Topics

First QS9000 certification obtained in inflator industry

In December 1999, Nippon Kayaku became the first airbag inflator manufacturer in Japan to obtain a certification of QS9000, a quality assurance system set up by the Big Three in the United States (Ford, Daimler-Chrysler, and General Motors). QS9000 is a quality assurance system established by the Big Three in the U.S. automobile industry and automobile-related companies such as parts and material manufacturers are required to comply with it. It is essential for a company to obtain the certification if it is going to engage in the automobile-related business in the U.S. Nippon Kayaku continues to invest in factory and equipment at its Himeji plant as a foothold in Japan to achieve sales of 10 billion yen in three years. At Indet Safety Systems (ISS), a Czech company subsidized in 1999, the business is being developed as a production and supply base for MGG in Europe to achieve sales of 3 billion yen in five years. Nippon Kayaku will accelerate the world strategy in the inflator business with acquisition of QS9000.

Establishment of a new trading company for dyes

Nippon Kayaku agreed with Nippon Kagaku Seihin and Shinwa Sangyo on establishment of a new chemicals trading company N·S·Color Techno (NSC; capital, 60 million yen) specializing mainly in dyes and color chemicals. The new company was started by integrating the dyes section of Shinwa Sangyo and Nippon Kagaku Seihin, a trading company affiliated with Nippon Kayaku that has a strong sales force in the Hokuriku area. After strengthening the management base by streamlining the sales network, logistics and administrative sections, and expanding the laboratory functions, the new company will establish a technical service system to deal with any type of fabrics including dyeing tests, CCM, color preparation by automatic dispensers, and solidness tests. The annual sales of the new company are estimated to reach approximately 4.5 billion yen.

Reinforcement of human resources training business

In August 1999, Nippon Kayaku decided to reinforce the business of medical care-related human resources training and development by merging its subsidiary Human Resource Development Center (Chiyoda-ku, Tokyo) with Japan Medical Science Research Institute (Chiyoda-ku, Tokyo) to start business as Jinkaiken (Chiyoda-ku, Tokyo; capital, 22 million yen). Human Resource Development Center before the merger possessed know-how for psychological testing, referred to as TPI, whereas Japan Medical Science Research Institute was a company renowned for preparation of medical care-related educational videotapes and the planning of study meetings. The merger streamlines the functions of both companies, and is expected to increase orders from other companies and serve to develop the company in educational and training business to flexibly deal with medical care and the aging society. In the future, the company intends to expand this business to employment agencies and the contract research organizations targeted at the pharmaceutical industry.

Separation of plants from the company as new independent companies

In June 2000, Nippon Kayaku separated the dyes section and administration section of the Tokyo plant (Kita-ku, Tokyo) and all sections of the Fukuyama plant (Fukuyama City, Hiroshima Pref.) from the company as new independent companies. Annual labor costs of 600 million yen will be saved and high cost structure improved by transferring approximately 360 employees to the new firm. Business expansion will be aimed at by introducing and nurturing new business and new products by means of strengthening cost competitiveness. Nippon Kayaku Tokyo will specialize in high value-added products such as functional color chemicals, which are expected to be in great demand, and inkjet printer ink to increase sales. Nippon Kayaku Fukuyama will expand business mainly with functional materials (thermal- and UV-related products) and fine chemicals (special resins, pharmaceutical intermediates, and agrochemicals).

Position class (personnel system)

In August 1999, Nippon Kayaku adopted a new personnel wage system, referred to as “position class system” (PC system), applicable to advisors and the head researcher, and from June 2000, the applicable range was extended to vice advisors and chief researchers. The PC system is not a system in which a salary is decided and paid based on the person’s ability as in a conventional professional ability and qualification system, but is a system in which “a salary is decided based on the content of the duties and paid to the responsible person.” The duties are evaluated by seven criteria, and classified into 10 classes from E1 to E10, and the fixed salary in each class (position salary) is set and paid to the person. The purpose of introducing the PC system is to further promote employee interest in their duties and results and to enhance the achievements and development of the company. To achieve such purpose, it becomes important to abolish the pay scale of the seniority system which is not linked to the content of duties, and enhance the correlation between responsibilities and salaries, while paying a salary matching job duties irrespective of age. In the course of transition to the new system, an innovating system reform took place which broke a tradition of the company that has been observed for many years.

Creative challenge system (internal ventures)

In December 1999, Nippon Kayaku established the creative challenge system (C&C system). This is a system for supporting enthusiastic employees who are eager to challenge internal innovation by volunteering to work as a manager of a project to realize new business and plans such as the development of new products and new technologies, the penetration of new markets, enforcement of revolutionary sales and marketing strategies, and revolutionary reform of existing duties. If a written proposal covering specific action plans is submitted to the Strategic Corporate Planning Office and approved, the person who made the proposal will be supported by the company by means of human resources, supplies, and funds. While the employee can establish a new organization if necessary, as a manager of the new project he/she is required to strictly observe the delivery date set by himself/herself, and achieve steady results. This new system is anticipated as the best opportunity for all employees to demonstrate their creativity, planning ability, and performance ability, thus creating the value worth working for.

Restructuring of administration section

In September 2000, Nippon Kayaku carried out drastic restructuring of the administration section in order to attain the “Nippon Kayaku Group Mid-Term Business Strategy.” We have been promoting management reform of the company’s salary and wage system, financial structure, management system, and so on in order to apply business strategies promptly and efficiently. As part of such efforts, we have newly established the Strategic Corporate Planning Office, Business Support Center, and Public Relations & Investor Relations Division aiming at: (1) reinforcing the strategic planning function; (2) strengthening and increasing the efficiency of support functions of all departments; (3) improving systems of IR, legal affairs, environmental safety and quality assurance, and (4) fortifying the auditing function. Also, we have established a system whereby directors are in charge of offices and supervise them directly in order to increase the speed of management. With organizational reform as described here, as well as expanded utilization of IT, we are planning to make a 20 percent reduction in management personnel over three years to increase management efficiency.

Corporate Citizenship

■Publication of environmental reports

In March 2000, Nippon Kayaku published the first edition of an Environmental Report summarizing measures taken to reduce waste and discharge amounts of chemical substances. In the "Measures to Reduce Chemical Compounds Discharged," we are proud to report that the discharge amount of five substances classified as harmful air pollutants was reduced by 62 percent in 1998 compared to 1995. In addition to complete abolition of benzene use since 1996, organic chloric solvents, a very harmful substance, were gradually replaced by solvents with greater safety. Further, introduced in the "Measures to Reduce Wastes" are various measures to control the final amount to be disposed including the methanol recycling system at the Takasaki plant.

■ISO14001 acquisition by Takasaki plant

In January 2000, Nippon Kayaku obtained ISO14001 certification, an international specifications for the environmental management system, at the Takasaki plant (Takasaki City, Gunma Pref.). This plant is a production base of our Pharmaceuticals Group that produces pharmaceutical products and *in vitro* diagnostic products, intermediates for pharmaceutical bulk, food additives, and feed additives. To conduct Responsible Care activities more effectively, we have set the acquisition of ISO14001 as a target for all our plants. Four of the six plants, including the Asa plant (Yamaguchi Pref.), have acquired the certification, and acquisition by the Takasaki plant was the fifth. The final remaining plant will obtain the certification by the end of year 2000.

■Wuxi Advanced Chemical Co., Ltd.

This company was established in 1996 as a joint venture in China by Nippon Kayaku, Tomen, and a local company, Wuxi Bada Chemical Factory, and in 1999, it became a company capitalized solely by Japanese firms. It is a production base of Nippon Kayaku as the first Japanese dye manufacturer that has penetrated the Chinese market. After completion of a plant for water-soluble dyes in 1998, a continuous production system from synthesis to final product was established. At present, about 25 types of products are manufactured. The company handles the KAYALON POLYESTER series for polyester, KAYASION series, a water-soluble dye for cotton, and KAYACELON REACT series. Because of the strict environmental regulations applied, the latest equipment to comply with them was brought in, and the production system was established in consideration of the local environment.

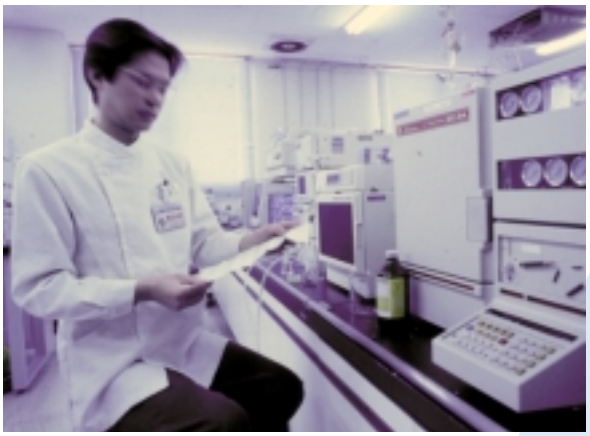
■Measure for social contribution, "Asunaro House"

In November 1998, Nippon Kayaku built Asunaro House (Omiya City, Saitama Pref.) to provide accommodation for people accompanying and taking care of children who are suffering from intractable diseases such as pediatric cancer or those who are to receive bone marrow transplants. For parents whose children are fighting intractable diseases at medical institutions away from their own home, the expenses during the stay to accompany the children are often a great financial burden. Nippon Kayaku provides accommodations for these families on the first floor of the company housing for singles which is available at a low cost. Ten families can use the 10 rooms as they would their own homes, and their privacy can be maintained by the structure of the building completely separated from the company housing including the entrance. At the same time, communal areas have been designed to reduce the psychological burden of the users such as a shared kitchen, dining room, conversation corner and children's playroom where the parents of hospitalized children can meet and talk with others facing the same problem. We give assistance to cancer patients and their families by developing new drugs, and carry out further activities with the support of regional authorities, medical institutions, and volunteer groups.

■Responsible Care

Responsible Care (RC) is an international activity undertaken by a company engaged in manufacturing chemical substances or handling them to "ensure the environment and safety throughout development to manufacturing, distribution, use and final consumption to disposal." Chemical companies carry out RC based on their respective originality and ideas. With respect to environmental preservation, in particular, the effect of chemical substances on the environment and the actual status of the discharge are investigated and the required reduction of discharge and appropriate use of chemical products are enthusiastically promoted. Since its initiation in Canada in 1985, RC has attracted global interest, and in Japan, the Japan Chemical Industry Association played a key role in the establishment of the Japan Responsible Care Council (JRCC) in 1995, to advocate the implementation of responsible care. To ensure public safety and health and to preserve the environment, Nippon Kayaku carries out the planning, development, and sales activities of chemical products for daily business activities as a Responsible Care company.

Research and Development



The Phamaceuticals Research and Development Division of Nippon Kayaku is the heart of our research and development of new pharmaceutical products. It has departments for drug research, technical development, and clinical development to ensure that pharmaceutical products required for today's medical treatment are released to the market. For the Fine Chemicals Group, R&D in various areas is being carried out by our R&D Division, consisting of the Inflators Technical Center, Catalysts Research Center, Functional Products Research Laboratories, Color Chemicals Research Laboratories, Agro & Fine Chemicals Research Laboratories, Explosives Research Laboratories, and Film Technology Laboratories. There is no end to R&D in today's ever-changing society. The ratio of our R&D expense against total sales for all business areas is consistently one of the highest among domestic companies in the chemicals industry. With our desire to protect human lives and health, and to make society and living more comfortable and convenient — flexible approaches and honest and sober R&D by individual researchers as well as the company as a whole are what we are most proud of.

■Drastic restructuring of the pharmaceutical organization

To keep up with the significant changes of new drug research environments such as internationalized development competition, Nippon Kayaku initiated drastic restructuring of the pharmaceutical organization in August 1999 to streamline research and development. The pharmaceuticals R&D division comprised of two departments, anticancer drugs and pharmacological agents, was unified to aim for the strategic investment of resources. In addition, a manager of the research project and products carries out collective management using a matrix system to further strengthen the responsible system from development planning to post-marketing surveillance and feedback of needs in the market. In addition to the operation of high throughput schooling, a state-of-the-art research infrastructure such as combinatorial chemistry is under way, and more than 15 projects in basic level research are currently in progress.

■Concept of Chemical Comprehensive Research Laboratories

In February 2000, Nippon Kayaku disclosed a concept to construct a comprehensive research center to conduct chemical R&D in the compound of the Tokyo plant (Kita-ku, Tokyo). The concept of a comprehensive research laboratory in the color chemicals business aims to effectively utilize the vacant space brought about by the restructuring above and to fortify the development of new products, mainly electronic materials, and to attempt to increase the comprehensive level of all company R&D. The company is aiming at realizing the concept around 2003 at the latest.

■Establishment of Film Technology Laboratories

In July 2000, Nippon Kayaku established the Film Technology Laboratories with a focus on development of next-generation optical products. We have developed various functional films by integrating a wide range of materials technologies including high-polymer, resin, and color agents, and have been shaping this into a business. Especially, Polatechno Co., Ltd., which manufactures polarization film with high durability, increased its sales due to increased demand for on-board use in automobiles such as car navigation systems, and for LCD projectors, and the resulting strong sales exceeded 10 billion yen. However, optical and functional films including LCD are exposed to radical technological reform, and our conventional research themes of the Functional Products Research Laboratories and research on improvements in which Polatechno has normally taken the initiative have come into question. Therefore, we have established the Film Technology Laboratories. The objectives of the establishment of this center are not only to improve the functions of polarization films, but also to research the next-generation high-polymer films for displays including PDP (plasma display) and organic EL (electro-luminescence) from a mid-term viewpoint, while working on product development in cooperation with Group companies. The Film Technology Laboratories is the seventh research center we operate, and initially it will be managed along with other research centers at the Tokyo plant, such as the Functional Products Research Laboratories, yet it will be expanded to a size of several dozen researchers at an early stage.

■Establishment of the invention incentive system

Since March 1999, Nippon Kayaku has employed the "Invention Incentive System." This is a system in which a researcher coming up with an epoch-making invention will be provided with 1 percent of the annual sales (more than 5 billion yen in pharmaceuticals, more than 1 billion yen in chemicals, more than 2 billion yen in agrochemicals) and 2 percent of the annual royalty without an upper limit. Such an incentive system will reward an inventor who comes up with a highly original innovation and makes a significant contribution to the company and will enhance the researchers' efforts toward new inventions.

Outlook for the future

Of the pharmaceutical products in Japan, NK433, a drug for temporomandibular joint disorder, and SNI-2011, a drug for Sjögren syndrome, have already been filed for NDA, and PMCJ-9, a drug for bladder cancer, and NS75A, a drug for infertility, are scheduled to be filed by the end of year 2000. As well, DDP-H, a drug for hepatocellular carcinoma, and SS750, an antifungal drug for systemic infections, are under development. Another drug under development has a drug delivery system (DDS) to concentrate and accumulate a high molecular weight compound encapusuling an anti-cancer drug to enhance its therapeutic efficacy. In overseas, development of NKT-01 (SPANIDIN), a drug for autoimmune diseases, is under way in Europe, and long-term joint research with venture companies in the United States is being conducted to search for new drugs.

With respect to chemicals, airbag inflators for passengers seat and seat side, new functional films, information-related functional products, coloring agents for inkjet printers, high-purity epoxy resins for semiconductor encapsulation, various ANFO explosives, and new insecticides have been developed and launched steadily.

For FLOWSEALER, an environment-adaptive crack-penetrating sealant for concrete launched in September 1999, more effective materials and construction methods are under development.

Pharmaceuticals Group R&D Division

Functional Products Research Laboratories

Changes in Research & Development Expenditures