

HOME & CSR & Fulfilling Our Responsibility to the Environment & Environment, Health and Safety, and Quality Assurance Management System



## Environment, Health and Safety, and Quality Assurance Management System

We prioritize health, safety and environmental matters in our management of the company as well as strive to reduce our impact on the environment through the reduction of environmental emissions across the entire Nippon Kayaku Group.

#### Declaration on Environment, Health and Safety, and Quality

The Nippon Kayaku Group, under the spirit of its CSR philosophy and Responsible Care, \*1 has formulated the Declaration on Health, Safety, Environmental Protection and Quality, in order to maintain and enhance its environmental protection, health and safety and quality assurance practices. We are also implementing this declaration using organized activities.

# The Declaration on Health, Safety, Environmental Protection and Quality

Enacted November 7, 1995 Amended September 1, 2010

We will exert efforts as part of our unwavering commitment to contribute to humanity by creating products and technologies that protect and enhance people's health, life and comfort.

Our activities will not threaten the health and safety of people or property, nor be harmful to the environment.

Under our corporate motto of "KAYAKU spirit", which calls for providing society with the best possible products that meet customers' needs, by means of endless innovation and real cooperation, based on our high-esteemed ethics, we will conduct ourselves according to the following fundamental policies.

#### **Fundamental Policies**

- We will be cognizant of the entire product lifecycle—from research and development, through production and sales to disposal—by evaluating effects on health, safety and the environment.
- We will bear responsibility for the quality of our products, and will strive to develop and improve products that satisfy our customers.
- We will increase our awareness toward the preservation of health, safety, environmental protection and quality of our products, and will endeavor to achieve the goals of no pollution, no accidents and no unsafe products.
- 4. We will provide necessary information about how to use and handle our products safely.
- We will continue to promote the conservation of physical and energy resources as well as global warming countermeasures in order to contribute to the protection of the environment.
- We will actively work to develop environmental protection technologies, as well as applications for such technologies.
- We will make efforts to deepen communication about our operations and products among communities and government authorities to assure that proper understanding is achieved.

President & Representative Director Nippon Kayaku Co.,Ltd. \*1 Responsible Care: A voluntary initiative under which companies that manufacture or handle chemical substances actively work on ensuring an operation that is aware of the environment, safety and health throughout its entire value-chain; from product development through production, sales, consumption, and disposal of chemical substances. The initiative began in Canada in 1985, and has now spread to encompass activities at companies in over 50 countries around the world.

## Message from the Head of Technical Operations Group

We have just begun our business plan geared toward achieving Challenge100A! and even more ambitious goals in the future. We have also made steady progress since 2001 toward reaching our mid-term environmental targets thanks to our unwavering commitment and dedicated efforts. However, the revisions made to the greenhouse gas emissions benchmark year under COP19 have resulted in very challenging targets for the Nippon Kayaku Group. Today, we need to further accelerate our current efforts toward becoming a company that consumes less energy. At the same time, we must study the causes of recent accidents at chemical plants in Japan and strive to improve our front lines capabilities in terms of the environment, safety, quality, production and technologies. This will be the key to Nippon Kayaku's sustainable growth. Therefore, our goal will be to continually enhance our front lines capabilities, which includes our knowledge and awareness.



Seiki Fukunaga Head of Technical Operations Group

#### **Environment, Health and Safety, and Quality Assurance Initiatives**

The Nippon Kayaku Group has made efforts to prevent accidents and injuries before they occur, achieve its environmental targets, respond in advance to natural disasters, develop and improve wastewater treatment technologies, carry out energy conservation activities, and promote employee health in order to strengthen its safety, health and environmental measures. In particular, over the past several years chemical companies in Japan have been involved in a number of serious accidents and, therefore, we have gone to great lengths to prevent accidents from ever occurring by using the Japan Chemical Industry Association's Guidelines on Prevention of Accident Disaster to identify latent risks to our operations.

In fiscal 2014, we are promoting efforts in existing group-wide environmental, safety and health issues, establishing systemized safety learning curriculum, and carrying out uniform safety training across the entire company. Additionally, we continue to make efforts to prevent accidents and injuries from ever occurring by flushing out latent risks in our operations, including non-regular work. This has enabled us to further improve the environmental, safety and health initiatives being carried out by the Nippon Kayaku Group.

In terms of quality, we are working on enhancing quality management technologies as well as reducing customer complaints and quality process mishaps.

Quality training focuses on practical applications for statistical analysis in the data analysis training course and also includes dispatching employees to outside lectures as well as onsite training at our plants covering internal audit procedures and other matters. In addition, we spread the world about quality improvement methods by publishing a collection of quality improvement examples.

We have continually carried out "why why" analysis to reinforce our recurrence prevention measures for customer complaints and quality process mishaps. In fiscal 2014, we set up the Why Why Analysis Promotion Team to step up our efforts. Also, we are promoting activities that encourage improvement through understanding the issues facing our business sites.





Training on the 5S methodology (Sort, Systematize, Shine, Standardize and Self-Discipline)



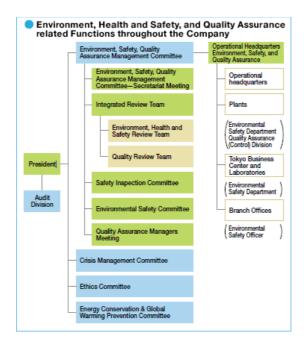
Training on quality

## Company-wide System for Managing Environment, Health and Safety, and Quality Assurance

The Nippon Kayaku Group takes part in organized activities at all of its sites including four overseas plants to ensure employees are aware of the environment, health and safety, and quality assurance as well as to maintain and improve quality assurance. These activities revolve around the Environment, Health and Safety, and Quality Assurance Management Committee, which is led by the President of Nippon Kayaku.

Structure of Environment, Health and Safety, and Quality Assurance related Functions throughout the Company 📾





#### **Management Structure at Our Business Sites**

Each of our business sites has a committee on health and safety or the environment, health and safety headed by the head of that particular site. In addition, as a subordinate body, each business site also has a committee for promoting health and safety that consists of members representing each of the site's workplaces. Matters discussed by the Health and Safety Committee or the Environment, Health and Safety Committee are shared with all employees at roundtable meetings organized by the Health and Safety Promotion Committee. Conversely, matters discussed at roundtable meetings and by the Health and Safety Promotion Committee are communicated back to the Health and Safety Committee or the Environment, Health and Safety Committee as employee feedback.

Each business site's quality assurance (management) department leads Quality (Assurance) Committee meetings on a regular basis to check raw materials handled at each business site, examine customer complaints or quality issues concerning products made at that particular site, and deliberate on how to eliminate such complaints and quality issues. The committee also debates quality issues pertaining to new products, modified products and existing products to ensure that quality is constantly improved.



## Certification of Quality Assurance System and Environmental Management System as well as GMP Authorization Status

The Nippon Kayaku Group has moved forward with acquiring ISO9001 and ISO14001 certification in order to provide and develop eco-friendly products and services of superior quality.

We started acquiring ISO14001 environmental management system certification in 1998. Since then all six of our plants have obtained certification, while other Group companies, including those outside of Japan, are in the process of obtaining this certification.

We began acquiring ISO9001 quality assurance system certification starting with our plants in 1995 and later expanded this scope to include business divisions, R&D departments, and Group companies outside of Japan.

#### Quality Assurance Management / Environment Management System Certified Workplaces

Workplace			●ISO9001 ■ISO / TS16949*2	ISO14001
Fukuyama Plant			<ul><li>June 1995</li></ul>	April 1999
Asa Plant			<ul><li>Jan. 1995</li></ul>	Sept. 1998
Tokyo Plant			<ul><li>June 1995</li></ul>	Dec. 1998
Takasaki Plant			<ul> <li>July 2003</li> </ul>	Jan. 2000
Himeji Plant			<ul> <li>Sept. 2007</li> </ul>	Jan. 2001
Kashima Plant			<ul><li>Dec. 1995</li></ul>	March 1999
Functional Chemicals Group			<ul><li>Jan. 2001</li></ul>	_
Pharmaceuticals Group			<ul> <li>Sept. 2003</li> </ul>	_
Safety Systems Group			<ul> <li>Sept. 2007</li> </ul>	_
Agrochemicals Division			<ul> <li>Sept. 2003</li> </ul>	_
POLATECHNO CO., LTD.			<ul><li>Jan. 1999</li></ul>	Aug. 2002
NIPPON KAYAKU FOOD TECHNO CO., LTD.			<ul><li>Nov. 2003</li></ul>	_
KAYAKU CHEMICAL (WUXI) CO., LTD.			<ul> <li>March 2005</li> </ul>	Aug. 2006
MicroChem Corp.			<ul> <li>April 2002</li> </ul>	_
Wuxi Advanced Kayaku Chemical Co., Ltd.			<ul> <li>April 2007</li> </ul>	July 2007
Zhaoyuan Advanced Chemical Co., Ltd.			<ul> <li>March 2005</li> </ul>	_
INDET SAFETY SYSTEMS a.s.			March 2002	Dec. 2002
Kayaku Safety Systems (Huzhou) Co., Ltd.			<ul><li>June 2010</li></ul>	_
Kayaku Safety Systems de Mexico, S.A. de C.V.			● Sept. 2010	-
MOXTEK, Inc.			<ul> <li>July, 2012</li> </ul>	_
GMP*3 Approval Status	Workplace	Main governments		
	Takasaki Plant	Japan, USA, Europe, Canada, Brazil		

<sup>\*2</sup> ISO / TS16949: A world standard that was developed jointly by members of the IATF (International Automotive Task Force) to provide high quality products to automobile users around the world.

<sup>\*3</sup> GMP: A Japanese standard issued by the Ministry of Health and Welfare as a ministerial ordinance in 1980. Stipulates production control and compliance standards to ensure supply of high quality pharmaceutical and medical products.

## Overview of Environment, Health and Safety and Quality Organizations

## **Environment, Safety, Quality Assurance Management Committee**

The Environment, Safety, Quality Assurance Management Committee is a company-wide committee led by the President of Nippon Kayaku and comprised of executive officers responsible for business divisions, general managers of business divisions, and the General Manager of the Technical Operations Group. The committee formulates annual policy for the environment, health and safety and quality assurance, assesses the results and recommends improvements.

#### Environment, Safety, Quality Assurance Management Committee – Secretariat Meeting

The secretariat is comprised of general managers from the technical departments of each business division and from related departments of the head office. The secretariat deliberates fiscal year policy proposals and implementation status and reports back to the Environment, Safety, Quality Assurance Management Committee. It also reviews material matters related to the environment, health and safety, and quality assurance.

## **Central Integrated Reviews**

An integrated review is a combination of the conventional environment and health and safety review and the quality review, which had been implemented independently targeting business sites and group companies. The Integrated Review Team is led by the General Manager of the Technical Operations Group, and is comprised of the Environment, Health and Safety Review Team, led by the General Manager of the Environmental Protection & Safety Division and the Quality Review Team, which is headed by General Manager of the Quality Assurance Division. The same review as before is being performed on the head office, business sites and group companies that received environment and health and safety reviews or quality reviews. The head office, divisions, business sites and group companies for which issues were identified during the review process are required to create and execute an improvement implementation plan. The results of central integrated reviews are reported to the Environment, Safety, Quality Assurance Management Committee.

## **Safety Screenings**

Safety screenings are conducted when developing and manufacturing new products, designing new facilities and equipment, replacing facilities, changing raw materials, and outsourcing production. Risk and other assessments are also performed to prevent problems before they occur.

## **Environmental Safety Committee**

The Environmental Safety Committee comprises environmental safety managers or representatives from the Environmental Safety Department of each business site and group company selected by the General Manager of the Environmental Protection & Safety Division. The committee debates material matters and problems associated with the implementation of environmental protection and safety activities.

#### **Quality Assurance Managers Meeting**

The Quality Assurance Managers Meeting comprises quality assurance managers from the head office, business sites and group companies selected by the General Manager of the Quality Assurance Division. The meeting deliberates the implementation status of quality assurance and quality control activities.