Green Procurement Guideline

Version 2.5

March, 2020 Update

JVCKENWOOD Group

Table of Contents

Intr	roduction	2
Fun	ndamental Policy of Green Procurement	3
1.	Objectives of Green Procurement Guideline	3
2.	Scope	4
3.	Definition	4
4.	JVCKENWOOD Specific Chemicals	6
5.	Requirements to Our Suppliers	6
6.	Providing Survey Information and Other Information	7
7.	Analysis of Contained Chemicals	8
8.	Survey Strategy for Products for Automobile Manufacturer (Car OEM)	8
9.	Handling of Information	9
10.	Contact for This Green Procurement Guideline	9

Appendix

1.	Regulations List	10 -	12
2.	Revision History	13	

Related document JVCKENWOOD Specific Chemicals List (separate files)

- 1. JVCKENWOOD Specific Chemicals List
- 2. JVCKENWOOD Specific Chemicals Details

Related document Forms on chemicals contained in products (separate files)

- Material Contents Report
- Explanation of Material Contents Report
- Material Classification List

Related document Green Procurement Assessment (separate files)

- Green Procurement Assessment Form
- Examples of Green Procurement Assessment Form
- Green Procurement Assessment Operation Manual
- Green Procurement Assessment Chemicals Control Manual

Our company WEB site can obtain Related document. URL: https://www.jvckenwood.com/

Introduction

Special thanks for your continuous support for our environment conservation activities.

We have seriously thought that it is one of the social responsibilities that business should take to work with environment issues, including global warming. We will be advancing efforts to improve the global environment for the future and striving for realizing realization of society.

We will be respecting the environment in every aspect of our business activities and continually reducing the environmental loads that may pose during products' lifecycles, such as producing and selling.

As one of the approaches for the above, we believe it important to initiatively purchase components and products that can pose less environmental loads.

Especially, the consciousness of social responsibilities and morals in environmental issues, as well as compliance with various severe regulations including the recent REACH, has been required increasingly and more strictly than ever for business activities.

We and our affiliate companies have renewed the "Green Procurement Guideline" and will be aggressively promoting environmental activities with the concept of prosperous coexistence with all of our suppliers.

We hope that all of our suppliers understand our idea on environmental issues and deploy efforts to reduce environmental loads and provide us environmentally conscious components and products.

Your sincere understanding and cooperation will be highly appreciated.

JVCKENWOOD Corporation

Fundamental Principle

In all the aspects of our business activities, we fulfill our social responsibilities through continual improvement of the global environment and contribute to realization of sustainably developing society.

Fundamental Policy of Green Procurement

- 1. We comply with every law and regulation related to environmental activities and other requirements we consent to.
- 2. We, in order to provide products with less environmental loads, initiatively purchase components or products that consider their impact on the environment.
- 3. We promote our business with companies that are actively developing environmental activities.
- 4. We work toward effective uses of limited earth resources and aim for a recycle-oriented society.

1. Objectives of Green Procurement Guideline

The purpose of this guideline is to describe our idea on control of chemicals contained in products and the strategy of surveys for the control, which should apply when we and our affiliated companies procure components from our suppliers. Note that this guideline has been compiled so that we can cope with the current trend in various international chemicals control, such as the REACH.

2. Scope

This guideline applies to all the purchases to be procured as materials, components, and products that make up merchandise that our affiliated companies in Japan and overseas will sell. This guideline also applies to any other purchases related to the manufacturing activities for those goods.

For information on how to survey products to be sold to automobile manufacturers (Car OEM), refer to Section 8.

3. Definition

The definitions of the terms used in this guideline are as follows:

- Materials, components, and products
 As an example: Include raw materials, accessories, components, unfinished
 products, purchased products, sales promotion goods, and packaging materials.
- For the definitions of terms related to the JAMP, such as SDS, chemSHERPA, and CAS number, refer to the "Guidelines for the Management of Chemical Substances in Products" of the JAMP.
- JAMP (Joint Article Management Promotion-consortium) An association for establishment and promotion of specific mechanisms that can be used to appropriately control information on chemicals contained in products (articles) and smoothly disclose and communicate the information within supply chains.

https://chemsherpa.net/

- JAMA (Japan Automobile Manufacturers Association, Inc.) An association consisted of automobile manufacturers in Japan. <u>http://www.jama.or.jp/</u>
- JAPIA (Japan Auto Parts Industries Association) An association consisted of automobile component manufacturers in Japan. <u>http://www.japia.or.jp/</u>
- GADSL (Global Automotive Declarable Substance List)
 A common list of controlled chemicals, which has been established by the GASG (Global Automotive Stakeholders Group) consisted of automobile manufacturers, automobile component manufacturers, and chemicals manufacturers in Japan, USA, and Europe. The listed chemicals are defined with codes P (prohibited) or D (declarable).

https://www.gadsl.org/

 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) A law for chemicals control of the European Union, enacted through the EC Regulation No. 1907/2006.

4. JVCKENWOOD Specific Chemicals

Specific chemicals are categorized into banned chemicals and restricted chemicals. For the complete list, refer to " Related document: JVCKENWOOD Specific Chemicals List."

5. Requirements to Our Suppliers

5.1 Requirements on Environment Management System

In order to survey each supplier's environment management system, we ask each supplier for cooperation in the Green Procurement Assessment described in Section 6.1.

For suppliers that we will be continuing business with, we also ask them for self-assessment and reporting with the Green Procurement Assessment Form. Depending on the assessment results and business status, we may conduct audits of the supplier. We notify each supplier of periods in which we expect the supplier to conduct the Green Procurement Assessment.

- 5.2 Requirements on Chemicals Contained in Materials, Components, and Products
 - Materials, components, and products should comply with the applicable threshold level specified in the latest "JVCKENWOOD Specific Chemicals List."
 - Upon our request, each supplier should be able to provide us information that demonstrates the compliance mentioned above, not later than a date we specify.

Delay in providing the information may be reflected in green procurement assessment of that supplier.

- Each supplier should make efforts to ensure that necessary information is thoroughly communicated to the upper stream of its supply chains, including its suppliers and its secondary suppliers.

Information obtained from its supply chains should be kept for a required period by the law and regulation.

- Whenever the information each supplier has already provided us needs to be revised based on new information obtained, the revised information should be provided.
- Each supplier should continually make efforts to obtain the latest information on domestic and overseas regulations and comply with them.

5.3 Requirements on Manufacturing Processes

- Each supplier should not use any of the Ozone Depleting Substances shown in JVCKENWOOD Specific Chemicals List in the manufacturing process.
- Each supplier should make efforts to ban or restrict the use of the Specific Chemicals for tools and facilities that will be used in its manufacturing processes, considering transfer of the chemicals to the products.

6. Providing Survey Information and Other Information

Necessary forms are available at our Web site, which each supplier can download. Completed forms should be submitted in their original electronic data formats. Our Web site URL: https://www.jvckenwood.com/

6.1 Green Procurement Assessment

The Green Procurement Assessment intends that each supplier conducts self-assessment of its chemicals control system to know whether and how it is working. The ultimate objective is that, through the Assessment, each supplier establishes and maintains its control system for chemicals contained in its products and deploys continual improvement of that system. For a supplier who just enters business with us, we will conduct an audit of that supplier based on provided Assessment results and take the audit results into consideration to determine the business terms with that supplier.

For how to conduct the Green Procurement Assessment, refer to " Related document: Green Procurement Assessment Operation Manual."

When determining the overall evaluation of each supplier, we take account of the evaluation results of the Green Procurement Assessment (designated as "E"), as well as the evaluation results of appropriate quality ("Q"), appropriate costs ("C"), and stable delivery ("D"). Suppliers who comprehensively address those themes will be chosen with higher priorities when we purchase goods.

6.2 Forms on Contained Chemicals

Each supplier should complete and provide one of the forms listed below, on contents and chemicals used in all the materials, components, and/or products delivered to us. (According to the Survey request form)

Forms on chemicals contained in products:

- -"chemSHERPA AI"
- -"Material Contents Report": Our own form
- -"JAMA/JAPIA Standard Material Datasheet"
- * When a change occurred in the mention contents by new knowledge or the trend of laws and regulations, please send the new file again after having updated report contents of the file that you had submitted.

(Example: The addition of the SVHC substances of REACH)

* For materials to be used in our manufacturing processes, we request additional information, including SDS and chemSHERPA CI.

7. Analysis of Contained Chemicals

- We may analyze products delivered from a supplier to confirm that information the supplier has provided is consistent with actual products.
- For analysis methods for restricted substances specified in the RoHS Directive, among the Specific Chemicals, refer to the IEC62321 standard.

8. Survey Strategy for Products for Automobile Manufacturer (Car OEM)

For materials, components, and products of car OEM usage, we request the supplier to conduct additional surveys on the GADSL substances and report the results with the Survey request form.

Note that separate surveys based on client's request may occasionally need to be conducted.

* The "JGPSSI Survey Response Tool" "JAMP tools" is not allowed to be used as an alternative.

9. Handling of Information

Information provided is to be handled and shared as internal information within our group, and will be never made public outside the group. Information based on the Survey Request however, may be used as evidences that need to be presented to our clients.

10. Contact for This Green Procurement Guideline

For consultation about this Green Procurement Guideline and its relevant documents, contact the representative department of the firm that issues survey request.

Appendix 1: Regulations List

The following list is designated chemical substance group by IEC62474 and designated Substance by us. Related laws, ordinances and the example of the use are shown.

Note that this table does not necessarily include all the relevant laws and regulations. It is each vendor's responsibility to obtain and understand the latest legislation information.

Substance/Group	Regulation Information	Examples of Uses
Cadmium/Cadmium Compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006, ELV Directive (2000/53/EC), RoHS Directive (2011/65/EU), USA California Electronic Waste Recycling Act SB 20, amended by SB 50, China Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products, Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS, Package Directive (94/62/EC) and its amendments (2004/12/EC, 1999/177/EC), USA Regulations for heavy metals in packaging, Korean Quality anagement and Safety Control of Industrial Products Act, Directive 2006/66/EC, Chinese Standard GB 24427-2009	Pigment, paint, ink, contact point electrode, physical contact, plating, anti-corrosion surface treatment, paint drying agent, chromate treatment, paint adhesion enhancement, fluorescent bulb, optical material, solder material, anti- rust, tabilizer, plating, zinc plating, PVC stabilizer, battery, Packaging material
Chromium VI/ Chromium VI compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006, ELV Directive (2000/53/EC), RoHS Directive (2011/65/EU), USA California Electronic Waste Recycling Act SB 20, amended by SB 50, China Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products,Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS, Package Directive (94/62/EC) and its amendments (2004/12/EC, 1999/177/EC), USA Regulations for heavy metals in packaging	pigment, paint, ink, catalyst, plating, anti-corrosion surface treatment, dye, paint dryer, paints adhesion enhancement, Packaging material
Lead/Lead Compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006, ELV Directive (2000/53/EC), RoHS Directive (2011/65/EU), USA California Proposition 65 Settlement, USA California Electronic Waste Recycling Act SB 20, amended by SB 50, China Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products, Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS, Package Directive (94/62/EC) and its amendments (2004/12/EC, 1999/177/EC), USA Regulations for heavy metals in packaging, U.S. Consumer Product Safety Improvement Act, Directive 2006/66/EC, Chinese Standard GB 24427-2009	material, free-machining alloy, free- cutting steels, optical materials, X-ray shielding in CRT glass, electrical solder material, curing agent, vulcanizing agent, ferroelectrics, resin stabilizer, plating, metal alloy, resin additive, Cables/cords,
Mercury/mercury compoundsHazardous Substances in Electrical and Electronic Products, Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS, Package Directivematerial, pigment, a switches, high-effic antibacterial treatment		Fluorescent bulb, contact point material, pigment, anti-corrosion, switches, high-efficiency illuminant, antibacterial treatment, battery, Packaging material

Asbestos	ANNEX XVII of REACH Regulation (EC) No 1907/2006, US TSCA, Switzerland Ordinance on the reduction of risks linked to chemical products (ORRChim)	Brake lining and pad, Insulator, filler, abrasives, pigment, paint, talc, heat insulating material
Azocolourants and azodyes which form certain aromatic amines	ANNEX XVII of REACH Regulation (EC) No 1907/2006	Pigment, dyes, colorants
Ozone depleting substances	Montreal Protocol,EU EC No. 2037/2000,EC 1005/2009, US Clean Air Act, Japan Law concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures	Refrigerant, foaming agent, extinguishant, solvent cleaner
Fluorinated greenhouse gases (PFC, SF6, HFC)	EU Reg. No. 842/2006	Refrigerants, blowing agents, extinguishing agents, cleaning agents, insulating media, caustic gas
Perfluorooctane sulfonate (PFOS)	Commission Regulation (EU) No757/2010, Canadian Environmental Protection Act SOR/SOR/2008-178, Japan Law concerning the evaluation of chemical substances	Antistatic agent for films and plastics
Perchlorates	US/CA DTSC Rulemaking	Coin cell batteries
Polybrominated biphenyls (PBBs)	RoHS Directive (2011/65/EU), China Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products, Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS	Flame retardant
Polybrominated diphenyl ethers (PBDEs)	RoHS Directive (2011/65/EU), China Management Methods for Restricted Use of Hazardous Substances in Electrical and Electronic Products, Japan Revised law for Promotion of Effective Utilization of Resources (J-Moss), Korea RoHS,ANNEX XVII of REACH Regulation (EC) No 1907/2006)	Flame retardant
Dibutyltin (DBT) compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006), Commission Regulation (EU) No 276/2010	Stabilizer for PVC, curing catalyst for silicone resin and urethane resin
Dioctyltin (DOT) compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006, Commission Regulation (EU) No 276/2010	Stabilizer for PVC, curing catalyst for silicone resin and urethane resin
Selected Phthalates	ANNEX XVII of REACH Regulation (EC) No 1907/2006, RoHS Directive (2011/65/EU), U.S. Consumer Product Safety Improvement Act, USA California Proposition 65	Plasticizer, dye, pigment, paint, ink, adhesive, lubricant
Polychlorinated biphenyls (PCBs) and specific substitutes	Japan Law concerning the evaluation of chemical substances, ANNEX I of POPs Regulation (EU) No 2019/1021, US TSCA	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution; plasticizers, fire retardants, coatings for electrical wire and cable, dielectric sealants
Polychlorinated terphenyls (PCTs)	ANNEX XVII of REACH Regulation (EC) No 1907/2006	Insulation oil, lubricant oil, electrical insulation medium, solvent, electrolytic solution; plasticizers, fire retardants, coatings for electrical wire and cable, dielectric sealants
Polychlorinated naphthalenes (more than 2chlorine atoms)	Japan Law concerning the evaluation of chemical substances	Lubricant, paint, stabilizer (electric characteristic, flame-resistant, water- resistant) insulator, flame retardant

Radioactive substances	EU-D 96/29/Euratom, Japan Law for the Regulation of Nuclear Source Material,Nuclear Fuel Material, and Reactors, 1986, Japan Law Concerning Prevention from Radiation Hazards, US NRC	Optical properties (thorium), measuring devices, gauges, detector
Tri-substituted organostannic compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006, Commission Regulation (EU) No 276/2010, Japan Law concerning the evaluation of chemical substances	Stabilizer, antioxidant, antibacterial and antifungal agents, antifoulant, antiseptic, anti-fungal agent, paint, pigment, antistaining
Brominated flame retardants (other than PBBs,PBDEs, or HBCDD)		flame retardant for housing, connectors, package molding sealing, Printed wiring board laminate
Dimethyl fumarate	ANNEX XVII of REACH Regulation (EC) No 1907/2006	Biocide, leather seats
Phenol,2-(2H- benzotriazol-2-yl)- 4,6-bis(1,1- dimethylethyl)	Japan Law concerning the evaluation of chemical substances	Adhesives, paints, printing inks, plastics, inked ribbons, putty, caulking or sealing fillers
Formaldehyde	US/CA CARB Rule, US Federal Law 111-199/TSCA Section 601, Austria - BGB I 1990/194: Formaldehydverordnung, §2, 12/2/1990, Lithuanian Hygiene Norm HN 96:2000 (Hygiene standards and regulations)	Composite wood (plywood,particle board, MDF)products or Components, Stereo cabinets, kiosk enclosures, Textiles
Nickel/nickel compounds	ANNEX XVII of REACH Regulation (EC) No 1907/2006	Stainless steel, plating, external skin contact product
Shortchain chlorinated paraffins (C10 – C13)	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006, Norway Product Regulations FOR-2004-06-01-922, Switzerland Ordinance on the reduction of risks linked to chemical products (ORRChim)	Plasticizer for PVC, flame retardant
Tributyl tin oxide (TBTO)	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006, Japan Law concerning the evaluation of chemical substances	Antiseptic, antifungal agent, paint, pigment, antistaining, refrigerant, foaming agent, extinguishant, solvent cleaner
Beryllium oxide (BeO)	DIGITALEUROPE/CECED/AeA/EERA guidance	Ceramics
Polyvinyl chloride (PVC)	IEEE1680 (EPEAT: Electronic Product Environmental Assessment Tool)	Insulator, chemical resistance, transparency, sheath material
Hexabromocyclodo decane (HBCDD)	Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006, Japan Law concerning the evaluation of chemical substances	flame retardant
Perfluorooctanoic acid (PFOA) and individual salts and esters of PFOA	Norway Product Regulations FOR-2004-06-01-922,nr. 550 ,ANNEX XVII of REACH Regulation (EC) No 1907/2006	Textiles, photographic coatings applied to films, paper or printing plates and other coated consumer products.
Chlorinated Flame Retardants	USA California Proposition 65,IPC-4101 and IEC 61249-2-21	flame retardant
Polycyclic-aromatic hydrocarbons (PAH)	ANNEX XVII of REACH Regulation (EC) No 1907/2006	Rubber or plastic parts

Revision History

No.	Revised Section	Revision
1	•Paragraph 6.2 •JVC KENWOOD Specific Chemicals List •Regulations List	Issue of the Version 2.0 in October, 2017 •Paragraph 6.2 Forms on Contained Chemicals was changed. •JVC KENWOOD Specific Chemicals List and Regulations List are revised by revising the each country regulations.
2	•Paragraph 6.2 •JVC KENWOOD Specific Chemicals List •Regulations List	Issue of the Version 2.1 in May, 2018 •Paragraph 6.2 Forms on Contained Chemicals was changed. •JVC KENWOOD Specific Chemicals List and Regulations List are revised by revising the each country regulations.
3	•JVC KENWOOD Specific Chemicals List •Regulations List	Issue of the Version 2.2 in September, 2018 •JVC KENWOOD Specific Chemicals List and Regulations List are revised by revising the each country regulations.
4	 JVC KENWOOD Specific Chemicals List Regulations List 	Issue of the Version 2.3 in April, 2019 ·JVC KENWOOD Specific Chemicals List and Regulations List are revised by revising the each country regulations.
5	•JVC KENWOOD Specific Chemicals List •Regulations List	Issue of the Version 2.4 in October, 2019 •JVC KENWOOD Specific Chemicals List and Regulations List are revised by revising the each country regulations.
6	•Paragraph 6.2 •Paragraph 8 •JVC KENWOOD Specific Chemicals List	Issue of the Version 2.5 in March, 2020 •Paragraph 6.2 & 8 were changed. •JVC KENWOOD Specific Chemicals List is revised by revising the each country regulations.