

Green Procurement Guidelines

9th Edition

Revised on September 14, 2022

NTT Advanced Technology Corporation
Environmental Protection Office

1. Purpose

Aiming at corporate activities that are people- and environmentally friendly, NTT Advanced Technology Corporation (NTT-AT) is committed to company-wide environmental conservation activities in accordance with NTT-AT's Group Global Environmental Charter. As for one of our priority activities concerning environmental preservation, we are committed to reducing the environmental impact of the products we sell. That said, since we do not have a manufacturing division, we procure all raw materials, parts, and components that make up our products from outside sources, so the cooperation of our suppliers is essential. The following guidelines describe matters that we expect our suppliers to either comply with or consider carefully. We ask our suppliers to understand the purpose of these guidelines and cooperate with our activities concerning environmental protection.

2. Scope of Application

These guidelines apply to all products procured and sold by our company, the raw materials, components, parts, etc. that make up those products, and the suppliers of those procured products.

3. Basic Approach to Green Procurement

"Green Procurement" at NTT-AT means procuring products from suppliers who carefully consider environmental conservation in ways such as banning or reducing the use of hazardous chemical substances, saving energy and resources, and recycling. Aiming to achieve green procurement, these guidelines provide information about our suppliers' initiatives targeting environmental management and requirements concerning products to be delivered to us.

4. Requirements for Green Procurement

4.1 Requirements for Suppliers

As for activities by suppliers concerning environmental conservation, suppliers must meet the following requirements:

- (1) Establishment of an environmental-management system that conforms to

ISO14001 or equivalent.

- (2) Implementation of green procurement.
- (3) Identification and management of chemical substances contained in products.
- (4) Cooperation in investigating chemical substances contained in the procured products and reducing the environmental impact of the products.
- (5) Continuous efforts to improve energy efficiency and reduce energy usage and greenhouse gas emissions.

The use of renewable energy wherever possible.

- (6) Give consideration to biodiversity conservation for the materials used.
- (7) When selecting materials to be used, avoid composite materials that are difficult to recycle as much as possible, and try to use recycled materials as much as possible.
- (8) Conservation activities for ecosystems and rare animals and plants inside and outside business sites in cooperation with stakeholders (employees, local governments, NGOs, and other experts).

4.2 Requirements for Products, etc.

We request that you meet the following requirements regarding the goods you deliver to us. [Note that Requirements (1) and (2) are unconditional.]

- (1) "Prohibited substances"¹ specified in our standards shall not be included.
- (2) Products, etc. specified by our company must comply with RoHS Directives (RoHS2 (2011/65/EU) + (EU) 2015/863). (Must not contain designated substances for total elimination)
- (3) Information on the inclusion of "restricted substances"¹ specified in our standards must be clarified.
- (4) Plastic materials used in products must be selected from recyclable materials whenever possible.
- (5) The product must be designed to conserve energy and resources by reducing power consumption as well as downsizing and reducing weight.
- (6) The product must be designed so that when it is disposed of, it can be easily reused or recycled in a manner that reduces the environmental impact of waste.
- (7) Packaging materials should be made of easily recyclable materials or materials with low environmental impact.

Footnote 1: For “prohibited substances” and “restricted substances”, refer to Section 6. “Management Standards for Chemical Substances Contained in Products, etc.”

5. Application

We may ask for your cooperation in providing us with information or submitting certificates regarding the following items:

- (1) Status of environmental initiatives pursued by suppliers
- (2) Certificate of inclusion or non-inclusion of banned substances
- (3) Evidence of compliance with the RoHS Directives or a certificate of compliance with the RoHS Directives
- (4) Constituents and amount of restricted substances
- (5) Greenhouse gas emissions or energy use related to business activities, product manufacturing, transportation, etc.

6. Management Standards for Chemical Substances Contained in Products, etc.

We classify the chemical substances contained in our procured products as “Prohibited substances,” “Substances designated as discontinued,” and “Restricted substances,” and they must be managed as follows:

(1) Prohibited substances

- (i) Substances specified as banned substances in Table 1 “List of Hazardous Substances.”

Although prohibited substances are listed in Table 2 “Prohibited Substances List,” if the target substances are automatically changed due to revisions of laws and regulations, the latest laws and regulations take precedence.

- (ii) As a general rule, we do not purchase products that contain “prohibited substances.”
- (iii) If the product contains a prohibited substances, notify us in advance so we can discuss measures to be taken. If it is discovered after the fact, notify us immediately.

(2) Substances designated as discontinued

- (i) Substances in the "Substance group" column of Table 3
- (ii) If products, etc. are designated by us to conform to the RoHS Directives, the content of the substances designated as discontinued must be less than the threshold level in all parts of all components (except in cases that the RoHS Directives have an exemption provision).
- (iii) The threshold level for the content is the value given in the "Threshold" column of Table 1.

(3) Restricted substances

- (i) Substances specified as restricted substances in Table 1 "List of Hazardous Substances."
Although shown in Table 4 "List of Restricted Substances," the target substances are automatically changed due to revisions of laws and regulations, etc., and priority is given to the latest laws and regulations.
- (ii) The amount of restricted substances in the product must be reduced by the greatest extent possible.

7. Supplementary Provisions

The standards these guidelines may be revised in consideration of domestic and foreign laws, regulations, and social trends.

Table 1: List of Hazardous Substances (As of February 2013)

Classification	Details	Legal abbreviation
Prohibited substances	Class-1 specified chemical substances stipulated in Article 2, Paragraph 2 of Regulation of Manufacture and Evaluation of Chemical Substances/Act on the Regulation of Manufacture and Evaluation of Chemical Substances.	Chemical Substances Control Law (CSCL)
	Substances whose production is prohibited as stipulated in Article 55 of the Industrial Health and Safety Act.	Industrial Health and Safety Act
	Hazardous substances stipulated in Article 14-3 of the Water Pollution Prevention Act, and substances whose purification standard is “not detected” in Appended Table 2 of the Enforcement Regulations of the said Act.	Water Pollution Prevention Act
	Specified substances stipulated in Article 2 of the Law Concerning Protection of the Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures, and substances stipulated in the separate table of the same enforcement ordinance. However, Group I of Annex C of the Montreal Protocol is excluded.	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures The Montreal Protocol on Substances that Deplete the Ozone Layer
	Substances specified in Article 2, Paragraph 1 of the Act on Special Measures against Dioxins.	Act on Special Measures against Dioxins
	Substances stipulated in Article 1 of Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes	Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes
	Substances specified by NTT-AT	—
Substances designated as discontinued	(Restriction of the use of certain hazardous substances in electrical and electronic equipment) Substances designated by the RoHS Directive Restrictions on the Use of Certain Hazardous Substances Contained in Electrical and Electronic Equipment.”	RoHS Directive
	Substances specified by NTT-AT	—
Restricted substances (In case of duplication with prohibited substances, it should be specified)	Metals, chemical substances, etc. that are specified as hazardous industrial waste in Article 2-4, Paragraph 5 of the Waste Management and Public Cleansing Act, and are specified in Appended Table 1 of the same enforcement ordinance.	Waste Management and Public Cleansing Act
	Substances specified in Article 2, Paragraph 3 of the Act on Promotion of Global Warming Countermeasures, and Articles 1 and 2 of its Enforcement Order, which fall under Article 2, Paragraph 5 of the Law.	Act on Promotion of Global Warming Countermeasures
	Hazardous substances stipulated in Article 14-3 of the Water Pollution Prevention Act, excluding substances whose purification standard value is “not detected” in Appended Table 2 of the same enforcement ordinance	Water Pollution Prevention Act
	Specified hazardous substances stipulated in Article 2 of Soil Contamination Countermeasures Act, and substances stipulated in Article 1 of the same enforcement ordinance.	Soil Contamination Countermeasures Act
	Plastic materials containing halogen compounds	Substances designated by NTT Group Green Procurement Guidelines and NTT-AT

Table 2: List of Prohibited Substances (as of April 1, 2016)

Code	Name of substance	Legal abbreviation
A-1	Polychlorinated biphenyl or PCB	CSCL, Water Pollution Prevention Act, Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes
A-2	Polychlorinated naphthalene (2 or more chlorine atoms)	CSCL
A-3	Hexachlorobenzene	CSCL
A-4	Aldrin	CSCL
A-5	Dieldrin	CSCL
A-6	Endrin	CSCL
A-7	DDT	CSCL
A-8	Chlordanes	CSCL
A-9	Bis(tributyltin) oxide	CSCL
A-10	N,N'-ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine or N,N'-dixylyl-p-phenylenediamine	CSCL
A-11	2,4,6-tri-tertiary-butylphenol	CSCL
A-12	Toxaphene	CSCL
A-13	Mirex	CSCL
A-14	Yellow phosphorus match	Industrial Health and Safety Act
A-15	Benzidine and its salts	Industrial Health and Safety Act
A-16	4-aminodiphenyl and its salts	Industrial Health and Safety Act
A-17	4-nitrodiphenyl and its salts	Industrial Health and Safety Act
A-18	Bis(chloromethyl) ether	Industrial Health and Safety Act
A-19	Beta-naphthylamine and its salts	Industrial Health and Safety Act
A-20	Benzene-containing rubber glue (benzene content exceeding 5%)	Industrial Health and Safety Act
A-21	Asbestos	Industrial Health and Safety Act
A-22	Cyanide compounds	Water Pollution Prevention Act
A-23	Organophosphorus compounds (limited to parathion, methylparathion, methylidmetone, and EPN)	Water Pollution Prevention Act
A-24	Alkylmercury compounds	Water Pollution Prevention Act
A-25	CFCs	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-26	Halon	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-27	Carbon tetrachloride	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-28	Trichloroethane	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-29	HBFC	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-30	Bromochloromethane	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-31	Methyl bromide	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
A-32	Polychlorinated dibenzofurans	Act on Special Measures against Dioxins

A-33	Polychlorinated dibenzo-para-dioxin	Act on Special Measures against Dioxins
A-34	Coplanar polychlorinated biphenyls	Act on Special Measures against Dioxins
A-35	Kelsene or dicofol	CSCL
A-36	Hexachlorobuta-1,3-diene	CSCL
A-37	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol	CSCL
A-38	PFOS or its salt	CSCL
A-39	PFOSF	CSCL
A-40	Pentachlorobenzene	CSCL
A-41	α -hexachlorocyclohexane	CSCL
A-42	β -hexachlorocyclohexane	CSCL
A-43	γ -hexachlorocyclohexane or lindane	CSCL
A-44	Chlordecone	CSCL
A-45	Hexabromobiphenyl	CSCL
A-46	Tetrabromodiphenyl ether	CSCL
A-47	Pentabromodiphenyl ether	CSCL
A-48	Hexabromodiphenyl ether	CSCL
A-49	Heptabromodiphenyl ether	CSCL
A-50	6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepine 3-oxide (also known as endosulfan or benzoepine)	CSCL
A-51	Hexabromocyclodecane	CSCL
A-52	Pentachlorophenol or its salt or ester	CSCL
A-53	Polychlorinated Linear Paraffin (Limited to those with 10 to 13 carbon atoms and a chlorine content exceeding 48% of the total weight.)	CSCL
A-54	1, 1'-oxybis(2.3.4.5.6 – pentabromo)-benzene (alias: decabromodiphenyl ether)	CSCL

Table 3: Substances designated as discontinued and thresholds

Substance group	Threshold
Cadmium and its compounds	In resin: Cd < 5 ppm In packaging material: Total of Cd, Pb, Hg, and Cr(VI) < 100 ppm In other materials: Cd < 100 ppm
Lead and its compounds	In resin: Pb < 100 ppm In alloys: steel: Pb < 0.35 wt% aluminum: Pb < 0.4 wt% copper: Pb < 4 wt% In packaging material: Total of Cd, Pb, Hg, and Cr(VI) < 100 ppm In other materials: Pb < 1000 ppm
Mercury and its compounds	In packaging material: Total of Cd, Pb, Hg, and Cr(VI) < 100 ppm In other materials: Hg < 1000 ppm
Hexavalent-chromium compounds	In packaging material: Total of Cd, Pb, Hg, and Cr(VI) < 100 ppm In other materials: Cr(VI) < 1000 ppm
Polybrominated biphenyl (PBB)	< 1000 ppm
Polybrominated diphenyl ether (PBDE)	< 1000 ppm
Bis(2-ethylhexyl) phthalate (DEHP)	< 1000 ppm
Butyl benzyl phthalate (BBP)	< 1000 ppm
Dibutyl phthalate (DBP)	< 1000 ppm
Diisobutyl phthalate (DIBP)	< 1000 ppm

Table 4: **List of Restricted Substances (as of April 1, 2015)**

***If designated as a “discontinued substance,” follow the regulations concerning the substance**

Code	Name of substance	Authority
B-1	Mercury or its compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-2	Cadmium or its compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-3	Lead or its compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-4	Organic phosphorus compounds (excluding banned substances)	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-5	Hexavalent-chromium compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-6	Arsenic or its compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-7	Trichloroethylene	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-8	Tetrachloroethylene	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-9	Dichloromethane	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-10	Dichloroethane	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-11	Dichloroethylene	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-12	Dichloropropene	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-13	Thiramine	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-14	Simazine	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act

B-15	Thiobencarb	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-16	Benzene	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-17	Selenium or its compounds	Waste Management and Public Cleansing Act, Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-18	Carbon dioxide (limited to that related to the calculation of total emissions)	Act on Promotion of Global Warming Countermeasures
B-19	Methane	Act on Promotion of Global Warming Countermeasures
B-20	Dinitrogen monoxide	Act on Promotion of Global Warming Countermeasures
B-21	Hydrofluorocarbons as greenhouse gases	Act on Promotion of Global Warming Countermeasures
B-22	Perfluorocarbons as greenhouse gases	Act on Promotion of Global Warming Countermeasures
B-23	Sulfur hexafluoride	Act on Promotion of Global Warming Countermeasures
B-24	Boron and its compounds, Soil Pollution Control Law	Water Pollution Prevention Act, Soil Contamination Countermeasures Act
B-25	Ammonia, ammonium compounds, nitrous acid compounds and nitric acid compounds	Water Pollution Prevention Act
B-26	HCFCs	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
B-27	Plastic materials containing halides	Substances designated by NTT Group
B-28	Fluorine and its compounds	Water Pollution Prevention Act
B-29	Vinyl-chloride monomer	Water Pollution Prevention Act
B-30	1,4-dioxane	Water Pollution Prevention Act
B-31	Nitrogen trifluoride	Act on Promotion of Global Warming Countermeasures