

MegaChips Green Procurement Guideline

Rev 6.0
Oct 21,2008

MegaChips

Introduction

Environmental protection activities are gaining support in corporations, large and small, in order to preserve the Earth's precious natural environment for future generations. As part of their efforts, many corporations the world over are adopting green purchasing guidelines and programs designed to restrict and eliminate the use of chemical substances in manufacturing, end-products and packaging that are harmful or potentially harmful to the environment.

MegaChips Corporation considers environmental conservation one of its paramount management factors and has instituted a green procurement guideline to reduce the use of any environmentally unfriendly substances in its business operations.

The range of green purchase naturally involves suppliers and contractors, and their understanding and cooperation are essential. We hope this green procurement guideline will help to form a strong alliance at all levels of business for the reduction and elimination of hazardous substances.

MegaChips

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1. MegaChips Environmental Policy

MegaChips is a fabless technology company, conducting R&D, design and marketing of system LSIs and systems products, and subcontracting production of these products. Our objective is to contribute towards the realization of people's safety and comfort, delightful life, and affluent communication by providing high-tech based creative products in the world.

We have launched an environmental management system that is fully in compliance with ISO14001 standards. As we develop our business operations and provide products and services, we strive continuously to improve our environmental management system and prevent all forms of contamination. As a socially responsible company, we support the creation of societal and corporate values that contribute to environmental preservation.

1. We comply with all laws and regulations, and other requirements in which we have agreed. We will establish, beyond the legal requirements, a set of voluntary environmental management standards to reduce any further elements of contamination.
2. With regard to impact on the environment of products and services developed by our businesses, we will perpetually refine our environmental goals, and we further pledge to:
 - (1) enhance our product assessment programs for resource saving, energy saving, and industrial wastes reduction, and continue to design environmentally friendly products;
 - (2) promote green procurement to our contractors in order to restrict and control the use of hazardous substances; and
 - (3) augment our energy-saving and recycling activities in R&D offices and facilities, while working hand-in-hand with local communities to help preserve the environment.
3. We will continue to provide our employees with training and educational programs on environmental preservation, and help them deepen their knowledge and acquire new technology in this important field. As we familiarize employees with our environmental policy, we will encourage them to contribute ideas to our corporate-wide response to the issue of environmental conservation.
4. Our environmental policy will be made available to the public through our brochures and other media.

June 25, 2008

Yukihiro Ukai

President, MegaChips Corporation

2. Green Procurement at MegaChips

2.1 Promotion of Green Procurement

- (1) In order to lower environmental burdens, we will reduce and eliminate the use of chemical substances shown in Table 1 and 2, including those substances that are contained in raw materials, parts, products, and containers and packaging materials.
- (2) To promote further reduction in the use of environmentally harmful elements, we will procure materials and products from suppliers and contractors whose environmental preservation activities are well established and widely recognized.

2.2 Green Procurement Items

We define green procurement items as the following raw materials, parts, products, and containers and packaging materials. However, materials supplied from our customers are excluded.

- (1) Parts, products, containers and packaging materials that suppliers and contractors design or produce at the request of MegaChips.
- (2) Raw materials, parts, products that MegaChips purchases.
- (3) Containers and packaging materials that are used for MegaChips products and supplied to MegaChips.

2.3 Environmentally Hazardous Substances

Based on the list of substances compiled with the Joint Industry Guide for Material Composition Declaration for Electronic Products (JIG), we have earmarked the following classes of substances for elimination and restriction.

(1) Banned Substances

We will, in principle, eliminate the use of substances listed in Table 1 found in all items that are covered in the above section 2.2. We will aim to eliminate substances in use at the present time. However, substances that are exempted from laws and regulations may be used as exception.

(2) Restricted Substances

We will restrict the use of substances listed in Table 2 found in all items that are covered in the above section 2.2.

Restricted substances are different from banned substances, and are to restrict its use in products in the future. We will monitor the use at the present time.

3. Requests for Our Suppliers and Contractors

3.1 Understanding Banned/Restricted Substances Contained in Supplied Products to us

We request our suppliers and contractors to survey “Use/Nonuse of Banned Chemical Substances” and “Product Chemical Substances”. Please submit the latest report of used chemical substances when parts and raw materials etc. are changed. If substances that are exempted from laws and regulations are used, please also report to us.

We may request our suppliers and contractors to submit a written document to confirm that the content of the latest report of used chemical substances is true. This may be asked even by lot unit.

Please note that we may also ask our suppliers and contractors to conduct tests and report on the use of chemical substances in raw materials, parts, products, and containers and packaging materials after delivery.

3.2 Criteria

Please measure by homogeneous materials unit.

Homogeneous material: a material that cannot be mechanically disjointed into different materials. The term “homogeneous” means “of uniform composition throughout.” Examples of “homogeneous materials” are individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings. In case of materials consisting multiple layers, such as coating and plating, each layer is considered as homogeneous material.

Mechanically disjointed: materials that can, in principle, be separated by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes.

Intentionally added: Deliberate use in the formulation of a product or subpart where its continued presence is desired to provide a specific characteristic, appearance or quality. If listed materials or substances are contained in products or subparts purchased by supplier and are incorporated, such materials/substances must be disclosed if the supplier has knowledge (or with reasonable inquiry should have knowledge) of the presence of such materials or substances.

- Paint and adhesives are measured after being dried cure.
- Numeric data is maximum value (theoretical value or actual measurement).

3.3 Laws and Regulations

Laws and regulations may exist, in Japan and overseas, governing uses of and restrictions on substances not included in this guideline. We request our suppliers and contractors to fully comply with such regulations.

3.4 Customers Requirement

Upon our customers' request, we may ask our suppliers and contractors to comply with requirements beyond those stipulated in this guideline.

3.5 Nonconformity Products

If there is a possibility that the nonconformity products (including suspected products) are supplied to us, please report to us immediately.

3.6 Promotion of Environmental Preservation Activities

We request our suppliers and contractors to understand the content of this guideline, and promote environmental preservation activities such as reducing the use of environmentally hazardous chemical substances, and preventing adulteration in production process.

4. Inquiries

For further inquiries, please contact MegaChips Green Procurement office (+816-6399-2873).

Table1 List of Banned Substances

No.	Substance	Threshold Level
1	Cadmium/Cadmium Compounds	1. Intentionally added 2. Any content greater than 75 ppm (0.075%) by weight in homogeneous material.
2	Hexavalent Chromium/ Hexavalent Chromium Compounds	1.Intentionally added 2. 2.Any content greater than 1000 ppm (0.1%) by weight in homogeneous material.
3	Lead/Lead Compounds	1.Intentionally added 2. 2.Any content greater than 1000 ppm (0.1%) by weight in homogeneous material or for surface contact layer of cables/cords (thermoset/ thermoplastic coating) content greater than 300 ppm (0.03%) by weight
4	Mercury/Mercury Compounds	1. Intentionally added 2. Any content greater than 1000 ppm (0.1%) by weight in homogeneous material.
5	Tributyl Tin Oxide (TBTO)	Intentionally added
6	Certain Tributyl Tin (TBT) and Triphenyl Tin (TPT) compounds	Intentionally added
7	Polybrominated Biphenyls (PBBs)	1.Intentionally added 2. 2.Any content greater than 1000 ppm (0.1%) by weight in homogeneous material.
8	Polybrominated Diphenylethers (PBDEs)	1.Intentionally added 2. 2.Any content greater than 1000 ppm (0.1%) by weight in homogeneous material.
9	Polychlorinated Biphenyls and Terphenyls (PCBs, PCTs)	Intentionally added
10	Polychlorinated Naphthalenes (more than 3 chlorine atoms)	Intentionally added
11	Certain Shortchain Chlorinated Paraffins (C10 – C13)	1.Intentionally added 2. Any content greater than 1000 ppm (0.1%) by weight in homogeneous material.
12	Asbestos	Any content must be reported.
13	Certain azocolourants and azodyes (which form certain aromatic amines) in textile and leather applications only	1.Intentionally added 2.Any content greater than 30 ppm (0.003%) by weight in finished textile or leather articles
14	Ozone Depleting Substances	Any content must be reported.
15	Radioactive Substances	Intentionally added

*Adding amount that exceeds threshold level is prohibited.

*Total consistency of Lead, Cadmium, Mercury, and Hexavalent Chromium in containers and packaging materials must be under 100ppm.

Table2 List of Restricted Substances

No.	Substance	Threshold
16	Antimony/Antimony Compounds	1000ppm
17	Arsenic/Arsenic Compounds	1000ppm
18	Beryllium/Beryllium Compounds	1000ppm
19	Bismuth/Bismuth Compounds	1000ppm
20	Nickel (specific applications only, see NOTE 1)	Release of nickel not to exceed 0.5 micrograms/sq cm/week when tested to DIN EN 1811
21	Selenium/Selenium Compounds	1000ppm
22	Brominated Flame Retardants (other than PBBs or PBDEs)	1000ppm
23	Polyvinyl Chloride (PVC)	1000ppm
24	Certain Phthalates	1000ppm

*In case that above restricted substances are used in products beyond the threshold, it needs to be reported.

NOTE 1 Nickel must be reported in certain regulated applications where nickel is likely to result in prolonged skin exposure (e.g., an outer enclosure for a portable electronic product designed to be carried).

Established Document • Revision Record			
Document Title	MegaChips Green Procurement Guideline		
Established Date	Version	Establishment • Revision Reasons and Contents	
January 1, 2005	Rev.1.0	First Issue	
October 1, 2005	Rev.2.0	2.4	Changed JGPSSI to JGPSSIJIG.
		Table	Added threshold levels and changed/deleted substances.
April 1, 2006	Rev.3.0	2.5	Added criteria.
		3	Divided chapters and specified documents needed at delivery.
		Table	Specified threshold levels for packing materials.
December 15, 2006	Rev.4.0	1	Replaced MegaChips group's environmental policy.
		2.3	Added the words "supplied to MegaChips group".
		2.4	Specified the regulation of restricted substances.
		3.1	Changed documents needed at delivery and their submission method.
		3.2	Changed the position of this chapter.
		3.5	Specified nonconformity products.
		Table 2	Added remark.
May 1, 2007	Rev.5.0	1	Replaced MegaChips's environmental policy.
		2.3	Changed RoHS to laws and regulations.
		3.1	Added request to report on the substances that are exempted from the requirements in the restriction of hazardous substances in laws and regulations.
		3.6	Added promotion of environmental preservation activities.
		overall	Reviewed and modified construction of the whole document.
		overall	Changed our company name.
Oct 21, 2008	Rev.6.0	1.	Replaced MegaChips's environmental policy.
		3.2	Added explanations of Homogeneous material, Mechanically disjointed, and Intentionally added.
		4.	Changed TEL number for inquiries.
		Table 1	Added Terphenyls (PCTs) into Substance of No.9.
			Added "Any content greater than 1000 ppm" into Threshold Level of No.11.
			Changed to "Any content must be reported." in Threshold Level of No.12.
			Added "Any content greater than 30 ppm" into Threshold Level of No.13.
			Changed to "Any content must be reported." in Threshold Level of No.14.
Table 2	Changed to "Release of nickel not to exceed 0.5 micrograms/sq cm/week when tested to DIN EN 1811." in Threshold of No.20.		