

CKD Green Procurement Guide For FY 2011



CKD

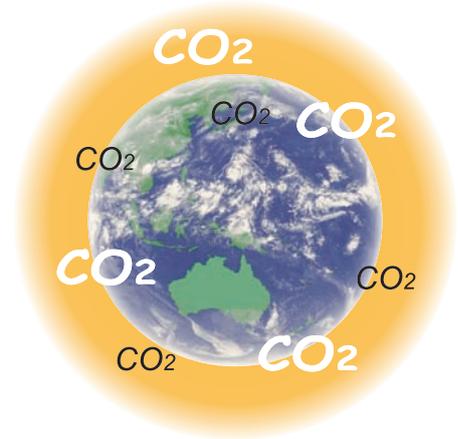
Introduction

Consumption continues to grow in the modern life worldwide. The earth has lost approximately 30% of its natural resources for the last 30 years. It is said that we need two earths to maintain our current life style until mid-2030s.

The conservation of the global environment is a common wish for all countries; COP10, held in Nagoya in 2010 October, reminded us of the importance of biodiversity.

We are committed to developing and expanding sales of environmental load reduction products by taking advantage of our automation and fluid control technologies, while we appreciate the invaluable natural resources. As a purchasing activity, we currently practice green procurements that are environmentally friendly from the procurement stage. To promote our environmental conservation activities, "working with our business partners" is an indispensable factor. Thus, we established this CKD Green Procurement Guide and specified our requests regarding environmental impact chemical substance management and the environment conservation.

We hope that our business partners understand our policies and approaches for the environmental activities and proactively promote the activities with us.



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1. Purpose

This guide specifies the CKD requests to suppliers in order to promote the green procurement activities through the entire supplier chain and to make reliable management on environmental impact chemical substances. These are the requests to all suppliers regarding the environmental impact chemical substance management.

- Specify included chemical substances. Do not deliver products with prohibited substances included.
- Do not modify included chemical substances (components) without permission (communication).
- Implement data management on chemical substances and processes control for the requests above.



2. Scope

- 1) The requests are applied to business partners who supply raw materials, parts, sub materials, or products that CKD places orders for or that are incorporated in CKD products.
- 2) The requests target the following products: The CKD brand machinery products as well as the solder print inspection machines (VP) responsible by Automatic Machinery Product Division.



3. Purchasing Principles

We choose business partners who have trustable management and quality control systems, and aim for the mutual business development with them.



4. Fundamental Purchasing Policy

- a) We promote the improving activities to meet the customer's needs.
- b) We place importance in a trusting relationship with a client company as a business partner.
- c) We respect related regulations and social norms.
- d) We pursue a clean and fair business with a business partner, who has high technologies, both domestically and internationally.
- e) We contribute to the conservation of the global environment through the purchasing activity.



5. Green Procurement

Our standard gives higher priority to business partners who are proactively engaged in environmental conservation activities.

a) Development of an environmental management system

We encourage our business partners to acquire the ISO14001 certificate or to develop one of the following environmental management systems that are equivalent to the certificate.

- Certification and registration with EcoAction 21 (EA21)

The certification and registration system is aimed to support all institutions including medium and small companies based on the "EcoAction 21 Guideline", developed by Ministry of the Environment.

The certification and registration is provided by Centre for Sustainability, Institute for Global Environmental Strategies.

- Eco Stage

As a support for environmental management, companies are encouraged to promote green procurements and accountabilities with the "Eco Stage Evaluation", which emphasizes contents and effects more than formats and is conducted by an evaluation organization of Eco Stage Institution. It is a step-by-step evaluation approach to help make improvements continuously on two factors, "system" and "performance".

CKD recommends that business partners are certified at Level 2 or higher.

- KES

In "The Miyako Agenda 21 Forum", the "KES Environmental Management System Standard" was established to offer a low cost and easy-to-understand evaluation and registration standard.

CKD recommends that business partners are certified with Step 2.

b) Prevention of environmental pollution

Please closely monitor regulations not to use prohibited substances in business partners and also make sure that such substances are not included in materials, parts or products.

We specify the prohibited substances for business partners to guarantee that they are not included. We appreciate your efforts to prevent inclusion of the prohibited substances.

Moreover, your active cooperation is highly appreciated to provide information on chemical substances included in products as well as information on environmental management activities implemented in your manufacturing processes. Our standard gives higher priorities to our procurements on raw materials, parts or products that have high green procurement rates.

c) Energy saving and prevention of global warming

Please provide us low environment load raw materials, parts or products in addition to productions in energy efficient processes.

d) Resource saving and recycling

Please make reusable structures and work on reducing the weight and size of parts. In addition, please use easily-recyclable materials for packages of raw materials, parts and products to be supplied as much as possible.

e) Management and reduction of wastes

Please perform the adequate treatments for the wastes discarded from the production process and contribute to the reuse and reduction of wastes. In addition, please pay attention to the development of yield rate.

6. Environmental Conservation Activities

CKD requests that our business partners develop a system, which allows identifying factors (environmental aspects) from influential activities, products or services to the environment, planning management methods for those factors, monitoring (inspecting) them, and maintaining and improving them.

[CKD evaluation for the environmental activities]

Please submit a copy of the certification to the Planning Department, Purchasing Division of CKD if you are certified with ISO14001 or other environmental management system certifications. Your certification is taken as object of the CKD evaluation.

7. Standards for Environmental Impact Chemical Substances

CKD has defined prohibited substances, controlled substances and the management standard to respond to international regulations regarding chemical substances.

No.	Standard name	Overview of the contents
1	Standard for environmental impact chemical substance management	The standard classifies environmental impact chemical substances into prohibited substances and controlled substances and defines criteria (thresholds) for them.
2	Thresholds for the six substances controlled by the European RoHs directives as well as analysis control values	The standard defines criteria (thresholds) of the six substances controlled by the European RoHs directives as well as analysis control values.

8. Environmental Impact Chemical Substance Management for Business Partners

8.1 Environmental impact chemical substance management

The following shows the summary of the CKD requests regarding the environmental impact chemical substance management for business partners.

- a) Develop a system to control and guarantee about environmental impact chemical substances and specify a management system and responsibilities/authorities
- b) Develop in documents and inform related parties of a prohibited substance standard and management methods for environmental impact chemical substances.
- c) Use products only after they are verified that they conform to the standard on environmental impact chemical substances.
- d) Specify procurement routes. Notify secondary suppliers of the requests and make sure that purchased products from them conform to the requests.
- e) Productions must be controlled in manufacturing processes. Prevent misuse, inclusion, or contamination with thorough approaches of 4S (Seiri, Seito, Seiketsu, and Seiso, or sorting, setting in order, cleanliness, and cleaning) and identification code management.
- f) Manage documents and records.
- g) See the questions in 10. Check Sheet for Environmental Impact Chemical Substance Management for details of the requests. In addition, use the Check Sheet for self-inspections to improve items that are evaluated as not satisfied.

8.2 Certifications for environmentally special processes

CKD certifies the following four processes as environmentally special processes: Lead-free alloy soldering, trivalent chromate plating, painting, and electroless nickel plating.

- a) CKD certifies the companies that handle actual operations of those environmentally special processes including secondary suppliers. (Do not place any order to companies if they are not certified.)
- b) If you wish to be certified, please enter necessary information in an "Application for RoHs purchase certification" and submit it with the following required documents and a sample to Procurement Department, Purchasing Division.
 - Analysis data of prohibited substances of a business partner
 - QC process chart (or operation standard sheet)
 - "Check list for process audit" used for self-inspection
 - "Certificate of non-inclusion of prohibited substances" for soldering materials or paint materials

9. Submission of Inclusion Data of Environmental Impact Chemical Substances, Certificate of Non-Inclusion of Prohibited Substances, and MSDS

9.1 Request for submission of inclusion data of environmental impact chemical substances

- a) Please submit inclusion data using the format (AIS or MSDS plus) of JAMP (Joint Article Management Promotion-consortium).
- b) CKD individually asks for an investigation. We appreciate your cooperation.

9.2 Request for submission of "Certificate of non-inclusion of prohibited substances"

- a) Information (data) on the JAMP format does not describe guaranteed values. Thus, please submit a "Certificate of non-inclusion of prohibited substances" to guarantee that no substances prohibited by the "Standard for environmental impact chemical substances management" is included.

Note 1) Please make sure to implement your own management on the substances that are prohibited by domestic regulations to be manufactured (imported) or used. CKD prohibits the substances that are prohibited by the European RoHS directives or prohibited by major domestic electronic manufacturers (including part of chemical substances covered by Class I Specific Chemical Substances of Japanese Chemical Substances Control Law).

Note 2) Please submit the JAMP format data with "Certificate of non-inclusion of prohibited substances" together.

9.3 Requests for submission of MSDS

- a) If you wish to introduce a new sub material (example: printing ink for face plates, soldering, grease, adhesive agent, antirust agent, etc.) or to change indirect materials (example: cleansing liquid, pre-cleansing rust preventive oil, etc.), please submit MSDS (Material Safety Data Sheet), which describes properties and handling information.

10. Check Sheet for Environmental Impact Chemical Substance Management (Reference for the system development)

Note) Symbols for the Result column:

- A: Sufficiently satisfied
- B: Partially not satisfied
- C: Not satisfied
- NA: Not applicable

Item	Description	Result	Reason (verification)
1. Top executive			
1.1 Policy	(1) The top executive announces that the company conforms to regulations as well as the agreement regarding environmental impact chemical substances included in the products and that the company develops a management system for the matter.		
	(2) The policy is informed to all executives.		
1.2 Internal audit	(1) The company practices an internal audit (including patrols, etc.) at least once a year to check (verify) to see if the developed system and its operations sufficiently work. Results are used for measures (reviews) appropriately.		
1.3 Review by the top executive (Management review)	(1) Failures and others are reported to the top executive if the internal audit detects them. Moreover, the top executive provides appropriate instructions for implementing measures.		
2. System			
2.1 Guarantee system	< Guarantee system > (1) The company has a developed system (scheme) for managing and guaranteeing about environmental impact chemical substances included in the products. Systemized rules, procedures, and standards are specified in documents.		
	<Responsibility/authority> (2) The company specifies a management structure (organization), responsibilities/authorities, and roles of the management of environmental impact chemical substances included in the products in documents.		
	<Standard for environmental impact chemical substances> (3) The company defines a management standard (substances to be covered and their thresholds) for environmental impact chemical substances included in the products in documents. Note) CKD has developed "Standard for environmental impact chemical substance management" and disclosed it to related parties.		

Item	Description	Result	Reason (verification)
2.2 Education/training	(1) The company has a training system for all related parties regarding (1) to (3) of the section 2.1 and also can present training records.		
	(2) The company provides education/training programs to operators who are engaged in special operations so that their skills can be proved.		
2.3 Document/record management	(1) The documents for the management for environmental impact chemical substances in the products are constantly updated and correspond to the operations.		
	(2) The company maintains records or proof (data) about the management for environmental impact chemical substances in the products as well as ones for included substances at least for three years or a certain period of time specified by regulations.		
2.4 Communication (Information sharing)	<Monitoring regulations> (1) The company has a system to monitor related regulations and reviews internal standard sheets at a new regulation or revision.		
	<Informing the CKD guidance and standard> (2) The company informs all employees of "CKD Green Procurement Guide" and the "Standard for environmental impact chemical substance management" to make sure that the internal standard conforms to them.		
	<Internal communication> (3) The company has a systemized communication system for the entire organization to share necessary information.		
3. Product manufacturing			
3.1 Design control	(1) The company has a standard to prevent selecting prohibited substances in designing stages (product designs, process designs).		
	(2) The company verifies that selected materials satisfy the standard and maintains the records.		
	(3) Instructions in documents (drawings, standard sheets, or specifications) clearly indicate not to use prohibited substances in downstream of the processes.		
3.2 Purchase control	(1) The company informs secondary suppliers of prohibited substances. Note) CKD has defined the "Standard for environmental impact chemical substance management" and disclosed it to business partners.		
	(2) The company informs secondary suppliers of the requests about the management of the environmental impact chemical substances in the products. Note) CKD has developed the "CKD Green Procurement Guide" and disclosed it to business partners.		

Item	Description	Result	Reason (verification)
3.2 Purchase control	(3) The company verifies secondary suppliers' management of environmental impact chemical substances in the products beforehand in order to select reliable secondary suppliers to place orders.		
	(4) The company has a developed procedure to obtain information regarding inclusion or non-inclusion of environmental impact chemical substances in purchased products for confirmation (verification).		
	(5) The company outsources suppliers that CKD certifies for the four environmentally special processes.		
	(6) The company verifies (inspects) with criteria at deliveries that purchased products conform to the standard.		
	(7) The company periodically audits (patrols) secondary suppliers to make sure that they conform to the standard and implements necessary measures.		
3.3 Manufacturing control (Prevention of misuse, inclusion, or contamination)	(1) The company has a system that allows only conformed products in its manufacturing processes.		
	(2) The company has lines, equipments, jigs and tools or sub materials specifically for the prohibited substances to prevent contamination if the company uses the substances in its lines, equipments, etc. (Example: Surface treatment, soldering)		
	(3) The company has and implements a cleansing standard, etc. if products are manufactured in equipment, etc. where the prohibited substances are used. (Example: Injection molding machine)		
	(4) For the processes where chemical reactions of included substances take place, the company defines manufacturing requirements to control the changes in chemical substances. The company identifies and controls the processes where chemical compositions change after oxidization or reductive reactions or where concentration changes after vaporization or volatilization. (Resin molding, bonding, plating, painting, printing, etc.)		
	(5) The company has understanding of risks of recycled materials and defines an operation standard for them.		
	(6) If the prohibited substances are used (contained) in plants, identification codes are displayed to prevent misuse, inclusion, or contamination.		

Item	Description	Result	Reason (verification)
3.4 Shipment control	(1) The company has a system that ships only conformed products. - Manufacture with materials that are verified (inspected) at receiving. - Manufacture with specified equipment, requirements, or methods. - Treat non-conformed products appropriately. - Perform verifications (inspections) such as measurements if necessary.		
	(2) 4S and the identification code management are implemented for inventory storage so that wrong retrievals or mixing is prevented.		
3.5 Non-conformed product control	(1) The company specifies in documents and informs a criterion and procedure for handling non-conformed products.		
	(2) The company treats non-conformed products according to the handling procedure. In addition, there are identification codes used to prevent misusing or mixing conformed with non-conformed products as well as to prevent shipping out non-conformed products.		
	(3) The company makes analysis and investigates causes of non-conformed products to prevent reoccurring.		
	(4) The company has a reporting procedure to CKD for the case that a delivered product to CKD turned out that it was or may be non-conformed one.		
3.6 Modification control	(1) The company informs related parties of CKD's "Quality assurance guideline for business suppliers" and is capable of practicing the modification control according to the guideline.		
	(2) The company informs secondary suppliers of this guideline and instructs them to follow the procedure.		
3.7 Traceability (History control)	(1) The company practices history control of products based on risks so that it can specify a scope of a non-conformed product or can provide information on modifications.		

11. Terms and definitions

Terms	Definitions and descriptions
Environmental impact chemical substances	- They are influential to the environments (including human health and safety) and include the substances banned or controlled by national regulations as well as the substances banned or controlled by CKD. (Some may be described as chemical substances.)
Prohibited substances	- They must not be used in products.
Controlled substances	- The inclusion or non-inclusion of these substances must be confirmed as well as contained amounts.
Business partners	- CKD describes direct procurement sources as "business partners".
Secondary suppliers	- CKD describes external procurement sources of the "business partners" as "secondary suppliers".
Products	- Raw materials, parts, and products are described as products if they are delivered to CKD. (In the Check Sheet, they are all referred to as products.)
Environmentally special processes	- They mean the following four processes where prohibited substances are likely included: lead-free alloy soldering, trivalent chromate plating, painting, and electroless nickel plating.
JAMP	- Joint Article Management Promotion-consortium. It is founded to promote cross-industry activities for REACH responses and offers a list of substances to be controlled. - Contained substances must be reported in MSDS plus or AIS files.
Sub materials	- They are not in the list that is issued by Engineering Division but are contained in products. (Example: Printing ink for face plates, soldering/soldering paste, grease, adhesive, rust preventive oil that is directly applied).
Indirect materials	- They are used at manufacturing processes but do not remain in products or parts (example: cleansing liquid, pre-cleansing rust preventive oil).
MSDS	- Material Safety Data Sheet The sheet describes properties and safety manuals of the following substances. The sheet is issued by a manufacturer when the following substances or the products with the following substances included are supplied or offered to another business institution: Substances specified by Class I or II Specific Chemical Substances of Japanese Chemical Substances Control Law or specified by Poisonous and Deleterious Substances Control Act of the Occupational Health and Safety Law

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