

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** 1. 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. 2. We will bear responsibility for the quality of our products, and will strive to develop and improve products that satisfy our customers 3. 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. We will provide necessary information about how to use and handle our products safely. 5. 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. 6. We will actively work to develop environmental protection technologies, as well as applications for such technologies. 7. We will make efforts to deepen communication about our operations and products among communities and government authorities to assure that proper understanding is achieved. June, 25, 2015 lo un masandu U 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

The Nippon Kayaku Group has grown on the back of chemical technologies and today it develops and manufactures a truly broad range of products. To satisfy the needs of the market, we harness our long-standing technologies and the latest knowledge each and every day to provide stable supplies of high quality products.

We recognize that safety requires the awareness of individual workers and the continual enhancement of supporting systems. In order to establish a stable operating structure for the generational change of manufacturing workers and the globalization of our production sites, we are focusing a great deal of efforts on education, training and follow up.

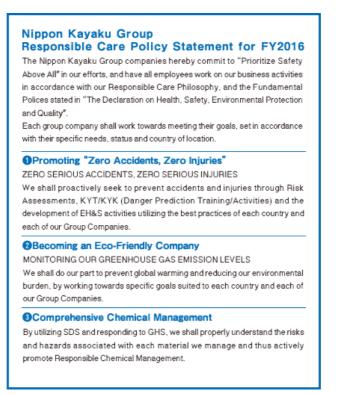
Environmental measures such as reducing  $CO_2$  emissions, increasing recycling, and lowing waste emissions are necessary not only for regulatory compliance, but also for maintaining the future continuity of our business operations. We are currently working hard to find the best mix, technologically speaking, for our production processes and scale.

Going forward, we will continue constantly enhance quality and carry out Responsible Care activities in order to gain the satisfaction of all stakeholders.

#### Nippon Kayaku Group Responsible Care Policy Statement for FY2016

The every Nippon Kayaku Group company hereby commits to "Prioritize Safety Above All" in our efforts. And we agreed not only complying with related environmental and safety laws in Japan and Overseas, but also preventing environmental and safety accidents. Furthermore we ensured they can carry out activities together under the Declaration on Health, Safety, Environmental Protection and Quality, with the ultimate goal of realizing the KAYAKU spirit.

In fiscal 2016, we will continue with these efforts and in order to further promote the spirit of responsible care we have renamed our policy as Responsible Care Policy.



#### 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 2016, we will continue to promote efforts in existing group-wide environmental, safety and health efforts, establishing systemized safety learning curriculum and carrying out uniform safety training across the entire company. In particular, we focus on pointing and calling, KYT, and pre-work KY (each occupational safety methods). 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. We will conduct legally required risk assessments on chemical substances in Japan and further improve the environmental, safety and health initiatives being carried out by Nippon Kayaku Group.

In terms of quality, we have worked toward improving quality management technologies and enhancing customer satisfaction (reducing customer complaints and quality process mishaps).

Quality training focuses on practical applications for statistical analysis in the "Field 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. Furthermore, in fiscal 2015 we conducted training for carrying out "Why-Why Analysis" at Group companies in China using a Chinese language version of this manual.

#### Creation of Our Own "Why-Why Analysis" Manual

There are many past examples of incidents involving non-compliance at Nippon Kayaku and similar events, and analysis indicated that insufficient efforts were being made to find the fundamental cause of these incidents. Therefore, we decided to implement why-why analysis in an effort to correctly identify relationships between cause and outcome, determine the fundamental cause, and prevent similar events from happening again. Each plant selects members to promote these efforts and we have also compiled our own "Why-Why Analysis" Manual (made available in both Japanese and Chinese language versions). This manual is used by every workplace for why-why analysis.

#### 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 and certain Group companies including 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**





Basic safety training sessions were held for every workplace over a two-year period



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.

Our overseas Group companies involved in the auto industry are working on obtaining ISO/TS 16949 certification, which adds requirements common to the auto industry to those of ISO 9001. The Takasaki Plant has obtained manufacturing approval under the Ministerial Ordinance on Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs (GMP ordinance) and has obtained accreditation from the United States and Europe (EU).

System Certified Workplaces				
Workplace		●ISO9001 ■ISO / TS16949*2	ISO14001	
Fukuyama Plant			June 1995	April 1999
Asa Plant			Jan. 1995	Sept. 1998
Tokyo Plant			June 1995	Dec. 1998
Takasaki Plant			July 2003	Jan. 2000
Himeji Plant			Sept. 2007	Jan. 2001
Kashima Plant			Dec. 1995	March 1999
Functional Chemicals Group			Jan. 2001	_
Pharmaceuticals Group			Sept. 2003	-
Safety Systems Group			Sept. 2007	-
Agrochemicals Division			Sept. 2003	-
POLATECHNO CO., LTD.			Jan. 1999	Aug. 2002
NIPPON KAYAKU FOOD TECHNO CO., LTD.			Nov. 2003	_
KAYAKU CHEMICAL (WUXI) CO., LTD.			March 2005	Aug. 2006
MicroChem Corp.			April 2002	_
Wuxi Advanced Kayaku Chemical Co., Ltd.			April 2007	July 2007
INDET SAFETY SYSTEMS a.s.			March 2002	Dec. 2002
Kayaku Safety Systems (Huzhou) Co., Ltd.			May 2014	-
Kayaku Safety Systems de Mexico, S.A. de C.V.			Feb 2014	-
MOXTEK, Inc.			<ul> <li>July, 2012</li> </ul>	-
<ul> <li>GMP<sup>*3</sup></li> <li>Approval Status</li> </ul>	Workplace		Main governme	ents
	Takasaki Plant	Japan, USA, Europe, Canada, Brazil		

#### Quality Assurance Management / Environment Management

\*2 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.

\*3 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.

# Kayaku Safety Systems (Huzhou) Co., Ltd. Obtained ISO 9001/TS 16949 Certification in Quality Management for the Auto Industry

Kayaku Safety Systems (Huzhou) Co., Ltd. (KSH) is a Nippon Kayaku Group company established in China in 2006 to manufacture automotive safety components.

In May 2014, KSH obtained TS 16949 certification in order to satisfy customer requirements and further stability quality based on the recognition that it manufactures products that directly affect the lives of people. TS 16949 is a quality management system standard for the automotive industry that fulfills the global procurement standards of for automotive components found in ISO 9001.

KSH launched in-house workshops on the system beginning in 2011 mandatory for all employees. After the twoyear preparation period, education was initiated by a screening body starting in May 2013 where 32 employees became accredited as in-house screeners. The first audit carried out in December 2013 and the final audit was completed in March 2014. Later in May 2014, KSH was notified that it had successfully obtained certification. The audits included findings and instructions, while the final audit was extremely rigorous as it was carried out over a three-day period. In the end, the goal was achieved thanks to the strong conviction and dedication toward obtaining TS certification displayed by all KSH employees.

As a result, after building the foundation for global competitiveness, KSH now finds itself at the starting line as a manufacturing company specializing in automotive safety components. Moving forward, KSH will work toward the goal of becoming a better company and stronger company by obtaining ISO 14001 certification (environmental management systems) and OHSAS 18001 certification (occupational health and safety management systems).

Copyright © Nippon Kayaku Co.,Ltd. All Rights Reserved.



ISO9001-TS16949



ISO audit in progress

# **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.