

SHARP

GREEN PROCUREMENT GUIDELINE

Version 7.0



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Sharp Corporation

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1. Sharp Environmental Philosophy

In accordance with environmental policies established under the Basic Environmental Philosophy, the Sharp Group Charter of Corporate Behavior, and the Sharp Code of Conduct*, Sharp is pursuing the reduction activities of environmental loads in all aspects of its business activities.

Basic Environmental Philosophy

Creating an Environmentally Conscious Company with Sincerity and Creativity

The Sharp Group Charter of Corporate Behavior Contribution to Conservation of the Global Environment

The Sharp Group will make efforts to further contribute to global environmental conservation by strengthening our development of proprietary technologies for protecting the global environment, and by carrying out business activities in an environmentally conscious manner.

The Sharp Code of Conduct Contribution to Conservation of the Global Environment

1. To Conserve the Environment;

- (1) We will comply with all applicable environmental laws, regulations, and regional agreements, and make voluntary efforts to practice effective use and saving of resources and energy, in the recognition that global environmental conservation is an essential facet of corporate and individual pursuits.
- (2) We will work aggressively to reduce greenhouse gas emissions in all business activities, in order to contribute to the prevention of global warming.
- (3) To deal with environmental issues on a global scale, we will promote the sharing and practical application of energy-saving actions and environmental conservation technologies among the Sharp Group companies in each country and work to contribute to reducing environmental load.
- (4) We recognize that maintaining an eco-system where diverse living organisms coexist brings about a rich environment in which both corporations and individuals can operate and live. To that end, we will work actively to conserve biodiversity and promote the sustainable use of biological resources.
- (5) In order to promote communication with local residents and other stakeholders, we will engage in acquiring environmental information at an international level, and providing internal reports thereof, and work to actively make disclosure to the local community and other stakeholders.

2. To Develop Environmentally Conscious Products and Services, and Conduct Our Business Operations in an Environmentally Conscious Manner;

- (1) We understand the importance of internal company systems and the efforts needed to enhance measures based on Sharp Group's environmental policy, and we will observe relevant internal company rules.
- (2) Toward the minimization of our consumption of natural resources such as energy, water, minerals, and the like, we will positively engage in reduction in the size and weight of products, use of recycled materials, and the development of products and services that contribute to energy-saving, energy-creating and long life of products.
- (3) We will work to compile information related to harmful substances that might damage the environment or human health, and will not, as a matter of principle, make use of these harmful substances in our products and services.
- (4) We will ensure proper use and control, and also reduce our consumption of chemical substances in our business activities, including research, development, and manufacturing, at levels meeting or exceeding those stipulated by laws and regulations.
- (5) We will, as a matter of policy, design recycling-conscious products with structures that are detachable and decomposable and will use recyclable materials wherever possible.
- (6) As to the resources needed for business activities (equipment, raw materials, subsidiary materials, tools, etc.), to the extent possible, we will work to conduct our business in such a way as to select and purchase such resources that have the least adverse effect on the global environment, the local residents and employees.
- (7) We realize that waste material is a valuable resource, and we will actively take part in maximizing the 3Rs (reduce, reuse, recycle) and minimizing the amount of final waste disposal.

* The Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct were instituted in May 2005 as a revised edition of the preceding Sharp Charter of Conduct (instituted in 2003), and instituted in Jan. 2015. The section above is an excerpt from descriptions of Sharp's environmental conservation efforts.

2. Purpose of Green Procurement

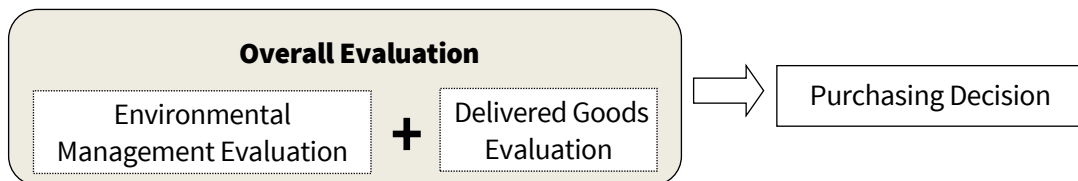
Sharp Group (hereafter “SG”) pursues the reduction of environmental burdens in all aspects of its business activities following our Basic Environmental Philosophy stated above, as well as the Sharp Group Charter of Corporate Behavior and the Sharp Code of Conduct.

When obtaining materials from our business partners, in particular, we follow the evaluation criteria of the “Green Procurement Guideline” as we work together with them to conserve the global environment and to achieve a fully recycling-oriented society.

3. Purchasing Decision

Green procurement involves the conventional procurement of materials based on the criteria of “quality (Q), cost (C), delivery terms (D)”, but it also comprises an overall judgment that is based on environmental considerations (E).

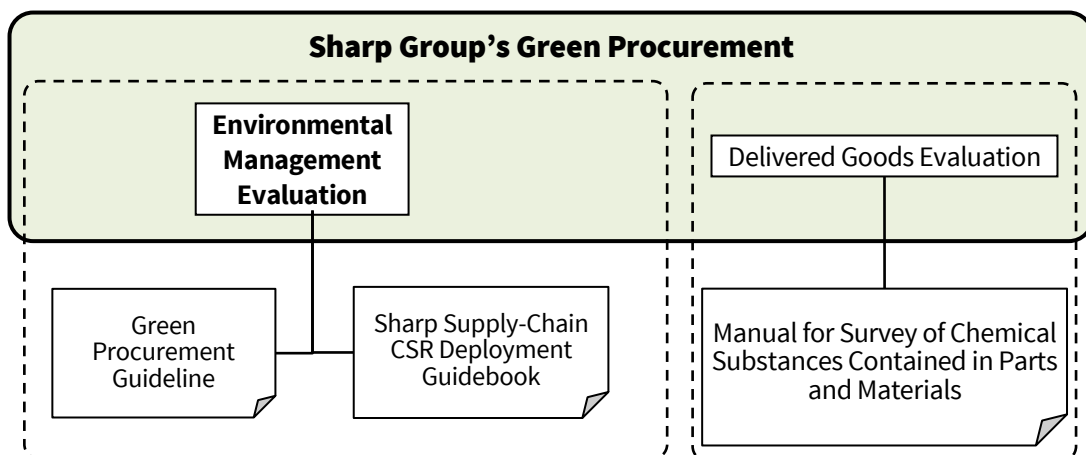
Evaluation based on environmental considerations follows the “Environmental Management Evaluation”, criteria which appraise our partners’ organizational measures for environmental conservation, It also follows the “Delivered Goods Evaluation”, criteria for appraising their efforts to reduce environmental burdens imposed by parts and materials we purchase from them (raw materials, multi-purpose parts, finished goods, semi-finished goods, supplementary materials, etc.).



- Items relevant to environment conservation in SAQ (Self-Assessment Questionnaires) based on our "Sharp Supply-Chain CSR Deployment Guidebook" are included in "Environmental Management Evaluation"

4. Positioning of Green Procurement Guideline

The positioning of the “Green Procurement Guideline” is shown below;



With regard to standards and survey procedure of contained substances in a product, please refer to "Manual for Survey of Chemical Substances Contained in Parts and Materials".

5. Applicable Range

This guideline targets our business partners who are delivering all the products SG procures or purchases. All products herein are shown in right box.

Our business partner to whom contracted the assembly using supplied parts and materials by SG and the process etc. of materials only is also included.

However, for our business partners who deliver office supply or furniture, the separate "Green Purchasing Guideline" will be defined.

All the products SG procures or purchases

- 1) Direct material:
Parts and raw materials to be assembled in the SG products
- 2) Finished product:
Finished products SG purchases and delivers to customers
- 3) Semi-finished product:
Semi-finished products to be assembled in the SG products
- 4) Packaging material:
Packaging materials to pack the SG products
- 5) Indirect material:
Auxiliary materials such as chemical, gas etc. used in the manufacturing process
- 6) Others:
Equipment and its consumption materials etc.

6. Evaluation and Judgment Guideline

6.1 Environmental Management Evaluation

As a part of Environmental Management Evaluation items, question items relevant to "(1) Chemical Substance Management" and "(2) Conservation of Biodiversity" are described below. For other items, please refer to "SHARP Supply-Chain CSR Deployment Guidebook"

1) Item for Evaluation

(1) Chemical Substance Management

No.	Question Item	Explanation
1	<p>[Classification of delivered items]</p> <p>Parts and materials incorporated in the SG products, finished products delivered to SG's customers or Packaging materials to pack the SG products are delivered to SG.</p>	<p>Whether our business partners deliver following 1) - 4) or not are confirmed.</p> <ol style="list-style-type: none"> 1) Direct material: Parts and raw materials to be assembled in the SG products, 2) Finished product: Finished products SG purchases and delivers to customers, 3) Semi-finished product: Semi-finished products to be assembled in the SG products. 4) Packaging material: Packaging materials to pack the SG products, <p>If deliveries fall into followings, please select "No",</p> <ol style="list-style-type: none"> 5) Indirect material: Auxiliary materials such as chemical, gas etc. used in the manufacturing process, 6) Others: Equipment and its consumption materials etc. <p>(Note) If deliveries to SG are only 5) or 6), please select "Not Applicable" in question items No. 2 to No. 14.</p>

No.	Question Item	Explanation
2	<p>[Submit a Report on Chemical Substances Contained in the Product]</p> <p>A "Report on Chemical Substances Contained in the Product" is submitted for newly used parts delivered to SG.</p>	<p>A "Report on Chemical Substances Contained in the Product" surveys whether or not a product contains "Materials Prohibited to Use" designated by SG. Please submit this report by attaching to a copy of delivery specifications or drawings when exchanging delivery specifications.</p> <p>Subjects of submitting "Report on Environment Impact Substances Contained in the Product" are parts and materials which are adopted newly by SG.</p> <p>(Note)</p> <p>Packaging materials used when parts and materials deliver to SG are not subjected. However, ones used when shipped from SG for service are subjected.</p>
3	<p>[Reply to Contents survey]</p> <p>Registering the reply data to "Survey of Chemical Substances Contained in Parts and Materials" for parts and materials delivered to SG.</p>	<p>When the "Survey of Chemical Substances Contained in Parts and Materials" is requested, please be sure to register its reply.</p> <p>This survey's subjects are all parts and materials newly adopted by SG. For detail, "Manual for Survey of Chemical Substances Contained in Parts and Materials" could be referred.</p>
4	<p>[Submit and store evidences]</p> <p>Evidence to show non-inclusion of RoHS restricted substances, such as analysis data, is submitted. And, originals of its evidence is stored and managed.</p>	<p>As evidence to show non-inclusion of RoHS Directive restricted substances, "Analysis Data" should be attached. It is necessary to include measurement site, actual measurement value and name of measurement institute in the analysis data.</p> <p>Objective documents which can be confirmed conformity with standards of SG are accepted as evidence.</p> <ul style="list-style-type: none"> - Analysis report issued by third-party measurement body is preferred. - In case of metal materials, compliance with JIS or other public standards which meet RoHS requirements is regarded as evidence. - In case of parts or materials which consist of more than one homogeneous material, the document which is summarized the "Analysis Data" of each homogeneous material is acceptable. However, an original analysis data should be managed and submitted to SG as required. - If parts or materials are clearly made with the same constituent material, "Analysis Data" for a typical part or material can be used for each maker, even if part codes are different. - "Analysis Data" less than one year old since the testing date should be submitted. - Latest "Analysis Data" which is renewed within one year should be stored.

No.	Question Item	Explanation
		<p><Not Applicable> Only if there no part which is newly adopted after April 1st, 2008, please select "Not Applicable".</p>
5	<p>[High-risk parts] High-risk parts designated by SG are delivered to SG.</p>	<p>Whether our business partners deliver following high-risk parts or not are confirmed.</p> <ol style="list-style-type: none"> 1) Colored resins, inks, labels, red, orange, yellow, pink, or green, 2) Vinyl chloride resin, 3) Soldered parts, Mounting boards, connector terminals, lead terminals, etc., 4) Glass for metal seals, 5) Chromating or electroless nickel plating parts except terminals of electronic components, Steel sheet, screws, nuts, bolts, washers, etc., 6) Flame-retardant plastics 7) Parts using resins or rubbers Cables, Rubbers, Adhesives, glue, Shrinkable tube, label, emblem, silver paste, etc. 8) Finished products, semi-finished products or parts including above 1) - 7).
6	<p>[Construction of in-house analysis and verification system] An in-house verification system exists due to adoption of an X-ray fluorescence spectrometer and/or other necessary analysis equipment.</p>	<p>SG recommends that our business partners develop their own in-house verification systems when delivering high-risk parts to SG.</p> <p>More specifically, we recommend the development of a system to enable in-house verification of compliance with RoHS, for example, introducing an X-ray fluorescence spectrometer (XRF) and/or other necessary analysis equipment (e.g. ultraviolet- visible spectrophotometer (UV-Vis)) and educating staff so they can conduct analysis.</p> <p><Not Applicable> Only if deliveries are NOT high-risk parts, please select "Not Applicable".</p>
7	<p>[Establishment and operation of the control standard] At receiving and storage area, control standard for prevention of improper use and contamination is established and operated properly.</p>	<p>SG requires that control standard for prevention of improper use and contamination of "banned substances" designated by regulations and SG is established and operated properly at receiving and storage area.</p> <p>Especially, we requires that establishment of the control standard and the proper operation for prevention of contact transfer of phthalates to resins or rubbers.</p> <p><Not Applicable> Only when no possibility of improper use and contamination is confirmed, please select "Not Applicable".</p>

No.	Question Item	Explanation
8	<p>[Establishment and operation of the control standard in manufacturing process]</p> <p>At manufacturing process, control standard for prevention of improper use and contamination is established and operated properly.</p>	<p>SG requires that control standard for prevention of improper use and contamination of "banned substances" designated by regulations and SG is established and operated properly at manufacturing process shown below:</p> <p>Especially, we requires that establishment of the control standard and the proper operation for prevention of contact transfer of phthalates to resins or rubbers.</p> <ul style="list-style-type: none"> - Line process (including its surroundings) SG requires that manufacturing lines are separated among products which have different requirement from regulations or customers. When their line cannot be separated, operate after the clear measures to prevent from contamination of prohibited chemical substance at the mixed flow process. Also, the distinction of the product depending on regulations or customer requirements is implemented. - Work-in-progress storage (including the long-term WIP storage area) - Rework process E. g. a repair process for soldering and not a normal production line. - Production equipment, tools and jigs (if they touch or attach to parts or materials) <p><Not Applicable> Only when no possibility of improper use and contamination is confirmed, please select "Not Applicable".</p>
9	<p>[Establishment and operation of the control standard in delivery warehouse]</p> <p>At the delivery warehouse where products are stored, control standard for prevention of improper use and contamination is established and operated properly.</p>	<p>SG requires that control standard for prevention of improper use and contamination of "banned substances" designated by regulations and SG is established and operated properly At the delivery warehouse where products are stored.</p> <p><Not Applicable> Only when no possibility of improper use and contamination is confirmed, please select "Not Applicable".</p>
10	<p>[Control of outsourcing organizations]</p> <p>For outsourcing organizations, process controls mentioned from question item No. 7 to 10 are requested.</p>	<p>Request your outsourcing organizations for the execution of process control on the product chemical substance content to prevent mixing or contamination at (No. 7) receiving and storage area, (No. 8) manufacturing process and (No. 9) the delivery warehouse where products are stored.</p> <p><Not Applicable> Only when deliveries to SG are not parts / materials / finished products / semi-finished products, please select "Not Applicable".</p>

No.	Question Item	Explanation
11	<p>[Obtaining Information of contents on chemical substances]</p> <p>It is stipulated that information on content of "Banned substances" designated by SG is obtained for purchased goods (materials, parts, products) used in parts/materials delivered to SG. The term "purchased goods" also includes materials used for prototyping, and auxiliary materials (tape, ink, grease etc.) which remain on the product.</p>	<p>In order to determine whether the chemical substances contained in your company's products are compliant with SG's requirement (Banned substances), it is necessary to obtain information on contained chemical substances for parts and materials purchased from suppliers (e.g. materials, parts, units, equipment).</p> <ul style="list-style-type: none"> - Rules* for obtaining information on chemical substances contained in purchased parts and materials to ensure that information is obtained without any omissions should be established. - Materials used in prototypes and auxiliary materials (tape, ink, grease etc.) which remain on the product are included. <p><Not Applicable> Only when your company outsource an assembly or processing with parts and materials supplied from Sharp, please select "Not Applicable".</p>
12	<p>[Check and management on content Information]</p> <p>It is checked whether content information on SG's "Banned substances" obtained by your company complies with control standards. And, checked documents are stored and managed.</p>	<p>It is necessary to check whether information on SG's "Banned substances" obtained by the company meet the company's own standards or SG standard values. Operating rules* are established to check without omission, and also the measures in case of non-conformity with requirements are clarified.</p> <p>Content information obtained and their confirmation results are managed in order to submit to SG as required.</p> <p><Not Applicable> Only when your company outsource an assembly or processing with parts and materials supplied from Sharp, please select "Not Applicable".</p>
13	<p>[Confirmation of conformity at various changes]</p> <p>When there has been a change in design, materials, process or purchasing source either at your company, your suppliers or outsourcing contractors, it is checked whether "Banned substances" designated by SG are not contained by evidence, such as "Analysis Data", a constituent table etc.</p>	<p>If there has been a change in design or material etc., there is a possibility that a material or part has become non-compliant with SG's standard (Banned substances). Before making a change in design or material etc., first resubmit to SG a "Report on Chemical Substances Contained in the Product" together with its evidence (e.g. "Analysis Data") and obtain authorization from SG.</p> <p>(Resubmitting evidence is applied to the design change or material change of parts and materials adopted after April 1st, 2008.)</p> <p><Not Applicable> Only when your company outsource an assembly or processing with parts and materials supplied from Sharp, please select "Not Applicable".</p>
14	<p>[Action rules at the time of problem occurrence]</p> <p>Rules are established if problem occurs, such as non-compliance</p>	<p>Establish and operate rules*, including procedures for stopping shipment and emergency notification routes (including SG), for the case of revealing non-compliance with company's standard or SG standard by information</p>

No.	Question Item	Explanation
	with "Materials Prohibited to Use" designated by SG.	on chemical substances obtained by the company, the results of the company's analysis or other information. <Not Applicable> Only when your company outsource an assembly or processing with parts and materials supplied from Sharp, please select "Not Applicable".

* When rules are designed, "Guidelines for the management of chemical substances in products" (issued by Joint Article Management Promotion-consortium (JAMP)) can be referred.

JAMP website: <http://www.jamp-info.com/>

(2) Conservation of Biodiversity

No.	Question	Explanation
15	Establish a policy on the conservation of biodiversity and the sustainable use of natural resources in business activities.	Consider the below items when setting out the policy. The company is aiming to lessen its impact on biodiversity and to use natural resources in a sustainable way through business activities which may affect biodiversity directly or indirectly. "Sharp Group Policy on the Sustainable Support of Biodiversity*" and the guidelines which each country issued are examples for your reference.
16	Specific activities which have been promoted under the Biodiversity policy.	Define specific promotional activities within the organization of which the executive is in charge. For example – Company-wide promotion under the executive and the department in charge. – Promote understanding of Biodiversity and thereby help to reduce the impact on biodiversity through own business activities (Environmental burdens such as CO ₂ emissions and waste handling) The guidelines which each country issued as reference.

* Sharp Group Policy on the Sustainable Support of Biodiversity

http://www.sharp.co.jp/corporate/eco/data_list/greenseal/biodiversity_e.pdf

2) Criteria for Evaluation

Based on the survey result of the Environmental Management Evaluation, we rank our suppliers is classified into 4 levels. The business partner with evaluation rank "A" is called "Green Supplier" from whom the priority procurement will be made.

For the business partners with evaluation rank "B" or below, the direction and assistance for improvement etc. will be made by SG group or mfg. base.

For the new business partners with evaluation rank "D", the dealing contract will not made as a principle.

6.2 Delivered Goods Evaluation

1) Parts and Materials

Items of evaluation on parts and materials we purchase from our suppliers (raw materials, parts, finished and semi-finished goods, supplementary materials, etc.) are as shown in the following.

(1) The “Banned substances” specified by SG must not be contained.

The “Banned substances” means chemical substances which should not be contained in parts and materials specified by SG. The “Banned substances” is divided into two kinds; one is “Substances banned in all cases” which is prohibited to use in any usage and the other is “Substances banned depending on the application” which can be used in particular usage but prohibited to use in other usage.

"Content" refers to the content of a chemical substance, as a constituent of a component, material, or product. The "content" includes cases wherein a chemical substance that is contained naturally (an impurity) is included, or wherein a substance that is left over from a common industrial refining process (an impurity, a residual solvent, a non-reacted monomer, or other residual substance) is included. Additionally, if it is obvious that a chemical substance is intentionally added or contained, it is considered as "content" regardless of its amount.

(2) Evaluation on the content materials in parts and materials will be implemented by following three methods; Furthermore, these surveys on parts and materials are required.

a. Survey of Chemical Substances Contained in Parts and Materials

Of the subject substances for survey including "Banned substances", its content, usage location and purpose of usage are surveyed. As we request you from our department in charge of survey, your reply based on the “Manual for Survey of Chemical Substances Contained in Parts and Materials” is duly requested. However in some case, depending on our group or mfg. base, other materials may be also requested for survey.

The “Manual for Survey of Chemical Substances Contained in Parts and Materials” can be downloaded from our website below.

<https://www.scope.sharp.co.jp/>

b. Report on Chemical Substances Contained in the Product

On the materials of “Banned substances”, yes or no of its content is surveyed. At the time of contracting the delivery specifications, attaching to the delivery specifications or copy of drawings, and submission is duly requested. The “Report on Chemical Substances Contained in the Product” can be downloaded from our website below.

http://www.sharp-world.com/corporate/eco/supplier/g_procure/index.html

c. Evidence (Analysis data etc.)

Evidence, such as "Analysis data" of substances restricted by RoHS, are duly requested on "Report on Chemical Substances Contained in the Product".

2) Chemicals, Equipment, Tools and Printed Matters etc.

Chemicals, equipment, tools and printed matters we purchase from our suppliers will be handled as indicated in the following:

- a. For chemicals we purchase, we ask vendors to provide SDS and carry out the risk assessment separately based on our company rule.
- b. For equipment and tools for production and research, we give priority to purchase of equipment with mechanisms and functions that reduce environmental loads.
- c. For printed materials (except those packed with products), we give priority to purchase of those using recycled paper.

6.3 Overall Evaluation

Overall Evaluation will be made based on the evaluation result on the environmental management, considering the evaluation on delivered goods additionally.

7. Operation

7.1 Environmental Management Evaluation

Time to Survey	The survey is executed once a year in principle. However, please correct your replies promptly in cases of: <ul style="list-style-type: none">- any changes in your replies after submitting a survey report,- any changes in contents of "Environmental Management Evaluation".
Subjects of Survey	It is applied as a unit to production work site where parts, materials, chemicals, equipment, tools and printed materials, etc. are manufactured.
Reply Procedure	According to the Self-Assessment Questionnaire (SAQ) based on "Sharp Supply-Chain CSR Deployment Guidebook" separately specified.
Notice of Result	The survey result (evaluation rank) is informed from our relevant Division, including in the result of our SAQ based on "Sharp Supply-Chain CSR Deployment Guidebook. Also note that there might be the case to ask the audit of our business partner depends on the contents of reply.

7.2 Delivered Goods Evaluation

Time to Survey	The survey is executed each time when new delivery of parts or materials occurs. Your quick reply is duly requested.
Subjects of Survey	It is applied to parts, materials, finished goods, semi-finished goods and sub-materials etc., and the survey is undertaken for each delivery as a unit. * It is not necessary to reply basically, however, submission of document might be requested partially in some case as stated in the clause 6.2 2).
Reply Procedure	Based on the "Manual for Survey of Chemical Substances Contained in Parts and Materials" separately specified.

8. Confidentiality

Information you give us is used only in SG and is never disclosed to outside.

9. Revision

This Guideline will be reviewed and revised properly due to changes in social conditions and trends of laws and regulations.

10. Contact Information

Please contact following e-mail address if there are any queries relating to this Guideline.

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