DNP Group Green Procurement Guidelines for Chemical Substances

Ver. 2.0

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Dai Nippon Printing Co., Ltd.

1. Introduction

The DNP Group has established the "DNP Group Sustainable Procurement Guidelines" to promote responsible procurement that considers society and the environment and is engaged in various initiatives. Regarding the management of chemical substances contained in products, companies are required to appropriately understand and manage the chemical substances contained in raw materials, materials, and products throughout the entire supply chain to reduce risks to human health and the environment. Considering this, we have established the "DNP Group Green Purchasing Guidelines for Chemical Substances" (hereinafter referred to as "these guidelines") that we ask our suppliers to comply with.

We kindly ask all suppliers to review the contents of these guidelines and cooperate with the DNP Group's initiatives.

2. Objective

These guidelines aim to establish the requirements that suppliers must comply with in order to appropriately manage the chemical substances contained in the products handled by the DNP Group, as well as in the raw materials and materials used in the manufacturing of these products. Additionally, these guidelines outline the DNP Group's management standards regarding these chemical substances, with the goal of reducing risks to human health and the environment and contributing to the preservation of the global environment.

3. Scope of Application

These guidelines apply to all suppliers that deliver the following "raw materials, materials" or "products" to the DNP Group. Additionally, the controlled chemical substances and their management standards specified in Annexed table 1 apply to the following "raw materials, materials" or "products" purchased by the DNP Group.

2.1 Materials and Supplies

- (1) Materials Constituting the Product:
 - Examples: paper, plastics, metal, glass, ink, coating materials, adhesives, tape, additives, solder, packaging materials, etc.
- (2) Components Constituting the Product:
 - Examples: electrical and electronic components, mechanical parts, printed circuit boards, exterior parts, functional units, etc.
- (3) Supplies Used in the Manufacturing Process:
 - Examples: solvents, cleaning agents, plate-making materials, lithographic plates, molds, etc.

2.2 Products

- (1) Products that the DNP Group has commissioned suppliers to design and manufacture.
- (2) Products purchased from suppliers and sold or distributed under the DNP Group's trademark.

4. Definition of Term

(1) Chemical substance

A chemical element or compound that either exists in nature or is obtained through a manufacturing process.

Examples: lead oxide, nickel chloride, benzene, etc.

(2) Mixture

A mixture intentionally comprising two or more chemical substances.

The definition of the term "preparation" is the same as mixture.

(3) Article

An item of specific shape, appearance or design created during manufacture which substantially determines functions in final use rather than functions provided by its chemical composition.

(4) Chemical product

Chemical substance and/or mixture, not an article.

(5) Inclusion of chemical substances

Inclusion of chemical substances means that chemical substances are detected in parts,materials and products as ingredients.

(6) Intentional inclusion of chemical substances

Intentional inclusion refers to inclusion of chemical substances in materials or products to maintain or improve specific function/performance or quality.

(7) Unintentional Inclusion of Chemical Substances

Unintentional inclusion refers to the presence of unreacted raw materials, reaction catalysts, indicators, and by-products generated through unintended reactions, which do not have a specific functional role in the product.

Additionally, any unintended inclusion of chemical substances in supplied materials during the manufacturing and delivery processes (such as contamination) is also considered unintentional inclusion.

(8) Homogeneous material

A homogeneous material refers to a material that cannot be mechanically separated into different materials. Examples of "homogeneous materials" compound, polymer alloy, metal alloy, glass, single coated layer formed by print or coating.

In case of multi-coated layer, homogeneous materials mean each layer constituting the multi-coated layer.

(9) JAMP Guidelines

The guidelines issued by the Joint Article Management Promotion-consortium (hereinafter referred to as "JAMP"). These guidelines outline the management requirements that organizations involved in chemical substance management in products should implement to achieve reliable information exchange regarding chemical substances contained in products throughout the entire supply chain.

The JAMP Guidelines can be obtained from "chemSHERPA by JAMP."

https://chemsherpa.net/docs/guidelines

(10) Managed Substances

Managed substances refer to chemical substances that should be controlled in product chemical management.

The common managed substances for the DNP Group are specified in Annexed table 1.

Each core organization and group company (hereinafter referred to as "each department") may define additional managed substances specific to their department, in consideration of customer requirements, applicable regulations for the products they handle, and the characteristics of their business, in addition to the common managed substances of the DNP Group.

(11) Product Chemical Management Standards

Standards established by each department based on laws, regulations, and industry standards related to chemical substances contained in products.

These standards include management criteria defined for each managed substance, both those commonly specified by the DNP Group and those designated by individual departments.

5. Requirements for Managing Chemical Substances in Products

5.1 Establishment and Operation of a Chemical Substance Management System for Products

To appropriately understand and manage the information regarding chemical substances contained in products, it is essential for all businesses involved in the supply chain to establish and operate an internal management system to enhance the reliability of this information. In this regard, we ask that you build and operate a chemical substance management system for products in accordance with the JAMP Guidelines. Additionally, please be mindful of the matters specified in the attached document and ensure compliance with the controlled chemical substances and their management standards defined in the following sections.

5.2 Controlled Chemical Substances and Their Management Standards

- (1) The DNP Group's controlled chemical substances are specified in Appendix 1. Please refer to Annexed table 1 and ensure that the "raw materials, materials," or "products" (hereinafter referred to as "delivered items") supplied by you to the DNP Group meet the management standards set for each controlled chemical substance.
- (2) The ordering department may add controlled chemical substances or change management standards based on the intended use, destination, applicable regulations, and other requirements related to the delivered items and the products of the DNP Group that utilize these delivered items.
- (3) Management Substances shall be identified and managed according to the following three categories. Classification A: substance prohibited to be included in purchased materials and products.

This substance is prohibited or restricted for use in products under domestic and international regulations, and its inclusion in delivered products is strictly forbidden. If any prohibited chemical substance designated as a Class 1 Specific Chemical Substance under the Chemical Substances Control Law (hereinafter referred to as "CSCL") is confirmed to be present unintentionally, please report this immediately to the purchasing department. Additionally, even if the competent authority allows the substance to be treated as not present due to special measures under the CSCL, a report is still required.

From a quality management perspective, we may request an investigation or confirmation regarding the presence or absence of unintentional inclusion as necessary. Furthermore, if any substance regulated under the RoHS Directive is confirmed to be present, regardless of whether it is intentional or unintentional, please report this as well.

Classification B: substance included in materials and products the amount of which should be acknowledged by DNP Group

Although inclusion of these substances in supplies is not restricted, DNP considers that it needs to grasp the presence or absence of inclusion, contained amounts and contained parts in consideration of domestic and international laws and regulations as well as the industry criteria. In the case such a substance is included at the concentration level of more than 0.1wt% in a unit or in an arbitrarily divided unit of supplies, please grasp and report it to us.

Classification C: substance that should be prohibited to be included in purchased materials and products depending on future regulatory trends.

This substance is anticipated to be designated as a Class 1 Specific Chemical Substance under the Chemical Substances Control Law, and due to future regulatory trends, it should be considered for prohibition of inclusion. Regardless of whether the inclusion is intentional or not, if it is confirmed to be present in the delivered products, please report it immediately to the purchasing department.

- (4) The threshold values established as management standards will be applied to the concentration of substances contained in delivered products calculated by the following methods:
 - 1. For substances regulated under the RoHS Directive, the concentration will be calculated for each homogeneous material.
 - 2. For other substances, the concentration will be calculated for each unit of the delivered product or for any arbitrarily subdivided units of the delivered product.
- (5) For products purchased from suppliers and sold or distributed under the DNP Group's trademark, if the supplier has established their own chemical substance management standards for product content, we may request information regarding the supplier's chemical substance management standards and engage in discussions about them.

(Reference)

To determine whether individual substances fall under the category of regulated chemical substances, you can use the following tool:

chemSHERPA data entry support tool

Source: https://chemsherpa.net/english/tool

However, even if the results from the input support tool indicate that a substance is not applicable, please report it as a regulated chemical substance if it is known to be subject to relevant laws and regulations.

6. Operation

- 6.1 Evaluation based on the Guidelines
- 6.1.1 Management of Chemical Substances in Products

Please conduct a self-assessment regarding the establishment and operation of the chemical substance management system for products, following the instructions from the purchasing department of the DNP Group. After completing the assessment, fill out the results in the Annex Check Sheert of the JAMP guidelines and submit it.

6.1.2 Information on Chemical Substances Included in Supplies

Please investigate in advance regarding the presence of regulated chemical substances in the delivered products. In addition to those specified in Appendix 1, each purchasing department may designate additional regulated chemical substances, so please confirm the applicable chemical substance management standards for products with the purchasing department.

Generally, report the investigation results to the purchasing department using "chemSHERPA-CI" and "chemSHERPA-AI."

you can use the following tool:

chemSHERPA data entry support tool

Source: https://chemsherpa.net/english/tool

6.1.3 Evaluation

Based on the obtained result, the order department shall evaluate the conformance to requirements. To grasp suppliers' management systems of chemical substances in products and the information on chemical substances in supplies more clearly, we may ask for submission of other necessary documents in addition to above data.

6.2 Communication to DNP

In the case supplies fulfill any of the items below, please contact the order department immediately.

- (1) If it is found that the product does not comply with the chemical substance management standards for products.
- (2) If a prohibited chemical substance designated as a Class 1 Specific Chemical Substance under the Chemical Substances Control Law is confirmed to be present unintentionally:
 - 1) Even if the substance is allowed to be treated as not present due to special measures under the Chemical Substances Control Law, please notify us.
 - 2) If you notify us under item 2), we will take individual response measures based on the intended use of the delivered product and the DNP Group's products that use that delivered product, as well as the destination, applicable regulations, and other requirements.
- (3) If there is a possibility of changes in the chemical substance information of the product due to changes in raw materials, materials, processes, or production equipment of the delivered product.
- (4) If new inclusions are discovered regarding the chemical substance information that has already been reported, or if there are changes to the reported content.

6.3 Revision of the Guidelines

The Guidelines may be revised due to amendment of domestic or international laws and regulations or a trend in the industry.

(Appendix)

To ensure the appropriate management of chemical substances contained in products delivered to our company and to comply with "5.(2) Regulated Chemical Substances and Their Management Standards," we would like to outline specific points for suppliers to pay particular attention to, categorized by each item in the JAMP guidelines "5. Implementation Items for Product Chemical Substance Management."

5.1 Context of the organization

5.1.1 Understanding the organization and its context

The organization shall clarify external and internal issues that are relevant to purpose and that affect its ability to achieve the intended results of its management of chemicals inproducts

<Examples of Challenges>

Domestic and international regulations related to chemical substances in products, social and technological trends, stakeholder awareness and values including those of customers, organizational structure, and the characteristics of products and business operations.

5.1.2 Understanding the needs and expectations of stakeholders

The organization shall clarify the following items to understand the needs and expectations of stakeholders.

- 1) The stakeholders closely related to the management of chemicals in products
- 2) The requirements of those stakeholders that are closely related to the management of chemicals in products

5.1.3 Determining the scope of application of management of chemicals in products

Determine the scope of chemical substance management regarding product content for our products and business, considering challenges that affect the effectiveness of the management, stakeholder requirements, and the products handled by our company.

5.2 Leadership

5.2.3 Resources, Roles, Responsibility and Authority of an Organization

To implement effective management of chemicals in products, the top management shall define the responsibilities and authorities for the relevant roles and communicate this within the organization.

5.3 Plan

5.3.1 Actions to address risks and opportunities

To determine the risks and opportunities that need to be addressed, consider the following factors:

(1) Understanding of Regulatory Compliance

Awareness of the regulations applicable to the destination of our products.

Awareness of the regulations applicable to customer products that utilize our products.

(2) Management status of raw materials prone to contamination with restricted substances (restricted

chemical substances) in own products, such as paints, inks, plastic molded products, plating, solder, etc.

- (3) The management status of processes where contamination by restricted chemical substances is likely to occur.
- (4) The status of chemical substance management concerning product content related to points (2) and (3) among our suppliers.

5.5 Operation

5.5.1 Operational planning and control

To meet the management standards for chemical substances contained in products established by both the company and the customer, as well as to implement the initiatives determined in section 5.3.1, plan, execute, manage, and maintain the necessary processes.

5.5.2.2 Defining the management criteria of chemicals in products

Establish the company's management standards for chemical substances contained in products by considering customer requirements, relevant laws and regulations pertaining to the products handled, industry standards, and the characteristics of the business.

5.5.3 Management of Chemicals in Products at Design and Development

To establish management standards related to chemical substances contained in products during the design and development process, consider the following factors to ensure that products meet the management standards for contained chemical substances:

- (1) The potential for contamination with restricted chemical substances in raw materials such as paints, inks, resin molded products, plating, and solder, as well as the impact on the company's products if such contamination occurs.
- (2) Risk reduction measures commensurate with the severity of the risks associated with potential contamination, including strategies to prevent contamination with restricted chemical substances and measures to prevent the release of products that may contain these substances.

5.5.4.2 Verification of the Management Status of Chemicals in Products at Supplier

- (1) When selecting suppliers for the company, verify and record the management status of chemical substances contained in their products.
- (2) After the commencement of transactions, re-confirm and record the management status of the supplier as necessary.
- (3) In particular, for suppliers that manufacture or handle materials prone to contamination with restricted substances, such as paints, inks, resin molded products, plating, and solder, confirm that adequate measures are in place to prevent contamination of restricted chemical substances in the raw materials and supplies procured by the company.
- (4) Establish predetermined actions to be taken if any issues are identified during the above verification process.

5.5.4.3 Management of Chemicals in Products at Receiving

- (1) Upon receiving raw materials and supplies from the company's suppliers, confirm that they comply with the management standards established by the company and record the results.
- (2) The confirmation method will be determined based on the obtained information regarding the chemical substances contained in the products and the management status of the respective suppliers.
- (3) For materials that are prone to contamination with restricted chemical substances, such as paints, inks, resin molded products, plating, and solder, consider and implement appropriate methods for conformity verification based on the risk of contamination with restricted chemical substances.

5.5.4.4 Verification of the Management Status of Chemicals in Products at Outsourcing

- (1) When outsourcing processes such as product design, development, and manufacturing, verify the management status of chemical substances contained in the products at the external contractors to ensure compliance with the management standards for chemical substances. Record the results of this verification.
- (2) In particular, for external contractors that manufacture or handle materials that are prone to contamination with restricted chemical substances, such as paints, inks, resin molded products, plating, and solder, confirm that adequate measures are in place to prevent contamination of the restricted chemical substances in the raw materials and supplies procured by the company.

5.5.5.2 Prevention of Incorrect Use and Contamination

When handling restricted chemical substances within the workplace, implement measures to prevent contamination of these substances into the company's products.

5.5.5.3 Identification and traceability

The organization shall assure traceability of the information of chemicals in products by appropriate manners in order to grasp, utilize, disclose and transfer the information of chemicals in products swiftly.

5.5.6 Change management

- (1) Identify elements of change that may affect the management-targeted chemical substances defined by both the company and the customer.
- (2) For the identified changes, appropriately verify any changes in the information regarding chemical substances contained in the products and ensure that the management standards for chemical substances set by both the company and the customer are met before implementing the changes.
- (3) Document the procedures for change management and record the details and results whenever a change is made.

5.5.7 Delivery of products

- (1) At the time of delivery of the supplied products, confirm that they meet the management standards related to the chemical substances contained in the products, record the results, and then hand over the products.
- (2) The aforementioned management standards include the results of conformity checks regarding the

- management standards for chemical substances contained in products at both the acceptance stage and during the manufacturing process.
- (3) In the warehouse, manage the products to prevent incorrect shipments and contamination.

5.5.8 Response to occurrence of nonconformity

- (1) If non-conforming products containing chemical substances are delivered to the DNP Group, promptly report to the ordering department and take necessary measures to prevent any damage caused by the non-conforming products.
- (2) To ensure a swift and appropriate response in the event of non-conforming products, establish response procedures for such occurrences and disseminate them within the company.

Revision History

2004.03.26	DNP Group Chemical Substance Management Standards – Established
2006.03.17	DNP Group Managed Substances List – Updated
	Updated concentration standards for cadmium, hexavalent chromium, mercury, and lead in accordance with RoHS threshold values
2007.03.27	DNP Group Managed Substances List – Updated
	Beryllium: Authorization of certain applications to be classified as "Classification c"
2008.03.19	DNP Group Managed Substances List – Updated
	Change of Managed Substances from 29 substances to 24 substances.
	Remove five substances from "Classification c"
	magnesium and its compounds, copper and its compounds, gold and its compounds,
	palladium and its compounds, and silver and its compounds
2013.12.12	Revised from "Chemical substance management standards" to " Guidelines for the
	Management of Chemical Substances - the Management of Chemicals in Products -"
	DNP Group Green Procurement Guidelines for Chemical Substances – Established
2017.11.14	Managed Substances List Specified by DNP target substances and standards – Updated
	Phthalate esters: Updat of criteria for substances regulated under the RoHS Directive.
2019.03.12	Changes made to relevant sections due to the transition from JAMP to chemSHERPA
	(modifications and additions to relevant regulations and symbols).
	No. 02: Polychlorinated naphthalene: Change the chlorine count from 3 or more to 2 or more.
	Change of Managed Substances from 29 substances to 28 substances.
	Remove Polyvinyl chloride from "Classification c"
	Item added: 2.2 Product, item 2 (document within parentheses).
2021.11.9	Managed Substances List Specified by DNP target substances – Updated
	Change of Managed Substances from 28 substances to 29 substances.
	Add perfluorooctanoic acid (also known as PFOA) or its salts.
	Change of note 2 for cadmium and its compounds, and lead and its compounds.
	Add note 5 for nickel and its compounds.
2025.5.7	•Revised '5. Action Items for management of Chemicals in Products' in response to the
	JAMP 'Product Content Chemical Substance Management Guidelines Version 4.0'.
	• Change of Managed Substances from 28 substances(group) to 29 substances(group).
	Establish Classification D and designate one substance (group).
	•Cliteria
	Regulations for handling cases where substances designated as Type 1 specified chemicals
	under the Chemical Substances Control Law are found to be unintentionally contained
	among "Classification a".