



# Green Procurement Guidelines

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Ver.5

November 2011

*Japan Radio Co., Ltd.*

# Environmental Policy

## Basic Philosophy

JRC (hereinafter referred to as “ the Company ”) recognizes environmental conservation to be one of the most important common concerns for all mankind, and will act with full consideration for environmental conservation in all aspects of its business activity.

## Basic Policy

The Company fulfills its responsibility as a corporation for development of sustainable society by establishing the following environmental policies led by ISO14001 and conducting its business in accordance with them.

1. To contribute by introducing environmentally conscious design products  
In the field of wireless communications and data processing, the Company contributes to the public by introducing environmentally conscious design products less environmental impacts throughout its life cycle.
2. To reduce environmental impacts in the business activity, products and services
  - (1)To save energy
  - (2)To promote 3R activities (reduce, reuse, recycle) to reduce discharge and wastes
  - (3)To promote Green Procurement
3. To comply with the laws and regulations related to the environment  
The business activity, products and services of the Company shall comply with the laws and regulations related to the environment and other social requirements to which the Company subscribes.
4. To make continuous improvement of environmental impacts and to prevent pollution  
The business activity, products and services of the Company shall comply with the laws and regulations related to the environment and other social requirements to which the Company subscribes.
5. To establish and do periodical review of the objectives and targets for environmental conservation  
The Company establishes the objectives and targets of environmental conservation and reviews them periodically. The Company shall make maximum efforts to achieve such objectives and targets.
6. To make announcement of the environmental policy to the public  
The environmental policy, including the basic philosophy and basic policy, shall be made thoroughly known to all employees and all people working for the Company in order to obtain their full understanding and cooperation. In addition, this environmental policy shall be announced to outside the Company through the homepages on web site and other ways of announcement.

## Introduction

The Japan Radio Co., Ltd. (referred to as "the Company"), in its Management Philosophy, is committed to contribute to the realization of an ever higher quality society by applying its full creative and intelligent resources to develop technologies and products of superior value. Moreover, the Company has been tackling efforts to reduce environmental impacts since 2005, the year in which the Environmental Policy was established, describing it as one of the key issues to harmonize its business activity in all stages and global environmental conservation.

The Company has been positively putting the spirit into procurement activity as well via Green Procurement in cooperation with business connections to date, in order to construct a society in which resources are circulated.

Having reviewed changes in the social regulations and business circumstances, the Company has now issued Green Procurement Guidelines Version 5 (referred to as "the Guidelines"), which supersedes the previous version.

Please understand the object of these guidelines, so that we may look forward to receiving even greater cooperation from you in future than ever before.

Japan Radio Co., Ltd.  
Procurement Department  
Quality Assurance

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## 1. Object

Our object is, via the Guidelines, to inform business connections of the requirements based on the Basic Environmental Policy of the Company and to ensure that the products, materials used for production (including sub-materials), electric parts, mechanical parts, and other things (referred to as "the Parts") purchased are environmentally friendly, so that our products will be well considered in terms of conservation of the earth environment.

## 2. Scope

The Guidelines shall apply to all the Parts purchased by the Company. However, in cases where customers specify their own guidelines for the supplies to comply with, the Company will purchase such parts accordingly to meet the requirement.

## 3. Requirements for business connections

### 3.1 To establish and maintain the Environmental Management System (EMS)

- a) To obtain ISO14001, Eco-action 21, Ecostage or KES Authorization, or to establish own "Environmental Management System (EMS)" as conditioned below and maintain the same.
  - 1) The management sets out an Environmental Policy and notifies all employees.
  - 2) To have an environmental conservation plan and have the force to drive it forward
  - 3) To identify relevant laws with which you are sure of your compliance
- b) To establish a management system of chemical substances with a certain environmental impact (identification system to prevent contamination, etc.), including the following conditions:
  - 1) To appoint a manager for the management system
  - 2) To have a system to confirm its compliance with customer requirements
  - 3) To have a system to inform customers of any nonconformity and take corrective action for the same
  - 4) To file data and record concerning the products to deliver

### 3.2 To specify the chemical substances with a certain environmental impact

Chemical substances of which the use is prohibited and controlled in our opinion are specified in accordance with the requirements of relevant domestic and international laws and regulations, outline of which are shown in this volume as "Outline of the chemical substances with a certain environmental impact". The chemical substances (not all but examples belonging under the outlines which have CAS / EC numbers) are to be kindly referred to the Separate sheets named List of chemical substances with a certain environmental impact Ver.5.01 Green Procurement Guidelines Ver.5.

#### 3.2.1 Chemical substances of which the use is prohibited

In Table 1 of the “Outline of the chemical substances with a certain environmental impact”, chemical substances of which the use is prohibited and their corresponding laws are shown. “Chemical substances of which the use is prohibited” are prohibited to contain in the Parts supplied to the Company. However, there are some exceptional permitted usages.

### 3.2.2 Chemical substances of which the use is controlled

In Table 2 of the “Outline of the chemical substances with a certain environmental impact”, chemical substances of which the use is controlled and their corresponding laws are shown. “Chemical substances of which the use is controlled” are not prohibited to contain in the Parts supplied to the Company. However, appropriate control and disclosure of information on these chemical substances are required.

### 3.3 To survey on the chemical substances with a certain environmental impact

To promote the green procurement, the Company conducts surveys on the chemical substances with a certain environmental impact used in the Parts. Business connections of the Company are kindly requested to cooperate with us in the surveys on a required basis as follows.

#### a) Survey types and target chemical substances

- 1) For declaration to specific requirement on chemical substances such as the RoHS Directive
- 2) For information by JGPSSI Survey Response Tools on the chemical substances specified by JIG
- 3) For information by JAMP Tools (MSDSplus: Basic Information Transmission Sheet and/or Article Information Sheet (AIS): Information Exchange Sheet) on the chemical substances controlled by JAMP
- 4) For information by JAMA/JAPIA Tool on the chemical substances specified by GADSL
- 5) For data measured for the purpose of analyzing the ingredient
- 6) In accordance with domestic and international regulations, and requests from our customers

#### b) Response to the surveys

- 1) Business connections of the Company are kindly requested to collect in advance such data on the Parts to provide the survey response in time of the submission due date.
- 2) For entry of the responses in each tool, please refer to the respective manuals issued by relevant organizations (JGPSSI, JAMP, JAMA/JAPIA).

#### c) Handling of the responses

The responses to the surveys will be shared within the subsidiaries and affiliate companies of the Company. Please also note that the responses may be disclosed to customers of the Company as part of information related to its products.

### 3.4 Matters other than the chemical substances with a certain environmental impact

#### a) Energy saving

To reduce the consumption of energy, such as electric power and fossil fuels.

b) Materials efficiency

To reduce the types of materials.

c) Ease of disassembly

The products should be structured such as to facilitate the disassembly and sorting of reusable and recyclable parts.

d) Indication of materials

Information such as the names of materials useful for recycling and optimum waste disposal should be indicated as much as possible in a way that is not easily erasable.

e) Resource saving

Recyclable materials should be used in the products as much as possible. In addition, the weight of materials used in the products should be reduced as far as

f) Packaging materials

Packaging materials should meet the following requirements in order to reduce environmental impact.

- 1) Structure: The packaging materials should be reusable.
- 2) Materials: To use recyclable materials and minimize the amount of materials in use.
- 3) Indication: To indicate the names of materials in a way that is not easily erasable. Indications on plastics should be in accordance with JIS-K-6899-1 to -4.
- 4) Packing materials should be easily separated into recyclable pieces.
- 5) Directive 94/62/EC (on Packaging and Packaging Waste) should be taken into consideration.

g) Materials efficiency

Relevant laws and regulations related to recycling and energy saving, and product disposal should be taken into consideration.

h) Usable for a long period

Extended periods of use should be taken into consideration.

i) Provision of information

Information concerning the existence of resources saving and energy conservation functions on the products, and how to effectively use the same should be given via the catalogue and homepage.

### 3.5 Delivery

- a) Transportation : Consideration should be given to transportation in order to reduce its environmental impact
- b) Reduction in waste : Packaging materials used to deliver products to the Company should be reduced by avoiding excessive packaging, employing reusable containers, and recovery.

### 3.6 Change of 4M•D (material, method, machine, man and delivery)

As for products delivered to which the Guarantee of Non-use of a certain environmental chemical substances is specifically applicable, details of the change (material, method, place, main facility, product manager) in plan should be specifically notified to use for our information before such changes are made.

#### 4. Definition

a) EMS

EMS is an abbreviation of Environmental Management System. EMS refers to both the ISO14001 standard and a certain management system assessing the environmental impact of an organization. For an organization, EMS is regarded as an essential system to manage environmental themes of the business in nature.

b) ISO14001, Eco-action 21, Ecostage, KES

ISO14001 is an international environmental standard and introduced to relatively big enterprises. On the other hand, Eco-action 21, Ecostage and KES are also EMS; applied to relatively small and medium-sized enterprises in terms of the cost of introducing and operating the same.

c) Chemical substances with a certain environmental impact

Chemical substances with a certain environmental impact include substances of which the use is prohibited, as defined in e) below and substances of which the use is controlled, as defined in f) below.

Examples of the chemical substances belonging to each group are shown in Table 1 and Table 2 respectively of the Separate sheets named List of chemical substances with a certain environmental impact Ver.5.01 Green Procurement Guidelines Ver.5.

The chemical substances with a certain environmental impact shown therein are the same with the chemical substances listed in Annex A (Normative) "JIG Declarable Substance List" and Annex B (Informative) "Detailed Substance Lists with CAS Numbers and/or EC Numbers" of JIG-101 Ed.3.1 dated Sept.14, 2010

d) The RoHS Directive

The RoHS Directive is the 2002/95/EC directive, which came into force on July 1, 2006, and which restricts or prohibits with threshold value and exclusion the use of lead, mercury, cadmium, hexavalent chromium, PBB (polybrominated biphenyls) and PBDE (polybrominated diphenyl ethers) in electrical and electronic equipment.

e) Chemical substances of which the use is prohibited

Chemical substances of which the use is prohibited are prohibited by relevant laws in certain countries, including the Act in Japan on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Law, Ozone Layer Protection Law, directives such as the RoHS Directive and so on.

f) Chemical substances of which the use is controlled

Chemical substances of which the use is controlled can still be used by law but it is recommended to suppress their use from the viewpoint of risk management for the environment, health, safety and the disposal process.

g) JGPSSI

JGPSSI is an abbreviation of the Japan Green Procurement Survey Standardization Initiative, which consists of certain manufacturers of electrical and electronic equipment aiming to reduce the work for the survey and obtain reliable data by standardizing the survey system on chemical substances.

h) Joint Industry Guidelines (JIG)

Guidelines supported by industry organizations, including Japan Green Procurement Survey Standardization Initiative (JGPSSI), European Information & Communications Technology Industry Association (DIGITALEUROPE, former EICTA), Consumer Electronics Association (CEA) in the United States, Association Connecting Electronics Industries (IPC), and Joint Electron Device Engineering Council (JEDEC), which apply to electric and electronic device products (including batteries but excluding packaging materials).

i) JAMP (Joint Article Management Promotion-consortium)

A cross-industry organization for activity promotion that manages information on chemical substances contained in an article (another name of a part or molded product) appropriately and aims to establish and disseminate the concrete system to disclose and transmit the information through companies on supply chain smoothly

j) JAMA (Japan Automobile Manufacturers Association, Inc.)

The Japan Automobile Manufacturers Association, Inc. (JAMA) works to support the sound development of Japan's automobile industry and to contribute to economic development and people's lives in Japan.

k) JAPIA (Japan Auto Parts Industries Association)

The Japan Auto Parts Industries Association (JAPIA) addresses social issues related to the auto parts industry and promotes international cooperation among the auto parts manufacturing industries and thus to contribute to industrial and economic development in Japan.

l) GADSL (Global Automotive Declarable Substance List)

The GADSL is the only one list to refer to the materials that require notification from the automotive, automotive parts manufacturer (supplier) and chemical/plastics industries.

## Outline of the chemical substances with a certain environmental impact

Table 1. Chemical substances of which the use is prohibited

JIG Criteria*1	JGPSSI Classification No.*2	Substances Group Name	Relevant laws or equivalent <threshold value>
R	C01	Asbestos	Industrial safety and health Law, REACH Regulation
R	C02	Aromatic Amines	In Germany, REACH Regulation
R	A05	Cadmium/Cadmium Compounds	RoHS Directive<100ppm>
R	A07	Chromium VI Compounds	RoHS Directive<1000ppm>
R	A09	Lead/lead Compounds	RoHS Directive<1000ppm>
R	A10	Mercury/Mercury Compounds	RoHS Directive<1000ppm>
R	C04	Ozone Depleting Substances	Ozone Layer Protection Law, Montreal Protocol
R	C08	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.,(Class 1 specified)
R	B02	Polybrominated Biphenyls (PBBs)	RoHS Directive<1000ppm>
R	B03	Polybrominated Diphenyl Ethers (PBDEs)	RoHS Directive<1000ppm>
R	B05	Polychlorinated Biphenyls (PCBs)	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class 1 specified),REACH Regulation
R	B06	Polychlorinated Naphthalenes	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class 1 specified),REACH Regulation
R	C06	Radioactive Substances	Law concerning the Prevention from Radiation Hazards due to Radioisotopes and Others
R	B09	Short Chain Chlorinated Paraffins(C10-C13)	In Germany,REACH Regulation
R	A28	Tri-substituted Organnostannic Compounds	2009/425/EC
R	A17	Tributyl tin oxide (TBTO)	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class 1 specified),REACH Regulation

\*1: R Regulated  
I Information Only

\*2: A Metallic compounds  
B Halogenated organic compounds  
C Others

**Table 2. Chemical substances of which the use is controlled**

JIG Criteria*1	JGPSSI Classification No.*2	Substances Group Name	Relevant laws or equivalent <threshold value>
I	A19	Beryllium oxide (BeO)	Industrial safety and health Law
R	C18	Boric acid	REACH Regulation
I	B08	Brominated Flame Retardants (other than PBBs,PBDEs or HBCDD)	Recognized market requirement for reporting
R	A22	Cobalt dichloride (CoCl <sub>2</sub> )	REACH Regulation
R	A20	Diarsenic pentoxide	REACH Regulation
R	A21	Diarsenic trioxide	REACH Regulation
R	A23	Dibutyltin Compounds	2009/425/EC
R	A24	Diocetyl tin (DOT) compounds	2009/425/EC
R	C11	Dimethyl fumarate	2009/251/EC
R	C19	Disodium tetraborate, anhydrous	REACH Regulation
R	B10	Fluorinated Greenhouse Gases	Montreal Protocol
R	C07	Formaldehyde	Industrial safety and health Law
R	B11	HBCDD and all Major Disastereoisomers	REACH Regulation
R	A11	Nickel	Pollutant Release and Transfer Register Law (Class 1 specified)
R	B12	Perchlorates Compounds	California State Law
R	B13	PFOS Compounds	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class 1 specified)
R	C15	Diisobutyl phthalate (DIBP)	REACH Regulation
R	C09	Selected Phthalates Group 1(BBP, DBP, DEHP)	REACH Regulation
R	C10	Selected Phthalates Group 2(DIDP, DINP, DNOP)	REACH Regulation
R	B15	Polychlorinated Terphenyls (PCTs)	REACH Regulation
I	B07	Polyvinyl Chloride	Recognized market requirement for reporting
R	C16	Refractory Ceramic Fibers, Aluminosilicate	REACH Regulation
R	C17	Refractory Ceramic Fibers, Aluminosilicate	REACH Regulation
R	C20	Tetraboron disodium heptaoxide, hydrate	REACH Regulation
R	B16	Tris (2-chloroethyl) phosphate (TCEP)	REACH Regulation

\*1: R Regulated  
I Information Only

\*2: A Metallic compounds  
B Halogenated organic compounds  
C Others

## JRC Green Procurement Guidelines Ver.5

### Revision History of the Guidelines

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