

Yokogawa Group  
*Green Procurement  
Guidelines*  
Version 4.5

October, 2018

YOKOGAWA 

## Introduction

With various environmental issues becoming pressing such as climate change, biodiversity, water and energy source depletion, efforts for environmental conservation have become more and more important in recent years.

The Yokogawa Group recognizes that the conservation of an irreplaceable global environment is the most significant challenge confronting mankind today. Accordingly, environment management with the aim of harmonizing corporate activities with global environmental conservation is one of the top priorities for our management. With the goal of contributing to the development of a sustainable society through all our corporate activities, we have formulated the “Green Procurement Guidelines,” in line with which green procurement activity will be promoted.

To construct a resource recycling-oriented society, the Yokogawa Group is committed to the objective of “Provision of environment-conscious products.”

To achieve this objective, the environmental load of materials, parts, and the like procured by the Yokogawa Group must be reduced in compliance with environmental regulations.

In view of the above, the Yokogawa Group will put emphasis on green procurement based on the following concept:

“Procurement of materials with low environmental loads = Provision of environment-conscious products”

Through shared understanding of Green Procurement, the Yokogawa Group requests that all of our suppliers join in our endeavor. Thank you in advance for your assistance and cooperation.

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## 1. Objectives

The Green Procurement Guidelines of the Yokogawa Group provides the criteria for procurement of parts and materials as well as for service provision in order to conform to relevant laws and regulations and to strive for environmental load reduction, so that each company of the Group contributes to the development of a sustainable society.

## 2. Basic Policies

In respect of global environmental conservation, the Yokogawa Group has formulated the following basic policies for parts and materials procurement and service provision:

1. Suppliers demonstrating greater effort toward environmental conservation will be given priority for our business.
2. Materials, parts, and products with no hazardous substances and small environmental loads will be given priority for procurement.

## 3. Scope

The Green Procurement Guidelines apply to all parts, products, materials, documents, packages and the like used in products of the Yokogawa Group. The guidelines also apply to parts and products with the Yokogawa Group's trademark that are outsourced to third parties for design and manufacturing.

## 4. Requirements

### 4-1. Compliance with Environmental Regulations

All suppliers must comply with REACH regulation and any other chemical substances regulations, pollution control regulations, and any other related laws, regulations, agreements as well as industrial principals.

### 4-2. Suppliers' Efforts toward Environmental Conservation

In principle, we require that our suppliers acquire an Environmental Management System Certificate (ISO14001) or third party certification (KES, EcoAction 21, etc.). If acquisition of a certificate is difficult, the following is requested:

- 1) Formulation of corporate philosophy and policies toward environmental conservation
- 2) Formulation of single-fiscal-year goals and mid-term objectives toward environmental conservation
- 3) Documentation of means, methods and plans to achieve goals and objectives
- 4) Documentation of laws and regulations for environmental conservation and management of the documents

5) Training and education of all employees involved in company operations regarding environmental conservation

4-3. Requirements for Parts, Materials and other components

The Yokogawa Group's controlled chemical substances comprise 5 levels as below. For each chemical substance, check Appendix "Controlled chemical substances list".

Prohibited substances 1: Prohibited substances

Prohibited substances 2: 6 substances banned in RoHS

Controlled substances 1: REACH SVHC (Substances of Very High Concern)

Controlled substances 2: Restricted substances by concentration or applications

Controlled substances 3: Substances whose contents must be identified

Submission of any parts, materials, and the like containing any of the prohibited substances (1-2) is forbidden. For controlled substances, while their contents have been identified, or their concentration and applications are limited within the restriction, the inclusion of them is not presently prohibited. The controlled substances 3 (Substances whose contents must be identified) are not prohibited, but because its use is likely to be prohibited in the future either by law or in response to social demand; we recommend the use of a substitute material. In addition to the above substances, all banned substances by any other regulations are prohibited.

**Regulations for Banned substances**

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Chemical Substances Control Law      Class I Specified Chemical Substances

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Industrial Safety and Health Act

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EU RoHS Directive, EU ELV Directive, China RoHS

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Packaging and Packaging Waste

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US heavy metals regulation on Packaging (Toxics in Packaging Clearinghouse)

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EU Battery Directive

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Poisonous and Deleterious Substances Control Act (Specific Poison)

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REACH Regulation      Restriction substances (Annex XVII)

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Montreal Protocol (Substances that Deplete the Ozone Layer )

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Stockholm Convention      Substances in Annex A (EU POPs Regulation)

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Ship Recycling Convention (Table A: Prohibited and/or restricted)

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EU Ship Recycling Regulation (Annex I: Control of hazardous materials)

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## Regulations for Controlled substances

REACH Regulation SVHC (Substances of Very High Concern)
REACH Regulation Substances for Authorization
REACH Regulation Restriction Substances (Annex XVII)
CLP Regulation
Industrial Safety and Health Act Prohibition of manufacturing
Industrial Safety and Health Act Chemical Substances requiring Labeling and Deliver of Documents, etc.
Chemical Substances Control Law Class II Specified Chemical Substance
Chemical Substances Control Law Monitoring Chemical Substances
Poisonous and Deleterious Substances Control Act (Poisonous Substances)
Poisonous and Deleterious Substances Control Act (Deleterious Substances)
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof : Class Specified Class 1 Designated Chemical Substances
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof : Class 1 Designated Chemical Substances
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof : Class 2 Designated Chemical Substances
Ship Recycling Convention (Table B: Hazardous materials)
EU Ship Recycling Regulation (Annex II: List of items for the inventory of hazardous materials)
IEC62474 (JIG)
WEEE Directive
California Code of Regulation: Best Management. Practices for Perchlorate Materials
chemSHERPA Declarable Substance (Latest edition) without the above substances (Including the substances under GADSL)
Other Controlled substances (Substances included in “RA 9165(Comprehensive Dangerous Drugs Act of 2002)”, “Prohibition of Certain Toxic Substances Regulations, 2012” and other regulations.)

### 4-4. RoHS Exemption for Use of Prohibited Substances

In a specific application exempted from the RoHS, the use of the prohibited substances is granted. For detail specific applications exempted from RoHS, see Appendix “RoHS Exemption List”. We ask for you to keep up with the new list of RoHS exemption issued by EU and promptly to switch to a substitute material before the exempted application expires.

### 4-5. Submission of Survey Documents

#### 4-5-1. Environmental Conservation Survey Document (Appended Table 1)

We ask for your cooperation in basic surveys on environmental conservation efforts. The results will be used to determine the priority order among suppliers.

#### 4-5-2. Green Procurement Survey

The figure below presents the survey flowchart of materials and parts in accordance with the requirements of 4-3.

Suppliers are requested to submit the survey documents as below.

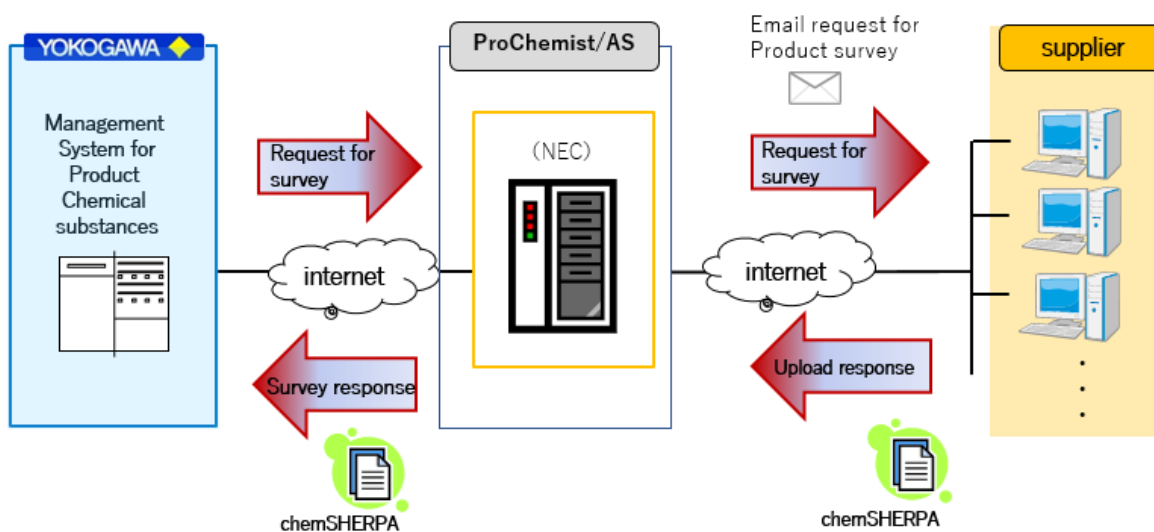


Figure Survey Flowchart

1) Conduct chemical substances survey

We conduct chemical substances survey of all parts, materials, instruction manuals, packaging and other Yokogawa group purchased products for all suppliers.

2) Information transfer format will use chemSHERPA format (most recent version)

If in the format of chemSHERPA-AI (articles), it will necessitate data provision for both composition information as much as compliance assessment information.

If for material/ mixtures/ coating etc., in order to understand the residue, excluding evaporated substances, under data provision by chemSHERPA-AI, we request for entry of density (g/cm<sup>3</sup>,g/mm<sup>3</sup>) within the comment column of “product/ parts information”.

If of more than one product (parts, material) then to respond in 1 file for each product.

Please reference the following homepage for details to chemSHERPA.

<https://chemsherpa.net/chemSHERPA/english/>

3) Conduct survey using AS

The survey request and information communication are based on ProChemist/AS.

It is necessary to subscribe to NEC ProChemist/AS.

#### 4-5-3. Certificate of EU RoHS compliance & non-use of Yokogawa prohibited substances

Please submit Non-use Guarantee of RoHS substances and other prohibited substances when required by Yokogawa.

### 5. Assessment Criteria

For green procurement, the following assessment criteria have been newly added:

- 1) For assessment of suppliers, the Environmental Index (E) has been added to the present ones: Quality Index (Q), Cost Index (C), and Deadline Index (D).
- 2) Index E will be assessed based on your response to the Green Procurement Survey and the Environmental Assessment Survey.

### 6. Implementation

- 1) Suppliers demonstrating greater effort toward environmental conservation will be given priority for our business.
- 2) Materials, parts, and products with no harmful substances and small environmental loads will be given priority for procurement.
- 3) Additional efforts towards environmental conservation may be requested according to the survey results. Thank you in advance for your understanding.
- 4) Another survey on your environmental conservation efforts may be requested. Thank you in advance for your understanding.
- 5) We ask for your cooperation when we conduct chemical substances survey in accordance with the change of regulations.

### 7. Others

#### 7-1. Revision of the Green Procurement Guidelines

The Green Procurement Guidelines by the Yokogawa Group may be revised without notice in response to the enactment of new laws or social demand.

#### 7-2. Handling of Submitted Documents

Submitted documents will be used exclusively by the Yokogawa Group in its endeavors to provide environmentally friendly products. The information will not be disclosed to third parties without prior consent from the supplier.

#### 7-3. Contact

- For inquiries regarding the Green Procurement Guidelines  
Phone: +81-422-52-9561
- For inquiries regarding the chemical substances survey  
E-mail: [Chem\\_Svy@cs.jp.yokogawa.com](mailto:Chem_Svy@cs.jp.yokogawa.com)



【Appended Table 1】 Environmental Conservation Survey Document

## Environmental Conservation Survey Document (for suppliers)

FY \_\_\_\_\_

Sent to \_\_\_\_\_

Date of delivery Month, Date, Year Person in charge of sending \_\_\_\_\_ (Name, organization)

Survey documents that have been submitted will be used exclusively by the Yokogawa Group and will not be released externally.

Company name		Person in charge of survey documents	
Person in charge		Name	
Plant/factory name		Title	
Plant/factory address		Dept.	
Phone		Date	
Main products			
Main submitted products			

Checkmark the appropriate box (☐) or fill in the blank

1. Have you acquired the Environmental Management System Certification ISO14001?

Yes (month, year) ·  Will acquire (month, year) ·  Under consideration ·  No plan

2. Have you acquired an environmental management system other than ISO14001 or developed your own system?

Yes (month, year) ·  Will acquire (month, year) ·  Under consideration ·  No plan

What is the name of the system that you are planning to acquire?  
(Environmental management certification: \_\_\_\_\_)

3. Survey item		
Item	Question	Answer Enter Yes ("Y") or No ("N") (a hyphen "-" if neither)
1. Corporate philosophy and policies	1) Environmental conservation is addressed in the corporate philosophy.	
	2) Environmental conservation policies have been formulated.	
	3) The environmental policies have been documented, disseminated among all employees, and made available to the public.	
2. Organization/ planning	4) Single-fiscal-year goals and mid-term objectives toward environmental conservation have been established.	
	5) It is clearly defined who (organization, individual) is in charge of achieving which goals and objectives.	
	6) Means, methods, and plans to achieve goals and objectives are documented.	
3. Observance of laws	7) Relevant laws and regulations are documented, and the documents are managed.	

4. Environmental factors management, and improvement	Energy	8) Use of energy (electricity, town gas, etc.) is managed, so that consumption can be restrained or reduced.		
	Chemical substances	9) In the product manufacturing process, prohibited substances (CFC, 1.1.1-trichloroethane, carbon tetrachloride, Halon, HBFC) are not used.		
		10) In the product manufacturing process, substances to be avoided are used (HCFC, methylbromide, trichloroethylene, tetrachloroethylene, methylene chloride). However, they are managed, so that the amount used can be restrained or reduced.		
	Waste	11) Domestic waste (paper, plastic, etc.) is separated and collected.		
		12) Industrial waste is managed, so that its emission can be restrained or reduced.		
		13) Special management industrial waste is managed, so that its emission can be restrained or reduced.		
		14) Manifest management is performed for industrial waste and special management industrial waste.		
Air	15) Effects on air pollution are evaluated for improvement.			
Water quality	16) Effects on water pollution are evaluated for improvement.			
Noise and vibration	17) Effects on vibration and noise pollution are evaluated for improvement.			
5. Emergency	18) Drills are conducted for possible environmental emergency situations.			
6. Products	19) Product assessment is conducted (development of resource-saving and energy-saving products; reduction of loads of harmful substance, packaging materials, and the like; recyclable design; waste reduction; etc.).			
	20) A system for product collection and recycling is in place ("in place" does not mean that all products are collected and recycled).			
7. Training, education, and freedom of information	21) Training is offered to employees regarding environmental conservation.			
	22) Involvement in local environmental conservation efforts is encouraged.			
	23) Information on environmental conservation efforts is made public.			
8. Transportation	24) Efforts are made to streamline product transportation.			
9. Packaging (required)	25) Packaging material is picked up from the customer site or taken back upon delivery.			
	26) Returnable boxes (can be used repeatedly) are used as packaging material.			
	27) Only corrugated fiberboard boxes (paper) are used as packaging material.			
10. Load survey (not required, but please provide as much information as possible) (if you use chemical substances other than those below, write them in the blank spaces [14]–[16]))				
FY _____ (The fiscal year runs from April to March) (Entry of expected value allowed)	1) Power consumption	MWh/year	9) HCFC	Kg
	2) Town gas consumption	Km <sup>3</sup> /year	10) Methyl bromide	Kg
	3) LPG consumption	Km <sup>3</sup> /year	11) Trichloroethylene	Kg
	4) Heavy and light oil, kerosene, and gasoline	K liter/year	12) Tetrachloroethylene	Kg
	5) Municipal waste emission	t/year	13) Methylene chloride	Kg
	6) Industrial waste emission	t/year	14)	Kg
	7) Special management industrial waste emission	t/year	15)	Kg
	8) Groundwater (pump discharge)	K liter/year	16)	Kg

**Space for correspondence**

Use this area to write down your requests and to describe efforts other than those mentioned above that you are making to reduce environmental loads.