

Environmental and Health Management



For the more than 86 years since our founding in 1916, Nippon Kayaku has dedicated itself to upholding a basic principle in our operations. This basic principle is our determination to be a “company that continues to contribute to humanity through products and technology for preserving life and health, and for supporting fulfilling lives.”

By fusing the intellectual assets we have acquired through our broad range of business activities, we are aiming to create new products and further contribute to society.

In particular, we are working for a fusion of intellectual assets in the field of environment, safety, and health, and are involved in strengthening our environment and safety management throughout the company. Notifications concerning amounts of chemical substances released into the environment became legally mandated beginning in 2002. However Nippon Kayaku, with our base of fine chemicals, has long recognized that the release of chemical substances is the greatest environmental burden involved in our business. As a key part of our “responsible care” activities, measures have been enacted to reduce the amounts of chemical substances released.

In addition, we are making plans that give full consideration to reducing amounts of industrial waste and greenhouse gas emissions.



Responsible Care

Responsible Care is the commitment by companies that manufacture or handle chemical substances to improving environmental, health, and safety measures in all processes involving chemical substances, from development, production, sales, and consumption to waste disposal. Since its inception in Canada in 1985, Responsible Care has spread around the world and is currently practiced in 40 countries.

Environmental, Health, and Safety Management

We strive to ensure good environment, health and safety based on a policy created by the Environment, Safety, Quality Assurance Management Committee, which is headed by the president as chairman. Our environmental, health, and safety activities are examined by a diagnosis team of experts, and the results are reported to the Environment, Safety, and Quality Assurance Management Committee. Safety audits are used for risk management to prevent accidents, including accidents during distribution, in all cases when new products are developed or manufactured, when new equipment is designed or installed, when changes are made to work procedures or equipment, and when the materials being used are changed.

Understanding of environmental protection costs

Costs associated with environmental protection have been publicly announced, beginning from FY 2001. These costs consist of costs for pollution prevention, including air pollution prevention (administrative cost: 178.2 million yen) and water pollution prevention (370.3 million yen); global environment costs such as energy conservation (60.1 million yen); resource environment costs such as disposal of waste materials and consignment expenses (682.9 million yen); and costs for monitoring of environmental burdens, such as exhaust gas analysis, wastewater analysis, groundwater analysis, and noise measurement (101.8 million yen). The total of these administrative costs, at 1.673 billion yen, was calculated based on the Environmental Accounting Guidelines (2002 edition) published by the Ministry of the Environment.

ISO 14001 certification received at all six domestic plants

In order to more efficiently promote “responsible care,” Nippon Kayaku has worked to acquire certification of our diverse efforts under the ISO 14001 international environmental management standards. Certification of all six of our plants was completed in January 2001. As one part of our ISO 14001 environmental protection activities, we are actively engaged in environmental protection activities that involve all of our employees, and are systematically training internal auditors.

Development of environmentally-friendly products

Nippon Kayaku is actively pursuing the development of environmentally-conscious products designed for protection of the environment. We are aiming to contribute to society through a broad range of products and technology that protect health and support lifestyles. These include biological pesticides that control pests using their natural enemies, photo-curing resins that are widely used in many industries as clean environmentally-friendly resins for the prevention of sick house syndrome and other problems, new environmentally-friendly epoxy resins, and dyes that are safe for people and the environment.



Japan's first biological pesticide, CUCUMERIS

Installation of energy-saving boilers

In September 2003, we scrapped the large water-tube boilers at our Fukuyama Plant, and installed a total of seven once-through boilers (4T/H x 24.5 MPa). These boilers feature a boiler efficiency of 92% (3% higher than the previous boilers). As a means of further saving energy, four of these seven boilers generate electricity using a steam turbine generator (Max. 650 kW). These boilers have been approved by the Japanese Ministry of Economy, Trade and Industry under the Electric Utility Industry Law.

In addition, the type of fuel has been changed from heavy fuel oil type C to heavy fuel oil type A. This, combined with the use of low-NOx boilers utilizing boiler exhaust gas recirculation, has reduced emissions of the pollutants NOx, SOx, and soot by approximately 50%.



High-efficiency once-through boilers

Construction of a biological decolorizing facility

Nippon Kayaku Group has installed a biological decolorizing facility at Nippon Kayaku Tokyo Co., Ltd., which produces dyes for fabrics and paper, colors for inkjet printers, and components of resins for CCDs. This decolorizing facility, for which a patent is pending, reduces the degree of coloration in the production wastewater that is released into the sewers, and has successfully reduced the amount of coloration to approximately half of the previous level. Temperature control for this biological decolorizing facility uses the coolant water from the cogeneration (gas engine generator) facility, and the exhaust gas from the facility is used in the boilers. This raises the thermal efficiency from 40% (for power generation alone) to 80%.



Patent pending decolorizing facility

Publication of Environmental Reports

In March 2000, Nippon Kayaku published, and has since updated, the company's Environmental Report. This important document summarizes our “responsible care” activities, centered on environment, health, and safety. The report is presented on the Nippon Kayaku home page in Japanese and English.

The next Environmental Report is scheduled to be published in November 2003.

