



Shimadzu Corporation Green Procurement Standards

Revision K (May 2019)

Introduction

Health and protecting the global environment are a common desire of people throughout the world.

In an effort to embody our core corporation principles of "Realizing Our Wishes for the Well-being of both Mankind and the Earth," Shimadzu Corporation (hereafter referred to as "Shimadzu") has made integrating our business activities with global environmental preservation one of our highest operational priorities.

From this point of view, we have been proceeding with "Green Procurement" that aims to eliminate or reduce the use of hazardous substances and making efforts to reduce the environmental load generated from our manufacturing and other business activities. Also, from this standpoint, we preferentially purchase materials, parts, supplies, equipment and other resources, as well as services that have a lower impact on the environment.

To effectively promote the "Green Procurement" program, cooperation from suppliers is essential. Therefore, we intend to assess our suppliers with respect to their commitment to environmental issues, in accordance with our fundamental purchasing policy "Symbiosis and EQCD (Environment, Quality, Cost, and Delivery)," and then develop strong partnerships with suppliers on the basis of the supply chain.

In recent years, the EU and other countries have been strengthening regulations and establishing new laws governing chemical substances. With the successive introduction of new and revised laws and regulations, such as the WEEE and RoHS directives^(*1) or the European REACH regulations^(*2), there is an increasing number of chemical substances that are now banned or restricted, and that number will undoubtedly increase significantly in the future.

Given these circumstances, Shimadzu should comply with these various laws and regulations as soon as possible. Therefore, we are hereby issuing Green Procurement Standards (Version 1, Revision K) (hereafter "Green Procurement Standards"), which shall govern all procurement activities, including for services.

Due to revisions in laws and regulations, it may be necessary to resurvey the content of chemical substances or resubmit non-inclusion guarantees. Accordingly, to comply with environmental laws and regulations, it is essential that suppliers comply with such requirements in a reliable manner. Therefore, we must ask for your understanding and cooperation.

We are sure that we can build strong partnerships with our suppliers to jointly fulfill all of our social responsibilities.

(*1) WEEE and RoHS Directives (Both effective from February 13, 2003.)

WEEE Directive: Directive 2002/96/EC of the European Parliament and of the Council on Waste Electronic and Electrical Equipment (Revised on July 24, 2012)

RoHS Directive: Directive of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (Revised on July 1, 2011; Annex II revised on June 4, 2015)

(*2) REACH Regulation

REACH is the European Community Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals, and entered into force on June 1, 2007.

It gives greater responsibility to industry to manage the risks posed by chemicals and to provide appropriate safety information on the substances to their users. Manufacturers and importers will be required to gather information on the properties of their chemicals, which will allow their safe handling, and to register the information in a central database run by ECHA.

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1. Purpose

This Green Procurement Standard specifies standards for reducing the content of hazardous chemical substances in products when Shimadzu procures goods and services from suppliers. The standard will not only provide compliance with environmental laws and regulations of respective countries, but also, through the cooperation of our suppliers, reduce our load on the environment.

2. Scope

The standards apply to all items purchased by Shimadzu, such as materials and parts incorporated in Shimadzu's products (including packaging and secondary materials that are put on the market along with products), general supplies and equipment. They also apply to products and parts that are manufactured by our subcontractors.

3. Requirements

Requirements will be specified for suppliers and procured items. Shimadzu will prioritize suppliers that meet Shimadzu's requirements in the following aspects.

Shimadzu Requirements for Green Procurement

Requirements for Suppliers	Supplier of Materials and Parts	Supplier of General Supplies and Equipment
Environmental management system certification	Recommended	Recommended
Establishment of quality assurance system, including a chemical content management	Mandatory (*3)	Recommended
Cooperation with various surveys Example 1: Cooperation regarding chemical contents survey Example 2: Submission of non-inclusion guarantee	Mandatory	Recommended
General supplier agreement	Recommended	Recommended

(*3) **Mandatory**: To be verified by audit.

Requirements for Products	Supplier of Materials and Parts	Supplier of General Supplies and Equipment
Not containing banned substances	Mandatory	Recommended
Designed to reduce environmental load	Recommended	Recommended

3-1 Requirements for Suppliers

Suppliers will be expected to meet the following criteria.

- (1) Obtaining environmental management system certification
It is strongly recommended that suppliers obtain environmental management system certification from the relevant independent organizations (e.g., ISO14001 certification). Please obtain independent certification if at all possible.
- (2) Establishing a quality assurance system for controlling chemical substances by ensuring the following procedures are in place
 - 1) A quality assurance system relating to all areas from production to shipment, is put into place, maintained and continuously improved, assuring obviation of any part or product containing hazardous chemical substances in the supply chain.
 - 2) Data regarding chemical substances in parts and materials being used are readily available for scrutiny on demand.
 - 3) Chemical content management system and responsible manager are established.
 - 4) Full training is given to all relevant staff regarding the control of hazardous chemical substances in the supply chain process.
- (3) Cooperation with various surveys
Suppliers may be required to perform surveys to verify paragraphs (1) and (2) above, survey the content of chemical substances, and/or submit non-inclusion guarantees for specific chemical substances. Please cooperate in responding to such requests accordingly. For details, refer to the Various Surveys section in our website.
Submitted responses will be shared with other companies in the Shimadzu Group. They also may be shown to customers if requested by the customer.
- (4) General supplier agreement
An article stipulating the supply of environmentally friendly products and services is included in the general supplier agreement.
Suppliers without a general supplier agreement already in place shall sign a Green Procurement Memorandum of Understanding.

3-2 Requirements for Products

- (1) Not containing banded substances
Items that are banned from intentional use, banned, or subject to control, threshold values, and other relevant information is specified on our website under List of Banned and Controlled Substances (MT83-6014). This list includes classes of chemicals. Names and CAS numbers for individual chemical substances included in such chemical classes, are indicated on the website under Detailed Substance List with CAS Numbers (MT83-6015). Exempted applications where the content of banned (or restricted) substances is permitted to exceed the threshold values specified in the RoHS directive (2011/65/EU) are listed on the website under "RoHS Directive Exemptions – Table 1" (MT83-6029) and "RoHS Directive Exemptions – Table 2" (MT83-6030).
Even if a substance is not indicated in drawings, banned substances specified in the List of Banned and Controlled Substances must not be used or added to the product. If a threshold value is specified, the content level must not exceed that threshold value.

(2) Designed to reduce environmental load

1) Selection criteria

Shimadzu will preferentially purchase products designed to reduce detrimental environmental impact, such as follows:

- Products that use as much recycled materials as possible, products designed with reduction in size and weight, and designed to show longer operation life
- Products designed with resources and energy savings taken into consideration
- Products designed with full consideration for recycling; namely, products that can be easily disassembled, separated and collected
- Products with environmental labels as type I, II, III
- Products whose environmental information is disclosed
- Products subjected to assessment

2) Suppliers will be expected to answer relevant surveys conducted by Shimadzu.

4. Shimadzu Activities

The following shall be performed to verify the status of compliance with the RoHS Directive (2011/65/EU) and various other chemical regulations that are particularly strict about manufacturing controls.

- Sample Analysis
- Supplier Assessment

4-1 Sample Analysis

Analyze these samples by screening them with an energy dispersive X-ray fluorescence spectrometer (EDX) and gas chromatograph-mass spectrometer (GC-MS). Then use the results to determine whether they pass or fail RoHS requirements, and whether or not precision analysis is required. In some cases, suppliers may be asked to implement corrective actions, as necessary. For more details, refer to "Sample Analysis" on the website.

4-2 Supplier Assessment

The status of chemical content controls at suppliers is assessed using a check sheet. Based on assessment results, we may request implementing improvements or other measures. Evaluation results will be shared with other companies in the Shimadzu Group.

5. Documents Submitted Voluntarily by Suppliers

Any changes in the chemical content levels shall be submitted as a change report, in the same manner as change controls for manufacturing specifications.

6. Contact Information

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Revisions Included in Revision J

- Revised to reflect the 2015/863/EU revision.
- Comment added regarding sample analysis: GC-MS screening is now clearly indicated.
- Revised the URLs for both the Japanese and English websites.
- Wording was revised.

These revisions include no changes to requirements for suppliers.

For the latest information regarding the Green Procurement Standard, refer to the following Shimadzu website:

<https://www.shimadzu.com/about/procurement/procure.html>