Nisso NIPPON SODA CO.,LTD.

Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

Nippon Soda Group

CSR Report 2015

Creating New Value through the Power of Chemistry

NISSO

The basic policy of the Nippon Soda Group is to contribute to society through our business activities using technologies, expertise and human resources that we have developed since our founding, as we improve the general public's confidence and trust in us.

Editorial Policy

The CSR Report 2015 is designed to provide information on the corporate social responsibility (CSR) and responsible care (RC) activities—and their results—of the Nippon Soda Group. Its aim is to promote transparency and accountability. The information contained in this report is arranged by RC Codes and CSR Core Subjects.

Publication Date

July 2015
(Next report scheduled to be issued in July 2016)

Guidelines Used as References

The Japanese Ministry of the Environment's Environmental Reporting Guidelines 2007 Japanese Standards Association ISO 26000: 2010 Guidance on Social Responsibility

Scope of the Report

This report summarizes CSR and RC activities of Nippon Soda Co., Ltd. and major Nippon Soda Group companies (three manufacturing group companies: Nisso Metallochemical Co., Ltd., Nisso Fine Co., Ltd. and Shinfuji Kaseiyaku Co., Ltd.; and five non-manufacturing group companies: Nisso Shoji Co., Ltd., Sanwa Soko Co., Ltd., Nisso Engineering Co., Ltd., Nisso Construction Co., Ltd. and Nisso Green Co., Ltd.).

This report provides the actual results for fiscal 2015 (April 1, 2014 to March 31, 2015). The data on occupational accidents presented in this report are based on the actual results from January 1, 2014 to December 31, 2014.

The financial data covers 19 consolidated subsidiaries and four equity-method affiliates. For a list of major companies, refer to the section titled, "Nippon Soda Group Network" on page 81.

International Standards Certifications

■ ISO 14001 is the international standard of the International Organization for Standardization (ISO) for environmental management systems (EMS). It specifies requirements for an environmental management system.

■ ISO 9001 is the international standard of the International Organization for Standardization (ISO) for quality management systems (QMS). It specifies requirements to enhance customer satisfaction, including quality assurance.

■ OHSAS 18001, the abbreviation of Occupational Health and Safety Assessment Series 18001, is the international standard for occupational safety and health management systems (OSHMS). The objective of OHSAS 18001 is to help companies reduce risks and the recurrence of problems by identifying risks related to occupational safety and employee hygiene, developing preventive measures, and implementing such measures (achieving continuous improvement).

Responsible Care

Responsible Care (RC) was launched in 1985 in Canada. The International Council of Chemical Associations (ICCA) was established in 1989 and, as of January 2015, more than 44 countries and regions around the world participate in the Responsible Care initiative. In Japan, the Japan Responsible Care Council (JRCC) was established in 1995 under the Japan Chemical Industry Association (JCIA) by 74 companies, most of which manufacture and handle chemical substances, with the aim of standardizing and augmenting environmental and safety activities that were previously conducted by individual companies as well as raising public awareness of RC activities. The JRCC became the "JCIA RC Committee" in May 2012. As of March 2015, the committee has a membership of 111 companies. The aim of RC activities can be summed up as follows: To do what is ethically right and to implement proactive measures to reduce risks.

Responsible Care®
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Nippon Soda Group CSR Report 2015

Corporate Profile

Name: Nippon Soda Co., Ltd.

Location of Head Office:
Shin Ohtemachi Bldg., 2-2-1 Ohtemachi, Chiyoda-ku, Tokyo 100-8165 Tel. +81-3-3245-6054

Foundation: February 1920

Representative Director, Chairman: Yutaka Kinebuchi
Representative Director, President: Akira Ishii

Stock Listing: Tokyo Stock Exchange, First Section

Capital: 29,166 million yen (as of the end of March 2015)

Number of Employees:
2,507 (consolidated),
1,194 (non-consolidated) (as of the end of March 2015)

Business Description:
Manufacturing, processing and marketing of caustic soda, potassium products, chlorine and chlorine products, synthetic resin, dyes, pharmaceuticals and pharmaceutical intermediates, agricultural chemicals, and various other kinds of chemical industrial products

Becoming a Sought-After Chemical Company in the 21st Century

Realizing the Dreams of the Next Generation

Through the use of innovative and creative technologies and products, Nippon Soda will continue to focus its efforts on contributing to the creation of a more comfortable society and making the dreams of the next generation come true.

Yutaka Kinebuchi
Representative Director, Chairman
Nippon Soda Co., Ltd.

Akira Ishii
Representative Director, President
Nippon Soda Co., Ltd.

How do you evaluate the development of CSR activities throughout the group during the first year of implementation?

The year 2020 will be the 100th anniversary of Nippon Soda Co., Ltd. We introduced CSR activities in April 2012 and two years later, in April 2014, started implementing them across eight Nippon Soda Group companies. Prior to the implementation, the Corporate Social Responsibility Department, in cooperation with the leaders in charge of CSR of these eight group companies, developed a plan for setting the policy, objectives and activities of each company, which enabled them to start their activities from the beginning of fiscal 2015.

The group companies now report their CSR activities at the Corporate Social Responsibility Administration Meeting and have chosen a theme for their individual goals in line with the nature of their business. It is our aim, through our CSR activities, to make our business foundation the strongest it has ever been and to improve the value of our company by increasing our presence on the international stage as an indispensable chemistry-oriented corporate group that is conscious of the global environment and CSR.

Overseas group companies have implemented responsible care activities at the same pace. With regard to CSR activities, however, different companies are in different stages according to the circumstances of each company and country. In fiscal 2015, we assessed the efforts of overseas group companies in their CSR activities. With the aim of achieving further globalization, we will place more emphasis on CSR activities to build an international reputation for reliability that is as our domestic reputation.

What roles do you think chemical manufacturers should take on?

The business of the Nippon Soda Group is mainly focused on areas essential for the sound development of society, such as agriculture, medicine, the environment and information. We are proud that we are able to contribute to society by providing a constant stream of new, safe and useful products and services.

What is the top priority policy of the Nippon Soda Group in seeking to achieve its overarching goal?

The four-year Medium-Term Business Plan launched in fiscal 2014 reached a turning point in fiscal 2016. There are three priority actions in this plan as follows:

Expansion of growth drivers

We aim to develop and launch new fungicides and miticides in the agro products field, to increase the production of HPC[1] and expand our business in the chemicals field, and to create new business through future projects.

Enhancement and restructuring of the business foundation

We recognize that enhancement of our business foundation is an ongoing issue that all departments must address in order to ensure the continued existence of our company.

Improvement of the Group's comprehensive capabilities

The Affiliates Department was reinstated in April 2014. In addition, new efforts, mainly by the Overseas Production Planning & Management Department, to support the business operation of overseas manufacturing subsidiaries and centers have been promoted. We aim to improve the comprehensive capabilities of the Nippon Soda Group and its corporate value through active dialogue.

What efforts should chemical manufacturers make in order to promote CSR activities?

Chemical manufacturers deal with a wide variety and large amounts of chemicals and dangerous and toxic substances. One of the important roles of chemical companies is to transform these raw materials and intermediates into products that can contribute to society. To fulfill this role, it is essential for chemical companies to ensure safety and quality in their production activities.
Unless safety is confirmed and ensured,
· products will not commercialized.
· products will not manufactured.
Unless quality is confirmed and ensured,
· products will not be shipped.
Only after confirming and ensuring the safety and quality of products,
· will they be manufactured and shipped.
With these in mind, we believe that we have an important mission to meet the specifications and delivery dates required by customers and to confirm and ensure the safety of transportation to the designated destination.

What issues do you think are important for CSR in the global era?

As a chemistry-oriented corporate group, the Nippon Soda Group promotes RC activities at every production site both in Japan and abroad as the core of its CSR activities. Our particular focus is on activities related to safety, the environment and quality. We use our own RC checklist of more than 600 items to conduct risk assessment, including on-site inspections. In this risk assessment, we identify potential risks for substances dealt with, reactions and locations and assess whether organization and management, safety, environment, safety of chemicals and products, distribution, disaster prevention, emergency response, and communication meet appropriate standards to avoid potential risks. Based on assessment results, improvement actions are implemented. The checklist is commonly used by all of our global production sites.

In the area of CSR issues, human rights and labor practices will be addressed, duly taking into account differences in cultures and customs so that we can meet the circumstances of each country and the expectations in each society.

To "Realize the Dreams of the Next Generation," what do you expect from employees?

I expect them to achieve the priority actions of the Medium-Term Business Plan: expansion of growth drivers, enhancement and restructuring of the business foundation, and improvement of the Group's comprehensive capabilities. To meet this expectation, employees need to balance a "willingness to take on challenges" to try new things and the "will and action to account for even the slightest risk in order to ensure safety," regardless of the environment in which they work.

Our efforts will continue to be focused on forming a globally competitive corporate group overflowing with the spirit of challenge such that we can keep on improving the value of the Nippon Soda Group and make enormous progress into the future.

Note: As of June 26, 2015, Yutaka Kinebuchi assumed the position of Representative Director and Chairman and Akira Ishii took over the position of Representative Director and President.

1. See page 13.

Special Section

Nippon Soda Group Contributing to Society with the Power of Chemistry

Creation of Nippon Soda Group's Value

As a chemical manufacturer aiming to grow our business while at the same time dealing with dangerous and toxic substances, we give maximum consideration to safety and the environment, maintain harmonious relationships with society and stakeholders, and provide new value.

Long-Term Vision Chemigress to 100

The Nippon Soda Group is currently promoting efforts to further improve its corporate value based on its long-term vision, "Chemigress to 100,"* with an eye toward the upcoming 100th anniversary. As encapsulated by the vision, the group aims to achieve the following three targets: 1. Focus mainly on areas essential for the development of a sound society, such as agriculture, medicine, the environment and information, and provide a constant stream of new safe and useful products and businesses, thereby making tremendous contributions to society; 2. Increase its presence and indispensability on the international stage as a chemistry-oriented business group that is conscious of the global environment and CSR; and 3. Form a globally competitive corporate group that is highly motivated and ready to take on challenges and enhance the comprehensive value of the entire group so as to make enormous progress. These efforts are expected to achieve the following numerical targets: consolidated operating income of 20 billion yen in 2020 and net income of 10 billion yen.

There are two basic principles in the Medium-Term Business Plan (Stage II). One is to accelerate growth to achieve the long-term goals and the other is to actively invest management resources to expand growth drivers, which may include M&A and business partnerships.

Priority actions are 1) expansion of growth drivers, 2) enhancement and restructuring of the business foundation, and 3) improvement of the Group's comprehensive capabilities.

Stage II

FY **2017** targets

Medium-Term Business Plan

(April 2013 to March 2017)

Net sales **160** billion yen

Operating income **10** billion yen

Net income **9** billion yen

Stage III

2020 targets

Long-Term Vision

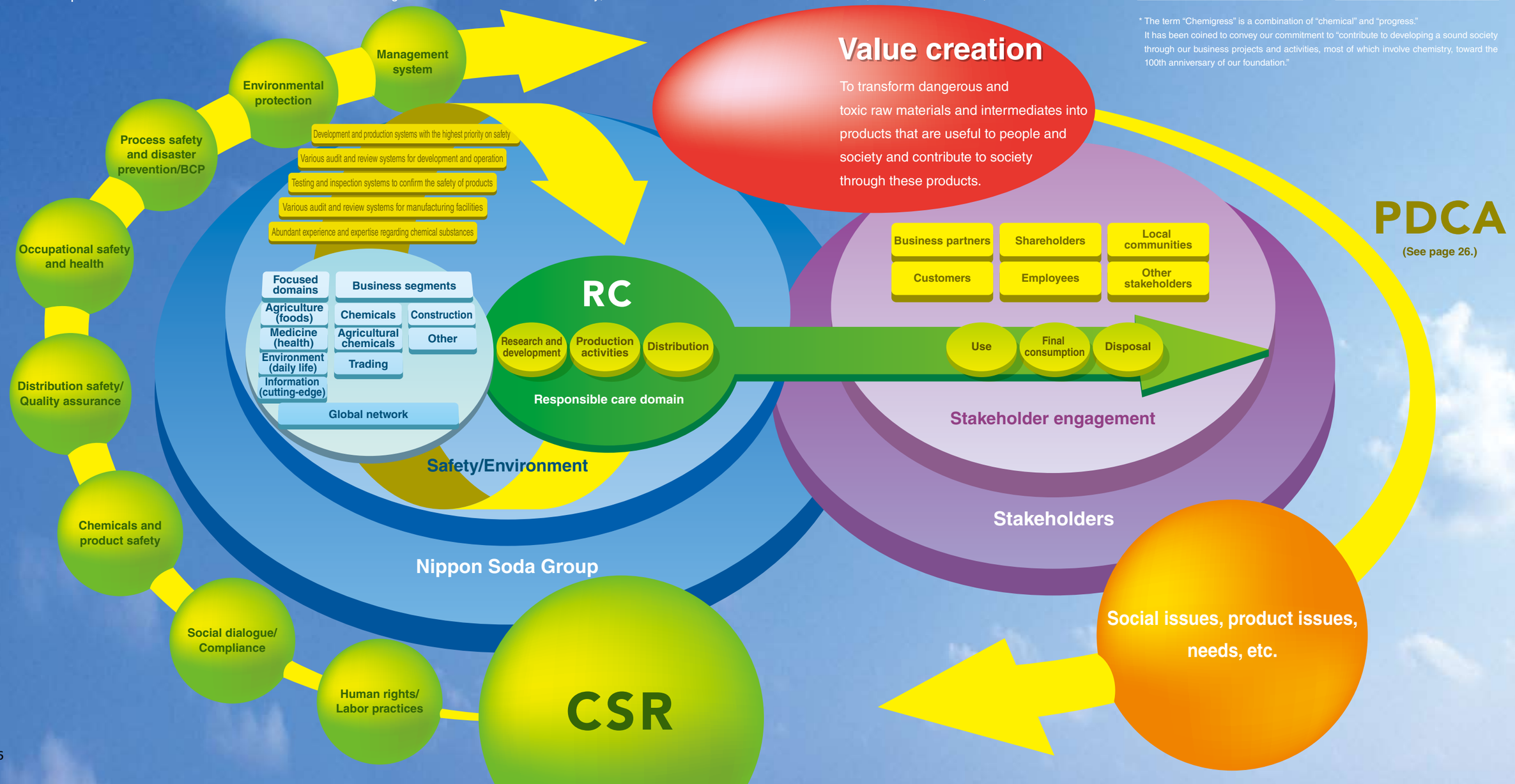
(As of March 31 2020)

Net sales **200** billion yen

Operating income **20** billion yen

Net income **10** billion yen

* The term "Chemigress" is a combination of "chemical" and "progress." It has been coined to convey our commitment to "contribute to developing a sound society through our business projects and activities, most of which involve chemistry, toward the 100th anniversary of our foundation."



Interview with Research & Development Division Manager

Creation of new value that helps society develop Research and development to address global issues

Focus on discovering new technologies and advancing existing technologies

Hiroyuki Adachi
Director and Executive Managing Officer Supervision of Technology and the Corporate Social Responsibility Department, and General Manager, Research & Development Division

For chemical manufacturers to grow, research and development is indispensable and therefore forms an important part of their business model. There are two approaches to development: one is to explore new fields and technologies and the other is to improve existing technologies and pass them down in a cyclical fashion. In either approach, the driving force behind research and development is to share research outcomes that benefit society and ensure public safety and security. Although we seldom produce a result over the course of a single fiscal year, the Research & Development Division focuses its development efforts on creating and introducing innovative value to the world with the hope of contributing as a chemical manufacturer to the development of society.

In the agricultural chemicals field, it sometimes takes 10 years from discovery through safety testing and registration to the launch of a product. To meet the safety standards of different countries around the world, which become increasingly stringent every year, we will continue to conduct post-launch evaluations and provide technology for improvement. In the chemical products field, markets change rapidly and therefore we need to quickly respond to the diverse needs of society.

Under the principle of competition, however, researchers do not always solely pursue effectiveness. They sometimes sacrifice a new efficacy they have discovered for reasons of safety because ensuring safety is important for chemical manufacturers in their research and development efforts.

Technologies we discover have the potential to help solve social issues in various regions around the world for generations to come. For example, in the agricultural field, where it is necessary to maintain harmony among human activities and surrounding ecosystems, Topsin M, which was developed more than 40 years ago, still contributes significantly to solving food problems in various parts of the world. The next generation of researchers are expected to develop technologies that contribute to achieving a sustainable society, while at the same time remaining vigilant with respect to developments in markets around the world. To meet such an expectation, our company started providing researchers with overseas training programs a few years ago. We will continue to put efforts into helping them not only improve their technical expertise but also acquire a comprehensive understanding of safety and evaluation standards, laws and other regulations of different countries.

Solution to social issues

Research & Development CLOSE UP

Training researchers to become globally competitive

We have provided employees with overseas training programs since 2013 with the aim of training them to acquire the competencies needed to work internationally. Two researchers have so far completed their training in the United States and Thailand, respectively, and are now playing a leading role at worksites. At present, three researchers are in training in such countries as the United States and France. The reports below are from the two researchers who have completed the training.

Experiencing diverse cultures and more

Hiroaki Kurushima
Overseas Production Planning & Management Department

I received one year of training in the United States from August 2013. In the first three months, I stayed with a host family and studied English at a language school. The opportunity to meet international students from around the world was a good incentive for me. At the New York office of Nisso America Inc., our business base in North America, I learned about marketing activities together with local staff. Technology survey is one of the most important duties for me as a researcher. In preparation for creating new business projects, I participated, in cooperation with the Research Department at the Head Office, in survey activities and international scientific conferences to build strong relationships with other researchers.

One year passed quickly but during my short time in the United States, I experienced both difficulties and joys in working together with others to transcend differences of language and culture. The training program also helped me realize the importance of development in a timely manner, based on customers' needs. Since returning to Japan, I have been involved in a joint project with foreign companies to promote overseas production, in which I use what I learned through the training.

At an international scientific conference

Experiencing the difference in agricultural conditions between Thailand and Japan and learning the necessity of adapting to foreign cultures

Akira Hamakawa
Department of Biological Research, Odawara Research Center

Our company's products are targeted at global markets. Researchers are therefore required to understand current situations in different countries and to sometimes work outside of Japan. As part of a project to train researchers to develop the competencies needed to meet these requirements, I was given an opportunity to engage in agrochemicals-related work at a university in Thailand for three months. Staff at the university's laboratory where I was assigned visit cultivated fields of local farmers almost every week to conduct tests, a practice not common in Japan.

I went to Thailand also during my student days but visiting a country for pleasure is different from going there on business. To do business, you need to communicate closely with local people and observe not only the superficial features of the country but also its inner depths. But, in the final analysis, we are all human. It is important in any country to show respect for others and communicate with each other on an equal footing.

I am now ready, in my job, to apply the knowledge I have acquired in Thailand and what I have learned about how to communicate with people from other countries.

Testing at a local cultivated field

Interview with Agro Products Division Manager

Agro Products Division contributing to solving food issues around the world

Expanding our global business with our ecosystem-compatible agrochemicals by taking advantage of their reliable quality

Tateshi Tsujikawa
Executive Officer
General Manager, Agro Products Division

The Agro Products Division is promoting growth strategies targeting overseas markets so as to contribute to solving food issues associated with a growing global population. Within the global agrochemical market valued at around 6 trillion yen, we have identified the South American region as one of the most rapidly growing markets. In Europe, where our company has been successful over many years, as a result of the progress of social reforms in former Eastern Bloc countries, the production of agricultural crops has increased remarkably and so has the demand for agricultural chemicals.

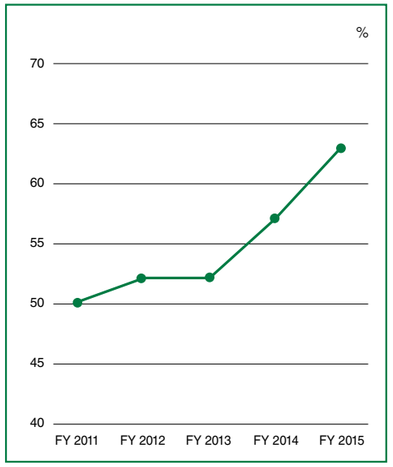
Our current focus is on selling existing agricultural chemicals effective in increasing crop production into new overseas markets. In the South American region, which is expected to play a major role in supplying the world's food in the future, we cooperate with local affiliate Iharabras S/A to contribute to the development of local communities while promoting the development of our business. We will also strengthen our efforts to develop and disseminate safer and more environmentally friendly agricultural chemicals in the Asian region, such as in India and Vietnam, where the population is increasing dramatically, in cooperation with local distributors.

The amount of land suitable for agricultural cultivation in the world has not increased. On the land that is available, therefore, we need to increase food production by effectively preventing the loss of agricultural crops due to pests and weeds. It is beyond question that chemical pesticides and other pest control measures play a significant role in addressing this issue.

The Nippon Soda Group has launched two microbial pesticide agents and continues its efforts in research and development in this field. More emphasis will be placed on identifying solutions for agricultural production in order to ensure harmonious relationships between food production and ecosystems. Efforts to achieve this goal include the active investment of resources into the development of pesticide agents prepared by using food additives.

Our continuing aim is to contribute to solving global food issues. To do so, we will provide a constant stream of agrochemicals that are highly safe for human and animals, have less environmental impacts and produce stable results.

Change in export ratio at Agro Products Division



Efforts for globalization

Agro Products Division

Expansion of overseas agrochemical markets

Agrochemical business of Nippon Soda Group, which supports the development of agriculture on a global scale

The term "sales" in the agrochemical business covers a wide range of activities, including development, registration management, establishment of sales networks and partner relations, contract and price negotiations, technical support, decisions on terms and conditions, and export control of products. In addition to these various activities, there are also differences among regions in cultures, customs, business practices, laws and regulations, and other requirements that must be addressed. It is therefore necessary to make effective use of individual expertise and maximize teamwork and mobility in order to contribute to addressing global social issues.

Our job is both challenging and satisfying despite frequent difficulties. Our sales territories cover extensive areas, including North America, Europe, South America and Asia. We are always collecting the latest information about local circumstances, such as any increase in population and speed of economic development, in order to develop new markets.

Efforts equally focused on both new and old products

Toshifumi Kuwagata
Manager, Business Strategy & Administration Department, Agro Products Division

New market development in the Asian region

Kazuhiko Murahashi
Manager, 2nd Overseas Business Department

International sales involve extensive activities, including local surveys on what kinds of pests cause problems and how we need to address those problems, promotional activities to explain the effects of products and provide instructions on how to use them, agrochemical registration management, establishment of sales channels, decision on terms and conditions, export of products in compliance with relevant laws and regulations in each country, and development of products combining other active ingredients so as to meet local needs.

Registration systems, safety standards and environmental issues differ from country to country and we need to comply with different standards for each. It is therefore essential for us to increase the number of our local collaborators to help us meet the requirements in each country in a timely fashion so that we can provide products that comply with local standards. With the support of our overseas offices and in cooperation with local distributors, we will continue our efforts to ensure carefully planned sales activities.

We will also continue our efforts to contribute to addressing global issues of food production through careful identification of the needs of local customers by leveraging the resources of our agrochemicals business, which provides integrated services from development and production to marketing and sales.

We adopt a flexible sales strategy taking into account market needs, based on the safety and reliable quality of our products, which meet the standards of international markets.

Agro Products Division CLOSE UP

Overseas local subsidiary NCE engaged in business activities ranging from development to marketing of agrochemicals that meet the needs of European countries

What is NCE?

Nisso Chemical Europe GmbH, or NCE, is an overseas subsidiary located in Dusseldorf in Germany. It covers an extensive area within Europe, including Russia, Ukraine, the former Yugoslavia and part of North Africa.

Characteristics of agrochemical markets

Climates, cultivated crops, cultivation systems, pests and weeds differ from region to region, which means that needs for agrochemicals also differ. Furthermore, agrochemical markets undergo constant change. Thanks to our careful and persistent efforts to provide solutions adapted to changing needs, the Nisso brand has been a trusted name in European and numerous other countries for many years.

Yuji Horikoshi
Manager, Europe Section,
2nd Overseas Business Department

FOCUS ① Development

Development activities to evaluate new chemicals and expand the application of existing products

To establish safe and effective use methods that meet local needs, local staff together with Development members from Japan and sales partners in each country make on-site visits to talk to local advisors and experts and conduct tests on cultivated fields.

In fiscal 2015, we conducted tests on new chemicals in France, Germany, Italy and other countries to identify optimal doses and spraying timings.

Inspection with a sales partner at a cultivated field where a new agrochemical is evaluated

FOCUS ② Marketing

Marketing activities using various methods to promote sales in different areas

We organize events in cooperation with sales partners in different countries, such as seminars for local dealers and farmers to introduce products and explain their proper use. We also invite customers to come and take a look at a cultivated field where our product has been used to give them an opportunity to see the effects for themselves. When the product Pancho (local name: TAKUMI) was registered for vegetable crop use, Certis, our sales partner, conducted launch seminars in France and Spain to explain its performance and measures to manage resistance. For the seminar held in France, an NCE staff member fluent in French was invited to make a presentation.

On-site explanatory session

Seminar

Photos provided by Certis Europe B.V.

Interview with Chemicals Business Division Manager

Nippon Soda Group's Chemicals Business contributes to ensuring the safety and comfort of people all around the world

Create new market value and support the development of society using the power of chemistry

Tsutomu Sakuma
Executive Managing Officer,
General Manager, Chemicals Business Division

Our company's chemicals business has concentrated its resources in the area of fine chemicals for many years. Over this time, we have developed products indispensable for the development of society such as, for example, products used in the domains of medicine and the environment, which have become a focus of contemporary concerns.

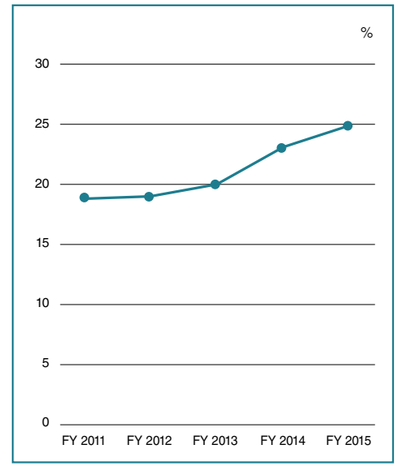
Hydroxypropyl cellulose (HPC), a cellulose derivative, was commercialized as an original product more than 40 years ago and is still trusted today. This long-selling product is widely used by pharmaceutical manufacturers in Japan and abroad, among others, as a binder and coating agent for pharmaceutical tablets and other products. Both its functionality and quality are trusted and highly evaluated around the world. We are now set to expand sales into Asian countries, such as India and China, where the demand for pharmaceuticals is expected to increase.

One of the social roles that the Chemicals Business Division can take on is to provide products that help reduce environmental impacts. For example, our PCB detoxification technology using metallic sodium to detoxicate dioxin and our product HIDION, an environmentally friendly product used to stabilize heavy metals to prevent them from leaching from the incineration ash of industrial and other waste, meet green business standards to protect the global environment.

Hi-chlon, an inorganic chlorine disinfectant, is a familiar product in daily life and is used to improve environmental hygiene. It accounts for a large share of the disinfectants used mainly for swimming pools and public baths in Japan. Recently, Hi-chlon is also used in the Asian region to purify drinking water and disinfect shrimp farming ponds. It ensures the hygiene of water, something we cannot live without, to help provide a better quality of life.

The target market of the Chemicals Business Division is the whole of society, which means it therefore covers an extremely wide range of sectors. By staying abreast of social changes and providing as many products as possible that are useful in daily life, we will continue to contribute to the global society.

Change in export ratio at Chemicals Business Division



Efforts for globalization

Chemicals Business Division

Expansion of the chemicals market overseas

Chemicals business of Nippon Soda Group, which contributes to the world by offering one-of-a-kind products

HPC, which contributes to improving the QOL of patients, well received in pharmaceutical markets around the world.

Exhibition booth at an annual meeting of the American Association of Pharmaceutical Scientists

HPC (hydroxypropyl cellulose) is a highly safe compound obtained by chemically modifying cellulose. We sell 10 grades of HPC featuring different viscosity and different particle size. HPC can be used for a wide range of applications—such as a binder to form pharmaceutical tablets and supplements, a whipped cream stabilizer, and a thickener to increase the viscosity of paints—and is used by customers in various fields. In particular, HPC is used for tablets, powdered medicines and granules as a superior excipient by many pharmaceutical manufacturers around the world because it does not impair the effects of drugs.

We provide high quality that conforms to laws, regulations and religious standards of different countries as well as well-rounded services.

In recent years, sales of HPC have been increasing in India and China, in addition to Europe and the United States. In promoting sales in global markets, we need to provide carefully tailored services that meet local needs. We are currently developing HPC applications for pharmaceutical formulations in partnership with an overseas university. Results from the joint development research project have been widely presented at overseas academic conferences and exhibitions and have been well received in global markets.

In the United States and Europe, we strengthened the organization of local subsidiaries and have placed emphasis on employing local staff members, which is the key to local sales promotion. Local staff play an important role in implementing our growth strategy. Their activities include not only the provision of information on the latest technology and compliance with laws and regulations but also the collection of information on differences in cultures and needs between countries. In Asia, we implement proactive marketing activities, such as sales activities, in cooperation with local distributors and technical seminars and lectures by our researchers at local sites.

HPC conforms to the pharmacopoeias of Japan, the United States and Europe, which define the standards for drugs, allowing us to export HPC as a pharmaceutical ingredient to almost all countries. Some religions, however, do not allow people to eat foods that are not certified by their organizations, a restriction that also applies to pharmaceutical ingredients. We have therefore started to acquire religious certifications for HPC and have successfully acquired some already.

We will accelerate our research and development efforts to identify new ways to use HPC in manufacturing drugs so that we can contribute to improving the quality of life (QOL) of patients around the world.

HPC: Hydroxypropyl cellulose developed by our company is used in more than thousands of pharmaceutical products such as tablets, powdered medicines and granules.

Packaged HPC

Chemicals Business Division CLOSE UP

Alkaline SAS, a wholly owned subsidiary, pursuing environmentally friendly business activities centered on Europe

Alkaline SAS is:

A wholly owned subsidiary acquired in December 2011. It is a holding company that owns MSSA SAS, a producer of metallic sodium with a more than 100-year history, and EnviroCat SAS, a producer of sodium methylate, a derivative of metallic sodium.

The quality of MSSA's metallic sodium is highly regarded worldwide.

In Japan, it is used to decompose PCBs. Since the method using metallic sodium releases less dioxin, it has a relatively smaller environmental impact.

Developing global markets by offering attractive products

Eiji Aga
General Manager, Strategy & Administration Office, Chemicals Business Division

Business Development ① MSSA SAS

MSSA, a group of specialists in metallic sodium

There are only three companies in the world that export metallic sodium and MSSA is one of them. Metallic sodium is a base chemical and demand for it is stable. It is therefore important to establish a supply system that ensures a stable supply of products while maintaining markets.

In recent years, the uses of metallic sodium have been expanding in green energy markets. For example, it is being used as a raw material in both solar panels and biodiesel fuel, for which demands have been increasing in Europe and the United States in the pursuit of environmentally friendly alternative energies.

Employees with Chairman Kinebuchi

Business Development ② EnviroCat SAS

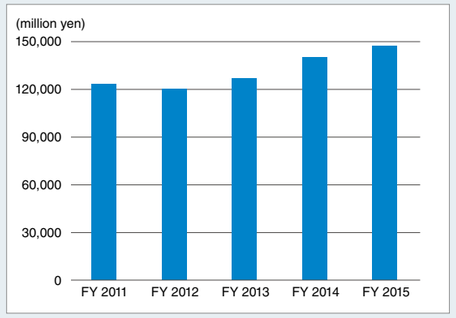
EnviroCat and its environmentally friendly manufacturing method

Sodium methylate, a derivative of metallic sodium, is traditionally produced using mercury-based processes. EnviroCat has started the production of methylate using processes that do not involve mercury, thus reducing the environmental impact. Discussions on restricting the use of mercury starting from 2017 are currently underway. In line with this trend and in terms of environmental protection in local communities, processes that do not use mercury play an important role.

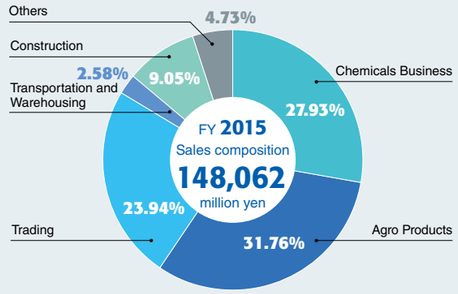
Numerical Data of Nippon Soda Group

Consolidated financial highlights

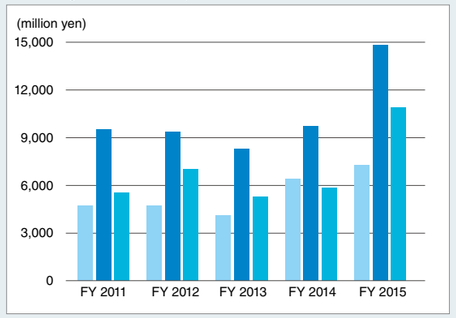
Change in consolidated net sales



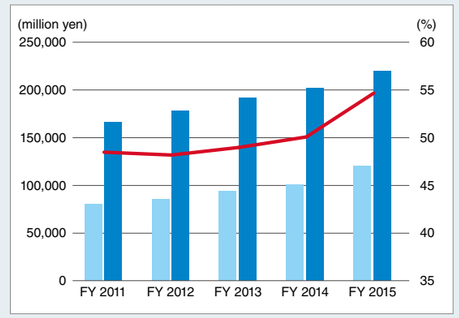
Sales composition



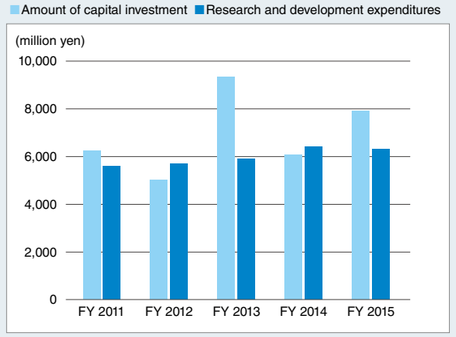
Profitability indices (operating income, ordinary income, net income)



Soundness indices (net assets, total assets, equity ratio)



Growth indices (amount of capital investment, research and development expenditures)



Number of consolidated companies

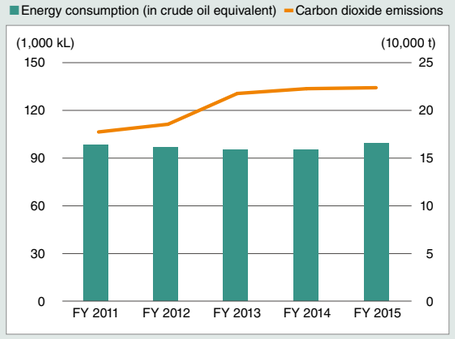
FY	2014	2015
Consolidated subsidiaries	19	19
Equity-method subsidiaries	0	0
Equity-method affiliates	4	4

* For a list of consolidated companies, refer to “Nippon Soda Group Network” on page 81.

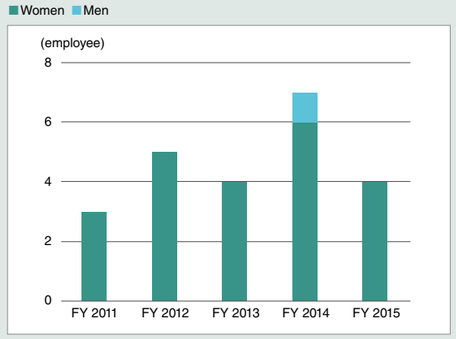
CSR-related indices

Note: The figures for the CSR-related indices are those of Nippon Soda Co., Ltd. alone.

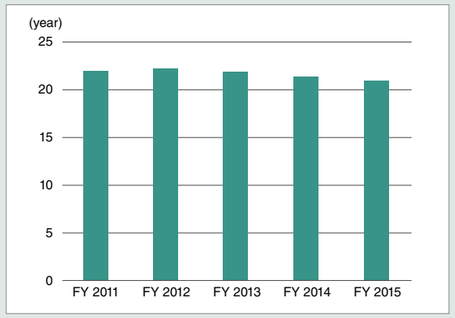
Changes in energy consumption and carbon dioxide emissions



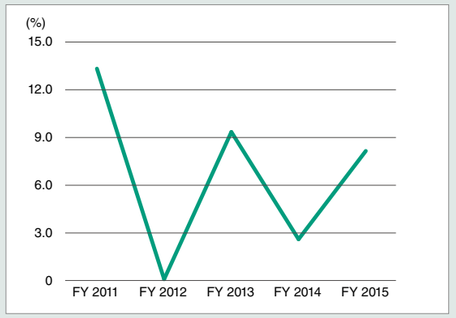
Change in the number of employees who took maternity/child care leave



Average length of service of employees



Ratio of females among new graduates hired



Data on employment and use of human resources

FY	2011	2012	2013	2014	2015
Number of employees	1,237	1,229	1,236	1,207	1,194
Average length of service of employees	21.9	22.2	21.9	21.4	21.0
New graduates hired (number of females)	15 (2)	30 (0)	43 (4)	38 (1)	37 (3)
Number of employees who left the company within three years of employment	0	0	1	2	1
Ratio of employees with disabilities*	2.09	1.91	1.62	1.56	2.06

* The figures for fiscal 2011 to 2014 are as of June 1 of the fiscal year concerned. Those for fiscal 2015 are as of March 31, 2015.

The Nippon Soda Group's CSR

CSR Officers

Masahito Ikeda
Executive Officer
General Manager of the Corporate Social Responsibility Department
Nippon Soda Co., Ltd.

Hiroyuki Adachi
Director and Executive Managing Officer
Supervision of Technology and the Corporate Social Responsibility Department, and General Manager, Research & Development Division
Nippon Soda Co., Ltd.

Noriyuki Haketa
Executive Managing Officer in charge of Corporate Social Responsibility Department and General Affairs & Personnel Department and Personnel Group Leader

The following three officers are in charge of CSR activities:

Hiroyuki Adachi, Director and Executive Managing Officer, supervises overall CSR activities.

Noriyuki Haketa, Executive Managing Officer, is mainly in charge of CSR activities in the Human Rights/Labor Practices field described in 8 on page 18.

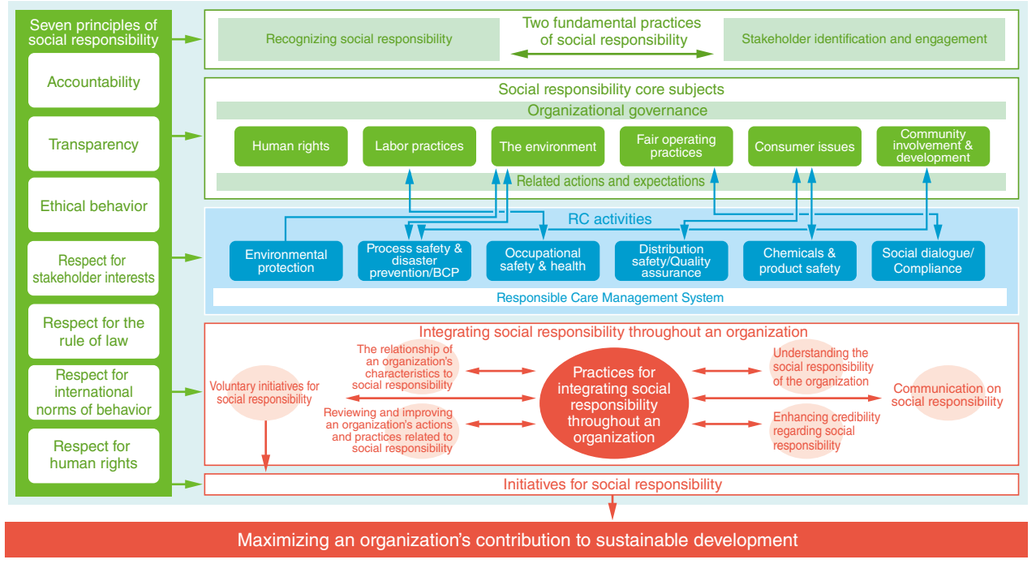
Masahito Ikeda, Executive Officer, serves as General Manager of the Corporate Social Responsibility Department and is in charge of CSR activities in fields other than the Human Rights/Labor Practices field described in 1 through 7 on page 18.

The Nippon Soda Group's CSR

The CSR activities of the Nippon Soda Group include all of the responsible care (RC) codes (activity items).

The conceptual diagram of CSR below outlines the relationship between CSR and RC, with RC promotional activity codes shown in blue. As indicated by the arrows, the core subjects (activity items) of CSR are closely interrelated with the RC codes.

The Nippon Soda Group integrates these activity items and determines the eight policies described on the next page.



Policies and Promotion System

Policies

1 Management system RC and organizational governance CSR

In order to carry out sound and transparent corporate activities in compliance with laws and regulations, we will continuously implement the PDCA cycle of goal setting, improvement and periodic reviews based on RC Codes and RC ethics.

We will conduct business activities in accordance with the seven principles of social responsibility in CSR: accountability, transparency, ethical behavior, respect for stakeholder interests, respect for the rule of law, respect for international norms of behavior, and respect for human rights.

We will also conduct CSR and RC activities in our overseas operations.

2 Environmental protection RC CSR

We will make efforts to save energy and resources, reduce and recycle waste, and reduce emissions of harmful substances, with the goal of minimizing the environmental impact of our business activities.

3 Process safety and disaster prevention RC /BCP

We will prevent major accidents at our facilities and promote safe and stable production. We will establish a business continuity plan (BCP) and drive continuous improvement.

4 Occupational safety and health RC

We will create an accident-free working environment in order to provide a healthy and happy working experience.

5 Distribution safety RC , quality assurance and consumer issues CSR

We will prevent distribution accidents by minimizing hazards, harm and risks of in-transit accidents associated with the transportation and distribution of our products. We will increase customer satisfaction.

6 Chemicals and product safety RC

We will increase the confidence and trust of customers and the general public in us by taking into account possible hazards and harm that chemicals and products may have to safety, health and the environment, and we will comply with domestic laws and regulations, international standards, treaties and the like, as well as other regulations that are publicly demanded.

7 Social dialogue RC , community involvement and development CSR, fair operating practices CSR and compliance

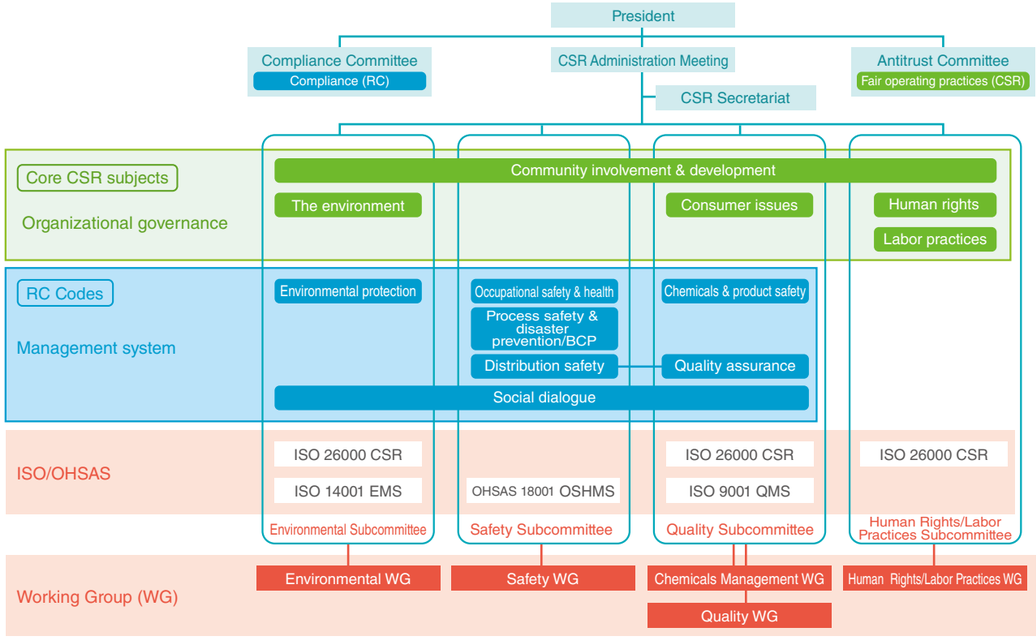
We will make efforts to improve the general public's confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements to improve transparency.

8 Human rights CSR and labor practices CSR

We will respect human rights and act in recognition of both their importance and their universality. We will act based on the understanding that socially responsible labor practices are indispensable to social justice and peace, and influence respect for the rule of law and a sense of fairness that exists in society.

Promotion System

Chaired by the President, the CSR Administration Meeting serves as a company-wide decision-making body to promote CSR activities, including RC. It sets annual targets to help the PDCA cycle "spiral up" and provides a management-level review of CSR activities. Held twice a year, the CSR Administration Meeting is attended by all directors, operating officers and worksite managers.



New Medium-Term CSR Goals

1. Management system RC and organizational governance CSR

Goal: Proper implementation

Actions: As basic requirements, “education for personnel to increase their knowledge” is provided and “review of systems for improvement” is made on a regular basis.
Completion of the integration of CSR and RC management systems
Verification and improvement of the efficiency of internal audits and the RC audit review meeting
30% reduction in total non-conformity cases

2. Environmental protection RC CSR

(1) Environmental abnormalities

Goal: Zero events

Actions: Establishment of a system to prevent environmental abnormalities from occurring

(2) Energy

1) Energy use per unit of production

Goal: Annual average improvement of 1%

Actions: With an eye to meeting the energy-saving target, focusing efforts to ensure the improvement in the per-unit energy use through the setting, implementation and evaluation of themes for improvement.

2) Energy use per unit of transport

Goal: Annual average improvement of 1%

Actions: With an eye to meeting the target for saving energy use for transport, focusing efforts to ensure the improvement of the per-unit energy use through the setting, implementation and evaluation of themes for improvement.

(3) Waste

1) Amount of final disposal at landfills

Goal: 3% reduction from the previous medium term

Actions: With an eye to meeting the reduction target, focusing efforts to ensure the improvement in the per-unit waste generation through the setting, implementation and evaluation of themes for improvement.

2) Zero emissions

Goal: Continuation of zero emissions and 0.5% improvement from the previous medium term

Actions: Continuing to achieve zero emissions at all worksites; 0.5% improvement of zero emission rate

(4) Emissions of harmful substances to the atmosphere

Goal: 5% reduction from the previous medium term

Actions: Achieving 5% reduction of emissions of harmful air pollutants by the entire company

3. Process safety and disaster prevention RC/BCP

(1) Major accidents at facilities

Goal: No accidents

Actions: Achieving zero major accidents at facilities; Reducing risks of major accidents at facilities in accordance with the BCP

(2) Maintenance and improvement of the business continuity plan (BCP)

Goal: Maintenance and improvement of the BCP using the PDCA cycle

Actions: Improving the emergency operation center and implementing regular emergency drills to ensure preparedness for Tokyo metropolitan and sequential earthquakes

4. Occupational safety and health RC

(1) Occupational accidents resulting in an absence from work or no absence

Goal: No accidents

Actions: Efforts by top management to raise safety awareness at worksites
Work environment-related: Systematic implementation of disaster risk assessment and mitigation measures;
Personnel-related: Systematic implementation of awareness-raising efforts at each worksite to prevent disasters

(2) Health promotion

Goal: 5% reduction in the total number of absentee days, excluding mental-health-related absence, and 5% reduction in the incidence of personal injury and illness, from the previous medium term

Actions: Guidance for improvement by healthcare professionals and staff in charge of health based on symptoms diagnosed by medical examination
Guidance for improvement of mental health care by healthcare professionals and staff in charge of health

5. Distribution safety RC, quality assurance and consumer issues CSR

(1) Distribution-related complaints

Goal: 30% reduction from the previous year, complete elimination by the end of the New Medium-Term Business Plan

Actions: Identifying and reducing risks of distribution-related complaints through active involvement by Head Office Logistics and RC Departments;
Identifying and reducing risks of distribution-related complaints through active involvement by worksites’ Logistics and RC Departments

(2) Product-related complaints

Goal: 30% reduction from the previous year, complete elimination by the end of the New Medium-Term Business Plan

Actions: Creating visual representations of product-related complaint management; Conducting company-wide quality risk assessments to reduce Rank A and B[1] risks by 30%

(3) Consumer issues

Goal: Sharing information on issues

Actions: Identifying products for consumers and confirming safety

1 Rank A risks require immediate action and Rank B risks require action.

6. Chemicals and product safety RC

(1) Compliance with chemical-related laws and regulations

Goal: Zero violations

Actions: Strengthening the management of chemical substances (poisonous and deleterious substances, new chemical substances, etc.) by adopting a new chemical substance control system;
Improving regular training programs on chemical substance control (poisonous and deleterious substances, new chemical substances, etc.)

7. Social dialogue RC, community involvement and development CSR, fair operating practices CSR and compliance

(1) Local gatherings and community involvement

Goal: 30% increase from the previous medium term

Actions: Increasing the number of dialogues with relevant organizations and concerned local people by 30% from the previous medium term

(2) Legal and other requirements

Goal: Zero legal violations

Actions: Preparing a list of relevant laws and regulations, checking compliance using the PDCA cycle, taking measures to prevent recurrence of deviations, and rolling out these measures to other similar cases

(3) Creation of more opportunities for stakeholder engagement

Goal: Once a year per one worksite on average

Actions: Creating more opportunities for stakeholder engagement
Incorporating results from stakeholder engagement activities to improve CSR and RC activities

8. Human rights CSR, labor practices CSR

(1) Utilization of diverse human resources

Goal: Increased ratio of female, disabled and older employees

Actions: Making effective use of diverse human resources

(2) Rewarding workplace that employees can be proud of

Goal: Understanding and improving levels of employee satisfaction with their workplace

Actions: Developing globally competent employees in preparation for overseas business expansion; training the next generation of leaders; educating employees to increase their motivation and let them take pride in their work

FY 2015 Policies and Evaluation Results

Note) Achievement rate ◎: ≥ 90% ○: 90-80% △: 80-60% ×: ≤ 60%

Item	Policies	Major goals for FY 2015	Evaluation results: Nippon Soda	Evaluation results: Nisso Group
1. Management system	In order to carry out sound and transparent corporate activities in compliance with laws and regulations, we will continuously implement the PDCA cycle of goal setting, improvement and periodic reviews based on RC Codes and RC ethics.	(1) Compliance with legal and other requirements	(1) △ 3 cases of violations Minor violations: 3 cases of excessive standard deviation of wastewater • 6/18, 7/10, 2/2 Standard deviation of wastewater at Takaoka Plant	(1) × 4 cases of violations, etc. Major violations: 3 cases of fire • 1 case of small fire at Aizu Plant of Nisso Metallochemical Co., Ltd.: 9/17 • 2 cases of small fire at Alkaline SAS: 5/5, 8/16 Minor violations: 1 case • Effluent pH deviation at Aizu Plant of Nisso Metallochemical Co., Ltd.: 6/29
2. Environmental protection	We will make efforts to save energy and resources, reduce and recycle waste, and reduce emissions of harmful substances, with the goal of minimizing the environmental impact of our business activities.	(1) No environmental abnormalities (no legal violations) (2) 1% reduction of energy use per unit of production from the previous year (≤ 0.3485 kL/t in crude oil equivalent) (3) 1% reduction of energy use per unit of transport from the previous year (FY 2014) (≤ 0.0255 kL/million yen) (4) 3% reduction of the amount of final disposal as landfill from the previous medium term (≤ 400) (5) Continuation of zero emissions and 0.5% reduction from the previous medium term (≤ 3.7%: 0.17% for a single year) (6) 5% reduction of emissions of harmful substances to the atmosphere from the previous year (≤ 11.5)	(1) ◎ Major deviation: 0 × Minor deviation: 3 • 6/18, 7/10, 2/2 Violation of the wastewater agreement at Takaoka Plant (2) × 0.349 kL/t (1.1% increase from the previous term) (3) ◎ 0.0209 kL/million yen (12% reduction from the previous year) (4) ◎ 248 t (39% reduction from the previous medium term) (5) ◎ 2.8% (26% reduction from the previous medium term) (6) × 15.4 t (32% increase from the previous medium term)	(1) ◎ Major deviation: 0 × Minor deviation: 1 • Effluent pH deviation at Aizu Plant of Nisso Metallochemical Co., Ltd.: 6/29 (2) × 0.194 kL/t (9.0 % increase from the previous term)
3. Process safety & disaster prevention/ BCP	We will prevent major accidents at our facilities and promote safe and stable production. We will establish a business continuity plan (BCP) and drive continuous improvement.	(1) Zero major accidents at facilities (2) Maintenance and improvement of the business continuity plan (BCP)	(1) ◎ Zero major accidents at facilities (2) ◎ Implementation of the 4th version of the BCP Establishment of the Head Office Disaster Response Headquarters and implementation of drills	(1) × 3 cases of fire • Small fire at Aizu Plant of Nisso Metallochemical Co., Ltd.: 9/17 • 2 cases of small fire at Alkaline SAS: 5/5, 8/16 (2) ◎ CSR adopted by 8 companies in April 2014
4. Occupational safety & health	We will create an accident-free working environment in order to provide a healthy and happy working experience.	(1) Achievement of zero accidents (absence from work/no absence) (2) 5% reduction in the total number of absentee days and the incidence of personal injury and illness from the previous medium term (excluding mental-health-related absences) (≤ 1333 total absentee days, ≤ 31 incidents of personal injury or illness)	(1) ◎ Employees: Zero cases involving absence from work × Employees: 6 cases involving no absence × Affiliate company employees: 1 case involving absence from work ◎ Affiliate company employees: Zero cases involving no absence • Safety patrol conducted at 6 worksites (2) ◎ Total number of days of absence (excluding mental-health-related absence) 534 days, 21 incidents	(1) ◎ Employees: Zero cases involving absence from work × Employees: 3 cases involving no absence × Affiliate company employees: 1 case involving absence from work × Affiliate company employees: 7 cases involving no absence (8 group companies) (2) × Number of incidents of personal injury or illness 21 cases in FY 2014→23 cases in FY 2015 Total number of days of absence (including mental-health-related absence) 1,025 days in FY 2014→1,289 days in FY 2015 (8 Group companies)
5. Distribution safety/Quality assurance	We will prevent distribution accidents by minimizing hazards, harm and risks of in-transit accidents associated with the transportation and distribution of our products. We will increase customer satisfaction.	(1) 30% reduction in distribution-related complaints from the previous year (≤ 3 complaints) (2) 30% reduction in product-related complaints from the previous year (≤ 9 complaints) (3) Consumer issues, sharing information on issues	(1) ○ 3 cases (2) × 18 cases (3) ◎ Confirmation of the appropriateness of food additive labeling for chlorine agents	(1) ○ 5 cases in total (target: ≤ 8 cases) (2) ○ 13 cases in total (target: ≤ 16 cases)
6. Chemicals & product safety	We will increase the confidence and trust of customers and the general public in us by taking into account possible hazards and harm that chemicals and products may have to safety, health and the environment, and we will comply with domestic laws and regulations, international standards, treaties and the like, as well as other regulations that are publicly demanded.	(1) Zero violations of chemical-related laws and regulations (i) Strengthening the management of chemical substances (poisonous and deleterious substances, new chemicals, etc.) by adopting a new chemical substance control system (ii) Improving regular training programs on chemical substance control (poisonous and deleterious substances, new chemical substances, etc.)	(1) ◎ Zero violations (i) ◎ Implementation started in October 2014 (ii) ◎ Head Office: Training sessions for new/transferred employees held twice, training sessions on MSDS/label preparation and hazardous materials transportation held twice, training sessions on Korean regulations held twice, training sessions at plants held at 20 departments, training sessions at research centers held twice	(1) ◎ Zero violations
7. Social dialogue/ Compliance	We will make efforts to improve the general public’s confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements to improve transparency.	(1) 30% increase in local gatherings and other meetings from the previous medium term (≥ 23 times/year) (2) Creation of more opportunities for stakeholder engagement (once/year/office (≥ 6 times))	(1) ◎ Achieved. 44 local gatherings (2) ◎ Achieved • Verification of the CSR report by JCIA[1] Head Office: 6/10, 17 Chiba Plant: 6/11 • Opinions on the CSR report by Development Bank of Japan (DBJ) • Diagnosis of disaster prevention capability by Sompo J[2]: 4 times • Diagnosis of occupational accidents by Sompo J: Once	(1) ◎ Achieved 56 cases in FY 2015 (13.7 cases/year for the previous medium term) (2) ◎ Achieved • CSR auditing by Nisso Nisso Fine Co., Ltd. (Isohara Dai-ichi, Iwaki: 7/23, 24; Koriyama: 8/28) Nisso Metallochemical Co., Ltd. Chiba: 9/25 • Renewal and surveillance audits of QMS and EMS by JCQA • Diagnosis of disaster prevention capability by Sompo J at 4 worksites
8. Human rights/ Labor practices	We will respect human rights and act in recognition of both their importance and their universality. We will act based on the understanding that socially responsible labor practices are indispensable to social justice and peace, and influence respect for the rule of law and a sense of fairness that exists in society.	(1) Workforce diversity (i) Increased ratio of female, disabled, older and foreign national employees (a) Identification of issues associated with the increased employment ratio (b) Planning, development and implementation of measures for the above effort (2) Rewarding workplace that employees can be proud of (i) Understanding and improvement of employees’ satisfaction levels with their workplace (a) Organization of issues and measures identified in the ES survey results (b) Implementation of measures	(1) (i) ○ • Reemployment System revised • Employment of persons with disabilities (Employment rate of disabled persons: 2.06%) • Identification of issues that need to be addressed to increase the ratio of female employees, interview surveys conducted at each office (2) ○ • Issues common to all offices sorted out • Measures to strengthen the organization implemented throughout the company	(1) ○ Reviewed and implemented while implementing CSR activities at each group company

For measures taken to address violations of laws and regulations, please see page 84.
For measures taken in response to fire accidents, please see pages 23 and 24.

1 JCIA: Japan Chemical Industry Association
2 Sompo J: Sompo Japan Nipponkoa Risk Management

This section outlines some of the efforts routinely made by the Nippon Soda Group to “spiral up” its CSR activities and make progress.

I. Audits and reviews

Audits and reviews carried out at the Nippon Soda Group for fiscal 2015 (number of times)

Offices	Received		Conducted	
	External	Internal	External	Internal
Head Office	3	2	31	37
Nihongi Plant	29	3	3	24
Takaoka Plant	8	4	10	1
Mizushima Plant	20	22	1	0
Chiba Plant	5	11	1	0
Odawara Research Center	1	0	1	6
Chiba Research Center	1	1	2	2
Domestic manufacturing group companies (3)	39	18	8	16
Total	106	61	57	86

II. Safety audits/reviews prior to trial operation

Nihongi Plant, Nippon Soda

On April 11, 2014, a safety audit/review prior to trial operation of the medium-scale HPC facility under test being constructed at Nihongi Plant and a safety audit at the Head Office were simultaneously conducted.

1. **Date of audit/review:**
   13:10–16:00, Friday, April 11, 2014
2. **Place:** Large Meeting Room, Nihongi Plant
3. **Audit result:**
   Forty safety issues were identified and improvement was confirmed. On May 19, 2014, an operation permit was issued.

Isohara Plant and Koriyama Plant, Nisso Fine Co., Ltd.

A safety review prior to trial operation for agrochemical intermediates was conducted at Isohara Plant on June 18, 2014 and at Koriyama Plant on June 19, 2014. Relevant Nippon Soda staff participated as observers.

(1) Safety review prior to trial operation at Isohara Plant

1. **Date:** 10:30–17:00, Wednesday, June 18, 2014
2. **Place:** Large Meeting Room No. 1, Isohara Plant

(2) Safety review prior to trial operation at Koriyama Plant

1. **Date:** 10:00–16:00, Thursday, June 19, 2014
2. **Place:** Meeting Room on the 4th floor, Koriyama Plant

Chiba Plant, Nippon Soda

On July 31, 2014, a safety review prior to trial operation of the drainage facility at Chiba Plant was conducted. Four observers from the Head Office participated.

1. **Date:** 09:00–11:40, Thursday, July 31, 2014
2. **Place:** Meeting Room No. 1, Chiba Plant Office
3. **Review result:**
   Twelve cases of issues that needed to be confirmed and safety issues were identified.

Takaoka Plant, Nippon Soda

On October 21, 2014, a safety audit/review prior to trial operation of the hydrochloric acid combustion chamber and absorption chamber, which were being renovated, was conducted. This renovation was made to partially change the composition of the facilities, which had been used since 1959.

1. **Date:** 13:30–16:00, Tuesday, October 21, 2014
   (On-site inspection 15:00–15:40)
2. **Place:** Meeting Room No. 5, Takaoka Plant
3. **Review result:**
   Four safety issues were identified and improvement was confirmed. On November 21, 2014, an operation permit was issued.

III. Safety reviews prior to regular maintenance

Nisso Namhae Agro Co., Ltd.

On April 23, 2014, a safety review prior to regular maintenance was conducted at Nisso Namhae Agro Co., Ltd.

1. **Date:** 09:00–16:00, Wednesday, April 23, 2014
2. **Review results:**
1) Detection: A failure in changing the standards after changing tasks, flaws in records and other documents (5 cases), non-performance of a safety evaluation at an affiliate company, a failure in providing education to the operation manager, flaws in checklists, a failure in providing training on evacuation routes (2 cases, scheduled to be conducted twice a year)
2) Warning: Inconsistencies in flash points and ignition points between the SDS and the standards, flaws in gas detection activities, head-space at worksites where sulfur is handled, work operations without any standards, errors in the ranking of control facilities, errors in the standards for non-destructive inspection
3) Facilities: Clarification of the no-entry area in places where a filling robot is operated, repair of broken lights in explosion-proof areas
4) Actions taken: Corrective measures were implemented and confirmed.

IV. Periodic CSR audits

Iwaki Manufacturing Department and Isohara Plant No. 1, Nisso Fine Co., Ltd.

On July 23 and 24, 2014, a CSR audit was conducted at Iwaki Manufacturing Department and Isohara Plant No. 1.

1. **Dates and sites:**
   13:00–16:30, Wednesday, July 23, 2014
   at Iwaki Manufacturing Department
   08:40–15:30, Thursday, July 24, 2014
   at Isohara Plant No. 1
2. **Results:**
   Seventeen corrective action reports were issued, including 10 at Iwaki Manufacturing Department, four at Isohara Plant No. 1, and three for both. Seven safety issues were identified at worksites.

Chiba Plant, Nisso Metallochemical Co., Ltd.

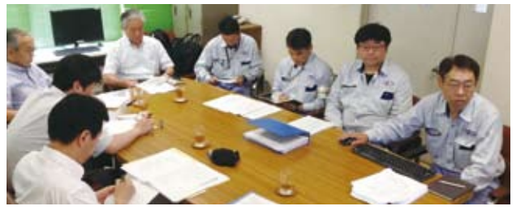
On September 25, 2014, an ordinary CSR audit was performed at Chiba Plant of Nisso Metallochemical Co., Ltd.

1. **Date:** 09:00–16:30, Thursday, September 25, 2014
2. **Audited office:**
   Chiba Plant of Nisso Metallochemical Co., Ltd.
3. **Result:**
   Thirteen requests for corrective actions were issued.

V. Special CSR audits

Chiba Plant, Nisso Metallochemical Co., Ltd.

On July 25, 2014, a special CSR audit was performed at Chiba Plant of Nisso Metallochemical Co., Ltd.



1. **Date and site:**
   09:00–12:00, Friday, July 25, 2014
   at Chiba Plant of Nisso Metallochemical Co., Ltd.
2. **Outline of the audit:**

1) An explanation of actions taken after the leakage of fuming sulfuric acid on July 5, 2014 at Chiba Plant of Nisso Metallochemical Co., Ltd. and measures to prevent recurrence were provided in an office setting, followed by on-site inspection. As a result, two requests for corrective actions to improve the RC management system were issued.
2) 1. Potential hazards they handle are sulfur trioxide and fuming sulfuric acid. The public fire department was called in twice in six months.
   2. Safety and environmental performance is insufficient.

(1) Prevent any abnormalities from occurring.
→Improvement of all the standards for cleaning
(2) Be prepared for any abnormalities.
→Improvement of the equipment for removing hazardous materials

Overseas group company Alkaline SAS

A safety audit and a general safety environment assessment were conducted on August 5 to 7, 2014 after the accidental fire of May 5, 2014. The following are summarized results:

1. **Date:** August 5 (Tue.) to 7 (Thu.), 2014
2. **Results:**
   In the safety audit, their measures to prevent accidents from recurring were confirmed. Some requests for corrective actions were issued to make the plant safer, which were agreed and signed off by the auditee and the auditor.
   In the general safety environment assessment, items listed in the check sheet were confirmed. The assessment result was confirmed and discussed with the Chemicals Business Division and other relevant divisions, and reported to Alkaline SAS.
   Causes and preventive measures were organized and reported to all Nippon Soda Group companies in Japan so that preventive measures can be rolled out where similar circumstances occur.

Aizu Plant, Nisso Metallochemical Co., Ltd.

A fire broke out at the J Pool at around 13:09 on September 17 (Wed.), 2014. To confirm their measures to prevent recurrence, a special CSR audit was conducted on September 30.

1. **Date:** 11:00–16:00, Thursday, September 30, 2014
2. **Site:** Aizu Plant, Nisso Metallochemical Co., Ltd.
3. **Results:**
   One request for a corrective action was issued. Its details are as follows: On May 30, 2013, a similar fire broke out at the J Pool (the public fire department was not called in) and, in response to this accident, the work standards were modified as of November 26, 2013 in such a way that all disposed products that are required to be shredded with an agricultural chemical shredder must be inspected. However, a fire broke out at the J Pool (a receiving pit) on September 17, 2014, which revealed that the inspection had not been performed perfectly.
   Why did the plant and its employees fail to comply with the work standards, which were revised a year before? We took into account the organizational climate in identifying the cause and, to help improve the situation, established a climate and a system that encourage and require employees to comply with decisions that have been made.

Overseas group company EnviroCat

At EnviroCat Atlantique, an affiliated company of Alkaline SAS, some 2 kilograms of metallic sodium leaked from a flexible pipe that delivers the ingredient from its storage tank to the methylate plant while preparing for starting production of methylate. The leaked metallic sodium spontaneously ignited. It was at 6:00 in the morning on August 16 (Sat.), 2014, the day after holidays.

Staff used fire extinguishers to control the fire as instructed in the manual. When 30 public firefighters arrived at the site, the fire had already been put out. There were no human casualties. The damage to facilities was minor and, at 2:00 am on the 17th (Sun.), the operation was resumed. We conducted a safety audit to review what actions were taken after the fire.

1. **Date:** Thursday, February 19, 2015
2. **Place:** Meeting Room at EnviroCat SAS, La Roche, France
3. **Result:**
   We had sent five requests for corrective actions following a document review but prior to the safety audit. In the audit, we confirmed that four of the requested actions had been completed and were informed that the result of the remaining case would be reported later.

IV. Follow-up CSR audit

Overseas group company Alkaline SAS

A safety audit was conducted at Alkaline SAS in France on August 5 to 7, 2014 to review the fire caused by Li-cells on May 5, 2014. In the audit, 15 requests for corrective actions were issued, based on which Alkaline implemented improvement measures. On February 17 and 18, 2015, we conducted a follow-up safety audit to check the progress of these measures.

1. **Date:** 10:00 on February 17 (Tue.) to 15:00 on February 18 (Wed.), 2015
2. **Place:** Meeting Room at Lithium Plant, Alkaline SAS, Pombliere, France
3. **Result:**
   In the safety audit conducted on August 5 to 7, 2014, 15 requests for corrective actions were issued. In this follow-up audit, it was confirmed that nine of the requested actions had been completed. As for the remaining six, we could not confirm completion but, instead, confirmed the schedule for improvement measures. It was decided that Alkaline SAS would report the progress of these measures to Nippon Soda either at a meeting of the Steering Committee or a technical meeting.

Organizational Governance and Management System

The Nippon Soda Group has an established management and organizational governance system to effectively promote CSR and RC activities.

Basic concept of corporate governance and the current system

The Nippon Soda Group recognizes that well-established corporate governance practices are important in order to implement basic business principles that ensure sound and transparent business management in compliance with laws and regulations as well as in order to address sudden changes in the management environment promptly and appropriately.

(1) Outline of the corporate governance system

Nippon Soda has a Board of Auditors. Our corporate governance system is comprised of our Board of Directors consisting of six directors and two outside directors plus our Board of Auditors, which consists of four auditors including three outside auditors.

Decisions on business management and the supervision of business execution are discussed intensively at the Board of Directors Meeting, generally held once a month, with the aim of promoting flexible and efficient management. To ensure a prompt response to any change in conditions and clarify management responsibilities the tenure of directors is one year.

The position of executive officer has been introduced to improve decision-making on and supervision of business management and to enhance business execution performance. In adopting this system, we revised our rules to decrease the maximum number of directors from 15 to 10.

The number of executive officers is 19, including six who concurrently hold the position of director. A Management Council meeting attended by those concurrently holding these two positions and by auditors is generally held once a week to discuss important issues involving business execution that need to be addressed quickly. In addition, an executive officer meeting attended by all executive officers is held once a month to share information on the current state of business execution performance and other issues.

(2) Reasons for adopting the system

As set out in our management philosophy, Nippon Soda seeks to contribute to social development through "chemistry," to meet the expectations of stakeholders, including shareholders, customers, business partners, employees and affiliated companies, and to promote environmentally conscious business practices and activities. We believe that the executive officer system consisting of a management team who are highly familiar with the firm's business activities and a total of five independent outside directors and auditors is the most suitable system for achieving these goals.

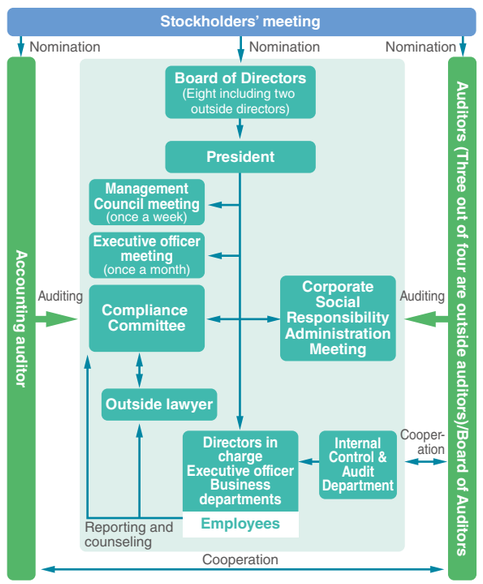
(3) Development of the CSR promotion system

Engaging in CSR (corporate social responsibility) activities allows us to continue our business activities while building the trust and confidence of the general public. We have established the Corporate Social Responsibility Administration Meeting chaired by the President in order to promote business activities that take into account environmental protection, occupational safety, product safety and human rights, as well as to implement risk management according to corporate rules, such as environmental management rules and security management rules, in order to prevent accidents.

Should a serious accident occur, our accident response headquarters is established according to corporate rules, such as our security management rules, to enable a cross-sectional and systematic response.

In the event of a natural disaster such as a large earthquake or some other crisis with potentially disastrous consequences, we will respond appropriately in accordance with our business continuity plan (BCP).

Corporate governance system and Corporate Social Responsibility Administration Meeting



CSR Management System

The management system that promotes the CSR activities of the Nippon Soda Group is designed to "spiral up" the PDCA cycle[1].

Each worksite is required to develop a CSR improvement plan (Plan), implement the developed plan (Do), make quantitative evaluations of both the plan and its implementation (Check), and implement measures based on quantitative evaluation results (Act) in order to ensure continuous improvement.

Plan

❶ Policy:
CSR-related policies consist of seven core subjects and RC-related policies consist of seven RC Codes. Activity items corresponding to the core subjects and RC Codes are integrated to determine eight policies, which are reviewed every year. (Refer to page 18.)

❷ Risk assessment and issue identification:
In RC activities, risk assessment is conducted: Risks for each of six RC Codes (excluding management system) are identified and reduced to the permissible level. In CSR activities, issues for each of the core subjects are identified and addressed. The identification and improvement activities are implemented every year in accordance with the PDCA cycle.

❸ Legal and other requirements:
The basic principles of CSR and RC are "to do what is ethically right." Recognizing that the law is the lowest ethical standard, we proactively comply with laws and other requirements but aim for a higher voluntary standard. Related activities are implemented every year in accordance with the PDCA cycle.

❹ Target:
Based on issues identified in the "risk assessment and issue identification" stage and on "legal and other requirements" for which improvement is needed, targets are determined in accordance with the policy. Target setting is performed every year in accordance with the PDCA cycle.

❺ Plan:
Specific plans to achieve determined goals are developed by each business site, department and unit every year in accordance with the PDCA cycle.

Do

❶ System development:
The CSR/RC promotion system as shown on page 18 is in operation. Working Group meetings are held monthly and Promotion Subcommittee meetings and Administration meetings are held twice a year.

❷ Education/training:
Both CSR and RC activities are performed by employees and other involved parties. Each business site provides the relevant individuals with education and training on a regular basis in order to not only ensure compliance with laws and other requirements but to also achieve goals and to prevent latent risks at worksites from developing into occupational accidents, environmental abnormalities and/or quality problems.

❸ Communication and stakeholder engagement:
Details of activities are published in the CSR and other reports. We seek third-party opinions on our CSR and RC activities, which are then incorporated into the activities.

❹ Documentation and document management:
The Head Office and each business site document specific standards and procedures for CSR and RC activities and manage these documents.

❺ Operational management:
Standards necessary to implement CSR and RC plans appropriately are established.

❻ Emergency response:
An emergency response system and procedures are predetermined for earthquakes and other natural disasters, fires, explosions, accidents and occupational accidents. Emergency drills are conducted regularly. A business continuity plan (BCP) is developed and reviewed every year.

Check

❶ Review by management:
Management reviews the entirety of CSR and RC activities twice a year.

Act

❶ Inspection/monitoring:
There are procedures for constantly inspecting and monitoring the actual performance of RC activities, such as the progress of the plan, target achievement levels, the progress of daily activities and the status regarding accidents, disasters and failures.

❷ Corrective and preventive measures:
In the event that an occupational accident, accident, environmental abnormality, quality problem, or other instance of non-compliance or deviation occurs, or is likely to occur, the cause is identified and necessary measures taken. Measures to prevent recurrence are also taken and these measures are rolled out to other similar cases.

❸ Information collection and record management:
Information on risks, legal and other requirements, and instances of non-compliance and deviation that affect the Nippon Soda Group is collected. Records relevant to maintaining safety are managed appropriately.

❹ Audits:
The implementation of CSR and RC activities is periodically audited.

Plan-Do-Check-Act cycle

1 The PDCA (plan–do–check–act) cycle is a management method used to facilitate management activities, such as RC activities, production control and quality control, in business activities such as manufacturing. It was advocated by Walter A. Shewhart and W. Edwards Deming after World War II.

Human Rights/Labor Practices

Objective of activities

The Nippon Soda Group focuses on creating a work environment where human rights are respected and all employees can find their work meaningful.

Noriyuki Haketa
General Affairs & Personnel Department

Basic concept

Nippon Soda respects individual human rights, recognizes the importance and universality of individual human rights, understands and appreciates diversity among cultures, customs and values, and prohibits the practice of any discriminatory activities.

Nippon Soda respects the unique characteristics of individual employees and consistently takes proactive measures to maintain and improve working conditions by developing and reviewing personnel and employment systems to ensure a work environment where employees can feel comfortable and fulfilled.

Summary of efforts in fiscal 2015

The priority goals in fiscal 2015 were “promotion of diversity” and “improvement in employee satisfaction with the workplace.”

Emphasis was placed on the recruitment of women, older workers and disabled persons. We improved the internal environment and systems in such a way that diverse groups of employees can make dedicated contributions.

An employee satisfaction (ES) survey was conducted for the first time in fiscal 2014 to help us understand actual worksite situations. In fiscal 2015, we implemented solutions to issues identified in the first ES survey to improve employee satisfaction.

Respect for human rights

Nippon Soda’s management philosophy describes our desire to contribute to social development through “chemistry” and, in doing so, to comply with laws and regulations while promoting sound and transparent business practices. As a matter of course, we place the utmost emphasis on respecting and advocating human rights. The Code of Conduct for The Nisso Group contains a statement on our commitment to stand up for human rights and prohibit discrimination, declaring our respect for the uniqueness and individuality of each employee as well as our pledge to provide a range of personnel and employment systems to suit different employees and to offer working conditions that give rise to comfortable and fulfilling workplaces.

Measures against harassment

Nippon Soda’s employment regulations prohibit any kind of harassment, including sexual harassment and workplace bullying. All employees are required to be fully informed of the company’s policy against harassment. We also provide rank-based training in order to ensure the prevention of harassment at the workplace.

We also have developed a system under which a harassment complaint office is established at each business site, usually by the personnel department. All cases of harassment reported are addressed confidentially, with the human rights of all involved duly taken into consideration.

Implementation of an employee satisfaction (ES) survey

We introduced an employee satisfaction (ES) survey in fiscal 2014 (for all employees including seconded staff) in order to create rewarding workplaces that all Nippon Soda employees can be proud of.

The objective of the survey is to help us understand how employees feel about working for the company and the specific conditions of their workplaces, and to identify issues that need to be addressed in order to create environments where they can work happily and productively. Identified issues are addressed by implementing appropriate measures so as to increase our employees’ job satisfaction.

The first ES survey was conducted in fiscal 2014 and, in fiscal 2015, actions were taken based on the findings.

Rather than being satisfied with merely having conducted the survey, we analyzed the results to identify the tendency and actual situation of the entire company and each office. Furthermore, from the perspective of thinking about issues that must be addressed in order to improve employee satisfaction with the workplace, we identified such issues and implemented company-wide efforts to address them throughout the year.

We will assess the progress and results of efforts and then conduct another ES survey to assess employees’ awareness of their work environment. This cycle will be continued to create a workplace where employees are motivated and exhibit positive attitudes towards their jobs.

Personnel system and human development

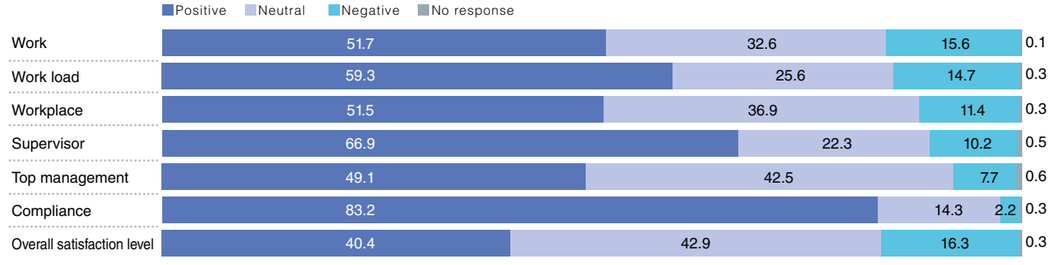
Nippon Soda’s personnel system is more than a mere management tool. Rather, through the linkage and association of different systems it is designed to help employees achieve professional development while at the same time properly rewarding them for their achievements so as to promote greater job satisfaction.

In fiscal 2012, we carried out a large-scale reform of the personnel system under the basic principle of “improving transparency to promote greater understanding.” The reform covered a wide range of issues, such as job categories and grades, salaries, bonuses, promotion, appraisal and benefit packages.

One of the important missions of any company is to help promote the personal development of its employees. All the subsystems that make up the personnel system as a whole should therefore be designed with this goal in mind. While providing equal opportunities for all employees to receive in-house training, we work to establish a system that fully supports those who are willing to learn and grow.

In addition to on-the-job training, our educational and training programs include rank-based training, manager training, early- and intermediate-phase practical training, and specialized training by job function. We also provide training for self-development, including programs to improve language proficiency and acquire qualifications, as well as many other various kinds of training programs.

Results by category of the first employee satisfaction survey



Conducted in September 2013
Surveyed employees 1,531 employees Respondents 1,451 employees Response rate 94.8% (Employees of Nippon Soda)

Human Rights/Labor Practices

On-site reports

Topics

Different ways of working

Shigeru Ozawa
Purchasing Section
Purchasing & Logistics Department

I am in charge of purchasing "construction and mechanical devices" at the Purchasing Section at the Head Office. Before assuming this position, I was involved in the construction of plants at the Nippon Soda Group. Having experienced both failure and success over the course of my career, I reached the age of retirement last year. This was a turning point in my life, at which time some people gave me considerate advice and others talked about the loneliness of gradually losing touch with other people and society at large. I decided to accept an offer of reemployment and, since then, have been engaged in the challenging and intense business of negotiating prices with dealers and manufacturers while at the same time keeping a close eye on the development of broader social issues.

Nami Fujita
Research Department III
Chiba Office
Nisso Chemical Analysis Service Co., Ltd.

I took childcare leave in both 2007 and 2010. I was anxious about my children going off to preschool but, because the childcare leave system allowed me to extend my childcare leave for up to additional six months, I was able to complete all the necessary preparations. I am grateful for the support of my supervisor and colleagues, for example, when my child got sick. It is sometimes too much for me both physically and time-wise to balance work and childcare but I will do my best by switching "on" and "off."

We place a particular emphasis on providing employees with mental health education, which has recently become increasingly important. We offer programs to help employees understand the importance of maintaining and managing their physical and mental health as a member of society, and teach them how. There are also programs for managers to acquire the knowledge and skills needed to provide their subordinates with mental health care.

Achievement of diversity

In recruiting our employees, we provide opportunities to as diverse a range of candidates as possible, that is, we do not discriminate on the basis of nationality, gender or belief. Furthermore, many positions have no prerequisite academic qualifications and we accept mid-career hires from outside the company throughout the year.

We are also ready to employ both older workers and people with disabilities, upon whom other companies have tended to place restrictions.

Improvement of work-life balance

Productive work is predicated on a healthy state of both mind and body. Nippon Soda has long focused efforts on reducing normal working hours and increasing the number of holidays.

Although the volume of work increases every year, overtime and leaves of absence are carefully monitored to prevent employees from working overly long hours and ensure that they take sufficient breaks.

Total annual working hours per employee (fiscal 2014) (Nippon Soda)

Normal working hours (hours)	Early start and overtime hours (hours)	Holiday overtime hours (hours)
1,830.8	124.2	7.7

Paid annual leave days taken (days)	Various kinds of leave days taken (days)	Total annual working hours per person (hours)
15.0	2.1	1,748.0

People perform better when they are able to strike a good balance between work and family duties. Child rearing and elderly care are two major challenges faced by many working people. For those who need it, we provide support and aid to enable them to fulfill their family responsibilities with ease.

We also encourage employees to take child/family care leave.

Change in the number of employees who took child/family care leave (Employees of Nippon Soda)

FY	Those who took child care leave (person) The numbers in the brackets are for male employees	Those who took family care leave (person)
2011	6 (0)	2
2012	2 (0)	1
2013	6 (0)	0
2014	7 (1)	0
2015	6 (0)	0

Labor-management relations and improvement of working conditions

Basic working conditions are determined by labor agreements concluded between the company and the labor union and renewed every year. To maintain cooperative labor-management relations, we hold labor-management council meetings and, in addition, create opportunities for constructive opinion exchange on various day-to-day issues under the motto of "dialogue rather than negotiation." Through these efforts, we improve working conditions in a rational way.

Labor union members (Nippon Soda)

FY	The number of labor union members (people)	Average age (years)	Average length of service (years)
2011	868	42.2	21.6
2012	848	42.0	21.3
2013	856	41.6	20.7
2014	850	40.9	19.9
2015	845	40.6	19.3

Measures to maintain health

While health conditions largely depend on individual lifestyle, Nippon Soda is actively involved in maintaining and promoting the health of its employees.

Each office implements its own efforts. One of such efforts is the "*Kenko-ryoku Up Dai-sakusen*" (Health Promotion Campaign). In this campaign, all employees set their own health improvement targets for two months and report their achievements. Their targets range widely from "quitting smoking" to "losing 2 kg" and "walking 10,000 steps a day." Apart from the intrinsic satisfaction of achieving their targets, many employees also enjoy the challenge of the campaign partly because they receive prizes according to their achievement level.

Voice

To create a work environment where every employee can work happily and productively

Takatoshi Shinbo
Personnel Group
General Affairs & Personnel Department

Four years have already passed since we carried out a large-scale reform of the personnel system. Since then we have been reviewing the system on an ongoing basis. In this fiscal year, we partially modified some systems, including the reemployment and wage systems, to make the current personnel system fairer and more acceptable to all employees.

We will continue to introduce new systems and implement new efforts to let a burst of fresh air into the company and promote the creation of a workplace environment where employees are ready to take on challenging tasks and are positively engaged in their duties.

Environmental Protection

Objective of activities

With the goal of minimizing the impact of our business activities on the environment, the Nippon Soda Group is engaged in environmental protection with a focus on saving energy and resources, reducing and recycling waste, and reducing emissions of harmful substances.

Shinichi Sato
Environment & Quality Management Group
Corporate Social Responsibility Department

Basic concept

It is our responsibility to protect the global environment and contribute to the sustainable development of society. The Nippon Soda Group will continue its efforts not only in preventing environmental pollution and complying with laws and regulations but also in reducing environmental impacts associated with its business activities (prevention of global warming, reduction in waste generation and waste to landfill) and developing products and processes with less environmental impact.

Summary of efforts in fiscal 2015

In fiscal 2015, efforts were made to achieve a 1% improvement in energy consumption (plants, etc. and transportation) per unit, a 3% reduction in the amount of final disposal of waste going to landfill from the previous medium term, and a 5% reduction in emissions of harmful substances to the atmosphere from the previous medium term.

Acquisition of high “environmental ratings” from DBJ

DBJ 環境格付 2011

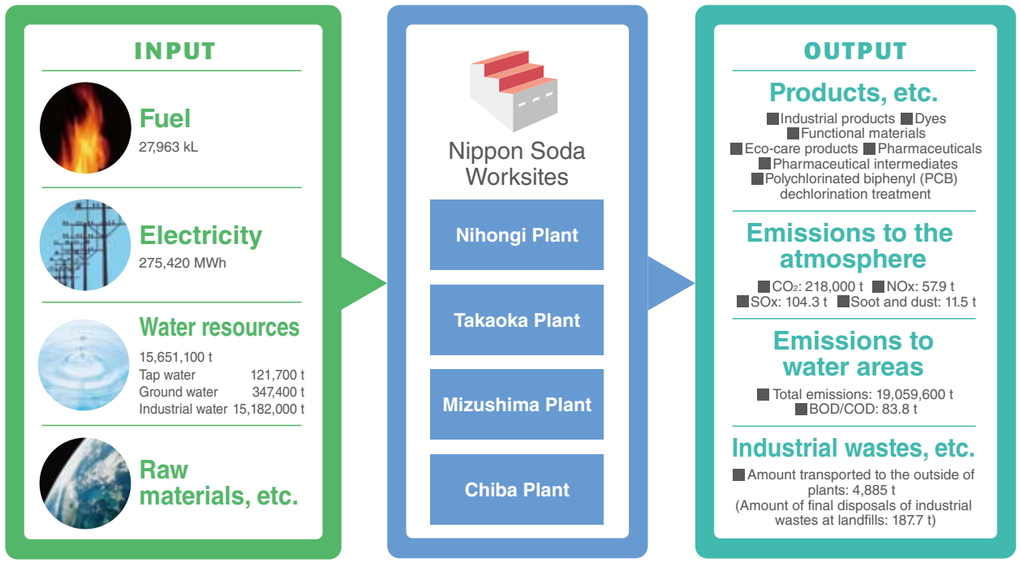
In April 2011, Nippon Soda received a loan from the Development Bank of Japan as a result of receiving high marks under the bank’s DBJ Environmental Ratings for our “particularly cutting-edge, environmentally conscious efforts.”

DBJ 環境格付 2014

In March 2015, Nippon Soda received a loan from the Development Bank of Japan as a result of receiving high marks under the bank’s DBJ Environmental Ratings for our “particularly cutting-edge, environmentally conscious efforts.”

Major environmental impacts

The environment impacts of Nippon Soda’s four major plants in fiscal 2015 are shown in the figure below.



Environmental Management Systems (EMS)

Nippon Soda has introduced an environmental management system at all plants and one research center.

Energy saving

Reduction of energy consumption and carbon dioxide emissions

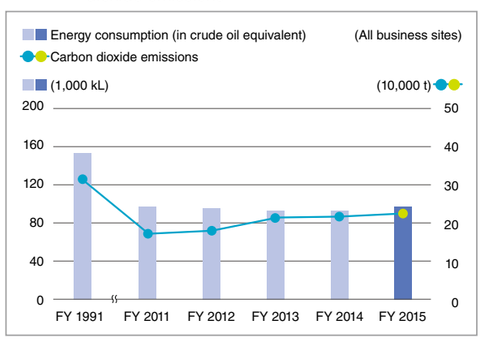
Nippon Soda promotes efforts to reduce greenhouse gases. The efficiency of our soda electrolysis technology in particular is ranked among the highest in the world. Furthermore, we place the utmost emphasis on reducing our energy consumption, saving resources and recycling.

Figure 1 shows the change in Nippon Soda’s energy consumption and carbon dioxide emissions.

During the period from 1990, the base year of the Kyoto Protocol, to last year, Nippon Soda not only improved the energy efficiency of its energy-intensive products (typically represented by electrolysis products), but also added higher functionality and more value to its products. As a result, energy consumption in terms of crude oil equivalent was reduced by 36.7% and carbon dioxide emissions were cut by 30.1% from 1990 levels.

In comparison with the previous year, energy consumption in crude oil equivalent increased by 4.4% and carbon dioxide emissions also increased by 0.5%. The main cause was increased production.

[Figure 1] Changes in energy consumption and carbon dioxide emissions

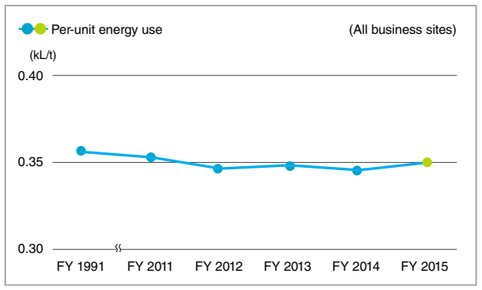


Environmental Protection

Improvement of the energy use per unit of production

In order to accurately assess the amount of energy saved in the manufacturing process, Nippon Soda uses a measurement called the "per-unit energy use," which is the energy required to produce one ton of products. Figure 2 shows changes in the per-unit energy use.

[Figure 2] The energy use per unit of production



Promotion of energy saving by the Logistics Department

Nippon Soda has been making efforts to improve efficiency and reduce environmental impacts in terms of logistics through modal shifts, reducing the number of trips by using larger-sized shipping containers and adjusting logistics distribution routes.

We were certified in 2013 as an "Eco Rail Mark" company for our modal shift efforts.

Waste reduction

Nippon Soda has been making efforts to reduce industrial waste.

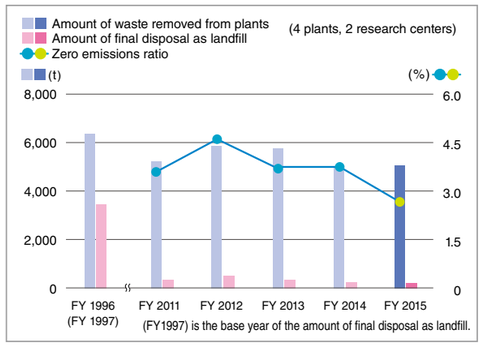
Reduction of the amount of final disposal as landfill

As one of its efforts to help build a recycling-based society, the Nippon Soda Group reduces industrial waste emissions themselves and, at the same time, promotes the recycling of waste items and implements other measures to reduce the amount of final disposal of waste going to landfill. Changes in the amount of transported industrial waste and the amount of final disposal as landfill are shown in Figure 3. In fiscal 2015, in comparison with the base year (fiscal 1996 for the amount of transported industrial waste and fiscal 1997 for the amount of final disposal as landfill), the amount of transported waste decreased by 21.0% and the amount going to landfill decreased by 94.6%.

Zero emissions

Nippon Soda promotes "zero emissions," defined as the state wherein the amount of waste disposed finally as landfill is 5% or less of the total amount of transported waste.

[Figure 3] Changes in the amount of transported industrial waste and the amount of final disposal as landfill



The amount of waste removed from plants does not include the surplus sludge at Takaoka Plant (which is treated with microbial autolysis at an external facility).
Base year of the amount of fi nal disposal as landfi ll: 1996

The change in the zero emissions ratio, or the ratio of the amount of final disposal as landfill to the amount of transported waste, is shown in Figure 3.

Nippon Soda has achieved the zero emissions goal.

PCB waste

PCBs (polychlorinated biphenyls) contained in condensers and transformers are required to be properly stored and detoxified in accordance with the Act on Special Measures concerning Promotion of Proper Treatment of PCB Waste, which was revised in 2012.

Each Nippon Soda site properly stores and manages condensers, transformers, high-pressure mercury lamps and other devices that contain PCBs as prescribed under the aforementioned Act.

Condensers, transformers and other devices containing high levels of PCBs are registered with the Japan Environmental Storage & Safety Corporation (JESCO) for treatment. Devices containing a small amount of PCBs are properly treated at a detoxication treatment plant certified under the Waste Disposal and Public Cleansing Act.

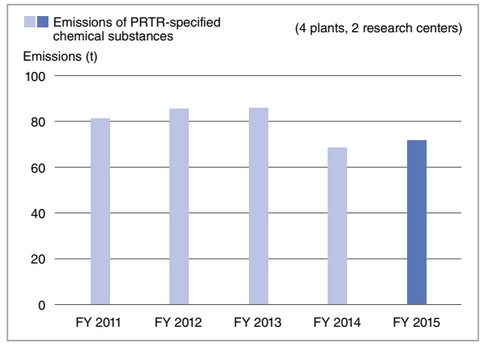
Atmosphere and water area protection

The Nippon Soda Group promotes efforts to protect the atmosphere and water quality.

Actions to conform to the PRTR Law

Nippon Soda takes measures to reduce emissions to the environment of Class 1 chemical substances specified by the Pollutant Release and Transfer Register (PRTR) Law, which was implemented in 2000 and revised in 2008. Changes in the emissions of Class 1 chemical substances specified by the PRTR Law are shown in Figure 4.

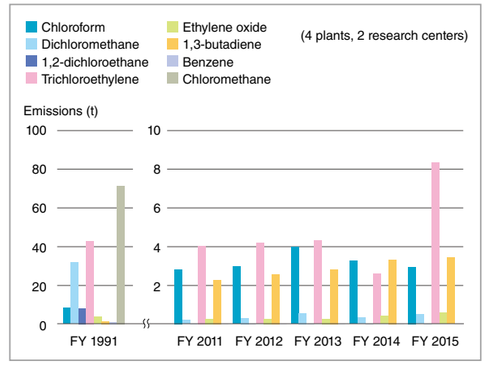
[Figure 4] Changes in the emissions of Class 1 chemical substances specified by the PRTR Law



Reduction of emissions of harmful substances to the atmosphere

Nippon Soda takes measures to reduce emissions of 13 voluntarily controlled harmful air pollutant chemical substances. Changes in the emissions of voluntarily controlled chemical substances to the atmosphere are shown in Figure 5.

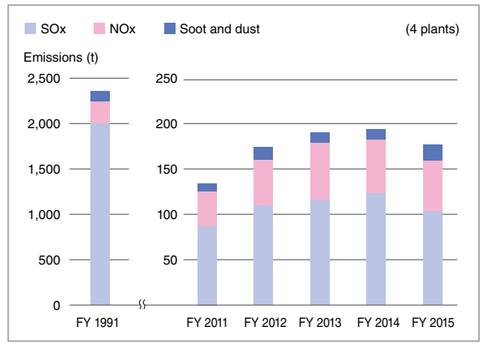
[Figure 5] Changes in the emissions of voluntarily controlled chemical substances to the atmosphere



Chemical air pollutants are trace elements in the air that adversely affect humans, animals, plants and the living environment. Figure 6 shows changes in the emissions of sulfur oxide (SOx), nitrogen oxide (NOx), and soot and dust. Emissions of these substances from stationary sources are controlled under the Air Pollution Control Act (1968).

In fiscal 2015, in comparison with the base year (fiscal 1991), emissions of sulfur oxide, nitrogen oxide, and soot and dust decreased by 94.8%, 75.5% and 89.5%, respectively.

[Figure 6] Changes in the emissions of substances controlled by the Air Pollution Control Act

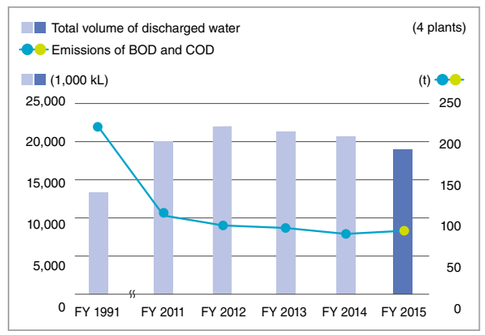


Reduction of emissions of harmful substances to water

Nippon Soda takes measures to reduce emissions of BOD and COD, which have an impact on the quality of water in the environment. Figure 7 shows changes in the total volume of discharged water and emissions of BOD and COD.

BOD, or biological oxygen demand, is the amount of oxygen consumed by organic substances in water when they are decomposed by microorganisms. It can be used as an indicator of the level of contamination of rivers by organic substances. COD, or chemical oxygen demand, is the amount of oxygen required to oxidize organic substances in water and can be used as an indicator of water quality.

[Figure 7] Changes in the total volume of discharged water and emissions of BOD and COD



Actions to conform to the Fluorocarbons Emission Control Act

In response to the Fluorocarbons Emission Control Act enacted in April 2015, Class 1 FC-containing products were identified and an Inspection Manager was nominated at each worksite. Simplified inspection will be started in April 2015 at one worksite at a time.

Environmental Protection

Environmental accounting

Environmental-protection-related investments, costs and effects of Nippon Soda in fiscal 2015 are quantitatively identified and evaluated.
Scope of environmental accounting: Data shown pertain to Nippon Soda only and do not include those of group companies.
Period covered: April 1, 2014 to March 31, 2015
Reference guideline: Ministry of the Environment's Environmental Accounting Guidelines (2005)

Environmental protection costs

Environmental protection costs (classification according to business activities)

Classification		Major measures taken		Invested amount (unit: million yen)			Costs (unit: million yen)		
			FY	2013	2014	2015	2013	2014	2015
(1) Business area costs				446	171	130	2,435	2,568	2,905
Details	1-1 Pollution prevention costs	Water pollution prevention, air pollution prevention		408	147	117	1,816	1,916	2,138
	1-2 Global environmental protection costs	Global warming prevention		33	14	2	70	79	101
	1-3 Resource recycling costs	Effective use, reduction of waste		5	10	11	549	573	666
(2) Upstream and downstream costs		Use of low-sulfur fuel oil C, precious metal catalyst recovery		0	0	0	81	80	65
(3) Environmental activity costs		Environmental measures, environmental analysis, waste treatment		0	0	0	502	465	517
(4) R&D costs		Research to reduce environmental impact		0	0	0	315	314	264
(5) Social activity costs		Environment-related contributions to external parties		0	0	0	1	1	1
(6) Environmental damage costs		Levies on air pollution, asbestos removal costs		0	0	0	79	245	121
Total				446	171	130	3,413	3,673	3,873

Economic effects produced by environmental protection

The amounts are recorded amounts. Unit: million yen

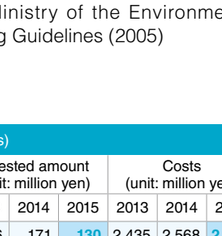
Economic effects produced by environmental protection (actual effects)

Details of effects			Amount (unit: million yen)		
		FY	2013	2014	2015
Revenue	(1) Revenues through recycling		1	0	0
Cost saving	(2) Cost saving through energy saving		173	165	146
	(3) Cost saving through resource saving		126	10	7
	(4) Saving of waste disposal costs		2	1	0
Total			302	176	153

Voice

We have successfully made various efforts to reduce waste.

One of the Nippon Soda Group's efforts to prevent global warming is to reduce industrial waste. At Chiba Plant, efforts have been made to reduce the final disposal of waste as landfill and achieve zero emissions. In addition, we have, in cooperation with external parties, also been trying to find ways to process different types of industrial waste so that we can recycle them. We have been successful in recycling 59% of all the waste oil we generate. We also reduced the final disposal of waste going to landfill by 90% during the last three years.



Takayuki Suda
RC Administration Section
RC/Engineering Department
Chiba Plant

Members engaged in CSR promotion

These are the members engaged in CSR promotion at different sites.

Head Office

Nihongi Plant

Takaoka Plant

Mizushima Plant

Chiba Plant

Odawara Research Center

Chiba Research Center

Process Safety & Disaster Prevention BCP

Objective of activities

The Nippon Soda Group prevents major accidents at its facilities and promotes safe, stable and trouble-free production activities while constantly improving its business continuity plan (BCP).

Atsushi Ogihara
Environment & Quality Management Group
Corporate Social Responsibility Department

Basic concept

Nippon Soda performs periodic inspections and constant repairs and renovations in order to prevent accidents at its facilities and ensure safe and stable operations at each manufacturing site. We also regularly conduct emergency drills and provide education to prepare employees for possible accidents. Through these efforts, we keep improving our risk management system. When facilities are newly constructed or renovated, our internal experts conduct safety reviews and audits to verify safety at the stages of planning, before starting construction, and before and after trial operation. We also undergo regular diagnoses of our disaster prevention capability conducted by external specialists.

Our business continuity plan (BCP), which was developed to help us be prepared for natural disasters such as earthquakes and other emergencies that could result in extensive damage, is regularly reviewed and improved.

Summary of efforts in fiscal 2015

For a large-scale construction project, the Head Office conducted a safety audit prior to trial operation. For other construction projects, each manufacturing site conducted a safety review to ensure safety.

To improve the emergency management system, each manufacturing site conducted emergency drills to be prepared for fires and earthquakes. Simultaneously with these drills, training to establish a Head Office emergency operation center was also conducted to make sure that the company-wide risk management system is in place.

Manufacturing sites underwent a diagnosis of their disaster prevention capability by Sompo Japan Nipponkoa Risk Management Inc. Based on the diagnosis results, improvements have been made.

The BCP underwent a regular review and was revised.

Process safety and disaster prevention

Risk assessment and reduction through process safety and disaster prevention

The Nippon Soda Group assesses risks for existing facilities and machinery, existing processes, new facility construction and extensions, and new processes. If any unacceptable risks are identified, we take actions to reduce them.

Safety audit to confirm the safety of plants

The Nippon Soda Group requires that safety reviews and audits be conducted by responsible personnel and specialists in order to ensure the safety of new facility construction and renovation projects.

Covering various aspects such as safety, the environment and quality, these checks consist of a safety audit of the Head Office, a safety review of plants, and a safety review of departments. Each review takes the scale and process of the relevant construction work into account. See pages 21 to 24.

Diagnosis of disaster prevention capabilities by a third party

The disaster prevention capabilities of Nippon Soda's manufacturing group companies are diagnosed every year by Sompo Japan Nipponkoa Risk Management Inc. The fiscal 2015 report on the diagnosis is presented on page 87.

Establishment of an emergency risk management system

The highest priority is given to preventing accidents and disasters. To prepare for unavoidable accidents and disasters, we have established an emergency risk management system designed to minimize damage.

Disaster prevention system involving local communities

Nippon Soda's manufacturing plants implement regular disaster drills in cooperation with other nearby plants and local governments so as to be prepared for an emergency situation. In order to improve their effectiveness, these drills are conducted in accordance with local environmental and other characteristics unique to each region.

Standards of behavior to respond to emergencies

Our drills are conducted based on standards of behavior that we have developed in order to be prepared for various tasks in the event of a disaster or accident. Such tasks include communications, taking action and exercising control in an appropriate and prompt manner.

Business continuity plan (BCP) basic policy

In the event of a natural disaster such as a large-scale earthquake or other crises that can result in serious damage, the social responsibility of Nippon Soda is to ensure protection for local residents, full-time and temporary employees and affiliate company employees from possible harm posed by the company's business sites located in the affected area, where toxins, deleterious substances, hazardous materials, high pressure gas and a large amount of energy are present. Since the company produces chemicals, agricultural chemicals, medicines, and other products that are indispensable for people's daily life and ingredients of industrial products, if the supply of these products is disrupted due to a disaster or crisis, tremendous inconvenience would be imposed not only on the company's customers but also on general consumers. In this context, Nippon Soda's BCP, or business continuity plan, must above all ensure the safety of its own employees, affiliate company employees and temporary employees and their families and local residents and also promptly safeguard the

Diagnosis of disaster prevention capability at Nihongi Plant
November 18 and 19, 2014

Diagnosis of disaster prevention capability at Takaoka Plant
June 12 and 13, 2014

Diagnosis of disaster prevention capability at Chiba Plant
June 24, 2014

Process Safety & Disaster Prevention BCP

Head Office, plants, research centers, branch offices and sales offices.

The BCP must also be designed to help its own employees, affiliate company employees and temporary employees be fully aware of their individual responsibilities and allow them to take on their assigned role at their discretion in order to execute emergency operations. It is also necessary for the company to establish a system that enables them to act flexibly according to the circumstances. With all the above taken into account, the principles of the BCP are defined as follows:

Principles of the BCP

1. The highest priority is placed on checking on the status and ensuring the safety of Nippon Soda's own employees, affiliate company employees and temporary employees and their families, and ensuring the safety of residents in communities where the company's business sites are located.
2. The consciousness of serving the public and community is shared among all personnel throughout the company.
3. Efforts are focused on protecting the safety of the affected Head Office, plants, research centers, branch offices and sales offices.
4. Measures should be taken to establish a system that allows Nippon Soda's employees, affiliate company employees and temporary employees who are engaged in ensuring safety and security to act flexibly and at their discretion according to the circumstances.

Continuation using the PDCA cycle

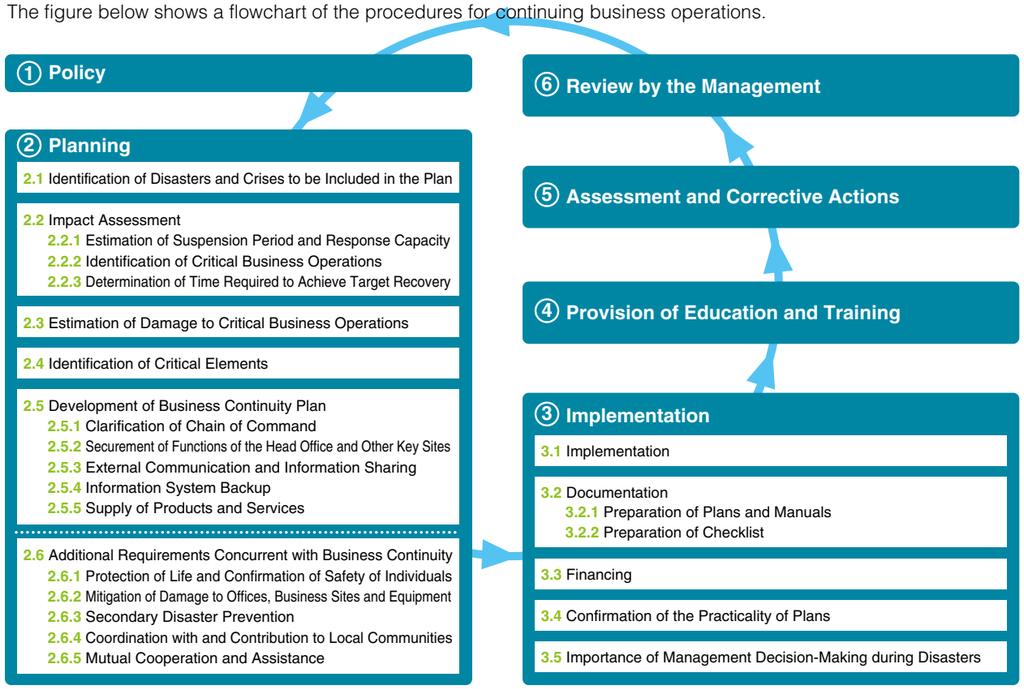
The RC activity is built into the PDCA cycle by incorporating the BCP in the voluntary activity code, helping the BCP "spiral up."

Continuation of supply of products according to customer needs

The BCP aims to ensure the supply of products to customers as requested at any time. To achieve this objective, improvement is accelerated using the PDCA cycle.

Efforts for business continuity

The figure below shows a flowchart of the procedures for continuing business operations.



Fire response system at plants

Each plant has its own fire response system—designed with the plant's characteristics taken into account—and conducts regular fire drills.


Nihongi Plant


Takaoka Plant


Mizushima Plant


Chiba Plant

Voice

Facility update and management, improvement of the emergency risk management system, and enhancement of risk management

Our CSR policy requires us to update and manage our facilities and promote safe, stable and trouble-free production activities in order to prevent major accidents at facilities. In line with this policy, when updating our facilities, we place an emphasis on risk assessment, risk reduction and update management. To be prepared for natural disasters, including a potential Kanto epicentral or Nankai megathrust earthquake, we organize and conduct drills on a daily basis to enhance risk management. These drills involve the risk management system and are based on the business continuity plan (BCP) and the emergency response standards.

Katsuhiro Kataoka
Management Section, Mizushima Plant

Occupational Safety and Health

Objective of activities

The Nippon Soda Group promotes efforts to create an accident-free working environment in order to provide a healthy and happy working experience.
We are implementing various measures to achieve and maintain the goal of no workplace accidents and promote employee health.

Masayuki Yoshida
Environment & Quality Management Group
Corporate Social Responsibility Department

Basic concept

Nippon Soda has introduced an occupational safety and health management system (OSHMS) at all of its plants and one research center. In accordance with the OSHMS, we conduct risk assessments and constantly develop, implement, review and improve measures (PDCA) to ensure safe and healthy workplaces with the aim of achieving the goal of zero occupational accidents. To help employees maintain and improve their health, we provide them with health guidance based on medical examination results and take measures to reduce incidents of personal injury or illness. A mental health check is also conducted and consultations with qualified mental health specialists are available so that we can offer mental care services whenever necessary.

Summary of efforts in fiscal 2015

All the manufacturing sites and one research center that have already been certified with OHSAS 18001 maintained and renewed their certifications. In accordance with this management system, we systematically implemented activities to prevent occupational accidents and promote employee health.

Activities to prevent occupational accidents included patrols at each worksite throughout the company. A survey on occupational accident prevention was conducted at one plant by Sompo Japan Nipponkoa Risk Management Inc.

Activities to promote employee health included periodic medical examinations, health counseling sessions, health lectures, mental health checkups, and mental health counseling sessions.

Occupational safety and health management system (OSHMS)

Nippon Soda has introduced an occupational safety and health management system (OSHMS) at all plants and one research center.

The OSHMS is a tool to identify safety policies for worksites and develop, implement, review and maintain the identified policies. Covering also organizational structures and procedures, it helps achieve goals and improve performance systematically by promoting the PDCA cycle.

To integrate OSHMS and RC activities effectively, Nippon Soda places an emphasis on OSHMS risk assessment. The basic objective of RC activities is to identify and assess risks based on RC Codes and to reduce them to permissible levels. The plants and research center identify and assess occupational accident risks and, if they are not permissible, reduce them to permissible levels.

Efforts to prevent occupational accidents

Nippon Soda uses two approaches in its efforts to prevent occupational accidents: one is to reduce occupational accident risks themselves and the other is to prevent worker errors.

Activities to reduce occupational accident risks themselves mainly consist of efforts to reduce occupational accident risks based on OSHMS risk assessments but also include efforts to reduce risks by identifying “hiyari-hat” (near miss) accidents and by sharing information on accidents that have occurred at other business sites and companies. When new plants are constructed and existing ones extended, a safety review and audit are required. Before starting operation, accident risks are reduced to permissible levels.

To prevent worker errors, the following three measures are adopted:

1. 5Ss
2. 4 Safety Cycles
3. Safety-awareness-raising efforts at business sites

The “5Ss” collectively refers to five Japanese words: seiri (organizing), seiton (tidying), seiso (cleaning), seiketsu (cleanliness) and shitsuke (discipline).

The 4 Safety Cycles are

1. KY[1] before starting operation
2. Pointing and vocalizing during operation
3. Mutually directing attention during operation
4. Identifying “hiyari-hat” (near miss) accidents after operation

The 5Ss and the 4 Safety Cycles are the two fundamental concepts that form the basis of safety activities for the entire Nippon Soda Group. The top management at each business site takes the initiative in promoting safety awareness among employees so that safety activities are improved through the continuous application of the PDCA cycle.

*1 KY is a combination of the first letters of two Japanese words, *kiken* (risk) and *yochi* (prediction). The KY system is designed to identify latent risks associated with work and take preventive measures before they occur.

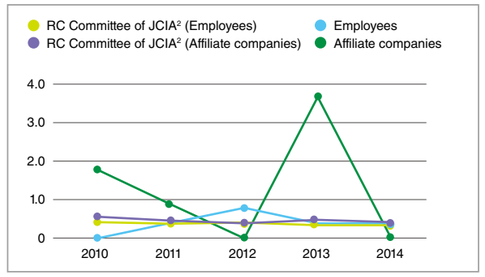
Changes in the number of occupational accidents resulting in absence from work and the frequency rate

In fiscal 2015, no occupational accidents causing an absence from work were reported at Nippon Soda and eight Group companies.

[Table 1] Number of occupational accidents causing an absence from work at Nippon Soda and its affiliate companies (Numbers reported in one fiscal year starting in April and ending March of the next year)

FY	2011	2012	2013	2014	2015
Nippon Soda	1	1	2	1	0
Affiliated companies	2	0	1	3	1

[Figure 1] Change in occupational accident frequency rates



Occupational accident frequency rate: Casualties/Total working hours (per million hours)

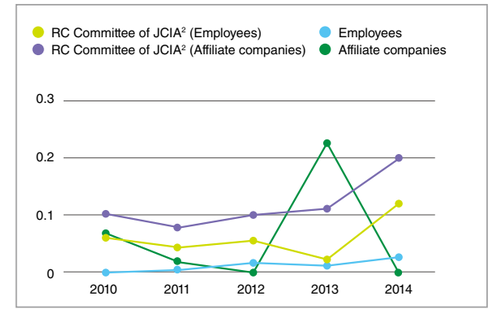
*2 JCIA stands for Japan Chemical Industry Association.

Note) The data for Figure 1 and Figure 2 were collected from January 1 to December 31 of each year.

Changes in the severity rate of occupational accidents

Change in the severity rate of occupational accidents is shown in Figure 2.

[Figure 2] Change in the severity rate of occupational accidents



Severity rate of occupational accidents: Man-days lost/Total working hours (per 1,000 hours)

Occupational Safety and Health

The number of consecutive days without accidents resulting in absence from work (As of March 31, 2015)

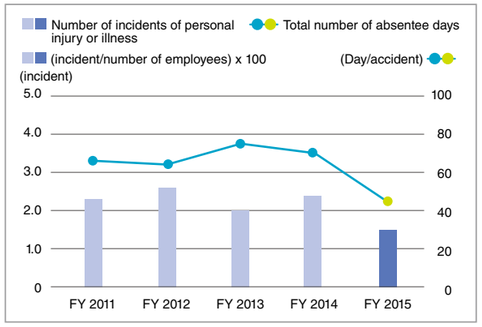
Worksite	The number of consecutive days without accident resulting in absence from work	The number of consecutive years without accident resulting in absence from work
Head Office	4,325 days	11 years
Nihongi Plant	929 days	2 years
Takaoka Plant	440 days	1 year
Mizushima Plant	8,181 days	22 years
Chiba Plant	3,886 days	10 years
Odawara Research Center	5,275 days	14 years
Chiba Research Center	8,438 days	23 years
Aizu Plant, Nisso Metallochemical Co., Ltd.	1,093 days	2 years
Chiba Plant, Nisso Metallochemical Co., Ltd.	10,286 days	28 years
Koriyama Plant, Nisso Fine Co., Ltd.	958 days	2 years
Isohara Plant, Nisso Fine Co., Ltd.	2,004 days	5 years
Onahama Plant, Nisso Fine Co., Ltd.	6,859 days	18 years
Shinfuji Kaseiyaku Co., Ltd.	2,678 days	7 years
Nisso Shoji Co., Ltd.	4,323 days	11 years
Sanwa Soko Co., Ltd.	875 days	2 years
Nisso Engineering Co., Ltd.	3,453 days	9 years
Nisso Construction Co., Ltd.	7,555 days	20 years
Nisso Green Co., Ltd.	5,479 days	15 years

Health promotion

Recognizing that achieving our production activity goals, preventing occupational accidents and performing CSR and RC activities are all dependent on the wellbeing of our workers, Nippon Soda makes efforts to promote employee health.

As one such effort based on specific numerical targets, all business sites work to reduce the number of incidents of personal injury or illness and the total number of absentee days related to injury or illness. Figure 3 shows the changes in these numbers.

[Figure 3] Change in the number of incidents of personal injury or illness (per 100 persons) and the total number of absentee days (per incident)



Note) The data for Figure 3 were collected from April 1 of each year to March 31 of the following year.

Each business site develops and implements its own health promotion activities, including a “Kenko-ryoku Up Dai-sakusen” (Health Promotion Campaign). Some other examples are warm-up exercises in the morning and after lunch and walking and other exercises during lunch break.

Voice

To improve occupational safety and health

To achieve the goals of zero occupational accidents and health promotion, we continue to improve safety and health promotion activities using the PDCA cycle. A safety meeting is held once a month at each department with participants from the department, including staff members from affiliated companies, to discuss and share information on issues such as safety education, accident reports, the latest topics, and health lectures. The meeting provides a valuable opportunity for department members to gain information about on-site activities and the opinions of on-site workers. Various kinds of safety patrols are conducted from the different perspectives of those in different positions, such as department managers, department members and members of other worksites. Results from these patrols help us better identify advantages and disadvantages, and we provide support to reduce risks based on them.

Yukiko Tatsushiro
RC Engineering Group
Department of Planning and Administration
Odawara Research Center

Healthcare staff, consisting of occupational physicians and nurses, provide health guidance based on periodic medical examination results and other data.

Our mental healthcare program consists of the following four components:

❶ Self-care
❷ Care by administrators in the workplace
❸ Care by occupational healthcare staff and other specialists at each workplace
❹ Care by external parties

To help employees with their self-care ❶ and provide care by occupational healthcare staff and other specialists at each workplace ❸ a mental health check is conducted once a year. To improve care by administrators in the workplace ❷, lectures on mental health by external specialists are organized. Consultations with qualified mental health specialists by phone or face-to-face are also available as part of efforts to provide care by external parties ❹.

Nihongi Plant

Survey on occupational accident prevention by Sompo Japan Nipponkoa Risk Management Inc.

September 4 and 5, 2014

As part of the stakeholder engagement effort, we requested the Global Business Department of Sompo Japan Nipponkoa Risk Management Inc. to conduct a survey on occupational accident prevention. The survey results, which are summarized below, will be used in future safety activities.

1. Date: September 4 (Thu.) and 5 (Fri.), 2014
2. Site: Manufacturing Department, Nihongi Plant
3. Summarized results of interviews and on-site inspection:

To obtain information on occupational accidents in the past at two sections of the Manufacturing Department at Nihongi Plant, an on-site survey (pre-work meeting, accident sites) and an interview survey with Section Managers and Heads were conducted. The objective was to make proposals for how to reduce occupational accidents based on all survey results combined.

Interview survey results

1) Pre-work meeting

- Section Managers and Heads mostly looked down to read materials containing the details of work to be performed and instructions to be given, and seldom raised their face to look at workers. They were advised to raise their face so that they can see the workers’ reactions.
- Some workers took notes during the meeting, which was favorably received. It was recommended that they make it a rule to take notes at worksites.

2) Creation of safety culture

- It was confirmed that they implemented Nippon Soda’s “4 Safety Cycles,” which are KY before starting operation, pointing and vocalizing during operation, mutually directing attention during operation, and identifying *“hiyari-hat”* (near miss) accidents after operation. It was recommended, however, that because it seemed that these time-honored 4 Safety Cycles had become routine for workers, they once again review them so that they can be fully incorporated into work activities at the plant.

3) Safety and health promotion activities

- It was pointed out that safety and health promotion activities had become too routine for workers. It was recommended that workers view safety activities as a tool to ensure safe operation, rather than thinking about safety activities as something separate from operations.

It was also recommended that workers maintain favorable working relationships among themselves to improve trust and that each one of them pay close attention so as to prevent co-workers from sustaining injuries and avoid accidents by implementing the 5Ss, identifying *“hiyari-hat”* accidents, and predicting risks.

4) Promotion of safety and health education

- It was highly recognized that safety and health education is systematically provided and individual records are used to manage learning activities, that workers are encouraged to acquire qualifications, and that a five-step evaluation is made using a competency checklist.

5) Passing on of skills and expertise

- With regard to the appointment of young workers as Shift Chiefs through the cooperation of experienced workers aged 50 or older, it was recommended that greater appreciation be shown to older, experienced workers with high levels of expertise (including those employed under the reemployment system) in order to improve their motivation, as their skills and expertise are indispensable resources that should be passed down, and that an atmosphere in which both mid-career and young employees feel comfortable consulting these more experienced workers be fostered.

6) On-site management by supervisors

- It was highly recognized that Department and Section Managers go on-site as much as possible to enhance their understanding of the actual conditions of worksites and promote communication with workers.

7) On-site survey

- An on-site survey at places where actual operations are carried out was conducted, based on which proposals for improvement to prevent occupational accidents were formulated.

Distribution Safety, Quality Assurance and Consumer Issues

Objective of activities

The Nippon Soda Group promotes efforts to reduce risks associated with the distribution of products to prevent distribution accidents. We also provide high-quality products along with an environment where consumers can use them safely in order to increase customer satisfaction.

Hideaki Gondaira
Environment & Quality Management Group
Corporate Social Responsibility Department

Basic concept

The Nippon Soda Group reduces risks of hazards, toxic harm and in-transit accidents associated with the transportation of products so as to protect the safety and environment not only of customers but also of workers engaged in distribution processes and of those living in areas near distribution routes. We provide not only high-quality products but also information about the safe use of these products to protect the safety and hygiene of consumers. Through these efforts, we contribute to increasing customer satisfaction.

Summary of efforts in fiscal 2015

The goal of our efforts in fiscal 2015 was to reduce distribution accidents and product-related complaints by 30% from the previous year.

With no major distribution accidents, the goal for distribution safety was achieved. Furthermore, we conducted a drill to simulate an accident while transporting hazardous materials. We also conducted an inspection at distribution companies and confirmed that they carried out their activities properly. In response to the shifting of cargo inside containers, which has occurred repeatedly during export shipments over the last two years, we conducted a large-scale trial and discussed the issue with the manufacturer of the loading equipment. As a result, it was revealed that there was a problem with local ground transportation. We took measures to solve the problem and have successfully prevented recurrences.

In quality assurance activities, we failed to reduce product-related complaints. The major reason was an increase in complaints about packaging defects. Other causes for claims have remained the same as in the previous year or decreased. We implemented measures to remove all of the causes. Specific causes for packaging defects that were identified included package swelling due to differences in temperature and atmospheric pressure and dents caused due to a lack of container strength. We conducted a verification trial of measures to address these problems and, by using the verified measures, have successfully prevented the same defects from recurring.

With regard to consumer issues, we have completed the update of the SDS preparation system, which started during the last fiscal year. The adoption of this system has allowed us to use a database that covers the relevant laws and regulations of Japan and other countries and to build a system to provide customers and distribution companies with the proper information promptly.

Efforts to ensure transportation safety

Yellow Card[1]

Nippon Soda promotes the use of Yellow Cards. Yellow Cards are occasionally reviewed in order to comply with any revision to product-related laws and regulations.

Container Yellow Card[2]

Nippon Soda promotes the use of Container Yellow Cards, mainly for hazardous materials, so that in the event of an emergency those on the scene can make an immediate response.

Measures to prevent transportation accidents involving hazardous materials

Nippon Soda maintains a “Safety Information List” containing information on the transportation route for designated products, emergency contacts, and other information necessary in an emergency situation so as to be better prepared and minimize possible damage in the event such a situation occurs. To maintain and improve their preparedness for responding to emergencies, each plant regularly implements emergency preparedness and communication drills in cooperation with local fire and police stations, neighboring companies and transportation firms. These drills are conducted for a variety of scenarios.

Transportation risk assessment

Nippon Soda identifies risks associated with the transportation of products. If the identified risks are unacceptable, efforts are made to reduce them to permissible levels. Through these efforts, we are constantly reducing distribution-related risks.

Request for improvement of customers’ facilities

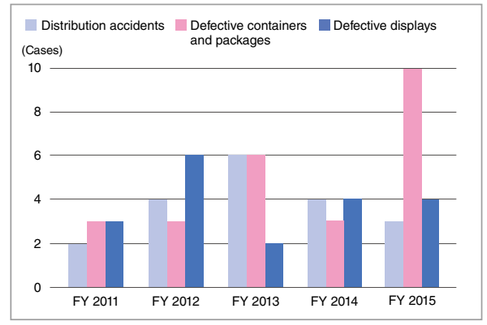
If risks such as potential leakage are identified with regard to facilities where our products are stored, Nippon Soda makes a specific request for improvement.

This system has proven successful, where customers and users who made improvements in compliance with our requests have averted problems in the past.

Audit of distribution companies

Nippon Soda regularly confirms that compnies to which we outsource distribution take appropriate measures to ensure safety. If a problem occurs, we conduct an audit of the distribution company involved. If matters needing improvement are identified as a result of an audit, Nippon Soda requests the company to make improvements and checks the result in the next audit.

[Figure 1] Changes in the number of distribution accidents, defective containers and packages, and defective displays (Nippon Soda)



Improvement to prevent cargo shift inside container

Before **Packaging before improvement**

With this packaging, it turned out that in the event the driver suddenly applies the brake to avoid an accident, the drums can fall over shown in (B).

After **Packaging after improvement**

Fastening bands were used to prevent cargo shift.

(A) Packaging before improvement

(B) Inside of the container where cargo shift has occurred

(C) Packaging after improvement

Distribution Safety, Quality Assurance and Consumer Issues

Distribution-related safety education of distribution companies

Nippon Soda on a regular basis provides distribution companies with education on the hazards and harm associated with various products along with information on safe handling procedures so that our products can be delivered to customers without any problems.

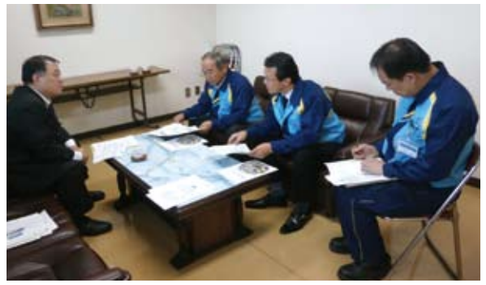
Distribution-related safety education

Distribution-related safety education at Daito Office, Sanwa Soko Co., Ltd. on October 30, 2014

On-site confirmation 1

On-site confirmation 2

Distribution-related safety education at Kurume Transportation Co., Ltd. on November 13, 2014



Distribution-related safety education

On-site confirmation

Distribution-related safety education at Hakuunsha Co., Ltd. on November 14, 2014

Distribution-related safety education

On-site confirmation

Efforts to ensure quality assurance

Verification of preventive measures against recurrence of logistics problems

Nippon Soda reviews as needed measures taken to prevent the recurrence of past logistics problems so as to ensure that these problems do not fade from memory and to improve the measures in order to meet current needs.

Quality management system (QMS)

Each of the plants and one research center of Nippon Soda have met ISO 9001 quality standards, obtained certification and established their own quality management systems.

Aiming to achieve zero quality complaints

Nippon Soda is making efforts to achieve zero quality complaints. This means we have our own regulations that define how to respond to product-related inquiries and complaints from customers. We identify the cause of a complaint and take suitable measures to deal with it. We then repeatedly provide education and information on these measures widely to employees and those concerned in order to prevent recurrences. We have also established a system to conduct quality system diagnoses to confirm if the measures are effective and meet contemporary standards and to make corrections, if necessary. Every plant has its own regulations regarding quality risk assessments to prevent product-related complaints from occurring.

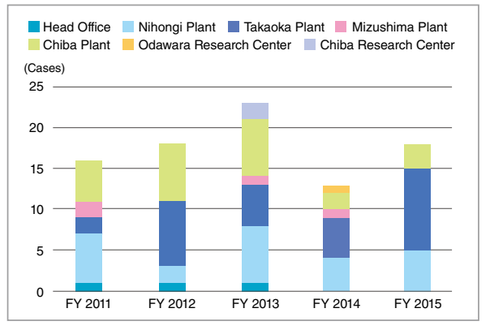
Through these efforts, we are reducing quality risks and implementing improved measures to prevent recurrence.

Efforts to address consumer issues

Nippon Soda provides product information to protect the health and safety of customers who use our products and increase customer satisfaction.

To promote these efforts, we revise SDS to meet GHS requirements[3] and make delivery specifications. When receiving an inquiry about one of our products from a customer, we identify whether or not chemical substances that are prohibited in and outside Japan are contained in it by tracing it as far back as to the raw materials involved in order to meet the customer's needs.

[Figure 2] Change in the number of product-related complaints (Nippon Soda)



1 A Yellow Card is an emergency information card with information about procedures that drivers, fire and police personnel, and other concerned parties should take in the event of a spillage, fire, explosion or other safety problem that may occur during transport, as well as emergency contacts. The issuance and carrying of Yellow Cards is required by the Poisonous and Deleterious Substances Control Act and other laws.

2 A Container Yellow Card is a label that is affixed to containers. It indicates the United Nations number and guide number defined by the Emergency Response Guidebook in addition to other information.

3 Please refer to notes 3 and 4 on page 51.

Voice

To provide customers with excellent quality products

Nihongi Plant has been steadily undertaking new construction to increase production and ensure stable operation, including the construction of new HPC facilities, upgrading of aging facilities for specific products, and construction of a new testing laboratory for chemicals. The Quality Assurance Team is responsible for improving systems and performance by improving the quality assurance and quality control systems and providing all employees with education on quality, tasks that are essential to provide customers with excellent quality products and gain their trust.

Takuya Kano
Quality Assurance Team
RC Administration Department, Nihongi Plant

Chemicals and Product Safety

Objective of activities

The Nippon Soda Group complies with domestic laws and regulations, international standards, treaties and the like as well as with social norms and expectations so that we can increase the trust of customers and the general public.

Tetsuya Kato
Environment & Quality Management Group
Corporate Social Responsibility Department

Basic concept

The Nippon Soda Group, giving due consideration to possible hazards that chemicals and products may have to safety, health and the environment, complies with domestic laws and regulations, international standards, treaties and the like as well as with social norms and expectations so that we can increase the trust of customers and the general public.

Summary of efforts in fiscal 2015

Particular emphasis was placed on strengthening the management of chemical substances by adopting a new chemical substance control system and improving regular training programs on chemical substance control in order to achieve zero violations of chemical-related laws and regulations. As a result, there were no violations of chemical-related laws and regulations. We adopted and started implementing a new SDS and Yellow Card preparation and management system and also started subscribing to the LOLI Database[1], an international chemical regulatory database. We provided many training programs on such issues as chemical substance control for new/transferred employees, legal reforms in Japan and abroad, transport of dangerous goods, and management of poisonous and deleterious substances.

Management of chemicals

Agenda 21, an action plan for achieving sustainable development, was adopted back in 1992 at the Earth Summit. In the action plan, the environmentally sound management of toxic chemicals was defined. In 2002, the UNEP (United Nations Environment Programme) Governing Council determined that there was a need for a strategic approach to the international management of chemicals and signatories to an agreement concluded at the World Summit on Sustainable Development (WSSD) pledged to “use and produce chemicals in ways that minimize significant adverse effects on human health and the environment by 2020.”

In 2006, the Strategic Approach to International Chemicals Management (SAICM) was adopted by the International Conference on Chemicals Management (ICCM). As these developments show, conditions surrounding the international management of chemicals have been changing over time. In line with these changes, the Nippon Soda Group too is placing greater emphasis on its chemicals management.

Specific actions for the management of chemicals

To ensure the proper management of chemicals, the Nippon Soda Group takes actions as follows:

Actions to comply with laws and regulations regarding the management of chemicals

In handling and using chemicals in the manufacture and marketing of products, we are required to comply with numerous laws, regulations and other requirements, including the Poisonous and Deleterious Substances Control Act, the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Act, the Agricultural Chemicals Control Act, and REACH[2].

To be well prepared for meeting these requirements, the Nippon Soda Group has established a system to assess the hazards of all chemicals used in the pre-manufacturing phase of production and to keep abreast of relevant laws, regulations and other requirements. This system also applied to R&D. Please refer to the “Procedures for registering new chemical substances” on page 54.

Preparation and revision of SDS[3] and product labels to meet GHS[4] requirements

We prepare SDSs and product labels according to the GHS requirements. Because the GHS is adopted globally, the Nippon Soda Group prepares SDSs and product labels used in Japan, Europe, the U.S., China, Taiwan, Korea, Malaysia and other countries in such a way as to meet the GHS requirements.

All EU chemical mixtures must comply with the GHS requirements by June 2015 and, in the U.S., the GHS system must be implemented also by June 2015. To meet these deadlines, we prepared SDSs and labels according to the GHS requirements in fiscal 2015.

Strengthening the management of chemical substances (poisonous and deleterious substances, new chemicals, etc.) by adopting a new chemical substance control system

The new SDS and Yellow Card preparation and management system was adopted. New SDSs in Japanese and Yellow Cards were transferred to the new system and a session to explain the system was held at offices due to use it. The switch to the new system was carried out and operation started in October 2014. After adopting the new system, the conventional MSDS (material safety data sheet) was replaced with the SDS (safety data sheet), which meets the latest JIS standard. The new system is designed to automatically identify the GHS classification category and applicable laws and regulations.

The new system will also allow us to prepare GHS labels and a wide variety of SDSs that can be used outside of Japan. This function will be implemented in 2015.

We also started subscribing to the LOLI Database, an international chemical regulatory database. A session to explain the LOLI database was held in March. The database contains lists from around the world of chemicals across various categories, which can be used to perform regulatory checks on chemicals due to be handled and to prepare SDSs. The database will become available in 2015.

A session to explain the new SDS and Yellow Card preparation and management system (September 29, 2014 at Head Office)

Improving regular training programs on chemical substance control (poisonous and deleterious substances, new chemicals, etc.)

We provide employees who handle chemical substances with training on how to comply with laws and regulations regarding chemicals management. Training provided in fiscal 2015 included training for new/transferred employees (May), education on the transport of dangerous goods and management of poisonous and deleterious substances (November, December), education on revisions to relevant laws and regulations in Korea, China, Taiwan, Malaysia and other foreign countries (January), and education on revisions to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Act, the Poisonous and Deleterious Substances Control Act and other laws and regulations (March).

Chemicals and Product Safety

Communication of safety information on chemicals

The Nippon Soda Group participates in the Global Product Strategy (GPS) and the Japan Initiative of Product Stewardship (JIPS). JIPS was launched by the Japan Chemical Industry Association (JCIA) in May 2009 as a new voluntary initiative of the chemical industry to strengthen chemicals management based on risk assessments and risk management that takes supply chains into account. The basic concept of JIPS is aligned with the Product Stewardship (PS)/GPS initiative of the International Council of Chemical Associations (ICCA). The Nippon Soda Group has prepared two safety summary reports—on hydroxypropyl cellulose and acetoxyazetidine—which have been registered on the ICCA portal page and made publicly available.

In fiscal 2015, we participated in a consortium meeting of the JCIA to prepare safety summary reports on caustic soda, hydrochloric acid and chlorine. We share information with member companies to promote the preparation of highly accurate safety summary reports.

1 LOLI (List Of Lists)
An international regulatory database of a collection of lists of chemical substances

2 REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) is a European Union regulation that requires companies that manufacture or import chemical substances in the amount of one ton or more per year into the EU to register these substances and submit chemical safety reports. Chemicals for which data are not submitted (substances that are not registered) are not permitted to be put on the market.

3 SDS (safety data sheet)
An SDS is a document that contains information on the safe handling of chemicals and raw materials that contain chemicals.

Education on chemical substances regulations for new/transferred employees (May 12, 2014 at Head Office)

Education on revisions to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc., the Industrial Safety and Health Act, the Poisonous and Deleterious Substances Control Act and other laws and regulations
(March 4, 2015 at Head Office)

4 GHS stand for Globally Harmonized System of Classification and Labelling of Chemicals. GHS is a global system for standardizing the classification and labeling (product labels and MSDSs) of chemicals according to their hazards.

Voice

Education on the revision of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Many laws and regulations related to the management of chemical substances were revised last year. In response, the Environment & Quality Management Department provided education on these revisions to all worksite representatives of Nippon Soda at the Head Office.

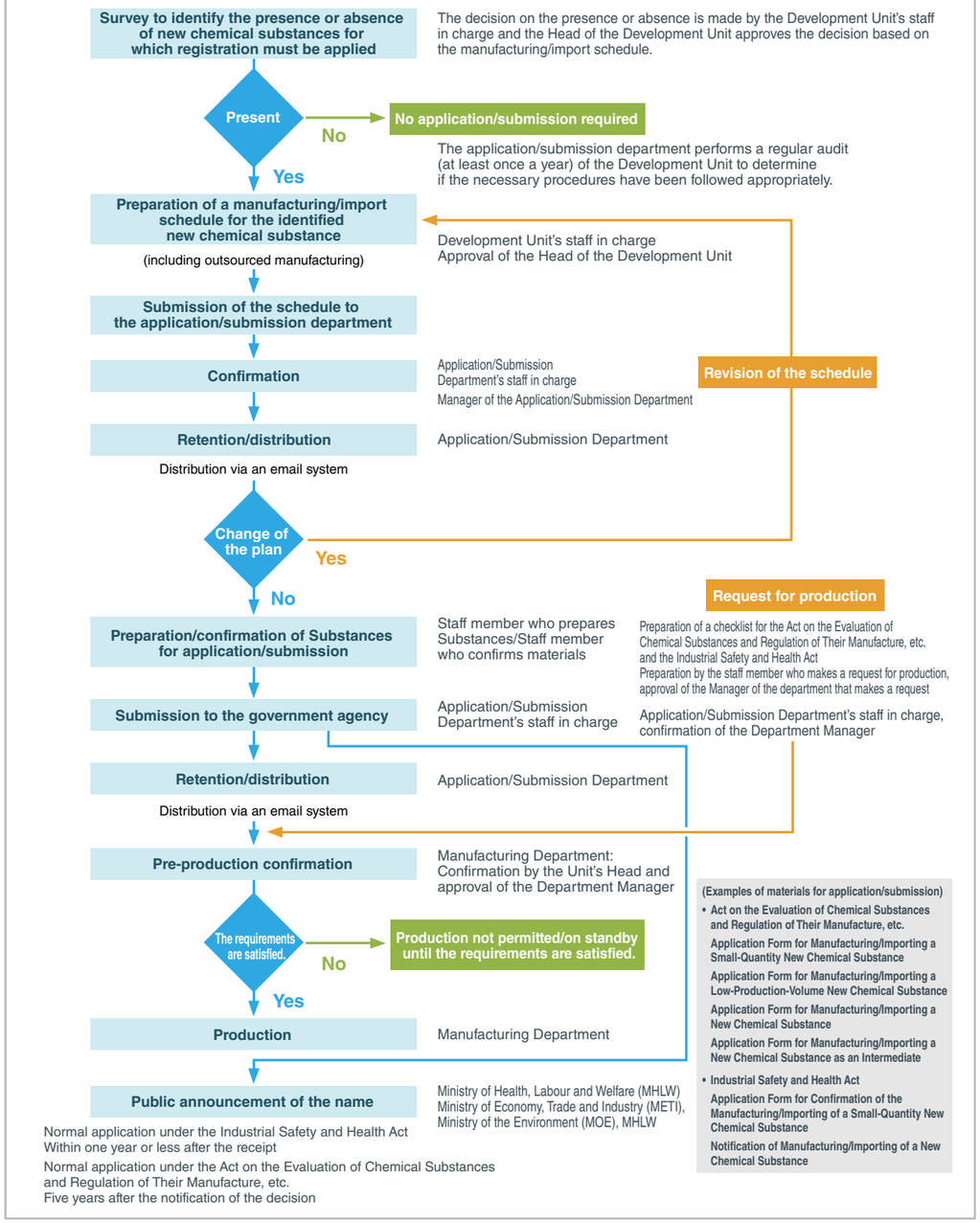
At the Chiba Research Center, because they handle many new chemical substances, the Chief of the Environment & Quality Management Department was invited to give an educational lecture on revisions to the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Two-thirds of our researchers attended the seminar and engaged in a lively discussion.

In response to the increasingly stringent regulations on and intensified management of chemical substances, we will improve educational programs and enhance our management of chemical substances so that we can increase public confidence in our company.

Hiroyuki Mori
Department of Administration
Chiba Research Center

Procedures for registering new chemical substances



Normal application under the Industrial Safety and Health Act
Within one year or less after the receipt

Normal application under the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
Five years after the notification of the decision

Community Involvement & Development/Social Dialogue/Fair Operating Practices/Compliance

Objective of activities

The Nippon Soda Group will make efforts to improve the general public's confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements to improve transparency.

Masahito Ikeda
Corporate Social Responsibility Department

Basic concept

The Nippon Soda Group will make efforts to improve the general public's confidence in us by participating in various environmental protection and safety activities and proactively engaging in dialogue with stakeholders regarding the effects of chemical substances on safety, health and the environment. We will comply with legal requirements to improve transparency.

Summary of efforts in fiscal 2015

In fiscal 2015, we mainly focused on the dissemination of information on CSR activities, external communication, stakeholder engagement, compliance and fair operating practices, relations with employees, and contributions society.

Eight companies of the Nippon Soda Group in Japan started implementing CSR activities and Nisso Namhae Agro Co., Ltd., an overseas group company, implemented stakeholder engagement in fiscal 2015.

Dissemination of information on CSR activities

The Nippon Soda Group disseminates information on its CSR activities by the following means:

- The CSR Report is available to anybody in the form of a brochure or via our website.
- Reports on activities and plans for activities are submitted to the Japan Chemical Industry Association and distributed at local and other meetings.
- Information on our activities is provided during tours of our offices and other gatherings.

External communication

Nippon Soda holds local gatherings and regularly offers tours of plants and research centers to residents in areas where its offices are located in order to provide information on CSR activities and receive feedback.

Takaoka Plant received a complaint from local residents about ground vibrations and noises caused by large trucks. The plant asked distribution companies to instruct their drivers to drive at 20 km/h or less and the request was complied with. In a dialogue that was held at a later date, the residents expressed their satisfaction with the improvement.

Table 1 External Communication Events (Nippon Soda)

FY	Local gatherings	Tours of plants and research centers	Local dialogue meeting of JCIA RC Committee	Others
2013	42	48	3	73
2014	40	92	2	122
2015	44	64	3	122

Stakeholder engagement

Nippon Soda has received diagnoses, verifications, ratings, and third-party feedback as shown below. These results are incorporated into our efforts to accelerate the improvement of the PDCA cycle.

(1) BCM rating from the Development Bank of Japan (DBJ)

- Reviewed on November 2, 2012
- Rated on January 15, 2013 Rank A (the best)

(2) Environmental Responsibility Rating from the DBJ

- FY 2010 Rank Matsu
- FY 2012 Rank Take
- FY 2015 Rank B

(3) Diagnosis of disaster prevention capability by Sompo Japan Nipponkoa Risk Management Inc.

1. Aizu Plant of Nisso Metallochemical Co., Ltd. May 29 and 30, 2014
2. Isohara Plant of Nisso Fine Co., Ltd. June 5 and 6, 2014
3. Takaoka Plant June 12 and 13, 2014
4. Chiba Plant June 24, 2014
5. Onahama Plant of Nisso Fine Co., Ltd. October 10, 2014
6. Koriyama Plant of Nisso Fine Co., Ltd. October 17, 2014
7. Nihongi Plant November 18 and 19, 2014

(4) Occupational health and safety survey by Sompo Japan Nipponkoa Risk Management Inc.

1. Nihongi Plant September 4 and 5, 2014

As part of the stakeholder engagement effort, the plant requested the Global Business Department of Sompo Japan Nipponkoa Risk Management Inc. to conduct a survey on occupational accident prevention.

See page 46.

(5) Verification of the "CSR Report 2014" by the RC Verification Center of the Japan Chemical Industry Association

1. Head Office June 10, 2014
2. Chiba Plant June 11, 2014

(6) Technical Conference for Corporate Shareholders, Nisso Namhae Agro Co., Ltd. January 28, 2015

A Technical Conference for Corporate Shareholders of Nisso Namhae Agro Co., Ltd. (NNA) was held from 13:00 to 17:00 on Wednesday, January 28, 2015 at a presentation room at Namhae Chemical Co., Ltd. in Yeosu City, South Korea. Since this was a meeting based on a concept similar to that of stakeholder engagement, we provide a brief summary of the meeting here.

Major participants
Front row: NNA Plant Manager Beom, Deputy General Manager of Chemicals Business Division Morii, Plant Manager Hong of Namhae Chemical Co., Ltd., Union Chairman Choi

Some 40 participants attended the conference.

Plant Manager Hong of Namhae Chemical Co., Ltd., NAA staff in charge Cho (interpreter)

Main agenda of the conference

- Opening address
- Profile of NNA
- Relationships between three corporate shareholders and NNA
- Position of NNA in the Nippon Soda Group
- Topsin M
- Current state of operation of NNA
- Topsin M manufacturing technology
- Procedures for risk assessment of plants applied by the Nippon Soda Group
- Current issues of NNA
- Current issues of and proposals for NNA from the perspective of Namhae Chemical Co., Ltd.
- Closing address

Issues arising associated with the production of Topsin M at NNA were discussed among the three companies in terms of social responsibility. Participants agreed to

Community Involvement & Development/Social Dialogue/ Fair Operating Practices/Compliance

address issues using their proprietary technologies to achieve continuous development. It was a very forward-looking and cooperative meeting.

(7) The 9th Responsible Care Local Dialogue in Okayama February 19, 2015

See page 66.

Compliance and fair operating practices

The Compliance Committee, under the direct control of the President, was established as of May 1, 2003 to improve the compliance system and ensure corporate activities based on compliance with corporate ethics and laws and regulations.

By following the requirements specified in the Nippon Soda Group Code of Conduct, which is distributed to the management and employees of Nippon Soda and its consolidated companies, the Nippon Soda Group ensures its business activities are conducted in a sound manner. To raise awareness of the importance of complying with laws and regulations, training based on the Code of Conduct is regularly provided. Furthermore, any Nippon Soda Group employee who believes he or she has identified a violation is able to consult directly with the Compliance Committee or a legal adviser via a dedicated consultation office.

A compliance survey is conducted among all employees once a year. Training on job-related laws and regulations is also provided at least once a year.

Contribution to society

As part of its efforts to contribute to society, Nippon Soda conducts cleanup activities in the vicinity of its business sites on a regular basis.

Table 2 Frequency of cleanup activities for local communities (Nippon Soda)

FY	Number of local cleanup activities
2013	11
2014	9
2015	10

Springtime environment cleanup (Takaoka Plant, June 5, 2014)

Springtime environment cleanup (Takaoka Plant, June 5, 2014)

Regular cleanup along Route 16 (Chiba Plant and Chiba Research Center, September 9, 2014)

Regular cleanup along Route 16 (Chiba Plant and Chiba Research Center, September 9, 2014)

Cleanup of Takashima Road (Mizushima Plant, May 12, 2014)

Cleanup of Takashima Road (Mizushima Plant, May 12, 2014)

Relations with employees

The Nippon Soda Group offers opportunities to employees who have made achievements in CSR activities to present their achievement and receive an award.

Presentation of successful cases

The Nippon Soda Group offers employees opportunities to present their successes in the areas of environmental protection, energy saving, productivity improvement, distribution safety, process safety & disaster prevention, occupational safety & health and others. At each worksite, employees who have made particularly outstanding achievements are selected to present their accomplishments to company executives and representatives of other business sites at an event known as the Company-wide Successful Achievement Presentation Meeting.

In fiscal 2015, the 35th Company-wide Successful Achievement Presentation Meeting was held on Friday, November 28, with 12 presentations made. Although held at the Head Office, the event was filmed, with both video and audio streamed in real time to all offices. The number of web-based participants was 129 in total, consisting of 21 at Nihongi Plant, 31 at Takaoka Plant, 30 at Mizushima Plant, 42 at Chiba Plant (including Chiba Research Center), and five at Odawara Research Center. This was in addition to the some 50 participants gathered at the meeting site at the Head Office.

At the end of the meeting, Senior Executive Managing Officer Ito commented on the presentations and offered a token of appreciation to each presenter.

Pointing and vocalizing to remind oneself of safety procedures before starting work

Presenters, assistants, organizers

Presentation themes
Presenters (assistant's name in brackets)/sections

❶ FC Unit A Plant Daytime Shift/*Kaizen* of Filling Operation
Akira Maruyama (Motoki Sato), FC Unit, Fine Chemicals Section, Nihongi Plant

❷ Measures to reduce steam used to control the temperature of electrolysis cells
Hironobu Kinuno (Tadasato Yashima), Industrial Chemicals Group of Industrial Chemicals Section, Takaoka Plant

❸ Reduction in the number of instances of removing SD coagulation by changing the piping of the PB base
Makoto Kiritani (Tomoyuki Onda), FC1 Section, 1st Manufacturing Department, Chiba Plant

❹ Improvement in the switchover of magnesium ethylate vibrating strainers (commonly used product ⇔product with a spherical shape)
Makoto Saito (Isao Kato), Metallic Sodium Unit, Industrial Chemicals Section, Nihongi Plant

❺ Wall of trichloroethylene 40 grams
Mitsuhiro Hamano (Hirokazu Tanaka), FC Group, Fine Chemical Section, Takaoka Plant

❻ Reduction in work by controlling the feed amount of D-90 collection BPS
Hidekazu Okamoto (Masahiro Motoyoshi), DC Section, Second Manufacturing Department, Chiba Plant

❼ *Kaizen* of HPC distribution – Effective use of company warehouses and re-establishment of the inventory management method –
Jumpei Kikuchi (Sachiko Yokota), Production Management Section, Manufacturing Department, Nihongi Plant

❽ Efforts to pass down multi-plant operation at 2nd Organic Products Section
Shingo Maeda (Takuya Maeda [NBL]), 2nd Organic Products Group, 2nd Organic Products Section, Takaoka Plant

❾ Improvement of maintenance operation of tablet machines
Shunya Okazaki (Tetsunobu Satake), Maintenance Engineering G, Manufacturing Department, Mizushima Plant

❿ Reduction in environmental risks associated with drainage construction
Tsuyoshi Muto (Masahiko Kato), Utility Section, Production Management Department, Chiba Plant

⓫ Environmental measures for the area surrounding equalization tank No. 3
Kinichi Okada (Hideo Namari), Specialty Chemicals Unit, Specialty Chemicals Section, Nihongi Plant

⓬ Scaling measures for Topsin water washing tank
Tomonori Takeuchi (Kiyoteru Yamamura), Organic 1st Products Group, Organic 1 Section, Takaoka Plant

Voice

To become a chemical plant in harmony with the surrounding environment

In order for businesses to continue their activities, there are many important issues that must be attended to. One of the most important of these for companies engaged in the manufacture of chemical products, including our company, is to give consideration to environmental and safety issues so as to gain understanding and trust from local residents and society at large. The Nippon Soda Group will continue to work on developing harmonious relationships both internally and externally and staying focused on environmental and safety issues through CSR activities in order to meet the expectations of all concerned parties.

Tatsuhiko Shimmen
General Affairs Department, Takaoka Plant

CSR Activities Unique to Individual Employees

CSR efforts made by employees within their spheres of responsibility Every one of their activities supports the development of the Nippon Soda Group.

My CSR activity

To ensure the stable supply of products I listen carefully to what my customers have to say.

Hironobu Kodama
Industrial Chemicals Section
Chlor-Alkali Business Department
Chemicals Business Division

Upon joining the company, I was involved in managing the production of industrial chemical products. The inventory management of liquid products used for water and sewerage treatment is not easy but I paid particular attention to this, making safe and stable operations my highest priority, to avoid causing any adverse impact to society.

This spring, I was transferred to sales of industrial chemical products. I have confidence in the products made by Nippon Soda and am proud to be selling them. From the vantage point of my new position, I will do my best to collect feedback from customers and relay it back to the company so that we can offer better products.

My CSR activity

“Passing down a culture of initiative” to the next generation, with the highest priority on ensuring safety

Hiroshi Yamada
Organic 2nd Group
Organic 2 Section
Manufacturing Department
Takaoka Plant

Since we deal with many hazardous materials, I always take into consideration the impact on the environment and workers’ health and place the highest priority on safety. As the manager, I also promote safety education.

While manufacturing sites will continue to exist in the future, operational procedures and manuals to ensure safety will not be passed down unless support is provided in terms of the awareness and initiative shown by workers at each worksite.

I place an emphasis on creating a workplace where every single employee can have an impact as an individual team member and can appreciate the impact of his or her fellow team members.

Trust through responsible actions

My CSR activity

We take a responsible approach to toxicological studies to develop safer agrochemical products at our GLP-compliant testing facility, which has been inspected by the Japanese Ministry of Agriculture, Forestry and Fisheries every 3 years and has been recognized as a highly reliable laboratory for 30 years.

Our primary work is to rigorously evaluate agrochemical candidates to identify and overcome challenges using animal models.

From an animal welfare perspective, we have been devoting ourselves to refinement for minimizing animal pain and to reduction of animal use. In recent years, we have also been promoting the replacement of animal testing.

Hiroko Moroe
Group of Exploratory Toxicology
Department of Environmental Science and Toxicology
Odawara Research Center

Good relationships with local partners to support the operation of an overseas joint venture

My CSR activity

The plant of Nisso Namhae Agro Co., Ltd. (NNA), which I am in charge of, is located in Yeosu City, a port city situated some 300 kilometers south of Seoul in South Korea. It is also 300 kilometers away from Fukuoka, located on the opposite side of the Tsushima Strait. Yeosu City has a long history of links with Japan. It is my role to support the operation of NNA from the standpoint of Nippon Soda. I have frequent opportunities to converse not only with local staff but also local companies. Although there are times when communication doesn’t go so well due to differences of culture and different ways of looking at things, we try our best to understand each other in order to improve NNA, which is our common goal. Every day I have difficulties in comprehending others, which makes me reaffirm the importance of mutual understanding.

Yufuko Yoshida
Business Strategy &
Administration Department
Agro Products Division

Nihongi Plant

950, Fujisawa, Nakago-ku, Joetsu,
Niigata 949-2392
Tel: +81-255-81-2300
Fax: +81-255-81-2341

Major products manufactured
Caustic potash, alcoholate, HPC, Faropenem sodium, Mospilan, Nissorun, Hi-chlon, HIDION, etc.

Number of employees
298 (as of the end of March 2015)
(including employees of Joetsu Nisso Chemical Co., Ltd.)

Number of employees of affiliates
176 (as of the end of March 2015)

ISO 14001: Certified in March 2000
ISO 9001: Certified in August 1995
OHSAS 18001: Certified in April 2009

Plant Manager Commitment

Satoshi Tsukamura
Executive Officer
Plant Manager

Finding value in ordinary routine activities
Building trust through individual professionalism

Nihongi Plant is a time-honored plant that has been in continuous operation for 95 years on the site where the company was originally founded. The plant maintains a very close relationship with the local community and has been involved in various kinds of exchange activities with local residents, including participating in local events and, most recently, hosting a workplace experience program for junior high school students. We also invite local residents to monitor any offensive odors coming from the plant so that we can incorporate their opinions into our improvement activities.

This year is the third year of the medium-term plan of Nihongi Plant and we are in the phase where individual employees are required to implement the plan in a professional manner. With a particular focus being placed on “the management of change,” we not only identify advantages of improvement activities but also risks associated with them in order to achieve greater improvement. Over the course of this year, more organized efforts will be undertaken to repair existing facilities and to improve the operation. Through activities to achieve this goal, it is expected that all employees will be able to further enhance their professionalism in relation to their specific tasks.

With regard to the transfer of skills and techniques, efforts will be focused not only on organizing lectures but also on providing on-the-job training to allow the older generation of workers to pass their expertise on to their younger colleagues. While the plant has become increasingly automated, I believe that it is important to incorporate “human” skills and techniques into automated processes in order to ensure safety and quality.

Another important effort made at Nihongi Plant this year is the introduction of a quality risk assessment program. Using the same concept as that underpinning the identification of hazards in terms of safety, we identify risks in terms of quality so that we can improve our activities to achieve higher quality.

My goal is to involve the entire plant in developing a PDCA cycle that can be implemented under the leadership of on-site workers. To do so, I will provide educational programs to help them effectively perform risk assessments on safety, quality and the environment.

On-site reports

Joint project with an affiliate company
Reduction of 230 tons of surplus sludge through our efforts to reduce the waste of the entire plant

Members of the Utility Unit and Soei-Sangyo’s project team

Nihongi Plant has implemented a project to reduce the total amount of surplus sludge waste since 2012. The plant annually generates somewhat less than 2,000 tons of waste, of which surplus activated sludge accounts for about 50%. Surplus sludge is generated in the treatment of industrial wastewater. We calculated that we could reduce the total amount of surplus sludge by reducing the water content, which accounts for about 75% of surplus sludge, and could thereby reduce our industrial waste treatment costs.

We therefore focused our efforts on reducing the water content by changing the coagulant used for the sludge dewatering machine. We at first used the dose of coagulant recommended by the coagulant manufacturer and the manufacturer of the dewatering machine, but later found a more optimal mixing ratio. Based on this ratio and the trial calculation of overall cost-effectiveness, the project’s members conducted a series of verifications over a period of one year to determine what measures should be taken.

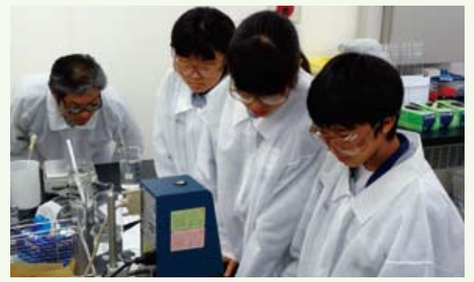
Most of the members of this project were in their 30s. The Utility Unit members who were involved in the project were given an opportunity to learn about the operation and management of an activated sludge plant, as one of the outcomes of the project. We also invited employees of Soei-Sangyo, an affiliate to which we outsource the plant’s operation and management, to join the improvement project. These efforts enabled us to successfully complete the improvement activities.

Before starting the project, the amount of treated surplus sludge was 974 tons. This was reduced to 746 tons (for fiscal 2015) at the end of the project. We successfully reduced the amount of waste disposal by about 230 tons.

Topics

Hands-on learning program for Nakago Junior High School students

We participated in the “Joetsu Yume Challenge Project,” which was designed to provide junior high school students in Joetsu City, with opportunities for work experience. The project’s purpose is to help students develop a view of working, understand what it means to hold down a job, and develop a clear image of their own future so that they can take action independently. As part of the program, Nihongi Plant hosted six students from Nakago Junior High School. We gave them a tour of the manufacturing site and an opportunity of work experience at the departments of Manufacturing, RC Promotion and General Affairs. We hope that some of them will join Nippon Soda in the future.



Experiencing product analysis at the RC Promotion Department

Nihongi Plant

Progress status of CSR activities

Management system and organizational governance

Nihongi Plant appropriately implements, maintains and oversees the management systems for quality, the environment and occupational safety & health. We have completed the integration of these three systems into one in order to implement them more effectively.

Human rights/labor practices

Based on the basic policy of the Nippon Soda Group, and through specific implementation of the personnel system and proactive labor management discussion, we focus our efforts on “creating a work environment where all employees can find their work meaningful.”

Environmental protection

We have an assessment system to better understand environmental impacts that are posed by our plant activities. We take actions, through communication with local communities, to create and maintain an earth-friendly work environment to minimize the impact of our activities on the environment.

Process safety & disaster prevention/BCP

Efforts are made to prepare for a natural disaster resulting in extensive damage, so that in the case of such an event occurring we can confirm the whereabouts and status and ensure the safety of our employees and affiliate company employees and their families, as well as ensure the safety of residents in local communities.

Occupational safety and health

Efforts are focused on constantly improving basic conditions for ensuring safety and OSHMSs for both mind and body to maintain an accident-free working environment in order to provide a healthy and happy working experience and ensure the safety of local communities.

Distribution safety, quality assurance and consumer issues

We take measures to ensure the quality of products from the consumer standpoint. Efforts are also made to prevent distribution-related accidents and disasters and ensure distribution safety in order to safely deliver better products to consumers.

Chemicals and product safety

We clarify the properties of individual chemicals contained in industrial products, food additives and pharmaceuticals as well as their proper handling methods. Efforts are made to protect the safety and health of all people and the environment. We prepare and provide safety data sheets.

Social dialogue, community involvement and development, fair operating practices and compliance

We promote communication with local communities by organizing local gatherings to discuss environment-related issues, and by participating in local events.

Plant environment data

Note: Figures in parentheses show the change compared with the FY 2013 result. + indicates an increase and ▲ a decrease.

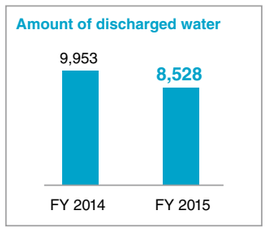
Unit: t/year (amount of discharged water: 1,000 t/year; CO_2: 10,000 t/year)

	Emissions to water		Emissions to air				Final disposal as landfill
	Amount of discharged water	BOD	CO_2	NO_x	SO_x	Soot and dust	
Actual environment data in FY 2015	8,528 (▲1,425)	18.1 (▲4.5)	6.4 (+0.1)	26.2 (+6.8)	5.9 (▲3.7)	6.1 (▲0.5)	70.6 (▲38.6)

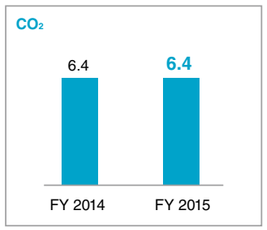
Unit: t/year

	Substance name	Amount emission		Amount transferred
		Air	Water	
Emissions of PRTR-designated substances in FY 2015	Toluene	20.04 (+0.89)	0.00 (0.00)	0.00 (0.00)
	Fluorine	0.00 (0.00)	0.00 (0.00)	2.23 (▲1.00)
	Chloroform	2.68 (▲0.32)	0.00 (0.00)	0.00 (0.00)
	Designated substances: 15 substances Total emissions: 24.28 t Total amount transferred: 3.52 t			

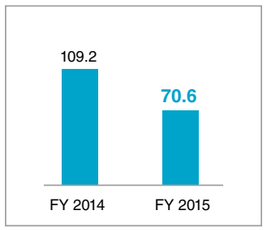
Emissions to water (1,000 t)



Emissions to air (10,000 t)



Final disposal as landfill (t)



Takaoka Plant

300 Mukaino-honmachi, Takaoka, Toyama 933-8507
Tel: +81-766-26-0206
Fax: +81-766-26-0300

Major products manufactured
Caustic soda, hydrochloric acid, TODI, phosphorus chloride, Topsin M, STM, pesticide formulation products, etc.

Number of employees
283 (as of the end of March 2015)

Number of employees of affiliates
165 (as of the end of March 2015)

ISO 14001: Certified in November 2000
ISO 9001: Certified in June 1995
OHSAS 18001: Certified in November 2005

Plant Manager Commitment

Izumi Takano
Executive Officer
Plant Manager

Development into the future based on proposals made by the plant, with the highest priority on achieving “no accidents and no disasters”

Last year marked the 80th anniversary of Takaoka Plant. The plant’s midterm plan includes “Challenge 10 Takaoka,” which defines the position the plant seeks to achieve over the next 10 years. We are continuing our efforts to implement plans one by one to achieve the goal so that we can maintain and develop the plant in a sound manner. The first priority objective for fiscal 2016 is to ensure safe and stable operations, with an emphasis on eliminating human error. After laying the groundwork for a forward push, our efforts will not only be focused on maintaining existing facilities and products but also on presenting plant-originated proposals by taking advantage of the characteristics unique to Takaoka Plant, including its teamwork approach and driving force, so that we can contribute to the entire group.

Since fiscal 2012, we have been working on a project called the “Plant Capabilities Enhancement Campaign,” which aims to promote the transfer of skills and techniques, mainly through education. As for safety issues, in cooperation with external parties, we provide hands-on training programs to prevent accidents. These programs are designed in such a way as to pass on the experience gained by older workers to younger employees. The higher the safety level of the plant, the lower the number of workers involved in work accidents. In this respect, the project is effective in terms of risk management. I hope to help all employees experience the satisfaction of “thinking, proposing and promoting,” which I believe is only possible at a manufacturing site.

In our CSR activities, it is important for us to help stakeholders understand our activities and provide us with their assessment of our efforts in order to ensure the sustainable development of the plant. Emphasis is also placed on exchanges with local residents, our closest stakeholders. Our efforts in the past included regular meetings with environmental monitors and our participation in regional exchange events, through which we have gathered opinions from local residents in order to incorporate them into plant activities. CSR activities should not be regarded as activities that deal with special issues but should be focused on fundamental issues, such as safety and environmental protection. Our efforts to address these fundamental issues should then be assessed by the public in order to improve our CSR activities. An emphasis will continue to be placed on achieving harmonious development with society.

On-site reports

During a time of significant employee turnover, the “Plant Capabilities Enhancement Campaign” was promoted to maintain and improve the capabilities of the plant.

Participants in the Plant Capabilities Enhancement Campaign

Due to the mass retirement of the baby boom generation over the last 10 or so years, the passing on of skills and learned techniques to newly recruited and transferred employees has become a major issue. In response, we launched a project called the Plant Capabilities Enhancement Campaign in fiscal 2012 to improve the educational environment in order to maintain and further develop the operational capabilities of the plant. We have been promoting efforts to implement the PDCA cycle with an emphasis on educational activities on a one-year basis, in line with the CSR plan for the entire plant. Takaoka Plant has implemented well-organized efforts to promote not only the transfer of skills and techniques but also to address issues surrounding safety, the environment, quality and others with the aim of further improving its activities in order to move forward next year.

In fiscal 2015, we developed a personnel development program unique to Takaoka Plant. Takaoka Plant has been actively engaged in building a new system designed for young employees and those who have newly joined the manufacturing department. The new personnel development program, which is innovative and cuts across departmental boundaries, has been instituted as the “Nisso Takaoka Academy” (NTA) since fiscal 2016.

This year will be the final year of the Plant Capabilities Enhancement Campaign. While continuing our efforts to perform damage control for the plant in terms of preventive maintenance, we will place particular emphasis on eliminating the opportunities for human errors, which by their nature are bound to occur if the opportunities continue to exist.

Topics

Hands-on training on fires, explosions and exposure to a liquid chemical agent

On July 2, 2014, a hands-on training session for dealing with fires, explosions and exposure to a liquid chemical agent was provided to 41 employees of Nippon Soda and its affiliates. In the first part of the program, a lecture on the basic principles of fires and explosions was provided. In the second part, demonstrations of dangerous phenomena, such as ignition by static electricity and dust explosions, were conducted using experimental devices. Participants also experienced simulated exposure to a liquid chemical agent, using water instead of an actual agent. A number of the participants noted that the training provided them with an opportunity to refresh their understanding of hazardous situations. “Seeing ignition and explosion events firsthand reminded me of how dreadful they are,” said one participant. “I learned about the seriousness of chemical burns,” reported another.

Disasters like fires and explosions at a chemical plant not only cause damage to on-site production facilities, they may significantly affect neighboring residents. Moreover, failing to operate chemical facilities or handle a liquid chemical agent correctly may result in exposure to the liquid agent, resulting in chemical burns.

In this context, we provide education on a regular basis to raise awareness among all employees in order to ensure the safety of the plant.


Lecture prior to beginning the hands-on training


Observing an explosion caused by static electricity


Simulated exposure to a liquid chemical agent

Progress status of CSR activities

Management system and organizational governance

Our basic objective is “to comply with laws and regulations and implement sound and transparent plant management.” In line with this, we set our goals, continue to make improvements and conduct regular reviews based on ISO 14001, OHSAS 18001 and ISO 9001.

Environmental protection

We comply with the standards for air and water emissions of harmful chemical substances. Efforts are also made to reduce emissions of PRTR-designated substances according to our chemicals management plan.

Occupational safety and health

We undertake risk assessments to reduce potential causes of hazards and implement four safety cycles to achieve “zero accidents.” Guidance on mental health and other health problems is provided to promote the sound psychological and physical health of employees.

Chemicals and product safety

We prepare MSDSs and product labels to meet Japanese and overseas requirements. We also provide customers with the most updated product information to ensure “safe management” and “zero use-related problems.”

Human rights/labor practices

Based on the basic policy of the Nippon Soda Group, and through specific implementation of the personnel system and proactive labor management discussion, we put effort into “creating a work environment where all employees can find their work meaningful.”

Process safety & disaster prevention/BCP

Because we use hazardous, poisonous and deleterious substances as well as high-pressure gas at the plant, we take into account measures to prevent risks, such as ignition and explosion, during the design stage when constructing new facilities. With regard to existing facilities, we implement measures to maintain them in an appropriate condition and upgrade them on a regular basis.

Distribution safety, quality assurance and consumer issues

We conduct inspections of transport companies and provide them with education and training so that products are delivered safely. Efforts are also made to prevent quality complaints through quality risk assessments, quality inspections and quality meetings.

Social dialogue, community involvement and development, fair operating practices and compliance

We continue to hold dialogues with the public on various occasions, such as “Thanking Local Residents” events and discussions with environmental monitors and neighborhood councils.

Plant environment data

Note: Figures in parentheses show the change compared with the FY 2013 result. + indicates an increase and ▲ a decrease.

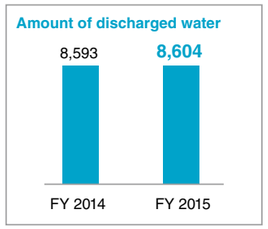
Unit: t/year (amount of discharged water: 1,000 t/year; CO_2: 10,000 t/year)

Actual environment data in FY 2015	Emissions to water		Emissions to air				Final disposal as landfill
	Amount of discharged water	BOD	CO_2	NO_x	SO_x	Soot and dust	
	8,604 (+11)	54.1 (+11.0)	12.8 (+0.5)	28.6 (▲7.1)	98.4 (▲13.6)	5.4 (▲0.4)	113.0 (▲37.0)

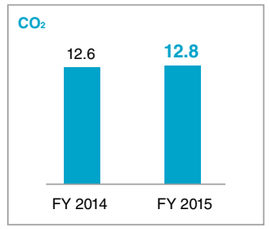
Unit: t/year

Emissions of PRTR-designated substances in FY 2015	Substance name	Amount emission		Amount transferred
		Air	Water	
	Acetonitrile	0.90 (▲1.88)	0.00 (0.00)	2.00 (▲0.60)
	Toluene	1.81 (▲7.25)	0.00 (0.00)	52.09 (+21.88)
	Chlorobenzene	13.62 (▲0.99)	2.00 (▲0.14)	1.77 (▲0.12)
	Designated substances: 24 substances Total emissions: 30.67 t Total amount transferred: 206.41 t			

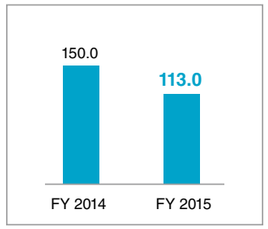
Emissions to water (1,000 t)



Emissions to air (10,000 t)



Final disposal as landfill (t)



Mizushima Plant

2767-12 Kojima-shionasu, Kurashiki,
Okayama 711-0934
Tel: +81-86-475-0036
Fax: +81-86-475-0039

Major products manufactured
Soda cyanide, potassium cyanide, diaminomaleonitrile (DAMN)

Number of employees
43 (as of the end of March 2015)

Number of employees of affiliates
25 (as of the end of March 2015)

ISO 14001: Certified in October 2001
ISO 9001: Certified in January 1999
OHSAS 18001: Certified in January 2009

Plant Manager Commitment

Teruo Tachibana
Plant Manager

Using various aspects of CSR as a means to improve the plant

Mizushima Plant manufactures sodium cyanide and potassium cyanide using highly toxic hydrocyanic acid gas supplied by a neighboring company. Because cyanide is a highly hazardous substance, all workers at the plant, including employees of affiliate companies as well as Nippon Soda employees, learn how to handle products correctly and must meet all requirements of CSR activities without fail, including learning how to wear protective clothing correctly and how to perform day-to-day operations in a safe manner. Since the plant is situated within the Mizushima chemical complex in Okayama, even a minor accident could lead to a large-scale disaster. We therefore pay constant and careful attention to ensuring safety and implementing preventive measures. We also provide explanations of products handled at the plant, possible risks, and other relevant issues to local residents. We believe that it is our responsibility to help them understand these issues if we are to continue to operate the plant.

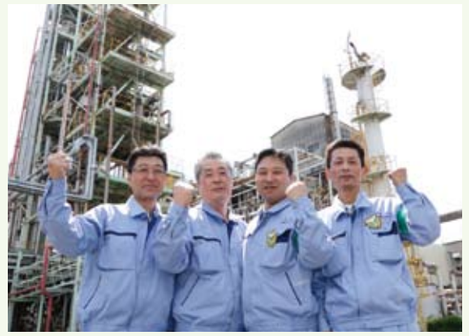
Our plant has been engaged in Mission Visualization (MV) activities since fiscal 2007. The objective of MV activities is to visualize and share information on CSR activities among all plant personnel in order to promote improvement. In these activities, we apply a cooperative, employee-driven approach rather than a top-down approach. Information on the state, progress and results of activities is provided throughout the plant by placing MV sheets in highly visible locations as well as organizing presentation meetings. This is a very good project and I would like to continue it.

We set a goal of “no accidents and no disasters” last year but one accident causing no absence from work was reported. This was a very minor incident but still we failed to meet the goal. More efforts will be made to achieve the goals of CSR activities, taking advantage of the plant’s culture of orchestrated teamwork.

CSR has many aspects. It is my hope that all employees work as hard as they can in regard to each to improve our plant. CSR activities themselves are not the objective. The objective is to further improve the plant and its peripheral environment through CSR activities and thereby contribute to the entire group and society at large.

On-site reports

Training using bird’s eye perspective diagrams to understand the flow of people



Members of Management Section

Mizushima Plant is located in Kurashiki City, Okayama, which is an area with a high likelihood of experiencing a Nankai megathrust earthquake. Due to the nature of substances handled by the plant, its employees have an intense awareness of disaster prevention.

To be prepared for power outages following a disaster, we have a fire extinguishing system that runs off our own generator. To be prepared for tsunami, we have set procedures covering all stages of an event, from the suspension of the plant’s operation and confirmation of people’s safety to evacuation. All the employees share relevant information with each other.

Mizushima Plant is a member of the Mizushima Industrial Complex Safety and Disaster Prevention Council, which consists of four representative companies and 27 member companies connected via a network using satellite phones. Okayama Prefecture conducts a comprehensive disaster prevention drill for the Mizushima Industrial Complex. This drill is conducted based on simulated damage and involves fire engines and ambulances from the local fire department. Participants also include the Disaster Response Headquarters, the Japan Red Cross, and representatives of the news media. This is a large-scale drill, during which the Environmental Policy Department of Kurashiki City performs atmospheric measurements.

In addition, our plant conducts joint disaster prevention drills with the fire department on a regular basis. We usually include on-site water spraying and evacuation simulations. Unlike previous years, last year we conducted a tabletop training session using diagrams. During an on-site drill, we cannot see how people move about. Using a diagram, however, we can discuss the flow of people while taking a bird’s eye view over the entire site. Through questions and answers that arose while we were simulating the flow of people on the diagram, all the participants, not just those from Headquarters, were able to understand what actions should be taken in an emergency.

Topics

Participation in local dialogue as a responsible care activity

On February 19, 2015, the 9th Responsible Care Local Dialogue in Okayama was held, with the participation of 55 people from 13 companies. At the meeting, which was sponsored by the Japan Chemical Industry Association (JCIA), efforts concerning responsible care activities were reported to 98 representatives of local government agencies and local residents’ associations. The program included reports on RC activities at three business sites, a keynote lecture, a panel discussion, and sharing of opinions.

The keynote lecture was given by a representative of the Okayama Prefectural Government’s Risk Management Department. Titled, “Emergency Preparedness for Disasters, such as Earthquakes and Tsunamis,” the lecture included a report on a tsunami inundation simulation for Okayama Prefecture in the event of a Nankai megathrust earthquake. We have reflected what we learned from the lecture in developing emergency plans for the plant as part of our earthquake preparations.

Mizushima Plant

Progress status of CSR activities

Management system and organizational governance

Keenly aware that the plant deals with cyanide in its production activities, all employees at the Mizushima Plant make concerted efforts to promote RC activities and are guided by CSR principles in performing their duties.

Environmental protection

Our efforts are focused on saving energy and resources and reducing waste and harmful substances in line with environmental policies in order to minimize the impacts of our business activities on the environment.

Occupational safety and health

We promote measures aimed at achieving the goal of accident free workplaces in order to provide employees with a healthy and happy working experience. We also promote risk reduction activities through risk assessment.

Chemicals and product safety

We give due consideration to the impacts of chemical substances and products on the environment, safety and health. Furthermore, we comply with laws and regulations as well as publicly demanded requirements in order to earn greater public trust.

Human rights/labor practices

Based on the basic policy of the Nippon Soda Group, and through specific implementation of the personnel system and proactive labor management discussion, we focus our efforts on “creating a work environment where all employees can find their work meaningful.”

Process safety & disaster prevention/BCP

To prevent major accidents at our facilities, we update and manage the facilities and promote safe, stable and trouble-free production activities. We also maintain a business continuity plan (BCP) that helps us to make continuous improvements.

Distribution safety, quality assurance and consumer issues

Efforts are focused on building trust with our customers and generating satisfaction among them as well as reducing the risks of in-transit accidents and preventing distribution-related accidents. As a shipper, we provide RC education to product transportation and storage companies once a year.

Social dialogue, community involvement and development, fair operating practices and compliance

We participate in opportunities for dialogue with government agencies and local communities through the Emergency Communications Council and other organizations and also participate in local events to deepen the public’s understanding of our business activities and build friendly relationships with local people.

Plant environment data

Note: Figures in parentheses show the change compared with the FY 2013 result. + indicates an increase and ▲ a decrease.

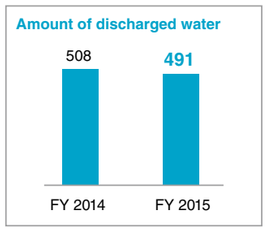
Unit: t/year (amount of discharged water: 1,000 t/year; CO_2: 10,000 t/year)

	Emissions to water		Emissions to air				Final disposal as landfill
	Amount of discharged water	COD	CO_2	NO_x	SO_x	Soot and dust	
Actual environment data in FY 2015	491 (▲17)	1.9 (▲0.3)	0.9 (▲0.3)	2.7 (▲0.3)	0.0 (0)	0.0 (0)	3.7 (▲1.7)

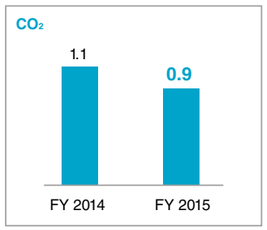
Unit: t/year

	Substance name	Amount emission		Amount transferred
		Air	Water	
Emissions of PRTR-designated substances in FY 2015	Inorganic cyanides	0.12 (+0.01)	0.03 (▲0.02)	0.006 (0.000)
	Acetonitrile	0.00 (0.00)	0.00 (0.00)	0.00 (▲0.23)
	Xylene	0.00 (0.00)	0.00 (0.00)	0.00 (▲0.03)
	Designated substances: 4 substances Total emissions: 0.15 t Total amount transferred: 0.006 t			

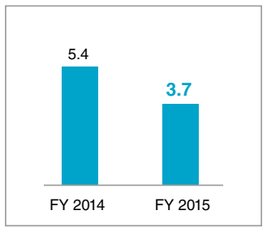
Emissions to water (1,000 t)



Emissions to air (10,000 t)



Final disposal as landfill (t)



Chiba Plant

12-8 Goiminami-kaigan, Ichihara,
Chiba 290-8530
Tel: +81-436-23-2012
Fax: +81-436-22-6588

Major products manufactured
POLYBUTADIENE, VP Polymer, Titabond, D-90, Take-One, Melsan

Number of employees
117 (as of the end of March 2015)

Number of employees of affiliates
101 (as of the end of March 2015)

ISO 14001: Certified in July 2000
ISO 9001: Certified in August 1997
OHSAS 18001: Certified in February 2008

Plant Manager Commitment

Atsuo Watanabe
Plant Manager

Well-planned PDCA cycle to ensure safety and security in the future

The goal for the plant in fiscal 2016 is the “implementation of a well-planned PDCA cycle.” The PDCA cycle is a system that is essential for ensuring safe operations at plants. We hope to further increase the safety level this year. To do so, every one of our employees needs to make a habit of thinking ahead before implementing any CSR activity. We will make efforts to enhance our system to the extent whereby we can improve the quality of the “plan” part of the PDCA cycle and then implement the improved plan, thereby achieving better results. This may not be easy but I believe that optimization of the entire plant and application of the PDCA cycle as part of human resources development will ensure us a better future.

All employees, whether young or experienced, have learned to be creative based on their understanding of fundamental principles, rather than merely relying on past experience. The human element is critical in ensuring safety. For example, to improve their understanding, on-site supervisory staff should learn about the safety system incorporated into the plant when it was designed and then share this acquired knowledge with Technical Department personnel. I hope, through these efforts, everyone will work together to make plant operations safer. The safe and efficient operation of facilities will make the plant safer as a whole and thereby provide a greater sense of security to plant personnel and local residents alike.

We have adopted the concept of corporate social responsibility over the last few years, during which time employees have come to understand how all activities conducted on a daily basis are linked with our social responsibility, not only in terms of ensuring safety, which is the highest priority issue for the plant, but also in regard to protecting the environment and ensuring quality. They have become more aware of how making better products in an efficient way and with the highest priority on safety can contribute to society. I think that this raised awareness has also made employees more motivated.

Chiba Plant is in the Keiyo Industrial Complex, which is adjacent to local residential areas. We place emphasis on exchange with local residents, including participation in an annual festival organized by a local community. We will continue to make safety a priority so that local residents recognize us as a safe plant.

On-site reports

Working Group for improving the wastewater system using wastewater pools Achievement of no electricity consumption using the difference in elevation

Project members

The treatment of plant wastewater is a very important issue in terms of environmental conservation. In 2013, Chiba Plant formed a Wastewater Working Group consisting of 10 representatives of related departments and the RC Department for the purpose of improving the wastewater system in general. The industrial wastewater generated by Chiba Plant is discharged into Tokyo Bay after undergoing activated sludge treatment. There was a concern, however, that under the old wastewater system, wastewater with pollutant concentrations exceeding the standards could be discharged into the bay in an emergency situation. The Working Group therefore started to discuss the idea of using an unused pool to build a new wastewater system. After repeated safety reviews to rigorously evaluate this idea, the Working Group decided to construct a new facility where wastewater that would conventionally have been discharged directly into Tokyo Bay would be collected in the pool before being discharged. In addition, an emergency shutoff valve was installed to prevent wastewater from being discharged into the bay in an emergency, which improved the system significantly.

The new wastewater system is designed to take advantage of the difference in elevation to transport the wastewater without the use of electricity. The project team was disbanded in March 2015 but we will continue to improve the facilities for wastewater, including rainwater, so that the total amount of wastewater from the entire Chiba Plant does not exceed the standard.

Topics

Plant tour for elementary school children

Every year, in cooperation with neighboring companies, we invite students from Keiyo Elementary School to take a tour of the plant. Last year, we invited 108 fifth-graders to visit us on July 17. As part of the tour, we joined forces with the adjacent Chiba Research Center to conduct an experiment using sodium polyacrylate to demonstrate gel formation. Staff members played the roles of a moderator, a doctor and an assistant to perform both a successful experiment (gelation in about 10 seconds) and a failed one (gelation in about 2 to 3 minutes). Through these experiments, the presenters encouraged the children to never give up because “failure teaches success.” The children showed tremendous interest in the experiments and the plant tour was deemed successful. Before leaving the plant, some of the students even asked the “doctor” for some feedback on their summer vacation research projects. By hosting this kind of event, we hope to become a plant that is loved and supported by local people.

An employee playing a role of “doctor”

Progress status of CSR activities

Management system and organizational governance

Concerted efforts by all staff are made to achieve RC activities in order to carry out sound and transparent corporate activities in compliance with laws and regulations. In business activities, all employees comply with CSR principles and use the PDCA cycle appropriately.

Human rights/labor practices

Based on the basic policy of the Nippon Soda Group, and through specific implementation of the personnel system and proactive labor management discussion, we focus our efforts on “creating a work environment where all employees can find their work meaningful.”

Environmental protection

The plant complies with the ISO 14001 Environmental Management System. This year, we successfully reduced our waste by 100 tons from the previous year. Under our general drainage management plan, we built a system to prevent abnormal wastewater discharge.

Process safety & disaster prevention/BCP

At least twice a year, in cooperation with public firefighters and a joint disaster response unit, we conduct disaster drills on the assumption of a disaster occurring on a weekday, at night or on a holiday. We also maintain a business continuity plan (BCP) that helps us to make continuous improvements.

Occupational safety and health

We promote measures aimed at achieving the goal of accident free workplaces in order to provide employees with a healthy and happy working experience in accordance with the OHSAS 18001 Occupational Safety and Health Management System.

Distribution safety, quality assurance and consumer issues

Efforts are made to reduce risks associated with the transportation and distribution of products in accordance with the ISO 9001 Quality Management System to prevent distribution accidents. We also make efforts to maintain quality assurance and contribute to improved customer satisfaction.

Chemicals and product safety

We give due consideration to the impacts of chemical substances and products on the environment, safety and health. Furthermore, we comply with laws and regulations as well as publicly demanded requirements in order to earn greater public trust.

Social dialogue, community involvement and development, fair operating practices and compliance

We take advantage of various opportunities to communicate with local communities and are actively involved in council meetings with other companies and activities to support volunteers.

Plant environment data

Note: Figures in parentheses show the change compared with the FY 2013 result. + indicates an increase and ▲ a decrease.
* Facilities without any emissions

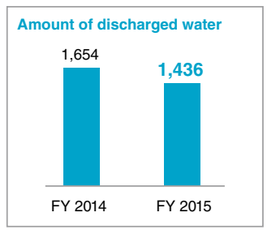
Unit: t/year (amount of discharged water: 1,000 t/year; CO_2: 10,000 t/year)

Actual environment data in FY 2015	Emissions to water		Emissions to air				Final disposal as landfill
	Amount of discharged water	COD	CO_2	NO_x	SO_x	Soot and dust	
	1,436 (▲218)	9.7 (▲0.5)	1.8 (+0.3)	*—	*—	*—	0.3 (▲4.5)

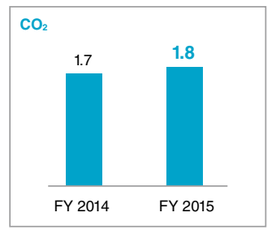
Unit: t/year

Emissions of PRTR-designated substances in FY 2015	Substance name	Amount emission		Amount transferred
		Air	Water	
	Toluene	8.15 (+1.05)	0.00 (0)	0.28 (▲2.03)
	n-hexane	5.11 (▲0.59)	0.00 (0)	0.00 (0)
	1,3-butadiene	3.40 (+0.16)	0.00 (0)	0.00 (0)
	Designated substances: 12 substances Total emissions: 17.34 t Total amount transferred: 41.17 t			

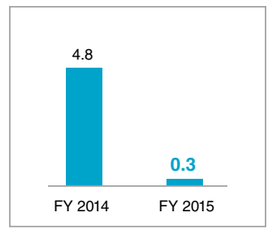
Emissions to water (1,000 t)



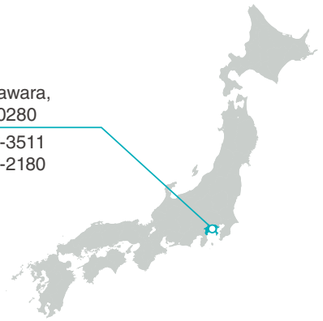
Emissions to air (10,000 t)



Final disposal as landfill (t)



Odawara Research Center



345 Takada, Odawara,
Kanagawa 250-0280
Tel: +81-465-42-3511
Fax: +81-465-42-2180

General Manager Commitment

Shinsuke Sano
Executive Officer
Research Center
General Manager

Research and development dealing with first-of-their-kind chemicals Ensuring safety and security

Odawara Research Center is engaged in the research, development and registration of, mainly, agricultural chemicals. In our drug discovery efforts, we often handle a chemical that is the first of its kind in the world and therefore conduct safety evaluations from various aspects in order to better ensure safety. In the process of developing an innovative agent, we establish a follow-up system to reduce human error in order to minimize risks.

Research activities are often conducted individually instead of in a group. Therefore, efforts are made throughout the research center to increase opportunities for communication between members beyond supervisor-subordinate relationships and to monitor the mental and physical health of workers. In addition, as one of our efforts to create a work environment where women are encouraged to play an active role, we try to create a culture of support that makes it easier for female employees to take maternity and/or child care leave.

The Odawara Research Center maintains agricultural fields for research purposes in Shizuoka, Fukushima and Hokkaido as well as Odawara. The main issue in occupational safety and health is how to instill a common CSR awareness among these four sites, which are located at some distance from each other. To overcome the geographical disadvantages in sharing information, we create increased opportunities, such as web conferences, for researchers at these locations to interact with each other on a more personal basis, in addition to communicating via email and document circulation. For those engaged in performing safety evaluations on-site at agricultural fields, we provide education on how to handle edged tools and dangerous agricultural machinery as well as general safety training.

Since we are engaged in research on agricultural chemicals that have a significant impact on food, we place an emphasis in our research and development activities not only on safety but also on the perception of safety among stakeholders with respect to our products.

On-site reports

Shigeji Sugimoto, Tatsumi Suzuki, Satoru Makita, Yukiko Tatsushiro
Department of Planning and Administration

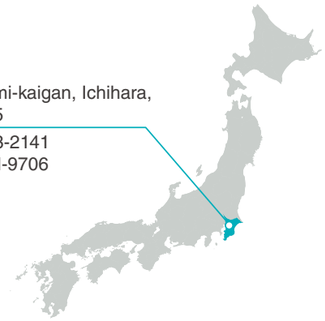
Strict handling control of agricultural machinery at all research fields

In the fields operated by Odawara Research Center, dangerous agricultural machines ranging from large tractors to small rotary weed cutters are used on a daily basis. We have been implementing activities focused on preventing accidents involving these machines since last year.

Many of those working on-site at our agricultural fields work for our affiliated companies and are not under our direct instruction and supervision. However, we started our activities with the hope of raising the awareness around safety and accident prevention of these workers also for as long as they are working within our facilities in order to reduce accidents as much as possible.

Specific activities include the listing of the presence or absence of a license for the operation of agricultural machinery and equipment owned by each field and operator. We believe that the use of these lists help enhance incident prevention awareness among those who work at our fields. We will continue our efforts to achieve the goal of "achieving zero accidents through the collaboration of all staff."

Chiba Research Center



12-54 Goiminami-kaigan, Ichihara,
Chiba 290-0045
Tel: +81-436-23-2141
Fax: +81-436-21-9706

General Manager Commitment

Akira Kaneko
Executive Officer
Research Center
General Manager

Development of new chemical products useful for the public Research activities with a top priority given to safety

From the development process through to the manufacturing of final products, Chiba Research Center places the highest priority on the safety of researchers as well as the safety of end users. Keeping in mind that the safety levels of newly developed products affect the range of environmental impact, we comprehensively take account all possible conditions in our research and development.

The safety of products and the development of environmental conservation technology occupy a large part of our CSR activities. As globalization progresses, it is essential for us to establish a system that requires all employees to understand the relevant laws and regulations both in Japan and abroad and that allows the research center to meet any necessary requirements quickly and accurately.

To do this, we regularly discuss related issues at CSR meetings and meetings of the Safety and Health Committee and relay the results to employees, if necessary. In these efforts, by repeating the PDCA cycle, we improve the CSR awareness of the entire research center. As a result, we have achieved the goals of "at least 4,400 days with no work-related accidents resulting in no absences from work" and "at least 8,000 days with no work-related accidents resulting in absences from work."

The research center and adjacent Chiba Plant adopt a unified operation management system for production and technology activities. This unified system enables smooth technology transfer to ensure safety and quality, which is most important in commercializing developed technology.

We will continue our efforts to provide new products useful to the public, giving our top priority to safety and environmental consideration.

On-site reports

Hiroyuki Mori Department of Administration

Promotion of cooperation among industry, government and academia to contribute to local communities

Chiba Research Center actively promotes cooperation in research and development with universities and government agencies in various ways. We promote communication with external parties by sending our researchers to universities, conducting joint research with university researchers, and various other efforts. Also, because we have customers not only in Japan but also overseas, our researchers sometimes participate in international scientific conferences.

One of the factors behind the active cooperation with universities is an approach taken by the Chiba Prefectural Government to prioritize industrial vitalization and the development of the Keiyo Industrial Complex by encouraging universities and private sector organizations within Chiba Prefecture to work together. In cooperation with Chiba University and the Chiba Institute of Technology, the prefectural authorities organize joint efforts involving representatives of industry, government and academia to invigorate the entire prefecture. Thanks to their efforts, cooperation between our research center and university researchers has progressed well and communication has flourished.

In the vicinity of the research center, there are a number of companies dealing with high polymers. Members of our research center take the initiative in organizing annual seminars at the Chiba Institute of Technology.

Feature Article on CSR Activities of Group Companies

SanWa, as a comprehensive distribution coordinator, provides highly convenient services in the areas of hazardous materials, poisonous and deleterious substances, and pharmaceutical products.

Nobuyoshi Takami
President, Representative Director

Since its foundation in May 1950, Sanwa Soko Co., Ltd. has promoted the establishment of well-planned, highly convenient next-generation distribution systems that meet various customer demands in real time, while keeping a firm eye on the future amid an ever-changing business environment.

From the beginning we have particularly specialized in the field of handling hazardous materials, poisonous and deleterious substances, and other chemical products with our priority on safety and accuracy. To perform these services we have developed physical distribution facilities equipped with modern systems and staffed by expert personnel.

Our Compliance Committee ensures our corporate activities are conducted in compliance with laws and regulations as well as in keeping with corporate ethics. With regard to internal control, efforts are focused on observing the basic policy and addressing issues accurately and appropriately. In this regard, we have a well-prepared system to provide information through online forms. Our emphasis is on providing comprehensive services. We will continue our efforts to meet the diversified needs of various customers.

Strength — We can handle a wide range of products, including legally regulated products (as per the Fire Defense Law, Poisonous and Deleterious Substances Control Act, and Pharmaceutical and Medical Device Act) and products that require delicate temperature and humidity controls.

We handle general cargoes as well as a wide variety of products, including legally regulated products and products requiring temperature control, and a wide variety of packaging forms.

■Can handle materials classified as hazardous under the Fire Defense Law (Class 1 to Class 6) and designated combustibles ■Can handle poisonous and deleterious substances controlled under the Poisonous and Deleterious Substances Control Act ■Can handle pharmaceutical products and veterinary drugs under the Pharmaceutical and Medical Device Act ■Can handle products complexly controlled by aforementioned laws ■Can handle products requiring temperature control

Products not governed by domestic laws and ordinances (chemicals, components, parts, reagents, product samples, etc.)

Offices	Features	Cargoes handled
Sapporo Office	Adjacent to the JR Sapporo Cargo Terminal, with a warehouse for hazardous materials, which is rare in Hokkaido	H P O
Omiya Office	Close to the center of Saitama City, serving as a center of distribution to areas north of Kanto	H P O F Ph
Kawaguchi Office	Adjacent to Tokyo, with optimal access to the metropolitan area	H P O
Chiba Office	Situated in the Keiyo Industrial Complex. Conveniently located as a stock point of various kinds of cargoes	H P O B
Kawasaki Office	Situated at the midpoint between Tokyo and the Port of Yokohama. A general physical distribution base with a multi-story automated warehouse for hazardous materials	H P O B F
Yokohama Office	Adjacent to a major arterial road and suitable for handling medical products	H P O B F Ph
Daito Office	An inland warehouse suitable for efficient distribution with a warehouse for hazardous materials and a warehouse for ordinary products within the same premises	H P O F
Ibaraki Office	Situated in Ibaraki City, the logistics center of Kita-Osaka. Can serve as a base for distribution throughout the nation or Osaka and its suburbs	P O F Ph

H Hazardous materials designated under the Fire Defense Law　P Poisonous and deleterious substances
O Ordinary products　B Bonded cargo　F Fixed temperature cargo　Ph Pharmaceutical products

Warehouse for ordinary products
About 42,000 m² (of which, about 8,290 m² for poisonous and deleterious substances, about 5,640 m² for pharmaceutical products)
Warehouse for hazardous materials
About 17,090 m² (of which, about 2,280 m² for poisonous and deleterious substances, about 490 m² for pharmaceutical products)
In total
About 59,090 m² (of which, about 10,570 m² for poisonous and deleterious substances, about 6,130 m² for pharmaceutical products)

CSR Activity Report

This year is the 65th anniversary of Sanwa Soko Co., Ltd. We will continue our business activities based mainly around our offices and in line with the basic policy established in 2012 in order to grow with society.

Fixed temperature warehouse for pharmaceutical products

President Takami and CSR Promotion Office members

1) Improvement of corporate governance

We place emphasis on corporate governance, promote internal control, disseminate the Code of Conduct of Sanwa Soko, act in accordance with laws, regulations and business ethics, and promote business activities with an emphasis on environmental protection, occupational safety, quality and safety, process safety and disaster prevention, business continuity planning, and harmonious relationships with local communities.

2) Promotion of environmental protection

Eight offices (Sapporo, Chiba, Omiya, Kawaguchi, Kawasaki, Yokohama, Daito and Ibaraki) have received Green Management Certification*. When renovating our warehouses, we convert lighting systems to LED with the aim of reducing environmental impact and improving the work environment by increasing light intensity.

* Green Management Certification is issued by the Foundation for Promoting Personal Mobility and Ecological Transportation to enterprises recognized to have made a certain level of effort after a review conducted in accordance with the Green Management Promotion Manual.

Work efficiency improved through conversion to LED lighting

3) Quality improvement

Based on the ISO 9001 standard, efforts have been made to improve quality in order to enhance customer satisfaction. To provide a constant stream of safe and high-quality services, we manage the progress of goals in meetings, including safety meetings held four times a year with the participation of executives and office managers. We also effectively implement the PDCA cycle to improve quality. In 2012, we obtained a drug manufacturing license (packaging, labeling, storage), which allowed us to expand the scope of our business activities. We now promote company-wide organizational activities in compliance with GMP.

An employee in charge of warehouse management

4) Social contribution

We are engaged in various kinds of activities to contribute to society, including activities to maintain harmony with local communities. Such activities are mainly related to crime and disaster prevention in areas where our offices are located.

Manufacturing group company
- **Nisso Metallochemical Co., Ltd. (Others)**
- **Nisso Fine Co., Ltd. (Chemicals)**
- **Shinfuji Kaseiyaku Co., Ltd. (Agro Products)**
- **ALKALINE SAS (Chemicals)**
- Nisso Namhae Agro Co., Ltd. (Agro Products)
- Joetsu Nisso Chemical Co., Ltd. (Chemicals)

Non-manufacturing group company
- Nisso Shoji Co., Ltd. (Trading)
- Sanwa Soko Co., Ltd. (Transportation and Warehousing)
- Nisso Engineering Co., Ltd. (Construction)
- Nisso Kensetsu Co., Ltd. (Construction)
- Nisso Green Co., Ltd. (Agro Products)
- NISSO AMERICA INC. (Agro Products)
- NISSO CHEMICAL EUROPE GmbH (Agro Products)

Nippon Soda Group Companies

Nisso Metallochemical Co., Ltd.

Manufacturing group company

Certified with ISO 14001/ISO 9001

Akihiko Kikuchi
President

To carry out sound and transparent corporate activities in compliance with laws and regulations, all employees are required to commit themselves to promoting the implementation and continuous improvement of the management system by taking advantage of the company's technology and knowledge gained in its metal- and chemical-related business. Through these efforts, we will further improve environmental safety, occupational safety, product safety and customer satisfaction.

Through our compliance-oriented business activities, we will contribute to improving living standards and supporting the development of local communities.

Business overview Our efforts are continuously focused on becoming a sought-after supplier based on the following three business areas: waste treatment, non-ferrous metals (zinc alloys), and industrial chemicals (sulfuric acids). As a Fukushima-based company, we commit ourselves to supporting restoration activities and contributing to the development of local communities.

Corporate Data

3-1-2 Ueno, Taito-ku, Tokyo 110-0005 (Akihabara Shinko Daiichi-seimei Building)
Tel: +81-3-5688-6381 Fax: +81-3-5688-1132
URL: http://www.nmcc.co.jp/

Aizu Plant: 1372 Oaza-Bandai, Bandai-machi, Yama-gun, Fukushima 969-3393
Tel: +81-242-73-2121 Fax: +81-242-73-2668

Chiba Plant: 12-32 Goiminami-kaigan, Ichihara, Chiba 290-0045
Tel: +81-436-21-3351 Fax: +81-436-21-1237

- Founded in 1916*
- Established as the current corporation in August 1983*
- Capital: 1,000 million yen
- Net sales: 7,979 million yen (FY 2015)
- Number of employees: 118 (as of the end of March 2015)

* The business of Takada Shokai Odera Refinery, founded in 1916, was transferred to Nippon Soda Co., Ltd. in 1928. In 1983, the company was re-established as Nisso Metallochemical Co., Ltd.

Nisso Fine Co., Ltd.

Manufacturing group company

Certified with ISO 14001/ISO 9001 Equipped with GMP-certified facilities

Gaishi Fujita
Representative Director and President

At Nisso Fine Co., Ltd. we focus on systematically integrating our capabilities in the fields of sales development, technology and production in order to further improve our expertise so that we can respond to needs for all kinds of products, ranging from resin molding materials to highly functional chemicals and from samples to mass production. Our goal is to become a trusted partner to our customers.

Business overview We are engaged in the contract manufacturing and marketing of functional dyes, functional resins, pharmaceuticals, and agricultural chemicals and their intermediates as well as the manufacturing, processing and marketing of synthetic resin molded products, deoxidizers and high-function desiccants.

Corporate Data

3-3-6 Honcho, Nihonbashi, Chuo-ku, Tokyo 103-8422 (Wakamatsu Building 2F)
Tel: +81-3-6202-0161 Fax: +81-3-6202-0168
URL: http://www.nissofine.co.jp/

Isohara Plant: 1309-2 Isohara, Isohara-cho, Kitaibaraki, Ibaraki 319-1541
Tel: +81-293-42-2064 Fax: +81-293-42-4130

Iwaki Manufacturing Department:
1-6 Yoshima-kogyodanchi, Iwaki, Fukushima 970-1144
Tel: +81-246-36-3576 Fax: +81-246-36-6687

Koriyama Plant: 1-176 Sasagawa, Koriyama, Fukushima 963-0108
Tel: +81-24-945-1886 Fax: +81-24-945-3637

Onahama Plant: 41-26 Yanagi-machi, Onahama-noda, Iwaki, Fukushima 971-8126
Tel: +81-246-58-4182 Fax: +81-246-58-6277

- Established in April 2012*
- Capital: 300 million yen
- Net sales: 10,712 million yen (FY 2015)
- Number of employees: 220 (as of the end of March 2015)

* Nisso Fine Chemicals Co., Ltd. (established in 2007 as a result of the merger of Koriyama Kasei Co., Ltd., established in 1954, and Ibaraki Kasei Co., Ltd., established in 1971) and Nisso Jushi Co., Ltd. (established in 1965) were merged and the new company was named Nisso Fine Co., Ltd.

Shinfuji Kaseiyaku Co., Ltd.

Manufacturing group company

Certified with ISO 14001/ISO 9001

Masanobu Kumano
President

Our company is located in a verdant area surrounded by the Jomo mountains. Our management philosophy is to contribute to social development through chemistry and to be a reliable and sought-after company. We provide agrochemical products, such as smoking agents, that are manufactured based on the technology and knowledge we have acquired as a chemical firm and that contribute to the stable supply of food resources and labor saving for agricultural producers. As a Nippon Soda Group company, we place importance on promoting CSR activities, mainly focusing on environmental protection, occupational safety and health, and quality assurance.

Business overview Our business mainly consists of two areas: the contract manufacturing of agrochemical products, such as smoking agents, water-dispersible granules, water-dispersible powder and spraying agents; and the manufacture, processing, small-size packaging and packaging of general industrial chemicals.

Corporate Data

Head Office/Plant (Gunma Plant)
313 Koyagi-machi, Takasaki, Gunma 370-0071
(located in the Takasaki Oyagi Kogyo Danchi)
Tel: +81-27-361-6100 Fax: +81-27-361-6116
URL: http://www.shinfuji-kaseiyaku.co.jp/

Takasaki Plant: 888 Oyagimachi, Takasaki, Gunma 370-0072
(located in the Takasaki Oyagi Kogyo Danchi)
Tel: +81-27-361-0371 Fax: +81-27-362-8909

- Founded/Established in October 1975
- Capital: 70 million yen
- Net sales: 1,087 million yen (FY 2015)
- Number of employees: 62 (as of the end of March 2015)

ALKALINE SAS

Manufacturing group company

Certified with ISO 14001/ISO 9001

Bruno Gastinne
President

MSSA SAS, of the ALKALINE Group, adopted and declared its policy on quality, safety and environment, which focuses on the safety and health of employees, environment and resident protection, and satisfaction of customers, employees and its stockholder as the highest priority items. In addition, MSSA SAS, as a member of NISSO Group, not only observes compliance (especially the regulations applying to the French chemical industry and related laws), but has also introduced the ISO 9001 and 14001 management systems in its business performance, aiming to achieve a sustainable development and the increase of its enterprise value.

MSSA SAS, appartenant au groupe Alkaline, a adopté et déclaré sa politique concernant la qualité, la sécurité et l'environnement.

Celle-ci met l'accent sur la sécurité et la santé des employés, l'environnement et la protection des riverains, la satisfaction des clients, des employés et de ses actionnaires qui sont ses plus hautes priorités.

En outre, MSSA SAS, en tant que membre du groupe NISSO, est non seulement en conformité avec les lois et réglementations (en particulier avec la réglementation applicable à l'industrie chimique française et les lois connexes), mais elle a également mis en place les normes ISO 9001 et 14001 pour la performance des systèmes de gestion de l'entreprise, visant à atteindre un développement durable et l'augmentation de sa valeur.

Business overview We are engaged in the manufacture and marketing of metallic sodium, chlorine, vanadium chloride, sodium oxide and alkali metals. Being certified with ISO 14001, we give proper consideration to resource and energy efficiency and to environmental protection.

Corporate Data

MSSA S.A.S.
Pomblière-73600 Saint-Marcel, France
Tel: +33-(0)4-79-24-7070 Fax: +33-(0)4-79-24-7050

- Established in February 2002
- Capital: 10.909 million EUR
- Net sales: 75.305 million EUR (2014)
- Number of employees: 270 (as of the end of December 2014)

Manufacturing group company
- Nisso Metallochemical Co., Ltd. (Others)
- Nisso Fine Co., Ltd. (Chemicals)
- Shinfuji Kaseiyaku Co., Ltd. (Agro Products)
- ALKALINE SAS (Chemicals)
- **Nisso Namhae Agro Co., Ltd. (Agro Products)**
- **Joetsu Nisso Chemical Co., Ltd. (Chemicals)**

Non-manufacturing group company
- **Nisso Shoji Co., Ltd. (Trading)**
- **Sanwa Soko Co., Ltd. (Transportation and Warehousing)**
- Nisso Engineering Co., Ltd. (Construction)
- Nisso Kensetsu Co., Ltd. (Construction)
- Nisso Green Co., Ltd. (Agro Products)
- NISSO AMERICA INC. (Agro Products)
- NISSO CHEMICAL EUROPE GmbH (Agro Products)

Nippon Soda Group Companies

Manufacturing group company — Nisso Namhae Agro Co., Ltd.

Hiroyuki Uryu
President

As a manufacturer of agrochemical substances, we are continuing our efforts to earn the trust of local communities as well as building confidence in the global community in cooperation with Nippon Soda. Our aim is to contribute to increasing food production. To ensure the protection of the global environment and to build relationships with local communities, safe operations, assured quality and stable production are essential. With this in mind, we focus on ensuring safe operations, assured quality and stable production so that we can continue to grow together with society.

Business overview Nisso Namhae Agro Co., Ltd. was jointly established by Nippon Soda, Namhae Chemical Co., Ltd. (the top fertilizer manufacturer in S. Korea) and Mitsubishi Corporation to manufacture the active ingredient for Topsin M (a fungicide). This is the first overseas manufacturing company established by Nippon Soda using its proprietary manufacturing technology. Full-scale manufacturing was started in fiscal 2014 and manufactured products are provided by Nippon Soda to customers around the world.

Corporate Data

Yeosu Head Office:
1384, Yeosusandan-ro, Yeosu-si, Jeollanam-do, 59618, S. Korea
Tel: +82-61-900-3500 Fax: +82-61-900-3560

Seoul Office:
18th Fl, Namsan Square Bldg, 173, Toegye-ro, Jung-gu, Seoul, 04554, S. Korea
Tel: +82-2-2267-2708 Fax: +82-2-2267-2724

- Established: June 2011
- Capital: 32,640 million won
- Net sales: 31,056 million won (FY 2015)
- Number of employees: 30 (as of the end of March 2015)

Manufacturing group company — Joetsu Nisso Chemical Co., Ltd.

Satoshi Tsukamura
President

Joetsu Nisso Chemical Co., Ltd., an independent contract manufacturing company partially spun-off from the Manufacturing Department of Nihongi Plant, manufactures chemical industrial products such as caustic potash, chlorine and chlorine products.

Our operation is integrated with the operation of Nihongi Plant. For our CSR activities, please refer to the CSR Activity Report of Nihongi Plant.

Corporate Data

Head Office/Plant:
950 Fujisawa, Nakago-ku, Joetsu, Niigata 949-2302 (within Nihongi Plant)
Tel: +81-255-81-2390 Fax: +81-255-81-2391

- Established: December 1, 2006

Non-manufacturing group company — Nisso Shoji Co., Ltd.

Certified with ISO 14001

Shingo Nakamura
President

Our company adopted corporate social responsibility (CSR) practices in April 2014.

We have acquired ISO 14001 certification and have since been using a management system based on ISO 14001 standards. Our ongoing emphasis under this management system is on raising awareness of global environmental issues and promoting compliance-based transparent and fair business activities. In general, as a member of the Nippon Soda Group, we promote CSR activities that require every employee to be aware of and comply with the seven principles of social responsibility so as to gain the increased confidence of society.

Business overview Over the last 70 some years, we have developed our global business in a wide variety of areas, mainly involving chemicals such as resins, industrial equipment and building materials. While fostering a lively corporate culture, we will continue expanding out network of trust and making efforts to contribute to society for many years to come through our environmentally conscious activities.

Corporate Data

3-3-6 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8422 (Wakamatsu Building)
Tel: +81-3-3270-0701 Fax: +81-3-3279-6026
URL: http://www.nissoshoji.com/en/

Osaka Branch: 4-4-11 Awaji-machi, Chuo-ku, Osaka-shi, Osaka 541-0047 (Urbanex Awajimachi Building 4F)
Tel: +81-6-6202-6941 (main) Fax: +81-6-6229-0924

Nagoya Branch: 3-4-6 Nishiki, Naka-ku, Nagoya, Aichi 460-0003 (Sakura-dori, Otsu Dai-ichi Seimei Building)
Tel: +81-52-971-9271 (main line) Fax: +81-52-971-9370

- Established: December 6, 1939
- Capital: 401 million yen
- Net sales: 40,549 million yen (FY 2015)
- Number of employees: 153 (as of the end of March 2015)

Non-manufacturing group company — Sanwa Soko Co., Ltd.

Certified with ISO 9001 Received Green Management Certification

Nobuyoshi Takami
President

Sanwa Soko provides logistics services consisting mainly of warehousing services to support the logistics operations of our corporate clients as well as insurance agency services largely consisting of general insurance.

Our basic CSR principles revolve around the concepts of “well-established corporate governance practices,” “promotion of environmental protection,” “quality improvement” and “social contribution.” With safety as our top priority, we focus our efforts on constant improvement and enhancement and are contributing to creating a better standard of living by providing high-quality and safe logistics services.

Business overview Based on the principles of safety, quality and environmental protection, we provide comprehensive distribution systems suitable for hazardous, poisonous and deleterious substances and pharmaceuticals using our high-function distribution facilities and highly advanced expertise. Through these business activities, we are committed to ensuring sustainable profits and improving our corporate value.

Corporate Data

2-4-1 Shibakoen, Minato-ku, Tokyo 105-0011 (Shiba Park Building B 4F)
Tel: +81-3-3578-3001 (main) Fax: +81-3-3578-3014
URL: http://www.sanwasoko.co.jp/english/

Osaka Branch: Daihatsu Building, 2-2-40 Katamachi, Miyakojima-ku, Osaka-shi, Osaka 534-0025
Tel: +81-6-6353-7406 (main) Fax: +81-6-6353-7435

Yokohama Office: Yokohama New Kannai Building 7F, 4-45-1 Sumiyoshi-cho, Naka-ku, Yokohama, Kanagawa 231-0013
Tel: +81-45-228-1733 (main) Fax: +81-45-228-1735

- Established: May 1, 1950
- Capital: 1,831 million yen
- Net sales: 5,440 million yen (FY 2015)
- Number of employees: 201 (as of the end of March 2015)

Manufacturing group company

Nisso Metallochemical Co., Ltd. (Others)
Nisso Fine Co., Ltd. (Chemicals)
Shinfuji Kaseiyaku Co., Ltd. (Agro Products)
ALKALINE SAS (Chemicals)
Nisso Namhae Agro Co., Ltd. (Agro Products)
Joetsu Nisso Chemical Co., Ltd. (Chemicals)

Non-manufacturing group company

Nisso Shoji Co., Ltd. (Trading)
Sanwa Soko Co., Ltd. (Transportation and Warehousing)
Nisso Engineering Co., Ltd. (Construction)
Nisso Kensetsu Co., Ltd. (Construction)
Nisso Green Co., Ltd. (Agro Products)
NISSO AMERICA INC. (Agro Products)
NISSO CHEMICAL EUROPE GmbH (Agro Products)

Nippon Soda Group Companies

Nisso Engineering Co., Ltd.

Non-manufacturing group company

Certified with ISO 9001

Kazuhiro Muto
President

Our management philosophy is to create new value and make broad contributions to society through engineering. To quickly respond to the sophistication and diversification of technology, we design our plants in such a way as to meet future needs. We also provide reliable after-sale services to ensure customer satisfaction with our technology, quality and ability to get the job done. Our goal is to become a company that is indispensable to society by ensuring safety, environmental protection and compliance.

Business overview We provide engineering services ranging from construction of various kinds of plants and selection of systems and equipment to post-delivery maintenance and energy saving. We have our own research facilities and diverse expertise, with which we can meet the needs of a variety of customers.

Corporate Data

1-6-1 Kanda Jinbo-cho, Chiyoda-ku, Tokyo 101-0051 (Takii Tokyo Building)
Tel: +81-3-3296-9201 Fax: +81-3-3296-9300
URL: http://www.nisso-eng.co.jp/

Osaka Branch: 2-6-8 Honmachi, Chuo-ku, Osaka-shi, Osaka 541-0053 (Senba Central Building)
Tel: +81-6-6258-6566 Fax: +81-6-6258-6572

Technology Development Research Center:
47 Goiminami-kaigan, Ichihara, Chiba 290-0045
Tel: +81-436-21-6441 Fax: +81-436-22-6241

- Established: October 10, 1962
- Capital: 1,000 million yen
- Net sales: 15,444 million yen (FY 2015)
- Number of employees: 136 (as of the end of March 2015)

* The company was founded as Shin-nichi Kogyo Co., Ltd. in 1962 and renamed as Nisso Engineering Co., Ltd. in 1967.

Nisso Kensetsu Co., Ltd.

Non-manufacturing group company

Certified with ISO 9001 Registered with Ecoaction 21

Shinichi Kawachi
President

We exert a mixture of fidelity, creativity and passion to make sure we win the satisfaction of our customers, business partners and employees and, in due course, eventually contribute to the sustainable development of society. Based on this management philosophy, we aim to cement our leading position as a key general contractor in the region.

Business overview Based on our experience as a Nippon Soda Group company engaged in civil engineering, architectural design and construction, we are engaged in the design and construction of private and public works as well as Nippon Soda Group projects mainly in Niigata's Joetsu region. We meet customer needs based on our extensive construction-related experience, ranging from facilities for factories, other buildings and stores to housing facilities.

Corporate Data

1169 Fujisawa, Nakago-ku, Joetsu, Niigata 949-2302
Tel: +81-255-74-2561 Fax: +81-255-74-2757
URL: http://www.nissokensetu.co.jp/

- Established: November 1, 1962
- Capital: 45 million yen
- Net sales: 2,711 million yen (FY 2015)
- Number of employees: 21 (as of the end of March 2015)

* The company was founded as Soei Kensetsu Co., Ltd. in 1962 and renamed as Nisso Kensetsu Co., Ltd. in 1967.

Nisso Green Co., Ltd.

Non-manufacturing group company

Yoshiki Masuoka
President

As a member of the Nippon Soda Group, we adopted CSR practices in April 2014 with the aim of maintaining and enhancing safety, environmental protection and quality. Our efforts are focused on promoting the development, safety and stable supply of products and technology such as agrochemical materials for golf courses and home gardening. Through these efforts, we will improve our corporate value and ensure transparent management so as to be recognized as the best in the industry.

Business overview Nisso Green Co., Ltd. has been expanding its business in agrochemicals for golf courses, agrochemicals for home gardening, foliar spray fertilizers, forestry materials, materials for civil engineering and landscape gardening, and materials for raising seedlings. More efforts will be focused on continuing to grow our business as well as contributing to greening the environment using our materials.

Corporate Data

3-1-2 Ueno, Taito-ku, Tokyo 110-0005 (Akihabara Shinko Daiichi-seimei Building 5F)
Tel: +81-3-5816-4351 Fax: +81-3-5816-4355
URL: http://www.ns-green.com/

- Established: April 1, 1999
- Capital: 50 million yen
- Net sales: 1,817 million yen (FY 2015)
- Number of employees: 12 (as of the end of March 2015)

NISSO AMERICA INC.

Non-manufacturing group company

Hiroyasu Yamazaki
President & COO

The economy of the United States, which has a large consumer market, has been booming over the last few years. While there has been a significant increase in prices, the unemployment rate has been dropping and public safety has been relatively improved. We would like to take advantage of this favorable economic situation to increase our sales, but competition with other companies has become increasingly intense. We will continue our united efforts to overcome this challenging situation.

Business overview Established in 1986 in the U.S. City of New York, NISSO AMERICA INC. is engaged in marketing, importing and exporting, advertising, selling and registering Nippon Soda's agrochemical products and chemicals in the United States and Canada.

Corporate Data

Wall Street Plaza, 88 Pine Street, 14th Floor, New York, NY 10005 USA
Tel: +1-212-490-0350 Fax: +1-212-972-9361
URL: http://www.nissoamerica.com/

- Established: March 1986
- Capital: 1 million USD
- Net sales: 42.298 million USD (FY 2015)
- Number of employees: 10 (as of the end of March 2015)

NISSO CHEMICAL EUROPE GmbH

Non-manufacturing group company

Atsuo Omi
President

NISSO CHEMICAL EUROPE ensures a stable supply of key products to the European market as well as to the CIS and Northern African markets to help the Nippon Soda Group develop its business globally. At the same time, the firm plays an important role in raising living standards in these regions.

Business overview Located in Düsseldorf, Germany, NISSO CHEMICAL EUROPE mainly sells products made by Nippon Soda. Two major categories of products the company deals in are agrochemicals and chemicals. Agrochemical products are formulated and registered in EU countries.

Corporate Data

Berliner Allee 42, 40212 Düsseldorf, Germany
Tel: +49-211-1306686-0 Fax: +49-211-32-8231
URL: http://nisso-chem.de/

- Established: July 1992
- Capital: 255,000 EUR
- Net sales: 73.565 million EUR (FY 2015)
- Number of employees: 15 (as of the end of March 2015)

Nippon Soda Group Network

Business Sites

1 Tokyo Head Office: Shin Ohtemachi Bldg., 2-2-1 Ohtemachi, Chiyoda-ku, Tokyo 100-8165
Tel: +81-3-3245-6054

2 Osaka Branch Office: Yodoyabashi Center Bldg., 3-4-10 Kouraibashi, Chuo-ku, Osaka-shi, Osaka 541-0043
Tel: +81-6-6229-7300

Plants

3 Nihongi Plant: 950 Fujisawa, Nakago-ku, Joetsu-shi, Niigata 949-2392
Tel: +81-255-81-2300

4 Takaoka Plant: 300 Mukainohonmachi, Takaoka-shi, Toyama 933-8507
Tel: +81-766-26-0206

5 Mizushima Plant: 2767-12 Kojima-shionasu, Kurashiki-shi, Okayama 711-0934
Tel: +81-86-475-0036

6 Chiba Plant: 12-8 Goiminami-kaigan, Ichihara-shi, Chiba 290-8530
Tel: +81-436-23-2012

Research Centers

7 Odawara Research Center: 345 Takada, Odawara-shi, Kanagawa 250-0280
Tel: +81-465-42-3511

8 Haibara Field Research Center: 62-1 Sakabe, Makinohara-shi, Shizuoka 421-0412
Tel: +81-548-29-0611

9 Bandai Field Research Station: 3967 Sarashina-bikuniyama, Bandaimachi, Yama-gun, Fukushima 969-3302
Tel: +81-242-73-2525

10 Chiba Research Center: 12-54 Goiminami-kaigan, Ichihara-shi, Chiba 290-0045
Tel: +81-436-23-2141

Sales Offices

11 Sapporo Office: Takeda Risona Bldg. 3F, 4-1-2 Kitaichijo-nishi, Chuo-ku, Sapporo-shi, Hokkaido 060-0001
Tel: +81-11-241-5581

12 Sendai Office: Sumitomo Seimei Sendai Bldg., 4-10-3 Chuo, Aoba-ku, Sendai-shi, Miyagi 980-0021
Tel: +81-22-227-1741

13 Kanto Office: Sumitomo Seimei Omiya Daini Bldg., 3-13-1 Nakamachi, Omiya-ku, Saitama-shi, Saitama 330-0845
Tel: +81-48-677-6010

14 Nagoya Office: Hirokoji Daiichi Seimei Bldg., 3-1-1 Sakae, Naka-ku, Nagoya-shi, Aichi 460-0008
Tel: +81-52-238-0003

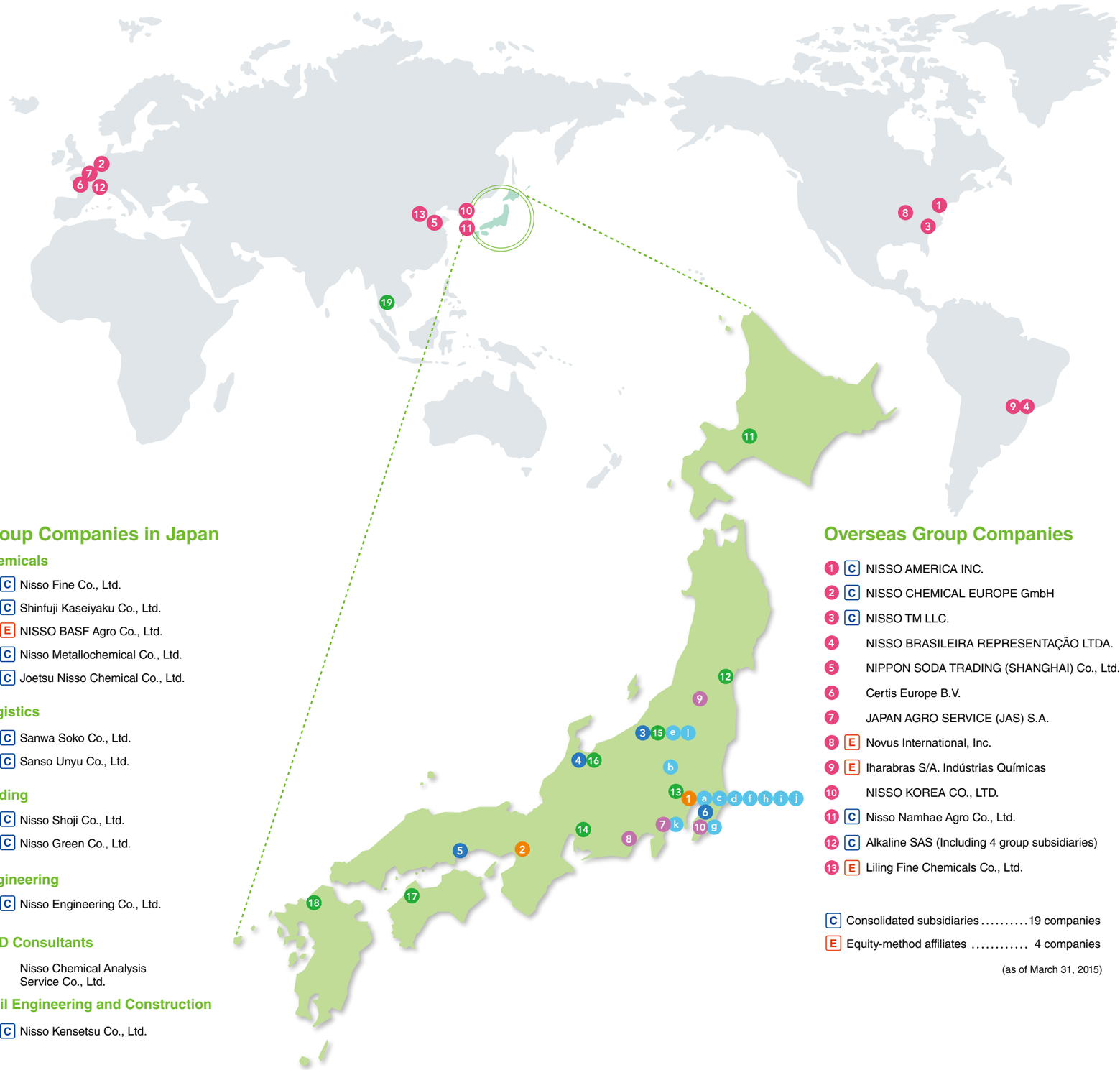
15 Shinetsu Office: Nihongi Plant, 950 Fujisawa, Nakago-ku, Joetsu-shi, Niigata 949-2302
Tel: +81-255-81-2323

16 Takaoka Office: 300 Mukainohonmachi, Takaoka-shi, Toyama 933-0901
Tel: +81-766-26-0239

17 Matsuyama Office: Asahi Seimei Matsuyama-Minamihoribata Bldg., 3-21 Hanazonomachi, Matsuyama-shi, Ehime 790-0005
Tel: +81-89-931-7315

18 Fukuoka Office: Tenjin Mitsui Bldg., 2-14-13 Tenjin, Chuo-ku, Fukuoka-shi, Fukuoka 810-0001
Tel: +81-92-771-1336

19 Bangkok Representative Office: 159/16 Serm- MitTower, 10th FL Room no.103-6 Sukhumvit 21(Asoke)Rd., Klongtoey-Nua, Wattana, Bangkok 10110, Thailand
Tel: +66-0-2661-6433



Group Companies in Japan

Chemicals

a C Nisso Fine Co., Ltd.
b C Shinfuji Kaseiyaku Co., Ltd.
c E NISSO BASF Agro Co., Ltd.
d C Nisso Metallochemical Co., Ltd.
e C Joetsu Nisso Chemical Co., Ltd.

Logistics

f C Sanwa Soko Co., Ltd.
g C Sanso Unyu Co., Ltd.

Trading

h C Nisso Shoji Co., Ltd.
i C Nisso Green Co., Ltd.

Engineering

j C Nisso Engineering Co., Ltd.

R&D Consultants

k Nisso Chemical Analysis Service Co., Ltd.

Civil Engineering and Construction

l C Nisso Kensetsu Co., Ltd.

Overseas Group Companies

1 C NISSO AMERICA INC.
2 C NISSO CHEMICAL EUROPE GmbH
3 C NISSO TM LLC.
4 NISSO BRASILEIRA REPRESENTAÇÃO LTDA.
5 NIPPON SODA TRADING (SHANGHAI) Co., Ltd.
6 Certis Europe B.V.
7 JAPAN AGRO SERVICE (JAS) S.A.
8 E Novus International, Inc.
9 E Iharabras S/A. Indústrias Químicas
10 NISSO KOREA CO., LTD.
11 C Nisso Namhae Agro Co., Ltd.
12 C Alkaline SAS (Including 4 group subsidiaries)
13 E Liling Fine Chemicals Co., Ltd.

C Consolidated subsidiaries .....19 companies
E Equity-method affiliates ..... 4 companies

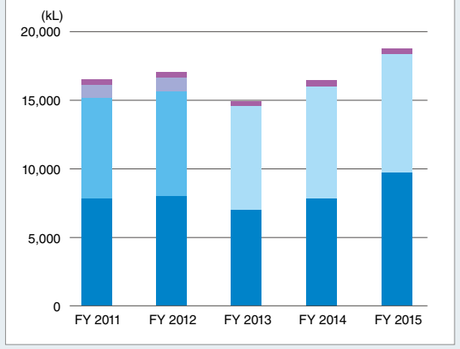
(as of March 31, 2015)

Nippon Soda Group Environmental Data Sheet

Manufacturing group companies

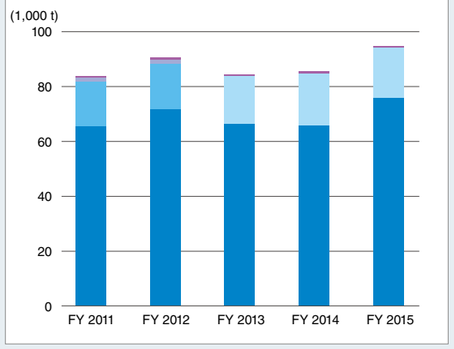
■ Nisso Metallochemical Co., Ltd.
■ Nisso Fine Co., Ltd. (■ former Nisso Fine Chemicals Co., Ltd., ■ former Nisso Jushi Co., Ltd.)
■ Shinfuji Kaseiyaku Co., Ltd.

Change in energy consumption (in crude oil equivalent)



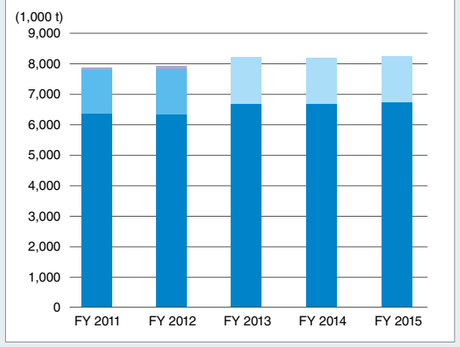
The increases in FY 2014 and FY 2015 from FY 2013 were due to the increase in the amount of industrial waste disposal at Nisso Metallochemical Co., Ltd.

Change in the amount of carbon dioxide emissions

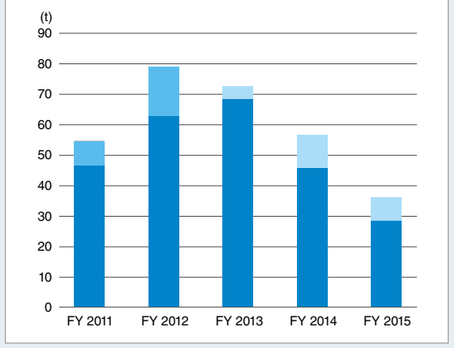


There was no difference between FY 2013 and FY 2014 but there was an increase in FY 2015 from FY 2013. The reason for this was the increase in the amount of industrial waste disposal at Nisso Metallochemical Co., Ltd. The company uses recycled fuel where the Act on the Rational Use of Energy is not applicable and an increase in the amount of this recycled fuel partially contributed to the increase in industrial waste disposal.

Change in the total volume of discharged water

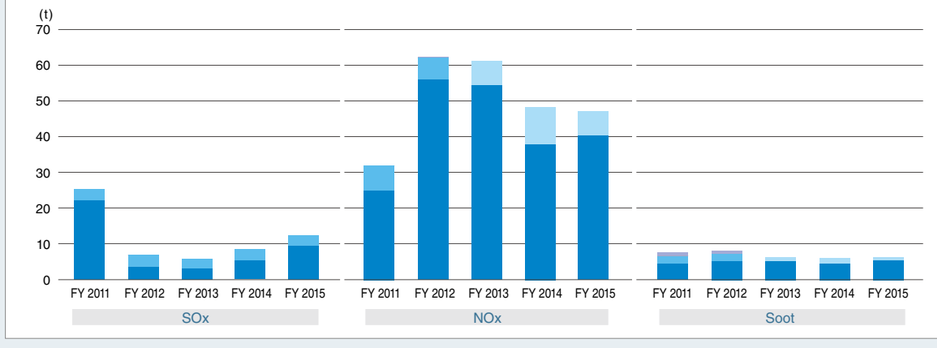


Change in the amount of BOD and COD emissions



The decreases in FY 2014 and FY 2015 from FY 2013 were partially attributable to the properties of the industrial waste that is incinerated at Nisso Metallochemical Co., Ltd.

Change in the amount of emissions of substances controlled by the Air Pollution Control Act



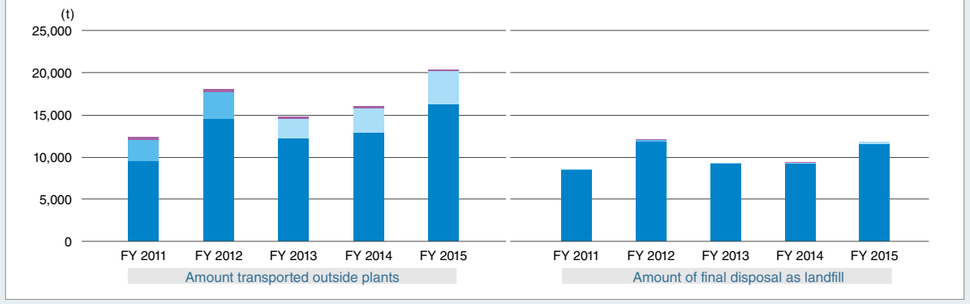
The increases in FY 2014 and FY 2015 from FY 2013 were attributable to the properties of the industrial waste coming from Nisso Metallochemical Co., Ltd. In addition, the total amount of waste gas increased due to the increase in the number of operating days.

The decreases in FY 2014 and FY 2015 from FY 2013 were attributable to the properties of the industrial waste coming from Nisso Metallochemical Co., Ltd.

Manufacturing group companies

■ Nisso Metallochemical Co., Ltd.
■ Nisso Fine Co., Ltd. (■ former Nisso Fine Chemicals Co., Ltd., ■ former Nisso Jushi Co., Ltd.)
■ Shinfuji Kaseiyaku Co., Ltd.

Change in the amount of industrial waste emissions



The increases in FY 2014 and FY 2015 from FY 2013 were attributable to an increase in the amount of industrial waste treated under a contract and also an increase in the amount of incineration residues at Nisso Metallochemical Co., Ltd.

Nisso Metallochemical Co., Ltd. outsources the treatment of residues of incinerated industrial waste to an external company. The amount outsourced for intermediate treatment (recycling) is determined annually under a contract and any excess over the contracted amount is sent for final disposal. In the graph above, there is no difference between FY 2013 and FY 2014 but there is an increase in FY 2015 from FY 2013, which is attributable to an increase in the excess over the contracted amount.

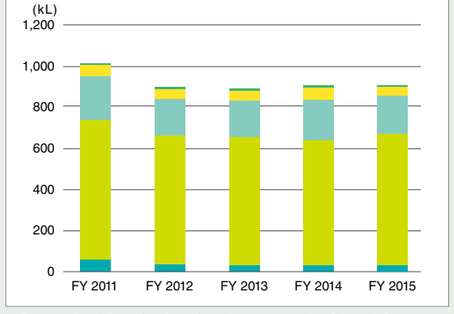
Overseas manufacturing group companies

(FY)		2011	2012	2013	2014	2015
Alkaline SAS (MSSA) (France)	Energy consumption (MWh)	262,708	280,561	253,216	261,886	251,968
	Total amount of wastewater (1,000 t)	234.72	270.65	287.34	277.49	261.85
Nisso Namhae Agro Co., Ltd. (Korea)	Energy consumption (in crude oil equivalent) (kL)	—	—	—	2,335.23	1,980.93
	Carbon dioxide emissions (1,000 t)	—	—	—	4.70	3.96
	Total amount of wastewater (1,000 t)	—	—	—	125.13	115.89

Non-manufacturing group companies

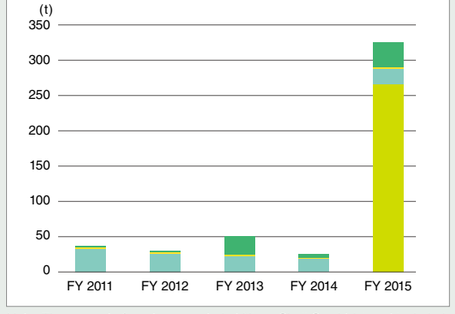
■ Nisso Shoji Co., Ltd. ■ Sanwa Soko Co., Ltd. ■ Nisso Engineering Co., Ltd.
■ Nisso Kensetsu Co., Ltd. ■ Nisso Green Co., Ltd.

Change in energy consumption (in crude oil equivalent)



Note: The tabulation for this fiscal year included the electric power consumption in crude oil equivalent of Nisso Engineering Co., Ltd. during the period from fiscal 2011 to fiscal 2015.

Change in the amount of waste generated



Note: The amount of waste generated at Nisso Shoji Co., Ltd. is not included. The amount generated at Sanwa Soko Co., Ltd. is only included in the tabulation for fiscal 2015.

Measures taken to address violations of laws and regulations

1) June 18, excess of BOD in wastewater over the standard value at Takaoka Plant: An excess of BOD in wastewater from the plant over the standard value of 40 mg/L was confirmed. Measures to prevent a recurrence have been taken.
2) July 10, excess of TCE in wastewater over the standard value at Takaoka Plant: It was confirmed that TCE in wastewater from the plant was 2.7 mg/L, which exceeded the standard value of 0.2 mg/L. Measures to prevent a recurrence have been taken.
3) February 2, excess of dichloromethane in wastewater over the standard value at Takaoka Plant: It was confirmed that dichloromethane in wastewater from the plant was 0.19 mg/L, which exceeded 0.15 mg/L, the value agreed with the city. Measures to prevent a recurrence have been taken.

Nippon Soda Group companies

1) September 17, a fire occurred at Aizu Plant of Nisso Metallochemical Co., Ltd. while industrial waste was being crushed. The cause was identified and measures to prevent a recurrence have been taken. Please refer to page 23.
2) Two small fires caused by leakage of a product occurred at Alkaline SAS, an overseas group company, and its group company. Measures to prevent a recurrence have been taken. Please refer to pages 23 and 24.

Japan Chemical Industry Association

Third Party Verification Report on Nippon Soda Group CSR Report 2015

Responsible Care
OUR COMMITMENT TO SUSTAINABILITY

Nippon Soda Group CSR Report 2015
Third Party Verification Report

June 16, 2015

To Yutaka Kinebuchi
Representative Director and President
Nippon Soda Co., Ltd.

■Objectives of Verification

The Responsible Care Report Verification was conducted by the Responsible Care Verification Center to verify the Nippon Soda Group CSR Report 2015 (hereinafter referred to as the "CSR Report") prepared by Nippon Soda Co., Ltd. and to present the views and comments of experts in the chemical industry on the following matters:

1) The reasonableness of the methods used to calculate and aggregate performance indicators (numerical values), and the accuracy of numerical values
2) The accuracy of reported information other than numerical values
3) Responsible care activities
4) Characteristics of the report

■Verification Procedures

- At the Head Office, the reasonableness of methods to aggregate numerical values reported from each site (office, plant) and the accuracy of reported information other than numerical values were assessed through interviews with managers responsible for each task and those who were responsible for the preparation of the reports based on materials and explanations provided by those managers.
- At Mizushima Plant, the reasonableness of the method used to calculate numerical values and the accuracy of numerical values and the information described in reports submitted to the Head Office were assessed. The assessment was made through interviews with managers responsible for each task and those who were responsible for the preparation of the reports, based on materials and explanations provided, and by checking evidence.
- Numerical values and information provided in the report were verified by sampling.

■Views and Comments

1) The reasonableness of the methods used to calculate and aggregate performance indicators (numerical values), and the accuracy of numerical values
   - Both the Head Office and Mizushima Plant applied rational methods to calculate and aggregate numerical values. Within the scope of the assessment, the values for performance were accurately calculated and aggregated. We expect there will be efforts to adopt a system to check the accuracy of numbers provided by business sites, etc. and numbers aggregated at the Head Office, and to provide more careful descriptions of changes in performance indicators in such a way as to make the report more easily understood by its readers.
2) The accuracy of reported information
   - It was confirmed that the information described in the reports was accurate. At the draft stage, we pointed out some parts that needed to be improved in terms of the appropriateness of descriptions or the understandability of sentences. In this report, however, these points have been corrected and there is nothing that particularly needs correction.
3) Responsible care activities
   - We commend your efforts in expanding CSR activities throughout the group companies since the establishment, in fiscal 2014, of a new Corporate Social Responsibility Department with enhanced autonomy with the aim of promoting the CSR of the Nippon Soda Group. We also appreciate your efforts in conducting self-assessment and assessment by the Head Office of overseas group companies in this fiscal year. It is expected that continuing efforts will be made to improve CSR activities of group companies in the future.
   - We commend your efforts to reduce accidents and incidents in fiscal 2014. It is expected that, with an eye toward the 100th anniversary, the entire executive team and each and every employee will make more efforts to prevent accidents and incidents for further improvement.
   - At Mizushima Plant, we commend the emphasis on particularly careful handling of cyanide as the "lifeline" of the plant.
4) Characteristics of the report
   - We commend the report on the employee satisfaction (ES) survey that has been conducted since fiscal 2013. It is expected that these efforts will produce results, including the resolution of issues.
   - We commend the third-party opinion. It is expected that you will make improvements that take the third-party opinion into account.
   - The contents of the report cover a wide range of issues and the number of pages has increased to the point where it has become a little too much for readers. It is expected that you will use the limited number of pages more effectively.

Junji Takase

Junji Takase
Chief Director
Responsible Care Verification Center
Japan Chemical Industry Association

On this page, "fiscal 2013" and "fiscal 2014" refer to the periods from April 1, 2013 to March 31, 2014 and from April 1, 2014 to March 31, 2015, respectively.

Development Bank of Japan Inc.

Acquisition of DBJ Environmental Ratings

March 31, 2015

To Nippon Soda Co., Ltd.

Toru Hashimoto
President & CEO
Development Bank of Japan Inc.

DBJ Environmental Rating Result Notification

This is to inform you of the result of the screening for the DBJ environmental rating that was conducted in response to your request.

1. Result

Total Points	General Management	Business Activities	Environmental Performance
158.0	75.0	40.0	43.0

2. Overall evaluation

Advanced environmental initiatives

3. Review

In "Chemigress to 100," the long-term vision toward the 100th anniversary of its foundation in 2020, Nippon Soda declares, as its basic policy, its determination to "contribute to society in a broad range of aspects by providing useful, new products and businesses in a sustainable and safe manner, mainly in the business fields that are indispensable to the sound development of society, including agriculture, medical care, the environment and information." As this indicates, the company aims to integrate environmental management into its business activities. On the basis of Responsible Care (RC) activities and with focus placed on its social responsibility core subjects, the company has built a system across its group to promote environmental management, product safety, process safety & disaster prevention, business continuity management (BCM) and others to ensure that environmentally sound business practices, including research and development, are implemented.

It is also praiseworthy that the company, firstly, as a chemical company handling hazardous materials, works hard to maintain safe, stable and environmentally compatible production activities as well as distribution safety through the united efforts of the entire group; secondly, utilizes its distinctive proprietary technologies to advance into medical care and other new fields while satisfying stringent product safety requirements such as EU regulations; and, thirdly, makes various efforts to actively engage society, such as organizing dialogues with local residents through local gatherings and "Thanking Local Residents" events held at its plants, as well as publishing its CSR Report every year.

Under its current Medium-Term Business Plan (2013 to 2016), the company is focusing on three priority initiatives, pledging to: (1) Increase the driving force for growth; (2) Strengthen and restructure the business foundation; and (3) Enhance the group's comprehensive capabilities. In parallel with these initiatives, we would also like to see the company further promote its novel attempt to connect RC activities with social responsibility activities and business management indexes. The company is a pioneer in terms of interrelating its social responsibility core subjects with the RC codes, but considering the recent trend for greater demand for disclosure of non-financial information, particularly among long-term investors, we would like the company to take the further step of identifying issues that are material for the company from among a broad range of social issues. At the same time, it is also hoped that the company will further advance the way it discloses information by, among others, setting key performance indicators (KPIs) for its activities, which will give it another means, alongside feedback from stakeholders, of measuring the effectiveness of its activities. For instance, the social value of agrochemicals is determined not by their environmental benefits alone but also by their effect on productivity, disaster prevention and many others. We believe that showing the comparative advantage of the company's products from various angles and quantitatively will also be beneficial for the company as it seeks to solidify its position in international chemical and agrochemical markets.

The company is in a position to directly contribute to solving issues such as the global food supply shortage, the need to adapt to climate change and others. By taking advantage of this position, we expect the company to further pursue its own growth while playing an even more leading role in order to solve social issues and realize a sustainable society through creating unique value based on its excellent research and development capabilities and, at the same time, to offer its customers value in a multifaceted and effective manner.

DBJ

This is an English translation of the Result Notification issued in the Japanese language and is provided solely for the convenience of English-speaking readers.
The "Medium-Term Business Plan (2013 to 2016)" mentioned on this page covers the period from April 1, 2013 to March 31, 2017.

Sompo Japan Nipponkoa Risk Management Inc.

Opinion on Property Conservation Survey

March 10, 2015
Yutaka Kinebuchi
Representative Director and President
Nippon Soda Co., Ltd.

Re: Opinion on Property Conservation Survey

Dear Mr. Kinebuchi,

Below is a brief summary and our opinion on the property conservation survey.

The objective of a property conservation survey is to provide information that contributes to improving the property loss prevent level of the plant by providing recommendations for improvement based on on-site surveys and interviews from the standpoint of six perspectives, including fire risk and fire prevention management.

The survey as carried out from the aspects of "surrounding environment", "building construction", "fire risk", "disaster prevention equipment", "fire prevention management" , and "natural disaster". A follow-up on the status of recommendations presented during the previous survey was also conducted.

Surveyed schedule and locations for property conservation survey

2014/6/12-13	Takaoka Plant	2nd Organic Unit and Medicine Manufacturing Unit
2014/6/24	Chiba Plant	2nd FC Unit
2014/11/18-19	Nihongi Plant (Joetsu Nisso Chemical Co., Ltd.)	Electrolyzing Unit and Potassium Unit
2014/5/29-30	Nisso Metal Chemical Co., Ltd Aizu Plant	BPS Unit and Metal Unit/Alloy Process
2014/6/5-6	Nisso Fine Co., Ltd. Isohara Plant	Isohara Plant
2014/10/10	Nisso Fine Co.,Ltd. Onahama Plant	Onahama Plant
2014/10/17	Nisso Fine Co.,Ltd. Koriyama Plant	Koriyama Plant

Overall Opinion

- We value the company's practice in regards to CSR and RC (responsible care) activities including establishment of the FY2014 action goals, improvement of the PDCA cycle, continuous review of the activities and employment of assessed result in next year's planned activities.
- The number of survey location for FY 2014 was increased to 7 locations; we value the increase security and disaster prevention awareness across the group company as a whole.

Plants The following are our comments and recommendations for improvement:

1) 【Takaoka Plant】 We value the plant's safety practice by implementing safety measures against static electricity and introduction of nitrogen gas into reactors. We also value the safety measures against static electricity taken in areas with dust explosion risk. It appears that gas alarms were not provided for a portion of the explosion proof area belonging to Medicine Manufacturing Unit. It is recommended that the plant considers installation of gas alarms in these areas.
2) 【Chiba Plant】 Static eliminator bars have been installed and earth bonding have been implement at various locations around the site, which reduces fire and explosion risks from electrical troubles. In addition, we value the plant's efforts in reducing worker's injury to a minimal by installing emergency showers.
3) 【Nihongi Plant】 We value the installation of fire detector at areas that uses flammable gas for reducing explosion risks in these areas. Rusted and corroded pillars and reinforcement braces observed during the survey. Subsequent reinforcement in these areas is recommended.
4) 【Aizu Plant】 We value the plant's installation of emergency discharge valve that will automatically discharge the heated steam even in the event that the heating distillation apparatus stops due to power failure. We also value the installation of leakage current detector that will able to detect leak of heated contents into cracks of melting furnace.
5) 【Isohara Plant】 We value the safety measures taken on-site such as prevention measures against falling water droplets from frozen pipes at workplace that uses hazardous item that are "Dangerous when Wet" and introduction of nitrogen gas into large-size injection molding machines to prevent charring of drums. We recommend the plant verifies the effectiveness of the outdoor hydrant located outside Plant No.2.
6) 【Onahama Plant】 The plant carries out disaster prevention drills every year as an effort to increase disaster prevention awareness. We value the plant's plan to schedule a joint training with the local fire department in the following fiscal year. It is recommended that the plant replaces fire detectors that have been coated by paint.
7) 【Koriyama Plant】 We value that different types of fire protection equipment such as fire extinguisher and dry chemical/foam/gas fire protection systems installed around the plant are appropriate to their occupancy. It is recommended that the plant take measures to repair block walls and strengthen wooden boards collapsed/damaged by the earthquake.

Sincerely,

Hidehiro Sumi
Representative Director and President
Sompo Japan Nipponkoa Risk Management Inc.

Opinion on the occupational health and safety survey

March 10, 2015
Yutaka Kinebuchi
Representative Director and President
Nippon Soda Co., Ltd.

Re: Opinion on the occupational health and safety survey

Dear Mr. Kinebuchi,

Below is a brief summary and our opinion on the occupational health and safety survey.

The purpose of the survey is to propose recommendations to help reduce the number of occupational accidents at the Special Medicine Unit under Special Medicine Division and the FC Unit under Fine Chemical Division of Nihongi Plant, focusing on the management aspects. The survey includes review of past accidents, on-site survey and interview with the relevant managers on current health and safety management practices.

The following survey activities were conducted at the two designated workplaces on September 4th and 5th, 2014:"pre-survey meeting visit", "on-site survey", "interviews with relevant personnel" and "document review"

Overall Opinion

- Occupational health and safety management at both Special Medicine Unit and FC Unit are rated as good overall due to the continued effort made by their managers. While no serious, work related accidents did occur at Nihongi Plant. Recommendations proposed based on this survey for improving occupational health and safety management are as shown in the following section.
- Nihongi Plant was selected as the target of this on-site survey following the survey at Takaoka Plant. While accidents have not occurred over the last 10 years at other facilities, extending a regular survey program to all facilities will be beneficial for enhancing the facilities' occupational health and safety level.

Fostering a safe culture

- The history of the "four safety cycle" is long and has been part of the company's safety culture. However, it seems that this practice has started to become habitual and monotonous. We hope that incorporation of this cycle into the work procedure will help promote the overall safety culture.

Promoting occupation health and safety program

- Near miss incidents have become an undeviating routine. While there are a total of 21 types of accidents, the plant tend to focus mainly on "falling-type" incidents. It is important to enhance education and widen the scope when identifying near miss incidents.

Passing down special knowledge and skills

- One of the jobs of an experienced post-retirement re-employee is to "pass down their special knowledge and skills". It is recommended that the "passing down of knowledge and skills" to the mid-career and younger employees are carried out in a systematic manner.

Sincerely,

Hidehiro Sumi
Representative Director and President
Sompo Japan Nipponkoa Risk Management Inc.

On this page, "FY 2014" refers to the period from April 1, 2014 to March 31, 2015.

Third-party opinion from an academic expert

We sought a third-party opinion from an academic expert to raise the objectivity of the CSR Report and identify new issues related to CSR. We will use the feedback to promote the CSR activities of the Nippon Soda Group and reflect them in future CSR reports.

Prof. Yasuhiro Iye, D.Sc.
Division of Nanoscale Science
Institute for Solid State Physics,
University of Tokyo

Profile

Graduated from Department of Physics, Faculty of Science at the University of Tokyo; received a doctoral degree in physics (D.Sc.) from the Graduate School of Science, University of Tokyo; Assistant at the Institute for Solid State Physics, University of Tokyo; Visiting Researcher at MIT, USA; Researcher at AT&T Bell Laboratories, USA; Visiting Researcher at IBM T.J. Watson Research Center in the Leo Esaki Group, USA; Associate Professor then Professor at Condensed Matter Division, Institute for Solid State Physics (ISSP), University of Tokyo; Professor at Division of Frontier Areas Research following the reorganization of ISSP and then Professor at Division of Nanoscale Science upon the division name change; 2008–2012: Director of ISSP; 2011–2012: Director of Section III (Physical Sciences and Engineering), Science Council of Japan (SCJ); 2013–2014: Vice-President of SCJ; Present: Serving as associate member of SCJ and concurrently as expert member of the Council for Science and Technology, Ministry of Education, Culture, Sports, Science and Technology (MEXT)

In response to a request to provide a third-party view of the Nippon Soda Group CSR Report 2015, I would like to hereby offer my opinions. Before reviewing the report, on Wednesday, June 17 I visited Odawara Research Center, where I was given a detailed explanation of the activities of the Nippon Soda Group based on a draft copy of the CSR Report. I was also given an opportunity to ask questions. At Odawara Research Center, I visited a site devoted to the research and development of agricultural chemical products, such as pesticides. This is an area that is completely removed from my specialization and experimentation methods are also different. For this reason, my questions were limited to my layman's knowledge but I was provided with detailed and clear explanations, which I appreciated greatly. This opportunity allowed me to reaffirm my recognition that the development of agrochemicals covers a broad range of disciplines, including chemistry, biology, and the environment, and relies on synthetic science, which requires steady efforts to conduct long-term verification experiments. While laboratories were neat and tidy, the aging of facilities seemed to impose some limitations.

In the CSR Report 2015, the "Special Section: The Ideal Company that Nippon Soda Aims to Become" starts with an interview with the Research & Development Division Manager that clearly indicates that the company places an emphasis on research and development. Statistical graphs show annual increases in export ratios, indicating that the international expansion of the group's business represents both opportunities and challenges. In this regard, needless to say, the professional development of individuals familiar with ecosystems in different regions and the laws, regulations and cultures of different countries is key. I think it is desirable for the company to use the existing international training systems more effectively and to further increase diversity awareness with an emphasis on the recruitment of women and foreign nationals.

Agricultural chemicals are indispensable for improving efficiency and saving labor in agricultural production and ensuring the stable production of food. To ensure the proper use of agricultural chemicals, efforts should be made to promote educational activities designed to dispel the public misunderstanding and vague sense of unease regarding agricultural chemicals so as to improve the group's corporate image. I wish the company continued success and expect further contributions to society well into the year 2020, the company's centennial.

Response to the third-party opinion from an academic expert

Masahito Ikeda, Ph.D.
Executive Officer, General Manager,
Corporate Social Responsibility
Department, Nippon Soda Co., Ltd.

In the past, we have requested and received verification of our CSR reports by the Japan Chemical Industry Association as well as surveys on occupational accident prevention and diagnosis of disaster prevention capability from Sompo Japan Nipponkoa Risk Management Inc. These verifications, diagnoses and surveys covered the areas of: safety and environment of plants, chemicals and product safety, distribution safety, and communication. We will continue to request these going forward so that we can make use of the results in our improvement efforts.

This year, for the first time, we sought a third-party opinion from an academic expert, Dr. Yasuhiro Iye. Dr. Iye is a professor at the Division of Nanoscale Science at the University of Tokyo's Institute for Solid State Physics. We requested him to provide his view on the Nippon Soda Group CSR Report 2015 and invited him to visit Odawara Research Center in order to get an overview of a typical Nippon Soda operational site.

I would like to take this opportunity to express my gratitude to Dr. Iye for his candid opinions.

Odawara Research Center General Manager Sano and all concerned found the comment about "efforts should be made to promote educational activities designed to dispel the public misunderstanding and vague sense of unease regarding agricultural chemicals so as to improve the group's corporate image" to be particularly helpful in terms of mapping out the future direction of our stakeholder engagement. We sincerely appreciate this observation. "Agricultural chemicals are indispensable for improving efficiency and saving labor in agricultural production and ensuring the stable production of food," Dr. Iye reminded us in pointing out the importance of education. We will follow his advice and make greater efforts in this area in order to "ensure the proper use of agricultural chemicals."

In the training and deployment of human resources, we will also make more efforts to "use the existing international training systems more effectively." In particular, more emphasis will be placed on "the recruitment of women and foreign nationals" as we "further increase diversity awareness."

In short, we will make more efforts to maintain the consistent development of the Nippon Soda Group and contribute more to society.

Address upon retiring from the CSR Office

As Representative Director and Senior Executive Managing Officer, I supervised CSR activities from June 2013 to March 2015.

CSR was first adopted by Nippon Soda in April 2012. In April 2014, eight companies belonging to the Nippon Soda Group started to also implement CSR. Since 2014, our efforts have been focused on building the foundation to place CSR activities on a solid footing. Such efforts have included risk assessment of RC promotional activities in relation to safety, the environment, quality and others as well as evaluation of safety and environmental performance levels at all business sites, including overseas manufacturing group companies. Where necessary, safety audits were conducted and improvement measures were taken.

To be successful, CSR activities cannot be left solely to the department in charge. Rather, all employees need to be aware of issues related to CSR, safety, the environment, and human rights as they go about their daily activities. In this way, CSR activities will spread throughout the Nippon Soda Group.

In April 2015, the Environment & Quality Management Department under the supervision of the Production & Technology Division was moved to the Corporate Social Responsibility Department and renamed the Environment & Quality Management Group. Under the Corporate Social Responsibility Department, the Group has greater autonomy and is engaged in the management and supervision of CSR-related activities more intensely and with an enhanced awareness of our responsibility to the public.

Upon my retirement, I entrust my successor with the further improvement of the Nippon Soda Group's CSR promotional activities and with the spread and implementation of CSR promotional activities throughout overseas companies of the Nippon Soda Group.

Eiji Ito
Advisor
Nippon Soda Co., Ltd.

NIPPON SODA CO.,LTD.

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