

Citizen Group
Green Procurement Guidelines

Revision 10.1 - Issued April 1st 2016

Citizen Holdings Co., Ltd.

1. Objective of The Guidelines

We, Citizen Holdings Co., Ltd. determines “Citizen Group Green Procurement Guidelines” for companies belong to Citizen Group (Companies, hereafter) in order to give priority purchasing to Green procurement items from Green suppliers.

In this document, the term ‘Green supplier’ refers to suppliers actively engaged in environmental management activities, and ‘Green procurement items’ refers to procured items (e.g. products, parts, component materials, mixtures, raw materials, packaging, subsidiary materials and so on) conformable to relevant environmental legislation, and having lower environmental load.

2. Scope of Application of The Guidelines

The Guidelines apply to products as well as parts, raw materials, packaging materials used for the final products, accessories and other items that constitute the products of Companies. The scope of the Guidelines does not include facilities or office supplies and are procured under other guidelines.

3. Green Procurement Guidelines

(1) Evaluation of Procured Products

The Citizen Group classifies chemical substances included in procured products as Rank 1, 2, or 3 according to their risks. Chemical substances in procured products are to be controlled in accordance with the relevant Rank.

1) Chemical Substance Control Standard Rank 1

Substances for which any inclusion in products is prohibited. Noted in Annex I.

2) Chemical Substance Control Standard Rank 2

Substances for which inclusion in products is restricted by legislations (e.g. threshold values, inclusion portions). Noted in Annex II.

3) Chemical Substance Control Standard Rank 3

Substances for which the amount and portion included ~~site~~ are known and controlled, and for which accurate information is required to be submitted.

Substances noted in Declarable Substances Reference List by JAMP (Joint Article Management Promotion-consortium, URL: <http://www.jamp-info.com/>) in principle. Noted in Annex III.

(2) Evaluation of Suppliers

1) Environmental Control System

With or without certifications like ISO14001 verified by external authorities, Companies will check if their suppliers have an environmental management system or have a concrete plan to get it.

2) Non-use of Toxic Substances in the Process (Chemical Substance Control Standard Rank 4)

Companies will check if their suppliers verify that ozone depleting substances and organochlorine detergents (noted in Annex IV) are not used in the manufacturing process.

4. Requests to Suppliers

(1) Verification of Green Procurement Products

- * Products including substances listed in Rank 1 and 2 are not allowed to be purchased. Suppliers are requested to submit Companies “Certificate of Non-use of Prohibited Substances” for Rank 1, and “Certificate of the Absence of Conditionally Restricted Substances” for Rank 2, prior to commencing any transaction. The submission documents can be downloaded from the following URL.

<http://www.citizen.co.jp/social/kankyo/green.html>

- * Suppliers are requested to submit Companies an information transmission sheet (AIS: Article Information Sheet, or MSDSplus: Material Safety Data Sheet Plus), which is recommended by JAMP for each product delivered to the Companies. Note that full disclosure of all constituents is required. If the total of all disclosed constituents is not 100%, or if there are any items for which constituents cannot be identified (e.g. noted as ‘synthetic resins’, ‘pigments’), resubmission will be required each time the JAMP Declarable Substances Reference List are changed.

Refer to the following URL for information transmission sheets recommended by JAMP.

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

- * Depending on the individual product or application, submission of documents relating to content not included in The Guidelines may be required.

(2) Verification of Supplier’s Environmental Management System, and Non-use of Toxic Substances in Manufacturing Processes

- * Submission of a “Survey of Green Procurement and Environmental Activities” is requested.

The form can be downloaded from the following URL.

<http://www.citizen.co.jp/social/kankyo/green.html>

- * The environmental management system is supervised and inspected as necessary. In such cases, the supplier is notified, and an agreement obtained, beforehand.

(3) Submission of Documents

Companies responsible notifies how to submit the documents individually to suppliers.

(4) Updating of Submitted Documents

Resubmission of each certificate and information transmission sheet may be required when relevant legislations or standards have been changed.

5. Contact

Contact the following for answers to any questions related to the “Citizen Group Green Procurement Guidelines”.

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Green Procurement Guidelines revision history

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Annex I Substances for Which Inclusion is prohibited under Chemical Substance Control Standard Rank 1.

Relevant legislation:

* The Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (hereafter, the “Chemical Substances Control Law”) Type 1 Specific Chemical Substances

* Industrial Safety and Health Law, Substances Prohibited for Manufacture

* The Law Concerning the Protection of the Ozone Layer Through the Control of Specified Substances and other Measures, Specific Substances (excluding Annex C-I of the Montreal Protocol)

	Chemical substances	CAS No.	Primary legislation	Primary environmental effects	Primary applications
1	Aldrin	309-00-2	CSCL (*1)	Persistence, high accumulability	Insecticides
2	Endrin	72-20-8	As above	As above	Insecticides
3	Chlordanes		As above	As above	Termite disinfestants etc.
4	Dieldrin	60-57-1	As above	As above	Insecticides
5	Hexachlorobenzene	118-74-1	As above	As above	Raw material for insecticides etc
6	DDT	50-29-3	As above	As above	Insecticides
7	N,N'-Ditolyl-p-phenylenediamine		As above	As above	Antioxidants for rubber, styrene-butadiene rubber
8	2,4,6-Tri-tert-butylphenol	732-26-3	As above	As above	Antioxidants and other additives (limited to lubricating oils and fuel oils) , lubricating oil
9	Toxaphene	8001-35-2	As above	As above	Insecticides, mite control agents (in agricultural and livestock farming applications)
10	Mirex	2385-85-5	As above	As above	Flame retardants for resins, rubber, paints, paper, textiles, electrical products etc., insecticide, ant repellent
11	Bis(tributyltin) oxide	56-35-9	As above	As above	Antifouling agent for fishing nets, and boat hulls etc.
12	Tributyl tins and its salts, triphenyl tins and its salts		As above	Persistence	As above
13	Polychlorinated biphenyls (PCB)		As above	Persistence, high accumulability	Insulating oils etc.
14	Polychloronaphthalenes (with 3 or more chlorine atoms)		As above	As above	Machine oils etc.
15	Dicohol	115-32-2	As above	As above	Mite preventative agents
16	Hexachlorobuta-1,3-diene	87-68-3	As above	As above	Solvents
17	2-(2H-1,2,3-Benzotriazole-2-yl)-4,6-di-tert-butylphenol	3846-71-7	As above	As above	UV light absorbents
18	Perfluoro (octane-1-sulfonic acid)(PFOS) or its salts (*2)		As above	As above	Water and oil repellants, surfactants
19	Perfluoro (octane-1-sulfonyl) = fluoride (PFOSF)	307-35-7	As above	As above	PFOS raw material
20	Pentachlorobenzene	608-93-5	As above	As above	Agricultural chemicals,

					by-products
21	alpha-Hexachlorocyclohexane	319-84-6	As above	As above	Lindane by-product
22	beta-Hexachlorocyclohexane	319-85-7	As above	As above	Lindane by-product
23	gamma-Hexachlorocyclohexane (also known as Lindane)	58-89-9	As above	As above	Agricultural chemicals, insecticides
24	Chlordecone	143-50-0	As above	As above	As above
25	Hexabromobiphenyl	36355-01-8	As above	As above	Flame retardants
26	Tetrabromodiphenyl ether		As above	As above	As above
27	Pentabromodiphenyl ether		As above	As above	As above
28	Hexabromodiphenyl ether		As above	As above	As above
29	Heptabromodiphenyl ether		As above	As above	As above
30	Endosulfan	115-29-7	As above	As above	Agricultural chemicals
31	Hexabromocyclododecane (HBCD)	3194-55-6	As above	As above	Flame retardant treatment for textiles, flame retardant beads for EPS, flame-proofed textiles and curtains
32	Polychloronaphthalenes (2 chlorine atoms)		As above	As above	Lubricating oils, preservatives, antiseptic paints
33	Pentachlorophenol and its salts and esters		As above	As above	Wood antiseptics, Insecticides and fungicides
34	Asbestos		ISHA*3)	Carcinogenic	Insulator, filler, thermal insulation
35	Bis(chloromethyl) ether	542-88-1	As above	As above	Dyes, Pigments
36	4-Aminodiphenyl	92-67-1	As above	As above	Pigments
37	4-Nitrodiphenyl and its salts		As above	As above	Dye intermediate
38	Benzidine and its salts	92-87-5	As above	As above	Dyes, Hardener
39	beta-Naphthylamine and its salts	91-59-8	As above	As above	Dyes, Antioxidant intermediate
40	Yellow phosphorous		As above	Flammability, acute toxicity	Matches
41	Benzene adhesive (greater than 5% benzene)		As above	Carcinogenic	Rubber adhesive
42	Ozone depleting substances (*4)		Ozone Layer Protection Law	Ozone layer destruction	Refrigerants, foaming agents, extinguishing agents

(*1) Chemical Substances Control Law

(*2) Perfluoro (octane-1-sulfonic acid) or its salts are excepted, and can be used in the following applications.

- Etchants
- Manufacture of semiconductor resists
- Manufacture of industrial photo film (details in accordance with regulations under Examination of Chemical Substances Control Law)

(*3) Industrial Safety and Health Law

(*4) Ozone depleting substances listed in the Montreal Protocol.

Annex II Substances for Which Inclusion is restricted under Chemical Substance Control Standard Rank 2.

Relevant legislation: Directive 2011/65/EU (RoHS) Annex II

	Chemical substances	Threshold value	Primary environmental effects	Primary applications
1	Cadmium and its compounds	0.01%	Kidney dysfunction Reproductive defects Carcinogenic	Pigments, anti-rust treatments, batteries
2	Hexavalent chromium compounds	0.1%	Carcinogenic	Pigments, paints, inks, catalysts
3	Lead and its compounds	0.1%	Central nervous system dysfunction Carcinogenic	Rubber curing agents, pigments, solder, plating
4	Mercury and its compounds	0.1%	Brain defects Mental disorders	Luminescence materials, electrical contacts
5	PBBs	0.1%	Bioaccumulative Production of Dioxins during combustion	Flame retardant
6	PBDEs	0.1%	Bioaccumulative Production of Dioxins during combustion	Flame retardant
7 ^{*1)}	Di (2-ethylhexyl) phthalate DEHP	0.1%	Serious influential anxiety to environment Reproductive toxicity	Plasticizers for resin, Paints, pigments, adhesives, lubricating oil additives
8 ^{*1)}	Butyl bezy phthalate BBP	0.1%	As above	As above
9 ^{*1)}	Dibutyl phthalate DBP	0.1%	As above	As above
10 ^{*1)}	Diisobutyl phthalate DIBP	0.1%	As above	As above

*1) Information on the content should be informed as SVHC(s) to comply with Article 33 of REACH regulation before 22 July 2019. It is prohibited to be contained in the articles from 22 July 2019.

Applications exempted from the restriction are listed in Annex III and Annex IV of the RoHS directive.

Annex III JAMP Declarable Substances Reference List

Relevant Standards	Code
Chemical Substances Control Law, Class I Specified Chemical Substances	JP01
Industrial Safety and Health Law, Substances Prohibited of Manufacturing etc.	JP02
Poisonous and Deleterious Substances Control Law, Specified Poisonous Substances	JP03
Directive 2011/65/EU (RoHS), Annex II Restriction of Hazardous Substances	EU01
Directive 2000/53/EC (ELV)	EU02
Regulation (EC) No 1272/2008 (CLP), Annex VI Table 3.2 CMR-cat. 1,2	EU03
Regulation (EC) No 1907/2006 (REACH), Annex XVII [Except EU03]	EU04
Regulation (EC) No 1907/2006 (REACH), SVHC on the Candidate List	EU05
Regulation (EC)No 850/2004 (POPs), Annex I	EU06
European chemical Substances Information System (ESIS) PBT [Fulfilled]	OT01
Global Automotive Declarable Substance List (GADSL)	IA01
IEC62474/JIG	IA02
JAMP- SN (Substance Number) Applied Substances	JAMP SN

- JP01: A Japanese law to establish a system for evaluating the properties of new chemical substances before their manufacture or import.
- JP02: A Japanese law to facilitate the establishment of comfortable working environment and to prevent industrial accidents.
- JP03: A Japanese law to conduct necessary control over poisonous and deleterious substances from a hygiene point of view in order to maintain public health.
- EU01: An EU directive regulating hazardous substances included in electrical and electronic devices, and prohibition of use of substances.
- EU02: An EU directive designed to reduce the environmental impact of End of Life Vehicles.
- EU03: An EU regulation related to Classification of substances and mixtures, Labeling, and Packaging.
- EU04, EU05: An EU regulations related to chemical substances and their safe use, handling, and application.
- EU06: An EU regulation based on international treaties covering persistent organic pollutants such as PCBs and DDT.
- OT01: A system for summarizing and public disclosure of environmental regulations of European nations.
- IA01: A substance control list designed to reduce environmental impact in the automobile life cycle.
- IA02: An international standard related to procedures for disclosure of included substances determined by the International Electrotechnical Commission (IEC) TC111 Committee.
- JAMP-SN: Chemical substance numbers determined by JAMP for substances not assigned CAS numbers.

Annex IV Substances Relevant to Chemical Substance Control Standard Rank 4 and Prohibited for Use in Manufacturing Processes (*1)

	Chemical substances	Primary legislation	Primary environmental effects	Primary applications
1	Ozone depleting substances (*2)	Ozone Layer Protection Law	Ozone depletion	Detergents and refrigerants
2	Organochlorine detergents (*3)	Soil Contamination Countermeasures Law	Soil contamination	Detergents

(*1) Except being used only in a hermetically sealed state (e.g. cooling medium in chillers).

(*2) Ozone depleting substances prohibited for use are in manufacturing processes in accordance with Montreal Protocol.

(*3) Organochlorine detergents prohibited for use in manufacturing processes are as follows;

trichloroethylene, tetrachloroethylene, dichloromethane, carbon tetrachloride, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,3-dichloropropene