requested to reduce their use with a view to complete elimination in the future.

Table 1 Environmental pollutants used in manufacturing process

Classification		Substance name	Applicable laws and regulations
Banned substances	1	CFC	Montreal Protocol Law Concerning the Protection of the Ozone Layer
	2	1.1.1-trichloroethane	
	3	Carbon tetrachloride	
	4	halon	
	5	HBFC	
	6	Methyl bromide	Montreal Protocol (Complete elimination in FY 2005)*
Substances to be avoided	7	HCFC	Montreal Protocol (Complete elimination in FY 2020)*
	8	Trichloroethylene	Water Pollution Control Law;
	9	Tetrachloroethylene	
	10	Methylene chloride	

\*Regulation schedule for developed countries in Montreal Protocol (December 1998)

- (3) Implementing the product environmental assessment (does not apply to software, service and other such companies that are not engaged in designing hardware products)

You are requested to perform environmental assessment when designing products so as to reduce the environmental impact of the product at the design stage.

Product environmental assessment is a preliminary assessment that considers environmental factors at the design stage based on the concept that matters such as global warming, resource recycling, elimination of environmental pollutants, should be taken into account at the design stage so as to promote the production of products that use little in the way of resources or energy.

To get a better idea of how to implement product environmental assessment, please try assessing at the design stage the products described in “7. Factors for product assessment.”

- (4) Commitment to global environmental conservation

In your commitment to global environmental conservation, we request that make efforts to achieve the following:

Reduction or complete elimination of the substances that may cause global warming  
Reduction in waste generation  
Management of chemical substances  
Reduction in resource consumption  
Reduction in the impact of package and packaging materials upon environment  
Environmental assessment (control of air pollution, water pollution, ground contamination, noise, vibration, etc.)

(5) Green purchasing

We request that you establish your own standards for green purchasing, and apply these standards to your purchases of product components and materials.

(6) Public disclosure of environmental information

We request that you make regular public releases of information on your commitment and achievements concerning environmental conservation.

## **7. Factors for Product Assessment (does not apply to software and other companies that do not deliver hardware products)**

- (1) The environmental pollutants<sup>1)</sup> contained in the product should be graded according to the following four categories: Table 2 indicates environmental pollutants contained in products.

Banned substances and conditionally banned substances (prerequisite):

That is, substances that must not be contained in the product by Japanese or foreign law or NEC's voluntary regulations. NEC, in principle, will not purchase any product containing such substances.

For conditionally banned substances, observe individual conditions.

[Reference standards: "Standards for Procurement Restriction on Chemical Substances in Products (Document No.: KANKANTU-04-006)"]

Check the drawings or specifications and confirm with the ordering department because the restriction on conditionally banned substances do not apply to some products.

Controlled substances:

That is, substances whose content in products is subject to control. If your products contain such substances, you are requested to disclose the type and content of such substances at the time of transaction. NEC will control the amount of such substances present in our products, and will avoid or reduce the use of them in accordance with applicable laws and regulations, and trends regarding environmental conditions.

Note:

- 1) Environmental pollutants: substances affecting the environment and human health that are to be controlled by laws, regulations or voluntary control programs as defined by NEC. The pollutant list below is based on the substances defined by the "Japan Green Procurement Survey Standardization Initiative (hereafter, referred to as JGPSSI)."

Table 2 Environmental Pollutants Contained in Products

Classification	No.	Name of substance group	Target date of complete abolition
Banned substances	1	PCB (Polychlorinated byphenyl)	Immediately
	2	Polychlorinated naphthalenes (with more than 3 chlorine atoms)	Immediately
	3	Bis (tributyltin) oxide	Immediately
	4	Tributyltin compounds and triphenyltin compounds	Immediately
	5	Asbestos	Immediately
	6	Short-chained chlorinated paraffin (carbon number: 10-13, chlorine content: 50 wt%)	Immediately
	7	Ozone depleting substances (Montreal Protocol on Substances: Class I)	Immediately
Substances banned with conditions	8	Cadmium and its compounds	March 2005
	9	Lead and its compounds	March 2005
	10	Mercury and its compounds	March 2005
	11	Chromium VI compounds	March 2005
	12	PBB (Polybrominated biphenyl)	Immediately
	13	PBDE (Polybrominated diphenyl ether)	Immediately
	14	Nickel and its compounds (Scope: components that come into contact with human body.)	Immediately
15	Azo dye (Scope: components that come into contact with human body.)	Immediately	
Controlled substances	16	Antimony and its compounds	
	17	Arsenic and its compounds	
	18	Beryllium and its compounds	
	19	Bismuth and its compounds	
	20	Selenium and its compounds	
	21	Bromine flame retardant (Except for PBB and PBDE)	
	22	Phthalate ester	
	23	Ozone depleting substances (Montreal Protocol on Substances: Class II)	
	24	Poly (vinyl chloride)	
	25	Radioactive substances	

- 1) For detailed conditions on banned or conditionally banned substances, please refer to the reference standards, "Standards for Procurement Restriction on Chemical Substances in Products (Document No.: KANKANTU-04-006)."
- 2) For the specific names, chemical formula, applicable laws and other information on the substances of each substance group, please refer to the guidelines, manuals and other documents issued by JGPSSI.

(2) Resource and energy conservation

We request that your products are designed to minimize resource and energy consumption in their manufacturing, distribution and usage. Accordingly, they should:

Consume minimum power in both the operation and standby modes.

Be compact and light in weight.

Use minimum volume of rare resources.

(3) Long lifetime

Parts should be designed to have a long life while units should be designed to enable easy repair and parts replacement.

(4) Use of recycled parts and materials

Recycled parts and materials should be used wherever possible.

(5) Easily recyclable materials

Products should be made of easily recyclable materials and designed so that same-material parts can be removed separately to promote material recycling.

(6) Labeling plastic type

Molded parts weighing more than 25g must be marked with a label indicating the type of plastic/ composite material in accordance with the JIS Standard. Whenever possible such labeling should be provided even on parts of less than 25 grams.

- JIS K 6899 (ISO1043-1) "Plastic symbol - Part 1: Basic polymers and their characteristics"
- JIS K 6899-2 (ISO1043-2) "Plastic symbol - Part 2: Fuller and reinforcing agent)"
- JIS K 6999 (ISO11469) "Plastic - Identification and indication of plastic products"

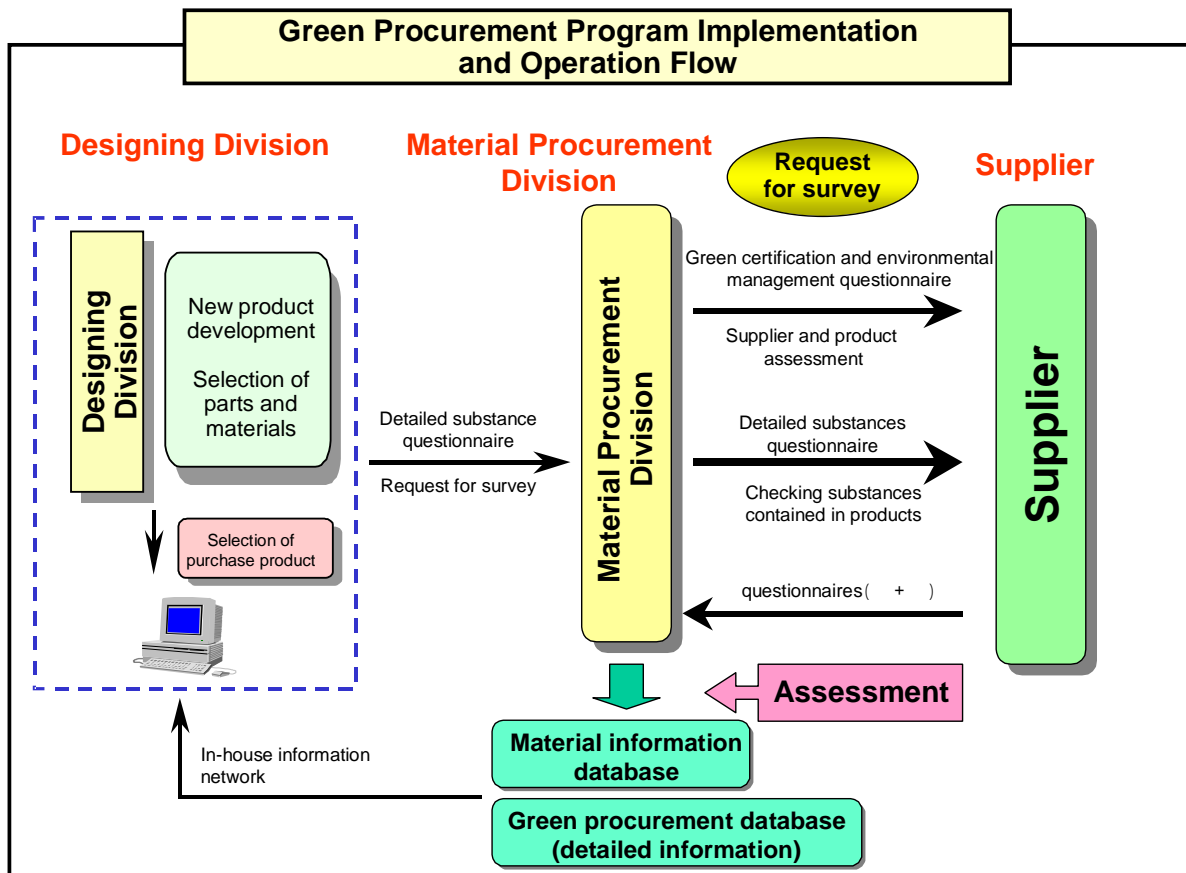
## 8. Operation of Green Procurement System

The green procurement system will be operated as follows:

(1) Supplier assessment

- 1) Each supplier is requested to disclose information on their management stance towards products and environmental conservation in view of the green procurement standard.
- 2) We evaluate the overall level environmental management within the company, including the state of environmental management system.
- 3) We shall check whether or not banned substances are being used in manufacturing processes (Table 1).
- 4) We shall check for the noninclusion of banned substances and conditionally banned substances (Table 2).
- 5) We check if you are prepared to reply to our detailed questionnaire on "environmental pollutants contained in the products" (Table 2), if any and the amounts.

- (2) Product-by product examinations
  - 1) If your products contain environmental pollutants (Table 2), their volumes are checked:  
The measuring tools and data presentation format of this survey shall be those determined by JGPSSI.
  - 2) We shall use a separate survey sheet to conduct a compliance survey in regards to RoHS Directives.
  - 3) In principle, environmental pollutants contained in the products should be submitted upon initiation of the transactions for products to be supplied.
- (3) If important change in your reply after returning your questionnaire, you are requested to notify us of the details of such change.
- (4) Individual provisions concerning green procurement may be included in the basic agreement, memorandum, purchase specifications etc., as wherever required. In such cases, the individual specifications shall take preference.
- (5) Based on the information provided by suppliers, NEC will select and procure better, greener products.
- (6) Any and all information received from suppliers will be treated with the highest confidentiality.



[Revision History]

- Revisions to Ver. 2 (June 2004)

“(1) Creation of an environmental management system” in section 6. “Supplier Assessment Items” changed as follows:

<1> Eco Action 21 (Ministry of Environment) and Eco Stage added as third party certifications

<2> Text in (1)- and (1)- was modified

- Revisions to Ver. 3 (December 2004)

- Notes on the explanation did not apply to the software and service companies

- Importance of management of product substances stipulated

- Substance banned in the manufacturing process added (Methyl bromide was moved from the substances to be avoided)

- Product substance standards revised (e.g. target substances and categorization)

- “Standards for Procurement Restriction on Chemical Substances in Products” and the JGPSSI guideline quoted for product substance standards (duplication deleted)

- Implementation of RoHS conformance check stipulated

[Issued on December 2004]

by NEC Corporation

7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan