

To ensure a balance between the preservation of nature and the advancement of civilization, it is essential to adopt a perspective that emphasizes making environmental considerations that transcend time when carrying out business activities. In the 21st century, it will also be crucial to undertake such activities as preventing global warming and creating a recycling-oriented society to ensure a harmonious coexistence with the environment. Paper is made from wood, one type of biomass—a renewable resource from which raw materials and fuels are derived. As part of the Nippon Unipac Holding Group, Nippon Paper Industries Co., Ltd., has designated resource recycling as the foundation of its business operations and is redoubling efforts in this area, focusing on three activities that constitute the pillars of its recycling activities: carrying out afforestation, utilizing recycled paper, and conserving energy.

Amid rising awareness Companywide of the importance of environmental protection, Nippon Paper has vigorously adopted a host of environmental measures, including its Zero Discharge campaign, which aims for the total elimination of waste materials, and the introduction of international standards.

Utilizing its own data, Nippon Paper is examining the results of its environmental activities. Also, with the aim of publicizing the results of its environmental preservation measures to reach a wider audience under its policy of vigorously disclosing such information, Nippon Paper revised its Environmental Charter in March 2000 and added the disclosure of information to the Basic Policy of the Environmental Charter. We have further demonstrated our commitment to information disclosure in our *Environmental Report 2000*, in which we published for the first time such data as the environmental impact of each business site as well as Companywide inflow and outflow of materials. This disclosure of information has yielded better-than-expected benefits, allowing us to make comparisons among the mills operated by companies within the Group while leading to the commencement of activities to improve the environment. We are confident that our efforts in this area will spread not only to the entire paper industry but also to industry in general and lead to an improvement in the living environment.

J. Miyoshi

Takahiko Miyoshi
President



● **Basic Philosophy**

Nippon Unipac Holding and its Group companies regard coexistence with the natural environment as the basis for their sustainable corporate activities.

Based on this recognition, the Group will strive to achieve a recycling-oriented society and to protect the natural environment on a global scale over the long term.

**Nippon Unipac Holding's
Charter on the Environment**

Established March 30, 2001

● **Basic Policy**

Forest Resource Protection

The Group shall promote tree-farming operations for securing sustainable resources and utilize wood resources efficiently.

Efficient Use of Resources

The Group shall promote energy savings, the utilization of recycled paper, and the recycling of containers and packaging.

Reduction of Environmental Impact

The Group shall enhance the management of substances that may affect the environment and promote the reduction of the

usage of such substances as well as the enhancement of waste reduction.

Consistency of Technological Development and Environmental Protection

The Group shall engage in the R&D of new products and manufacturing technologies that are consistent with environmental protection.

Advanced Disclosure of Environmental Information

The Group shall actively disclose environmental information and promote internal and external communications.

● **Action Guidelines**

Each Group company shall establish its own specific action guidelines that are in compliance with the basic philosophy and policy.



Nippon Paper is implementing environment management systems (EMS) on a Companywide basis in accordance with the Nippon Paper Environmental Charter while operating its mills based on ISO 14001 standards. The Company's environmental auditing is composed of performance audits carried out by top management and systems audits performed by third parties. Nippon Paper shows its immense pride in the distinct environment-related features of its operations—comprehensive and highly focused environmental management enabled by overlapping EMS—as well as ongoing efforts to improve the environment by publicizing the results of its environmental management.

As of 1999, Nippon Paper had obtained ISO 14001 certification for all the mills that it directly operates. The Company subsequently proceeded with efforts to obtain this certification for other business sites. At present, Nippon Paper has secured 36 ISO 14001 certifications covering 42 business sites, and intends to raise the number of sites covered to over 50 in fiscal 2002.

Nippon Paper achieved its objective of reducing waste materials to less than 1/1,000 of the total production volume two years ahead of its initial plan. The Company is currently making efforts to reduce waste materials to 1/10,000 of total production volume. We also improved our recycled paper usage rate to 32.0%, from 27.7% in the previous fiscal year, and reduced SOx emissions 20% from the previous fiscal year. In addition, we are making steady progress toward achieving other targets, including for overseas afforestation and energy conservation. Also, by directly viewing numerical values for harmful substances and environmental impact in other categories, we are working toward attaining a balance between improving the environment and undertaking our business activities.

Souji Ban
Vice President and Representative Director
Officer in Charge of Environmental Protection

Principal Environmental Achievements in Fiscal 2001

Companywide:

Achieved its Zero Discharge campaign target of reducing total volume of waste materials to less than 1/1,000 of production volume
Introduced environment accounting system

Kushiro:

Installed new flue gas desulfurization facility for coal boilers
Raised the de-inked pulp (DIP) content rate of ultra-lightweight newsprint from 60% to 70%

Asahikawa:

Received 7,622 visitors at the Shiyukan Museum, which features the recycling process of paper and paper products

Increased total number of participants in the paper resource short-recycle system (direct recovery) to 25 schools and 34 companies

Yufutsu:

Completely eliminated wastewater sludge previously disposed of at landfill sites through the operation of a Refused Sludge Fuel System
Introduced Japan's first ozone elementary chlorine-free (ECF) pulp-bleaching plant
Planted 3,711 seedlings in a tree-planting campaign at the mill

Ishinomaki:

Installed new activated sludge facilities to strengthen wastewater treatment facilities
Built a new High-Brightness DIP plant

Nakoso:

Volunteered as a liaison between the community and recyclers of milk cartons
Carried out cleanups of rivers, roads, and the coastline near the mill

Fushiki:

Implemented environmental assessments along with plans for the renewal of new incinerators
Cooperated in beautification activities in preparation for the 2000 National Athletic Games, which were held in Toyoma

Iwakuni:

Increased and strengthened the soot and dust removal equipment used in sludge kilns

Komatsushima:

Used trimmings and laminated scrap paper from "Oper" as a fuel

Yatsushiro:

Reached a 68.9% DIP content ratio for newsprint and recycled paper
Achieved energy savings equivalent to 3,804 kl on an annual crude-oil conversion basis

Higashi Matsuyama:

Achieved total recycling of incinerated ash

Gotsu:

Renewed wastewater treatment facilities and introduced one of the world's largest anaerobic biological treatment facilities

Continued and further expanded the volunteer collection of used paper (There is no other such collection system within the region.)

Otake Paper Mfg. Co., Ltd.:

Obtained ISO 14001 certification
Established new hydrogen peroxide bleach (chloride free) facilities

Kitakami Seishi K.K.:

Cooperated in the Ichinoseki Region Resource Recycling System Business and the Reusable Product Development Business

Koyo Paper Mfg. Co., Ltd.:

Obtained ISO 14001 certification
Achieved a 16.88% reduction in the basic unit

of industrial-use water consumed compared with the previous fiscal year

Tohoku Paper Co., Ltd.:

Established technologies enabling the production of ECF pulp
Added new cooling water towers as a countermeasure for enhancing the efficiency of biological treatment

North Pacific Paper Corporation:

Maintained or decreased process chemical volatile organic compound emissions
Conducted air testing and found no change to a net emission deduction for High Opacity newsprint and thermo-mechanical pulp (TMP) washing