# Completion of Registration of Existing Chemical Substances Used in Producing Base Paper for Products for Food Contact Use and Start of Registration of New Chemical Substances

#### 1. Completion of Registration of Chemical Substances

The Japan Paper Association (JPA) has been improving management system of chemicals used in pulping and papermaking process, in order to ensure higher level of food safety, in response to increasing public awareness of harmful chemical substances and international movement toward control of the substances. As part of such efforts, last year, JPA started the registration of existing chemical substances used in producing paper and paperboard for food contact containers and packages to "JPA-ChemiNet" which is an open database among registered members. The registration work was completed in March, 2011.

#### 2. Registration of Existing Chemical Substances to JPA-ChemiNet

Procedures for registering existing chemical substances to JPA-ChemiNet are the following:

- If chemical suppliers are members of the ChemiNet, paper manufacturers shall notify them of the chemicals used for producing paper and paperboard for food contacts, and they shall register the composition of the chemicals for the ChemiNet.
- 2) If the chemical suppliers are nonmembers of the ChemiNet, they shall notify paper manufacturers of the composition of the chemicals, and manufacturers shall register them for the ChemiNet.
- 3) In case that the suppliers refuse to disclose the composition of the Chemicals, the chemicals cannot be registered for the ChemiNet. If manufacturers would like to continue to use the chemicals that cannot be registered, they have to ensure the safety of the products through risk assessment.

#### 3. Membership of JPA ChemiNet

As of May 2011, the number of registered members of the ChemiNet is 143, of which, 34 are paper manufacturers and 109 chemical suppliers. For chemical

suppliers, in addition to 109 registered members, over 10 nonmember suppliers register their products to the ChemiNet through paper manufacturers. In this context, JPA recognizes that registration of all of chemicals which are or were used in producing paper and paperboard for food contact containers and packages has been completed. However, all the registered existing chemicals are those which are used in paper manufacturing mills, not including the chemicals used in converting plants and printing factories. Therefore, it is necessary for related industries to consider appropriate measures when needed.

#### 4. Classification of Registered Chemical Substances

JPA made a tentative classification of the registered chemical substances - over 1,900 substances into six categories based on certain standards (like positive list systems in western countries). JPA will conduct risk assessment of each substance based on hazardousness and exposure to make a definitive classification.

Assessment results and the definitive classification will be disclosed to the public. Description of the six categories is as follows:

- 1. Substances Group 1-A
  - (Substances that are not listed in both JPA's Negative List (NL) and candidate substances for the Negative List (CNL), and listed in the positive list (PL) in the western countries)
- 2. Substances Group 1-B
  - (Substances t that are not listed in both JPA's NL and CNL, but are not listed in PL in the western countries)
- 3. Substances Group 2-A
  - (Substances that are listed in JPA's CNL, while being listed in PL in the western countries)
- 4. Substances Group 2-B
  - (Substances that are listed in JPA's CNL and are not listed in PL in the western countries)
- 5. Substances for which CAS registry number are unidentified
- 6. Substances contained in dyestuff

Note: More information on JPA's NL and CNL is described in the Appendix.

## 5. Registration of New Chemical Substances

JPA will start acceptance of new chemical substances registration in May. Registration applicants will be required to submit information on the substance including hazardousness (e.g. physicochemical character), regulations and exposure (e.g. additive amount in paper making and residual volume in paper produced). Submitted information will be shared among the ChemiNet members, and members collectively will conduct a risk assessment to determine whether the substance can be registered to the ChemiNet.

#### 6. Future Works

JPA will promote risk assessment of registered existing chemical substances with closely examining their hazardousness and exposure. For examining exposure, JPA will divide the substances into the following three categories to estimate, or in some cases measure residual volume of each substance in base paper produced.

- 1. Substances used in papermaking process for quality control and remain in paper produced
- 2. Substances used for controlling papermaking process and are unlikely to remain in paper produced.
- 3. Substances used in wood pulp or recovered paper pulp production process and are unlikely to remain in paper produced.

## 1. Japan Paper Association Negative List (NL)

The JPA has established NL in accordance with the following domestic and international law and regulations, voluntary standards, and hazard and toxicity information.

Law and regulations, etc.	Category
Law Concerning the Evaluation of Chemical Substances	Class I Specified Chemical Substance
and Regulation of their Manufacture, etc.	Class II Specified Chemical Substance
(Chemical Substances Control Law)	Type I Monitoring Chemical Substance
Industrial Safety and Health Law	Manufacturing-prohibited Substances Specified Chemical Substance; Class I Substances
Poisonous and Deleterious Substances Control Law	Specified Poisonous Substances
The Law concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures	Specified Substance
Law Concerning Special Measures against Dioxins	Dioxins
Law on Prohibition of Chemical Weapons and Regulation etc, of Special Chemicals	Toxic Chemicals (Specific Chemicals) Toxic Chemicals (First Class Designated Chemicals) Toxic Chemicals (Second Class Designated Chemicals)
Stockholm convention on Persistent Organic Pollutants	POPs Chemicals
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Chemicals subject to the Prior Informed Consent (PIC) procedure
Carcinogenic Risks to Humans ( IARC)	Group 1
Carcinogen (EU)	Category 1
Occupational Carcinogens (JSOH)	Group 1
Carcinogenicity (ACGIH)	A1
Human Carcinogenicity (EPA)	Group A
Report on Carcinogens (NTP)	Known To Be Human Carcinogen

Chemical substances laid down in the "JPA Negative List" are listed on the web site for all user in the "JPA ChemiNet".

# 2. Candidate substances for NL

Law and regulations, etc., based on which the selection of regulated substances is examined in accordance with the results of ongoing research of paper-making aids, are listed as follows.

Law regulation, etc	Category
Chemical Substances Control Law	Type II Monitoring Chemical Substance
	Specified Chemical Substance; Class II substances
	Mutagenicity(New Chemical Substances)
Industrial Safety and Health Law	Mutagenicity(Existing Chemical Substances)
	Carcinogenicity (Chemical Substances assigned in the guideline)
	Class-1 Organic Solvent
Poisonous and Deleterious Substances	Poisonous Substances,
Control Law	Deleterious Substances
76/769/EEC	Restrictions (→2009.6.1 REACH)
Carcinogenic Risks to Humans (IARC)	Group 2A, Group 2B
Carcinogen (EU)	Category 2
Occupational Carcinogens (JSOH)	Group 2A, Group 2B
Carcinogenicity (ACGIH)	A2, A3
Human Carcinogenicity (EPA)	Group B1, Group B2
Report on Carcinogens (NTP)	Reasonably Anticipated To Be Human Carcinogen
Mutagen (EU)	Category 1, Category 2
Toxic for Reproduction (EU)	Category 1, Category 2