



Continuing to Provide Paper

Transfer of Environmental Protection Technology to Other Countries

In our business activities outside Japan, we not only strictly comply with local environmental standards, but also proactively transfer our environmental protection technology to other countries.

While planning our expansion into the growing Asian market, we also aim to build an environmental model mill in China.

Looking to enter the growing Asian market, the Oji Paper Group is building a paper mill in Nantong City, Jiangsu Province, China. Since the groundbreaking ceremony in November 2007, construction has rapidly progressed toward the commencement of production, which is scheduled for 2010. The Nantong Mill is expected to become a production base that will satisfy continuously increasing demand in East Asia, with a scheduled output of 800,000 tons of printing paper per year—from just one mill. For reference, the Oji Paper Group’s entire operations in Japan produce approximately 8,000,000 tons per year; the Nantong Mill is a massive undertaking indeed.

China is taking stringent environmental measures as a nation, with minimization of environmental impact and effective

use of energy and other resources absolute prerequisites to entering the manufacturing market there. The environmental measures at the Nantong Mill will utilize the environmental technology the Oji Paper Group has cultivated over many years in Japan, adopting highly efficient, cutting-edge equipment that enables drastic reduction in water and chemical use. Further, the latest equipment will be coupled with the enhanced environmental management systems developed at Japanese mills, allowing the Nantong Mill to serve as a model mill for China’s ambitious environmental measures.

We will tackle China’s water problems by employing advanced wastewater solutions and using technology cultivated in Japan for further improvement.

China suffers from a lack of water supplies. Most of its paper mills are small-scale and use outdated processing technology, causing the wastewater from the paper industry to account for 20% of all industrial wastewater and 30% of all substances that impact the environment. Because the Yangtze

River, which flows near the Nantong Mill, is such a precious water resource, the amount of water permitted for use is about half of that allowed in Japan. Figure 1 shows that the legal regulation values for wastewater that must be observed in China are stricter than those in Japan.

Figure 1 Comparison of Legal Regulation Values for Wastewater in China and Japan

COD, BOD = Wastewater pollution indicators. The lower the number, the cleaner the water.

SS = An indicator of how clouded water is. When the number is high, it can contribute to sludge. The lower the number, the cleaner the water.

Note: Methods of measuring COD differ between China and Japan. Figures on the table marked with asterisks (*) indicate that the Japanese legal regulation COD level (Mn) has been converted to the Chinese standard COD (Cr); COD (Cr)≈2.2 COD (Mn).

	Nantong Mill in China	Existing Japanese mill (Kasugai Mill)	
	Legal regulation values	Legal regulation values	Results (fiscal 2008)
COD (Cr) mg/L	90	132*	108*
BOD mg/L	20	45	26
SS mg/L	30	40	24

Figure 1 Focus Points: Differences in Chinese and Japanese regulation values for wastewater, compensation measures

- Japan, a country that has experienced severe pollution in the past, also has very stringent wastewater regulations.
- The Kasugai Mill emits wastewater into an urban waterway, and operates under even more stringent regulations than other mills in Japan.
- Since the Nantong Mill is subject to even more stringent regulations than those applied to Kasugai Mill, the Oji Paper Group will adopt new technology in order to comply.

Oji Philosophy

We embrace our responsibility to provide an example of environmental technology in China.

The paper companies of Japan have a history of causing serious pollution problems in the past. In two highly publicized incidents, wastewater from the Honshu Paper Company's Edogawa Mill (currently the Oji Paperboard Edogawa Mill) caused problems on the coastline of Urayasu, Chiba Prefecture in 1958, and sludge problems occurred in Tagonoura Bay near Fuji, Shizuoka Prefecture in early 1970. These pollution incidents had enough impact to cause the passage of Japan's Water Pollution Control Law and other laws regulating wastewater. In the 50 years since the first incident, the paper industry has made environmental improvement efforts more progressively and deeply than other industries. The advanced technology cultivated over that long history by our predecessors is now going to cross the sea to be utilized at the Nantong Mill. The Oji Paper Group must now polish its technology

even further as it aspires to become an example to Chinese industry.

Japanese demand for paper has matured, making it unlikely that there will be another opportunity to build a new mill from the ground up in Japan. In other words, chances to build a large-scale mill with high-level environmental measures in mind from the start are very rare, so the Oji Paper Group plans to utilize this opportunity to its fullest potential. Adopting equipment that uses the latest technology Japan and the world have to offer, the Group hopes to lead environmental technology in China and contribute to the development of its local industry. The Oji Paper Group is dedicated to proactive efforts as it takes its responsibility for the future in both countries.



Nantong Mill location



The Nantong Mill under construction