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Green Purchasing Guidelines

(For suppliers)

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Toho Titanium Company Limited

Table of Contents

1. Introduction	1
2. Scope of Application	2
3. Requirements to be Considered in Purchasing	2
1) Essential Requirements	2
2) Desired Requirements	3
4. Application of Green Purchasing	5
Attachment Guide for Banned Environmental Impact Substances	

Toho Titanium Company Limited Green Purchasing Guidelines

1. Introduction

The Toho Titanium Group, a comprehensive titanium manufacturer, is engaged primarily in titanium business, and also conducts electro-ceramic materials business and olefin polymerization catalyst business, making use of technology and intermediate products from the titanium refining process

Fully recognizing the effects these business activities have on the environment, our Group is trying to reduce environmental risks as well as to “use resources effectively” and “reduce environmental loads,” including improvement of yield and extraction rates, improvement of quality, process reduction, recycling and energy conservation, at any stage of the business activities, with a basic environmental policy that we will contribute to global environmental conservation through “reasonable and effective use of resources and technology.”

To this end, our Group has decided to promote green purchasing and established the “Green Purchasing Guidelines,” based on recognition that it is also essential to reduce environmental loads in all purchasing products necessary for our business activities.

These Guidelines present “essential requirements (minimum requirement level)” to be observed at the least and “desired requirements (desired level)” to be taken into account. If the “essential requirements” are not met, we may have to discontinue our business relationship. The “desired requirements” will be used for future reference in purchasing.

If standards other than those set forth in these Guidelines are required due to specification requirements of purchasing products, we will specify such standards in purchase specifications and other documents, which will be determined separately.

It should be noted that the green purchasing standards are subject to subsequent changes in laws and regulations, and social trends.

[Green purchasing policy]

We will contribute to “creation of a sound material-cycle society,” “prevention of global warming” and “promotion of 3Rs” through efforts to green purchasing.

All products to be purchased will be subject to green purchasing.

If the functions, prices and delivery periods of purchasing products to be purchased are equivalent, we will evaluate the degree of environmental load reduction based on the “essential requirements” and “desired requirements” and purchase those with less environmental loads.

* 3Rs = Recycle, Reduce and Reuse

2. Scope of Application

These Guidelines cover the following purchasing products at present.

1) Facility materials (manufacturing facilities)

Facilities related to titanium manufacture, electronic materials and functional materials, and olefin polymerization catalysts

2) Operational materials

All purchasing products “used for manufacturing titanium-related products, products related to electro-ceramic materials and functional materials and products related to olefin polymerization catalysts,” and facility maintenance materials

3) Office supplies

All purchasing products used at the headquarters, branches, offices and other places of business.

3. Requirements to be Considered in Purchasing

1) Essential Requirements

We will purchase products from suppliers that meet the following requirements. Suppliers are requested to submit us a confirmation that they meet the essential requirements.

(1) Essential requirements for suppliers

Our major consideration when determining which products to be purchased is the degree to which the products in question reduce environmental loads and whether the companies manufacturing and selling the products are taking an active stance toward environmental conservation. We will examine the policy of the companies toward environmental conservation and purchase products from suppliers that meet the following conditions.

a) Creation of an environmental management system

Factories and offices which develop, manufacture and sell purchasing products are required to create an environmental management system.

Suppliers can implement the ISO-14001 environmental management system or create their own environmental management system, which must include the following items:

- Establish environmental policies.
- Appoint an environmental management representative and set up an organizational structure for environmental management.
- Identify and comply with environmental laws and regulations.
- Establish and carry out environmental objects, targets and plans.
- Conduct environmental education and training for employees.
- Periodically check the status of legal compliance and environmental activities.

b) Nonuse of substances banned from use in the manufacturing process

In the manufacturing process, suppliers must not use any banned substances separately specified by our Group.

c) Cooperation in a survey of contained chemical substances

For a survey of chemical substances contained in purchasing products, suppliers are required to submit us a survey report of chemical substance contents (in the JGPSSI format).

(2) Essential requirements for purchasing products

Products to be purchased are required to have low environmental loads.

To avoid environmental contamination and harm to human health, measures must be taken to prevent hazardous substances from being released when purchasing products are used, scrapped or disposed of. By ensuring that purchasing products do not contain any substance that may cause damage to the environment or human health, we intend to design greener products and conduct more appropriate disposal activities.

Thus, we will only purchase products that do not contain any banned substances separately specified by us.

“Contain” as used in these Guidelines means “intentionally containing banned substances.” Although impurities, which are unavoidably contained, are not considered as contained banned substances, the contents must not exceed the threshold level (*) of hazardous substances indicated in the “Guide for Banned Environment Impact Substances.”

* Threshold level: the maximum level at which substances do not start to develop toxicity

2) Desired Requirements

We ask suppliers to understand the commitment of our Group to “creation of a sound material-cycle society,” “prevention of global warming” and “promotion of 3Rs” and to promote the following efforts. Suppliers are requested to give us periodical report of their promotion status.

(1) Implementation of environmental assessment of purchasing products

Suppliers are requested to perform environmental assessment of purchasing products when designing the purchasing products so as to reduce the environmental loads of the purchasing products at the design stage. Environmental assessment of purchasing products is a preliminary assessment that takes environmental factors into consideration at the development stage based on environmental design concepts such as global warming, resource recycling and elimination of environmental impact substances so as to provide eco-friendly products that use less resources or energy to the market.

(2) Commitment to global environmental conservation

Reduction of substances that may cause global warming, reduction in waste generation, management of chemical substances, reduction in resource consumption, reduction in the environmental loads of wrapping and packaging materials, and implementation of environmental assessment (control of air pollution, water pollution, ground contamination, noise, vibration, etc.)

(3) Green purchasing

Suppliers are requested to establish green purchasing standards and apply such standards in purchasing parts and components of green purchasing.

(4) Public disclosure of information

Suppliers are requested to make active public disclosure of environmental information of purchasing products and their commitment and achievements concerning environmental conservation.

4. Application of Green Purchasing

1) Supplier-by-supplier survey

- (1) Each supplier is requested to provide information on its management stance towards environmental conservation and purchasing products.
- (2) We will examine the state of the environmental management system and other related matters.
- (3) We will check whether or not banned substances are used.

2) Product-by-product survey

We will survey the contents of banned substances.

3) Notification of changes

In case of any change in answers to a survey form, suppliers are requested to notify us of such change.

4) Any and all information received from suppliers will be treated with the highest confidentiality.

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Attachment

Guide for Banned Environmental Impact Substances

1. Banned Substances and Threshold Levels

1) Substances banned from use in products

The following substances must not be used intentionally and, even if they are impurities, must not exceed the threshold level (*).

*Threshold level: the maximum level at which substances do not start to develop toxicity

(1) Heavy metals (which are contained in packaging ,plastics, ink, paints, etc.)

Cadmium and its compounds	wrapping materials, plastics, ink and paints: less than 5ppm raw metals containing zinc: less than 75 ppm raw metals not containing zinc: less than 20 ppm
Lead and its compounds	less than 100 ppm
Chromium VI compounds	less than 100 ppm
Mercury and its compounds	less than 100 ppm

As for packaging materials, however, the total contents of the above four substances must not exceed 100 ppm.

(2) Chlorinated organic compounds

- Polychlorinated biphenyls (PCB) : less than 50 ppm
(with 3 or more chlorine atoms)
- Polychlorinated naphthalenes (PCN) : less than 50 ppm
(with 3 or more chlorine atoms)
- Polychlorinated terphenyls (PCT) : less than 50 ppm
(with 3 or more chlorine atoms)
- Chlorinated paraffins (CP) : less than 50 ppm
(with carbon length of 10-13)
- Mirex

(3) Brominated organic compounds

- Polybromobiphenyls : less than 1000 ppm
- Polybromodiphenylethers : less than 1000 ppm

(4) Organotin compounds

- Tributyltin compounds : less than 1000 ppm
- Triphenyltin compounds : less than 1000 ppm

(5) Asbestos

(6) Formaldehyde : less than 0.1 ppm

2) Substances banned from use in the manufacturing process

(1) Ozone depleting substances

- CFCs, Halons, HBFCs, HCFCs, methyl bromide and carbon tetrachloride
- 1,1,1-trichloroethane

(2) Chlorinated organic solvents

- 1,1,2-trichloroethane
- 1,2-dichloroethane
- 1,1-dichloroethylene
- 1,2-dichloroethylene
- Dichloromethane (methylene chloride)
- Chloroform
- Trichloroethylene
- Tetrachloroethylene

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