



# Nihon Nohyaku RESPONSIBLE CARE REPORT 2017





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### **Editorial Policy**

This report is produced to help our stakeholders develop a holistic understanding of Responsible Care (RC). RC, a series of voluntary initiatives started by Nihon Nohyaku and its subsidiaries in Japan, are based on the Responsible Care Report 2017 released in Japan. These contents are a summary of the Nihon Nohyaku group's RC activities. The Responsible Care Report 2017 is compiled in accordance with "the Environmental Reporting Guidelines in Japan (2012)" while referring to the Environmental Accounting Guidelines (2003) of the Japan Chemical Industry Association (JCIA) and JIS Z 26000: 2012.

[Scope] Unless otherwise noted, the environmental performance indication data is for Nihon Nohyaku Co., Ltd., or Nichino Service Co., Ltd., or the sum of both companies.

[Aggregation period] Unless otherwise noted, FY 2016 (October 2015 - September 2016). Capital, number of employees and sales, etc. are as of the end of September 2016. Topics from October, 2016 to March, 2017 were also included.

[Other] An explanation of any terminology has been included on the page on which an RC related term first appears.

[Issue] September 2017

#### What is Responsible Care?

Responsible Care encompasses voluntary activities wherein each company handling chemical substances secures "the environment, safety and health" and publishes the results of its activities, maintaining a dialogue and communication with society regarding all its processes, ranging from R&D through manufacturing, sales, logistics, use, and final consumption, to the disposal and recycling of the chemical substances.

This is an initiative that the global chemical industry is integrally promoting to safely manage chemical products over their life cycles through its activities, such that chemical products can contribute to improving the quality of life and sustainable development.

We have 6 items of implementation for Responsible Care, namely "RC codes", consists of "Environmental Protection", "Occupational Safety and Health", "Process Safety /Disaster-Prevention", "Logistics Safety," "Product Stewardship (Chemical Materials and Product Safety)" and "Communication with Society," which are to be continuously improved upon through the PDCA (Plan Do Check Act) cycle.

# Our Commitment

## Nihon Nohyaku Co., Ltd.

## -Innovation for Life & Nature -

Nihon Nohyaku Co., Ltd. celebrates its 89th year since its founding as the first agrochemical manufacturer in Japan. Agrochemicals are one of the agricultural materials indispensable for securing and increasing food production. Nihon Nohyaku Co., Ltd. and the companies in its group (Nichino Group) strive to create superior values through innovative technologies with the mission of ensuring a safe and stedy food supply to improve the quality of life for all. In this year, which marks the halfway point in the medium-term management Plan (FY2016-FY2018) towards the realization of "Nichino Group Vision," we will build a framework to expand our business, while promoting fair and vigorous business activities that fully respect the environment, safety and health. We commit to being a trustworthy company for all stakeholders.

## - Nichino Group Vision "Nichino Group-Growing Global: Becoming an Outstanding Globally **Competitive Company''-**

We aim to contribute to the future of humanity through protecting crops and improving our living environment by further improvement of the technology that has arisen through our agrochemical business.

We also aim to become an R&D-focused enterprise with annual sales of 100 billion yen in FY2021 and to eventually be top 10 in the world in the future (annual sales of 200 billion yen or more).

## - Basic policy of Medium-term Management Plan "Advance to Growing Global 2018 (AGG 2018)"-

Nihon Nohyaku Co., Ltd. will implement business expansion initiatives with three main components of "Promote Growth Strategy","Improve Profitability" and "Strengthen Business Base" under the philosophy of "Contributing to society by continuously providing superior values such as new agrochemicals".

In addition, the Corporate Statement showing Nichino Group that realizes these basic ideals is "Chemical Innovator for Crop & Life".

We will strive to achieve the Medium-term Management Plan and vision by promoting business development that creates and provides a Business Framework by ourselves.







## - Responsible Care of Nihon Nohyaku Co., Ltd.-

Nihon Nohyaku Co., Ltd. and its domestic group companies work together on Responsible Care activities to strengthen our social reliability as a corporate group handling chemical products.

### -Closing Remarks-

We deliver this Responsible Care Report 2017 to deepen communication with all of you. This brochure summarizes our activities related to the environment, safety and health in FY2016. We hope to see the efforts and achievements of Nichino Group and deepen your understanding of our companies. Your further support and frank opinions are greatly appreciated.

March 2017

## Nichino Service Co., Ltd.

With its excellent quality control, Nichino Service Co., Ltd. is engaged in Responsible Care activities as a company responsible for the manufacture and distribution of chemical products mainly consisting of agrochemicals. In the interest of environmental conservation, we are promoting environmentally friendly business activities, such as resource and energy saving, as well as efforts to reduce substances of concern.

In 2016 fiscal year, we introduced an occupational safety & health management system, and worked on establishing a good working environment and risk management. We strive to promote safety and health by thorough safety management and equipment management, focusing on activities to reduce the risk of work-related injuries and to prevent disasters.

Going forward, we will continue to actively engage in activities that take the environment, safety, and health into account to gain further trust from society.

March 2017



President

President

宦

Kaoru Hirose

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にないすい Shin Sakuma (Inaugurated in December 2016)

## Nichino Ryokka Co., Ltd.

The mission of Nichino Ryokka Co., Ltd. is to contribute to the creation of an affluent society in green by making the best use of green technologies. It is the company's management philosophy to challenge new technologies and promote a high-quality environment for the creation and maintenance of comfortable green spaces. With the vision of becoming a unique enterprise in every department of green industry, we are developing business activities to realize the above vision.

Regarding "Responsible Care" in connection with environmental conservation, we are engaged in resource conservation and energy saving activities including the following: fully implementing a First In, First Out policy to reduce waste, efficiently exploiting office LED lighting to reduce power consumption, replacing business vehicles with hybrid types, and implementing the green purchasing of office supplies. As for occupational safety and health, we are engaged in Kiken Yochi (KY: hazard prediction) activities to prevent occupational accidents involving employees and subcontract workers. We have installed drive recorders for promoting the safe driving of business vehicles and are making efforts to create a comfortable working environment by improving health and mental health care.

The company will continue to comply with laws and regulations, actively engage in Responsible Care activities and strive to continuously preserve the environment and promote safety and health. March 2017

## Nichino Rec Co., Ltd.

As a company operating sports facilities centered on golf ranges and tennis courts, Nichino Rec Co., Ltd. strives to properly maintain and manage facilities and the environment to promote business, pleasing customers with the mottos of " Contributing to local communities and gaining popularity" and "Providing customers with high levels of convenience, comfort, and safety & security". Especially in its core business of golf range management, the company started posting a golfrange usage agreement and announcing warnings to promote safe use by customers. On the facility side, we perform periodic inspections such as net repair, wire adjustment, sufficient inspection of mechanical equipment, including towers, while focusing on daily inspections before start-up. As for the renewal of equipment etc., we have introduced LED lighting, replaced drivingrange carpets, reinforced golf nets and refurbished electrical equipment as needed.

Going forward, the company will continue to proactively engage in activities that emphasize "the environment, safety and health" and thus contribute to the local communities through sports. March 2017



President

古教、紀隆

Sumitaka Kose (Inaugurated in December 2016)

Masahiro Nagano

## Nihon EcoTech Co., Ltd.

Under our management philosophy, "We, as an analytical service company, will contribute to society through environmental measurements and evaluations, as well as analyses and evaluations related to the safety and quality of health and food", Nihon EcoTech Co., Ltd. is conducting business activities to respond to customer's safety and security needs. Such activities include the analysis/ evaluation of agricultural, forestry & fishery products and foods, as well as radioactivity testing and other environmental measurements. In this fiscal year, we will continue previous efforts to operate and manage the quality management system of ISO 17025, improve analytical expertise, and provide high-guality services focusing on customer satisfaction. In January, we relocated our headquarters to secure office space and to develop a healthy office environment that facilitates work.

As for Responsible Care activities, we are promoting the two ethical codes of "environmental conservation" and "occupational health and safety", under the 2017 policies of "Continuous preservation and promotion of environment, safety and health", as well as "Compliance with related laws and regulations, and thorough management of risks." More specifically, the company sets goals for the reduction of waste, such as organic solvents discharged during analytical work, for the sake of environmental conservation and to improve the working environment, and thus will provide an environment where employees can work comfortably.

Through these activities, the company strives to improve the quality of measurement and analysis services, which are the company's final products, and to perform fair and transparent activities that comply with the laws and regulations to gain further trust from society.

March 2017

## Nichino America, Inc.

Nichino America, Inc. (NAI) provides crop protection products that are recognized not only for their targeted performance, but also for their ease in application and safety. NAI has a long tradition of responsibility to our customers and is constantly striving to be a valuable partner in their agricultural businesses.

The Responsible Care Management System in NAI consists of rules, standards and procedures for environmental and health protection that are designed to provide safety and security to our contract manufacturers, distributors, transportation and end users. Our goal is zero incidents.

We provide safe working instructions to protect all NAI's employees, distributors, users of our products and our neighbors.

We are responsible for providing occupational and emergency response services for our employees and customers in case of any incidents.

In Nichino America, we act responsibly according to the guidelines of Responsible Care by carrying out regular audits at all our contract manufacturing sites and warehouses in the USA. Having regular audits ensure that we provide safe and reliable products to our customers and that our products are manufactured according to current safety and environmental regulations..

March 2017

## Taiwan Nihon Nohyaku Co., Ltd.

Taiwan Nihon Nohyaku Co., Ltd. was established in 1996 mainly for the business of importing and selling agrochemicals. Currently, Nihon Nohyaku Co., Ltd. owns 51% of the company's shares. The company has a headcount of 13 employees in total, and its basic concept is to contribute to the "improvement of agricultural productivity in Taiwan".

While various generics are circulating, we have established our position in the Taiwanese market by handling the original products of Nihon Nohyaku Co., Ltd. In business, we strive to reduce waste by thoroughly implementing First In, First Out for goods and have joined a waste container recovery fund to carry out appropriate processing. In our sales activities, we pay attention to the complicated traffic situation here and focus on safe driving so as to deliver safe and secure products to farm houses without any accidents.

March 2017





Jeffrey R. Johnson



Kazuhisa Goh



## **AgriMart Corporation**

AgriMart Corporation undertakes activities with the motto of "Creating a business with our customers." One of the main pillars of these activities is business that enable people to use their homes safely for a long period of time mainly related to termite control agents.

Last year, there were big earthquakes in Kumamoto and Tottori, which unfortunately damaged many houses. House damages caused by earthquakes deprive the afflicted people of happiness and also create much waste. Currently, approximately 30% of the houses existing nationwide were built before the enactment of the new seismic resistance standard (1980), and hence had not been required to have sufficiently strong concrete foundations. If there is a big earthquake, there will be great damage to these houses. Against this backdrop, we have been promoting foundation reinforcement, in addition to anti-termite treatment, working together with construction contractors since the Great East Japan Earthquake. We believe that combining these two jobs enables us to provide help in creating a housing environment that is strong against earthquakes, in which people can live safely and for long period of time. We will continue to contribute, not only to the sale of termite control agents, but also to the long-term usability of houses, by supplying services related to the use of those agents.



President 日 中 耳・イ= Shinji Tanaka

## Hyderabad Chemical Pvt. Ltd.

Hyderabad Chemical Pvt. Ltd. is an agrochemical manufacturing and sales company with its headquarters located in Hyderabad, India. We became a member of the Nichino Group through a capital alliance with Nihon Nohyaku Co., Ltd. in March 2015. Currently, we manufacture 18 types of active ingredients\* for agrochemicals and 74 types of formulated products in our 4 plants. Our products are being used by 2.4 million farms in India. We are encouraging the safe, proper use of agrochemicals through our customer service center and field promoters.

Our plants have been certified for ISO 9001, ISO 14001 and OHSAS 18001, and we have established a basic policy of operation giving the highest priority to the measures for health, safety and environment. As a code of conduct, we have enacted internal regulations concerning safe operation, occupational safety & health, environmental pollution prevention, emergency response, delivery procedure, product stewardship, etc., and periodically carry out employee training. We strive to improve our skills, as well as to comply with the laws and regulations.

In the future, we will strengthen our efforts not only towards the market in India, but also towards the global market, in collaboration with Nichino Group companies. We will further raise safety awareness and strengthen our environmentally conscious activities so as to be a company earning the trust of society and contribute to global food production.

President

Nellore Sukumar

\* Active ingredients are industrially produced chemical substances that serve as major components of agrochemicals for preventing disease, pest and weeds, and/or for adjusting the growth of plants.

## Sipcam Nichino Brasil S.A.

Sipcam Nichino Brasil S.A. (SNB) was founded in Brazil in 1979, and Nihon Nohyaku became the major shareholder in 2014. In 2003 we first achieved ISO 9001 and ISO 14001 and in 2008 we conquered the OHSAS 18001. These three International Certificates have been renewed since then by the original certifier, the German company – BRTÜV.

Our commitment to continuous improvement is managed mainly through SNB's Integrated Management System that is based on the following key factors: Established tasks and objectives; Performance Indicators; Corrective and preventative actions; and Internal and external audits.

The last BRTÜV audit was in January 2016 and reported 3 non-conformities type B (minor ones) and 5 opportunities for improvement, all of them were fixed this year.

The following are SNB's commitments to its stakeholders that lead our actions and are referred to as Responsible Care: Satisfy our customers; Preserve the environment; Ensure the health and satisfaction of our employees; Promote the professional development of our staff; and Pursue excellence in our products and services.

March 2017



Co-President 岸田 満

岸田 満 浩 Mitsuhiro Kishida

March 2017



President



Luiz J. Traldi

# **Basic Principles, Action Charter, and Corporate Governance Guideline**

## **Our Credo Card**

## **Basic Principles of the Nihon Nohyaku Group**

We contribute to society by ensuring a safe and steady food supply and improving the quality of life for all.

We fulfill market needs by creating superior values with innovative technologies.

We commit to being a trustworthy company for all stakeholders through our fair and vigorous business activities.



#### 😔 Nihon Nohyaku Co., Ltd.

## Nihon Nohyaku Group Action Charter

- 1. We improve the quality of life for all by providing safe and effective products and services that satisfy our customers.
- 2. We conduct fair and transparent business operations, respecting social ethics and complying with related laws, regulations and their spirit.
- 3. We contribute to the realization of a sustainable society, considering the global environment.
- 4. We actively communicate and contribute to our communities as a good corporate citizen.
- 5. We properly manage and disclose corporate information in a timely and appropriate manner.
- 6. We recognize the importance of personal data, intellectual property and other information, and safeguard it under proper protection and management.
- 7. We ensure a safe and comfortable work environment for our employees, always respecting human rights and the diversity found among people and cultures.
- 8. We entirely exclude involvement with antisocial forces and organizations, and resolutely refuse unreasonable requests.
- We contribute to the development of each country and region in line with globalization, adhering to 9. international rules as well as local laws, cultures and customs.
- 10. We promote the sound and sustainable growth of the Nichino Group to ensure our social contribution.

## Basic Approach to Corporate Governance Guideline (Excerpt from Corporate Governance Guideline)

(Formulated: November 13, 2015/ Implemented: December 22, 2015)

Nihon Nohvaku aims to be a company that earns the trust of its shareholders, customers, employees, business partners, local communities, and various other stakeholders. To this end, the company shall endeavor to constantly maintain an optimal system of corporate governance in line with the basic approach set forth below, believing that it will facilitate sustainable corporate growth and enhance medium- to long-term corporate value.

- 1. The Board of Directors shall establish and uphold the Basic Policies and Action Charter, which every officer and employee of the company shall hold in common and which shall govern all business activities of the company.
- 2. Nihon Nohyaku shall honor the rights of its shareholders. It shall endeavor to prepare an environment wherein shareholders can exercise their rights appropriately, and to secure substantive fairness for shareholders.
- 3. Nihon Nohyaku recognizes the importance of its social responsibility and public mission. The company shall work with stakeholders as appropriate in order to foster a corporate culture conducive to wholesome business operations underlined by steadfast self-discipline.
- 4. In order to earn the trust of its stakeholders and the community and further enhance its corporate value, Nihon Nohyaku shall set compliance with laws, ordinances, and corporate ethics as its cornerstone, and aim to ensure transparency and fairness in decision-making, and construct an aggressive system of corporate governance to facilitate swift and bold decision-making that is premised on such principles.
- 5. Nihon Nohyaku recognizes the importance of the ecological and social challenges associated with sustainability. The company shall work to fulfil its social responsibility as a company that deals in chemical substances, and enhance its corporate value.
- 6. Nihon Nohyaku shall ensure a diverse balance of viewpoints and values, and pursue diversity with a view to achieving sustainable growth.
- 7. In order to prepare a foundation for constructive dialogue with stakeholders, Nihon Nohyaku shall separately establish a Disclosure Policy; moreover, the company shall promote transparency in its corporate management and appropriate disclosure of company information, including information on non-financial operations.
- Nihon Nohyaku shall engage in constructive dialogue with stakeholders so as to contribute toward its sustainable growth and the enhancement 8. of its medium- to long-term corporate value.

# **Business Overview**

# Nihon Nohyaku Co., Ltd.

Runon Nonyaka CO., Eta.	
Head Office Foundation Capital Employees(consolidated) Total Assets(consolidated) Sales (consolidated) Ordinary Income(consolidated) Profit attributable to owners of parent (consolidated) Main Business	<ul> <li>19-8, Kyobashi 1-Chome, Chuo-ku,Tokyo 104-8386</li> <li>November 17, 1928</li> <li>10,939 Million Yen</li> <li>1,457 Person</li> <li>88,791 Million Yen</li> <li>50,641 Million Yen</li> <li>3,864 Million Yen</li> <li>1,035 Million Yen</li> <li>Agrochemicals (Agriculture/Professional Turf/Home &amp; Garden)</li> <li>Wood Preservative Agents</li> <li>Agricultural Materials</li> <li>Pharmaceuticals &amp; Veterinary Products</li> </ul>
Office Research Center Nursery Overseas Office Plant (Commissioned)	The locations of the following business sites and bases are indicated by the numbers to ③ in the map on the next page. Head Office(Tokyo) , Osaka Office(2016/8~)孽, Sapporo Branch , Sendai Branch , Tokyo Branch , Osaka Branch/Tokai-Hokuriku Sales Office 學, Fukuoka Branch 宁 Research Center (Kawachinagano,Osaka) 宀 Naganuma Nursery (Naganuma,Hokkaido) Bangkok Office ⑲, Vietnam Office ⑳ Nichino Service Co., Ltd. Fukushima Plant , Kashima Plant , Osaka Plant (~ 2016/7) 孾, Saga Plant 宂
Group Companies (consolidated)	<ul> <li>Nichino Ryokka Co., Ltd.</li> <li>Sales of Chemical/Pesticides for Professional Turf, Home &amp; Garden, Planning for Golf Courses and Amenity Areas</li> <li>Nichino Rec Co., Ltd.</li> <li>Operation of Golf Practice Range and Tennis Courts</li> <li>Nichino Service Co., Ltd. 7</li> <li>Production and Logistic Services of Agrochemical, Cultivation &amp; Management of Experimental Field/Laboratories</li> <li>Nichino America, Inc. (USA) 2</li> <li>Sales and R&amp;D of Agrochemicals in America</li> <li>Nihon EcoTech Co., Ltd. 7</li> <li>Agrochemical Residue Analysis, Chemical Substance Safety Testing, and Related Activities</li> <li>Taiwan Nihon Nohyaku Co., Ltd.(Taiwan) 2</li> <li>Sales and R&amp;D of Agrochemicals in Taiwan</li> <li>AgriMart Corporation 2</li> <li>Sales of Termite Control Agents/Devices, Pest Control Agents/Devices</li> <li>Hyderabad Chemical Pvt. Ltd. (India) 2</li> <li>Production, Sales and R&amp;D of Agrochemicals in India</li> <li>Nectar Crop Sciences Pvt. Ltd. (India) 3</li> <li>Production, Sales of Agrochemicals in India</li> <li>Sipcam Nichino Brasil S.A.(Brazil) 3</li> <li>Production and Sales of Agrochemicals in Brazil</li> </ul>
Group Companies (non-consolidated)	Nichino Europe Co., Ltd. (UK) 它 Sales and R&D of Agrochemicals in Europe Nichino Shanghai Co., Ltd.(China) 3 Promotion of Agrochemicals and related activities in China Nichino do Brasil Agroquímicos Ltda.(Brazil) 3 R&D of Agrochemicals in Brazil
Affiliated company accounted for by the equity method	Agricultural Chemicals (Malaysia) Sdn. Bhd. (Malaysia) Production, Sales and R&D of Agrochemicals in Malaysia Sipcam Europe S.p.A. (Italy) Production, Sales and R&D of Agrochemicals in Europe

## Nichino Group Locations



# **Group Vision / Medium-Term Business Plan**

## **Group Vision**

## Nichino Group - Growing Global to become an outstanding globally competitive group

We contribute to the future of mankind through protecting crops and improving our living environment by further improvement of our technology that has arisen through agrochemical business.

We contribute to society through supporting agriculture by providing new agrochemicals & technology continuously

Target scale and ideal business model in 2021

## To be an R&D focused company: No.1 in Japan and Top 10 in the world in the future (Sales over 200 billion yen)

#### Ideal business model in 2021 and a passing point towards future

- To be a company where every employee has high motivation, pride and wilt for their work
- To achieve the target sales of 100 billion yen

**Nichino Group - Growing Global** 

- To globally deploy high value-added new products, existing proprietaries and high quality generics
- To be a leading agrochemical company in the market share, business scale & profitability by having solid domestic base
- To be a globally outstanding company by expanding bases for development, production & sales in worldwide major market



## Achieving our Vision, "Nichino Group - Growing Global"

#### Progress of the Medium-Term Business Plan

- Hyderabad Chemical Pvt. Ltd. commercialized flubendiamide (insecticide), and manufacturing Nihon Nohyaku's technical pesticide products in India.
- Sipcam Nichino Brasil S.A. commercialized buprofezin (insecticide), fenpyroximate (miticide) in Brazil and became a consolidated subsidiary of Nihon Nohyaku Co., Ltd.
- 6 brand new fungicides including "Major" (wide spectrum fungicide) were launched (July, 2016). Application for registration of "Parade" (wide spectrum fungicide) is completed (November, 2015).

# **Corporate Governance & Responsible Care**

We have established "Basic Principles of the Nichino Group" as the base for all our activities. On the basis of the "Nichino Group Action Charter" and the Group Vision, both in accordance with the basic principle, we have established a corporate governance system to become a group of companies earning the trust of various stakeholders (see diagram below).

In establishing the system, we complied with the meaning and spirit of the corporate governance code, which has been incorporated into the Securities Listing Regulations of the Tokyo Stock Exchange in Japan, and established the "Nihon Nohyaku Corporate Governance Guidelines" to follow (Nov. 2015). As for the Nichino Group's Responsible Care activities, the Responsible Care Promotion Committee, participated by the representatives of the 5 domestic companies of the group, oversees the overall activities, and each panels established under this committee promotes concrete actions. We are currently a member of the Responsible Care Committee of the Japan Chemical Industry Association and have registered the 4 domestic group companies to this committee as our affiliates in RC activity. In addition, the method of each Responsible Care Code items is actively used also by the non-registered group companies for their voluntarily and autonomous activities, and the Environmental Safety Department of Nihon Nohyaku periodically performs Responsible Care audit for all the domestic companies of the group.





### 1) Responsible Care Global Charter

We are actively promoting Responsible Care by adapting the content of the Responsible Care Global Charter to the mid-term target of the Nichino Group Responsible Care program.

ICCA\* has announced the names of 543 companies that have signed the Global Charter (as of the end of January 2017).

\* International Council of Chemical Associations



Responsible Care Global Charter executed by former president Kohyama (current Chairman, Representative Director of Nihon Nohyaku)

## 2) Certified Management Sysyem

Nichino Group has acquired the following accreditation and certifications for the management system and is working to continuously improve its operations.

International Standards	Company(Facilities)		
ISO9001(Quality Management System)	Nichino Service (Fukushima, Kashima, Osaka, Saga) Hyderabad Chemical	Nectar Crop Sciences Sipcam Nichino Brasil	
ISO14001(Environment Management System)	Nichino Service (Fukushima, Kashima, Saga) Hyderabad Chemical	Nectar Crop Sciences Sipcam Nichino Brasil	
OHSAS18001(Occupational Safety & Health Management System)	Nichino Service Hyderabad Chemical (Balanagar)	Nectar Crop Sciences(Humnabad) Sipcam Nichino Brasil	
ISO17025(General requirements for the competence of testing and calibration laboratories)	Nihon EcoTech (Osaka Analysis Center)		

## 3) Nichino Group Responsible Care Mid-Term Target (FY2016-2020)

Area of Responsible Care	Mid-Term Target
General	Japan
	> Continuous improvement of RC in each site, and expansion to the subsidiary companies which have not introduced RC
	activities as one of their management systems.
	> Adopting the way of ISO management systems, and improvement of the quality of each ISO management system.
	#ISO14001: Environment management system
	#ISO9001: Quality management system
	#ISO45001: Occupational safety and health management system
	Global
Environmental Protection	> Introduction of RC and RC global charter to each subsidiary company.
Environmental Protection	Japan > Energy saving and reduction of CO <sub>2</sub> emission.
	Improve unit energy consumption more than 1% every year.
	Reduce $CO_2$ emission with such energy saving.
	> Participation in "Fun to Share".
	"Fun to Share" is a national movement led by the Japanese Ministry of Environment. The motto is: "Share the latest
	knowledge and establish a low carbon society!"
	> To expand and maintain the number of the manufacturing sites of "Zero Emission".
	• "Zero Emission" is defined as the condition whereby the amount of waste buried is less than 1% of total waste.
	Reduction of waste in each operation site.
	> Purchase of "Green Goods" to be more than 95%. (Consumable goods like stationary and designated items.)
	> Raise and enforce higher standards of "Green Procurement".
	To expand and keep the rate of "Green Procurement" within the total procurement of the SCM department.
	> Continuous effort to establish low carbon society. To monitor any changes in the operation percentage of nuclear power
	plants and the Japanese government COP21 policy and to set a target in the near future.
	Global
	> Energy saving and reduction of CO <sub>2</sub> emission according to local targets.
Occupational Safety & Health	Japan > Achieve Zero-traffic accidents on the way to work and on duty and Zero-injury operations.
licalti	> Share a series of risk assessment procedures with Nichino Group.
	Global
	<ul> <li>&gt; Achieve Zero-traffic accidents and Zero-injury operations.</li> </ul>
Process Safety &	Japan
Disaster Prevention	> Achieve Zero-disaster operations.
	Global
	> Achieve Zero-disaster operations.
Logistics Safety	Japan
	> Maintain Zero-serious accidents caused by any leakage and scattering of raw materials or products in logistics and
	transport.
	> Communicate actively with contractors, such as warehouse traders, and transportation traders at RC oriented business
	meetings, etc.
	Global
	> Achieve Zero-serious accidents caused by any leakage and scattering of raw materials or products in logistics and
Product Stewardship	transport.
(Chemical Materials &	Japan > Constant R&D efforts to develop safe and environmentally-friendly products.
Product Safety)	<ul> <li>Harmonization of management of SDS information worldwide under UN GHS and collaboration with subsidiaries.</li> </ul>
rioduct Salety)	> Continuous improvement of product quality under ISO9001 and certain management to maintain the high quality of
	Nihon Nohvaku products.
	Global
	<ul> <li>Constant R&amp;D efforts to develop safe and environmentally-friendly products.</li> </ul>
	Compliance with all domestic and international laws, regulations and in-house voluntary rules.
Communication with	Japan
Society	> RC report/ CSR report is issued every year.
	English version of such a report to be issued.
	Ensure RC inspections by an authorized third party in order to improve RC activities in the Nichino group.
	> Maintain and expand an excellent environment around each manufacturing and research sites.
	·

## 4) Outline of Responsible Care Activities in FY 2016

The following has been performed actively for as the first year activities of the Responsible Care mid-term target and of the mid-term management plan (AGG2018).

Area of RC		FY2016	1	Page
	Activity	Result	Evaluation*1	. age
General	<ul> <li>&gt; OHSAS 18001 Certification(Nichino Service).</li> <li>&gt; Execution of Responsible Care Promotion Agreement between Nihon Nohyaku and AgriMart.</li> <li>&gt; Provision of information related to Responsible Care to Group Companies outside Japan.</li> </ul>	<ul> <li>&gt; Nichino Service received OHSAS 18001 certificate which covers all facilities (December 2015). The management method and procedures of ISO 17025 (Test facility) has been deployed to all testing facilities of Nihon EcoTech.</li> <li>&gt; The Agreement was executed on October 28, 2015).</li> <li>&gt; The Responsible Care Global Charter and Nichino Group Responsible Care mid-term target have been noticed to the overseas affiliates.</li> </ul>	*	10-14
Environmental Protection	<ul> <li>Promotion of energy saving, reduction of energy consumption unit<sup>2</sup>;1% or more per year and reduction of CO<sub>2</sub> emissions aimed at achieving environmental rating commitment (-3%).</li> <li>Registration of all group companies in Japan to "Fun to Share" program by the Ministry of the Environment .</li> <li>Maintenance and expansion of zero emissions of wastes<sup>*3.</sup></li> <li>Green Purchase Rate <sup>*4</sup> of 95% or higher, and quantification of purchase amount.</li> <li>Strengthening of green procurement standards.</li> <li>Expansion of Locavore <sup>*5</sup> activities.</li> </ul>	<ul> <li>&gt; Nihon Nohyaku has reduced the energy consumption unit by 0.9%, and Nichino Service has reduced the same by 4.0%.</li> <li>Compared with 2013, CO<sub>2</sub> emissions have been reduced by 11.5% in the total of Nihon Nohyaku and Nichino Service.</li> <li>&gt; Proposed registration declaration has been set up for 8 business sites among 14 candidate sites.</li> <li>&gt; Nichino Service Saga has continued to meet the goal for over 10 years, Fukushima for the third consecutive year. Kashima, Osaka did not achieve zero emission.</li> <li>&gt; Green Purchase has been deployed to all the domestic group companies, achieving the target with a green purchasing rate of 97%.</li> <li>&gt; The new standards for green procurement have been established (May 2016).SDS became Essential item. The green procurement rate for 2016 fiscal year: 92%</li> <li>&gt; Questionnaires continued on "Number of times of one pot dish" and "Energy conservation that can be done at home" '6.</li> </ul>	•	15-17
Occupational Safety & Health	<ul> <li>&gt; Achieving zero traffic accident during work and commuting, and maintaining zero accident causing lost worktime.</li> <li>&gt; Implementation of risk assessment corresponding to the revised Occupational Safety and Health Law in Japan.</li> </ul>	<ul> <li>&gt; Driving recorders have been installed on business vehicles of the domestic group companies. Zero automobile accident has not been achieved (33 cases in Japan). 2 lost-time accidents (one of which belongs to a subcontractor).</li> <li>&gt; The information on risk assessment method of chemical substances has been provided to each domestic group company and business site. Risk assessment has been implemented at each business site.</li> </ul>	<b>T</b>	18
Process Safety & Disaster Prevention	<ul> <li>Maintaining zero serious accident on the production equipment.</li> </ul>	<ul> <li>&gt; Zero serious accident in production facilities has been achieved continuously.</li> </ul>	*	19
Logistics Safety	<ul> <li>&gt; Continuing zero serious accident (scattering / spillage) in logistics.</li> <li>&gt; Enhancement of logistics conference with suppliers.</li> </ul>	has remained to be zero.		20
Product Stewardship (Chemical Materials & Product Safety)	<ul> <li>&gt; Developing environmental, safety- conscious products and field testing, considering environment preservation and worker safety.</li> <li>&gt; Centralized management of the safety information on chemical substances and appropriate provision to domestic and overseas affiliates.</li> <li>&gt; Improvement of product quality and thorough management.</li> </ul>	<ul> <li>&gt; Audits have been conducted on small scale field tests.</li> <li>&gt; Environmental and safety information such as SDS<sup>'9</sup> has been provided to domestic and foreign parties related. The conversion of SDS to GHS version has been promoted.</li> <li>&gt; Nichino Service Kashima has focused on supporting GMP <sup>*10</sup>. 7 new products, not containing NPE<sup>*11</sup> for supplementary ingredients, have been released. The NPE replacement of existing products with has been studied.</li> </ul>	*	21

Area of RC	FY2016			
	Activity	Result	Evaluation <sup>*1</sup>	Page
Communication with Society	<ul> <li>&gt; Creating a Responsible Care Report 2016 as the stage of preparation of the change to CSR Reporting.</li> <li>&gt; Establishment of comfortable environment around business sites interacting and cooperating with the local communities.</li> <li>&gt; Participate in and promote activities towards VISION 2025 of Japan Crop Protection Association, JCPA.</li> </ul>	<ul> <li>RC report 2016 were issued in March, including some articles usable for CSR report.</li> <li>Each business site have arranged its managers and workers to attended regional Co-Working activities.</li> <li>Nihon Nohyaku participated in each committee of JCPA to encourage securing compliance and proper use of agrochemicals.</li> </ul>	*	22-24

🎌 Self evaluation of actual results: 🌞 : achieved, 🌨 : partially achieved, 👚 : not achieved.

<sup>2</sup> An index showing the efficiency of energy consumption. It indicates the ratio against the previous year of the energy consumption per area converted in consideration of work volume, for the Research Center, of the energy consumption per converted production volume, for Nichino Service other than Osaka Office, and of the energy consumption per floor area for Osaka Office. The composite evaluation shall be performed in accordance with the change of calculation method for notification of law concerning rationalization of energy use etc.
<sup>3</sup> The final disposal amount of waste shall be 1% or less of the generated amount.

\* The final disposal amount must only be landfill disposal, and not include ocean dumping disposal; ocean dumping was banned in Japan in 2007.

<sup>\*4</sup> Green Purchase Rate = (Green Product Purchase Amount) / (Total Purchase Amount of Target Products) × 100

\*5 A composite word with the term "Local" and the term "-vore (meaning an animal that eats something)", meaning "people who eat local food". It indicates an activity that leads to a reduction of CO<sub>2</sub> when combined with "local consumption of local products" and expanded consumption of "domestic agricultural and marine products".

<sup>\*6</sup> Questionnaires based on the "Lifestyle check 25" of "Family Energy Saving Dictionary (2012 version)" of the Energy Conservation Center, Japan, including our original question items.
<sup>\*7</sup> An emergency contact card promoted by the Japan Chemical Industry Association, and the card describes emergency measures to be taken by drivers, fire fighters and other stakeholders in case of an accident during transportation of chemical substances.

<sup>18</sup> Our own emergency contact cards with same notes as Yellow Cards for the chemical substances not required to carry Yellow Cards.

\*9 Safety Data Sheet

\*10 Good Manufacturing Practice: Quality control standards for pharmaceuticals, etc., as prescribed by the Minister of Health, Labor and Welfare based on Pharmaceutical and Medical Device Act.

<sup>\*11</sup> polyoxyethylene <u>n</u>onyl<u>p</u>henyl <u>e</u>ther

## 5) RC Activities in FY 2017

Area of RC	Activities
General	> Exchanging information relevant to the development of Responsible Care activities with overseas bases.
Environmental Protection	<ul> <li>&gt; Promotion of energy saving. Reduction of 1% or more per year of energy consumption unit and reduction of CO<sub>2</sub> emissions. Study on the evaluation unit.</li> <li>&gt; Registration to the National Movement "Fun to Share" led by the Ministry of Environment.</li> <li>&gt; Promotion of waste reduction and maintenance/expansion of zero emissions.</li> <li>&gt; Green purchasing rate of 95% or more.</li> <li>&gt; Improving green procurement rate under the new standard.</li> <li>&gt; Expanding Locavore Activity in group companies.</li> </ul>
Occupational Safety & Health	<ul> <li>&gt; Achievement of zero traffic accident during work and commuting. Achievement of zero accidents resulting in lost work time.</li> <li>&gt; Implementation of risk assessment corresponding to the revised Occupational Safety and Health Law.</li> </ul>
Process Safety & Disaster Prevention	> Maintaining zero serious accident of production equipment.
Logistics Safety	<ul> <li>&gt; Continuing zero serious accident of logistics (scattering / spillage).</li> <li>&gt; Strengthening communication with logistics companies.</li> <li>&gt; Continuing the use or Yellow Cards and White Cards.</li> <li>&gt; Promotion of modal shift <sup>*1.</sup></li> </ul>
Product Stewardship (Chemical Materials & Product Safety)	<ul> <li>Continuing to reduce PRTR<sup>2</sup> inert ingredients in new formulated products. (We already stopped using NPE to a new formulated products.) Substituting 50% of NPE in existing products.</li> <li>Completing the conversion of MSDS into SDS (compliant with JIS Z 7253: 2012).</li> <li>Promoting the provision and sharing of SDS information internally and with domestic subsidiaries.</li> </ul>
Communication with Society	<ul> <li>&gt; Preparing Responsible Care Report 2017 and its English version while preparing reformation to CSR report.</li> <li>&gt; Investigating the plan for receiving Responsible Care Inspection by JCIA.</li> <li>&gt; Exchanging with the local community and improving the environment condition around the establishment.</li> <li>&gt; Participating and promoting activities towards agrochemicals industry association JCPA VISION 2025.</li> </ul>

<sup>\*1</sup> Switching the transportation of raw materials and products from truck to railway or ship with less CO<sub>2</sub> emissions.

<sup>2</sup> PRTR is an abbreviation of <u>Pollutant Belease and Transfer Begister</u>, defined under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances into the Environment and Promotion of Improvements to the Management Thereof.

### 6) Establishment of Osaka Office

To improve production efficiency, Nichino Service Osaka Plant, which has been manufacturing agrochemicals products for a long time since 1934 at the Tsukuda district in Osaka, finished production and closed in July 2016. After that, Nihon Nohyaku Co., Ltd. Osaka Office was established in the same area, taking over management. In addition, the Osaka Storage and Delivery Group a part of Nichino Service Saga Plant, took work of storage and delivery work in this district.

# **Environmental Protection**

•2

•3

## Input of resources and energy and Output of products and environmental load

The following shows the amounts of raw materials, energy and water used in our business activities, along with the matters discharged in the process of production / products consumption and disposal.



<sup>18</sup> Amount consigned to Japan Containers and Packaging Recycling Association.

## **Environmental Impact**

## 1) Efficiency of Energy Consumption

Nihon Nohyaku and Nichino Service are working on energy conservation with the aim of reducing energy consumption unit by 1% or more compared with the previous year. Nihon Nohyaku reduced 0.9% and fell short of the target. Meanwhile, Nichino Service achieved a target reduction of 4.0%.

\* Indices based on fiscal 2010 as 100.



## 2) Energy, Water Consumption & CO<sub>2</sub> Emission

We reduced energy consumption by 3.2% compared to the previous year. Water usage increased by 15%.  $\rm CO_2$  emissions were reduced by 5.7%.



#### 3) Emission to Atmosphere

NOx increased by 23.1%.

SOx and dust have been shifting in an extremely small amount.



### 4) Wastes

#### (1) Amount of waste

The amount of waste which has formed through R&D and production activities was reduced by 11% compared to the previous year.

The amount of final disposal was reduced by 0.6%.

The recycling rate decreased by 2 points.

\* Recycling rate = (Recycled amount) / (Recycled amount + Final disposal amount)× 100

# (2) Survey and confirmation of waste disposal contractors

We select contractors, who properly handle waste upon each lows, and continue to inspect and confirm the final disposal traders and its sites, because illegal damping of the waste is responsibility of us (discharge person) in Japan by Waste Management and Public Cleaning Act.

#### (3) Waste containing PCB

Safety measures have been taken for wastes containing high levels of PCB (more than 5,000mg/kg) and Electrical equipment wastes with minor PCB\*(less than 100mg/kg) to prevent leakage, secure storage and decomposing process in accordance with the guidelines.

\* Waste of electrical equipment manufactured after discontinuation of PCB production and unintentionally contains a trace amount of PCB.



#### 5) Amount of Discharged and Transferred PRTR Substances (April 2015 ~ March 2016)

Although the amount of PRTR substances discharged<sup>\*1</sup> increased by 2.1% compared with the previous year, it still has been kept at a low level.

On the other hand, the transfer amount<sup>\*2</sup> increased by 12.5% from the previous year.

- <sup>1</sup> Discharge amount: Amount of discharge to the atmosphere, public water, soil, and landfill.
- <sup>2</sup> Transfer amount: Amount of transfer to sewers, and amount consigned to industrial waste disposal companies (excluding shipment as commercial products).



## Green Purchasing and Green Procurement

The Nichino Group is actively working on the green purchasing of office consumables. The green purchasing rate has reached 97% in the whole domestic group companies, achieving the target (more than 95%). Since we have achieved 100% green procurement rate of materials for the last 6 consecutive years, we have changed to a more stringent standard.

#### New Standard of Green Procurement

Each green supplier of chemical materials should satisfy the condition A and, in addition, satisfy at least one of conditions B-1 to B-3.

- A Providing SDS (Safety Data Sheet) or equivalent GHS related information.
- B1 Actively promoting environmental conservation\*1.
- B2 Suppling products with less environmental impact and without highly hazardous substances\*<sup>2</sup>.
- B3 Not using any highly hazardous substances during processing and manufacturing<sup>-2</sup>.
- \*1 Examples of activities: Carrying on business under certified environmental management system making efforts towards Responsible Care, initiative, participation in the national movement for environmental conservation (Fun to Share, etc.), issuance of environmental reports, Approved environmental rating, etc.
- <sup>2</sup> Examples of hazardous substances: POPs, substances subject to PRTR excluding

risk-manageable agricultural chemicals, highly hazardous substances subject to regulation in each country (such as SVHC in EU), chemical substances that must not be detected in food commodities, etc.

## Action towards Creating a Low-Carbon Society

Our solar power generation facility was completed in the premises managed by the Nichino Service Saga, and power generation started (June 2016).

In addition, as our original activity, we are working on Locavore. Furthermore, referring to "COOL CHOICE\*" promulgated by the Ministry of the Environment, we conducted an energy conservation questionnaire that can be done at home continuously from the previous year (August 2016).



Photovoltaic Power Generation Plant (NS Saga)

\* A national movement promoting all "smart choices" that contributes to the measures against global warming to achieve the goal of reducing greenhouse gas emissions by 26% in 2030 compared with 2013, involving Japanese energy-saving products, services, actions, etc., which are world-class.

# **Occupational Safety & Health**

### 1) Promotion of Safety and Health Management

We have held the safety and health committee regularly at all business sites to check the implementation and progress of targets/plans and to perform risk assessment, so as to

2) Expenses for Safety & Health

In this fiscal year, we spent 14.5 million yen for medical examination, 8.8 million yen for the industrial physician, 0.1 million yen for influenza immunization and the like, 1.2 million yen for mental health related expenditure, which totals to 24.6 million yen. We will continue to spend the expenses necessary for the improvement of safety and health, mental cares, etc.

improve safety and health standards for creating comfortable

workplace environment without an occupational accident.

### 3) Relationship with Employees

We strive to develop human resources so that employees can fully demonstrate their individual capabilities and sensibilities. We will accept diversified ways of working such as maintaining and promoting employees' health and work-life balance.

In addition, we are actively seeking global deployment now. It is important to understand and respect the partner in relation to people having various histories, cultures, and customs. We will respect basic human rights and will promote further diversity.

### 4) Working condition Improvement at Production Site

An Acceptable Operator Exposure Limit is voluntarily set for each chemical substance to be handled, in order to prevent acute and chronic health problem to workers.

### 5) Incident Rate and Record of Zero-Occupational Accident

There was one accident with workdays lost\*1 at Nichino Service.

There were 6 accidents without workdays lost\*2 at domestic group companies. We will strive to prevent occupational accidents from occurring in the future.

Record	of Z	ero-Oc	cupation	al Accident
necora	012		oupution	

Site		Total number of working days	Total number of working hours (thousand hrs.)
Nihon Nohyaku Research Center		2,255	1,763
Nichino Service	Fukushima	977	278
	Kashima	1,201	277
	Osaka	5,297*4	942 <sup>*4</sup>
	Saga	6,210	2,588



\*1 Occupational accident in which a worker must take one or more days off starting on the day after the accident in order to receive medical treatment for their injury or illness. Any such period concerning the worker is recorded by means of a certificate issued by a doctor

- \*2 Occupational accident in which a worker was treated at a medical agency or by a medical doctor due to any injury or illness caused by their work, but they did not need to take a day off after the day following the accident
- \*3 Quoted from the overview of the 2015 occupational accident trend survey (business site survey (business site scale, greater than 100 people) and general construction industry survey) (April 26, 2016: Health, Labor and Welfare Ministry).
- <sup>4</sup> The actual values include Osaka storage · delivery group of Nichino Service Saga since August 2016.

# **Process Safety & Disaster Prevention**

### 1) Training for Response to Earthquake Disaster

At the headquarters of Nihon Nohyaku, we conducted a training to ensure smooth cooperation between the head office and each business site, assuming an epicentral earthquake in the Tokyo metropolitan area.

### 2) Sharing of Risk Assessment Method

Risk assessment procedure are improved in at the Research Center and Nichino Service.

## 3) Safety Management of Equipment

We carried out a risk assessment of facilities and equipment, as well as various periodic check prescribed by a law. There was neither serious equipment accident, nor leakage accident of agrochemicals, nor serious water quality accidents.

### 4) Training for Emergency

Emergency response has been trained at each business site.



Process Safety & Disaster Prevention

(Head Office; May 22, 2016)



(Research Center; October 23,2015)



(Osaka Office; September 21,2016)



(NS Fukushima; July 25,2016)



(NS Saga; September 5,2016)



(NS Kashima; May 10, 2016)



The lectures by Dr. Tsubata,the Head of Research Center and safety training were conducted to learn from past experience and raise the safety awareness.



(Research Center; April 4, 2016)

# **Logistics Safety**

### 1) Safety Management During Transport

We ask our drivers to carry Yellow Cards to respond promptly in case an accident occurs when transporting poisonous materials, or hazardous materials/designated flammable substances stipulated by the Fire Service Act. In addition, in case where the Yellow Cards cannot deal with the situation, "Container Yellow Card<sup>\*1</sup>" labeling, which describes the "Guideline number<sup>\*2</sup>" "UN number" to show the first aid content, can be found on the exterior. Furthermore, we have established a system to create and carry our own "White Cards" for products not requiring Yellow Cards to be carried. In this way, we are striving for logistics safety.

- \*1 Indication of UN numbers and guideline numbers on containers/packaging, etc. when transporting consolidated freight recommended by JCIA or when transporting in small capacity containers.
- \*2 The number determined by JCIA with reference to the "2012 Emergency Response Guidebook".



Container Yellow Card of "Major flowable" picoxystrobin product in Japan

In order to reduce  $CO_2$  emissions, we are working on a modal shift from trucks to rail road or to marine transport, particularly focusing on the transportation between Nichino

Service Plants. The modal shift rate\* for this fiscal year was

11%, which was 2 points higher than the previous year. We

\* Modal shift rate = (transport amount of railway and sea) / (total transportation amount)

2) Promotion of Modal Shift

will keep focusing on modal shift.

× 100



White Card



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# **Product Stewardship** (Chemical Materials & Product Safety)

## 1) Product Development Considering Environment / Safety and Animal Welfare

Currently-used agrochemicals are designed not only to protect agricultural crops from pests diseases and weeds, but also to care the impact on people and environmental organisms appropriately. We are engaged in R&D aiming at producing agrochemicals that are more considerate of environment conservation, human safety and health. We are promoting accelerated and diversified safety research. These efforts not only enable fast evaluation of various risks at early R&D stage, but also lead to an increased awareness of the environment conservation, human safety and animal welfare.

In our R&D activities, 30 or more studies on toxicity, ecotoxicity and environmental fate which are based on the latest science, along with the studies on crop protection performance. Filing for registration is made to each country for approval before the commercialization. For business deployment outside Japan, we are pursuing research and development that takes environment conservation, human safety and health into consideration, in accordance with the environmental regulations of each country and under its registration system. Among those, we are continuing our efforts to reduce PRTR substances and eliminate NPE with respect to inert ingredients in formulated products, and are responding to European regulations (REACH\*).

\* Registration, Evaluation, Authorization, and Restriction of Chemicals

## 2) New Product

Fungicide "Major flowable" Active ingredient: picoxystrobin Mechanism: FRAC C3 Qol-fungicides

It indicates fungicidal activity by inhibiting the function of electron transport system (Complex III) in mitochondria which produce energy within pathogen cells.

## 3) Management of Safety Data Sheet (SDS) for Globalization

We have prepared about 700 items of safety data sheets for internal and external use, to safely handle our chemicals, including agrochemicals, and to prevent accidents, such as occupational accidents, in advance. We have also obtained SDSs for all the raw materials and goods and made them into electronic documents, such that necessary sections can be browsed and utilized by inhouse LAN when necessary.

In cooperation with our group company, Nichino Europe, we are responding to globalization by promoting the revision of the SDS for EU in accordance with REACH and based on the latest CLP rules<sup>\*</sup>.

\* Regulation on Classification, Labelling and Packaging of substances and mixtures: Regulations stipulating the classification, labeling and packaging of chemicals in the EU. A classification method based on GHS has been introduced and has been applied gradually since December 1, 2010. Product labels and SDS for chemical substances distributed in the European region, for example, are required to conform to CLP regulations.

## 4) Quality Management

We are making every effort to ensure product quality and safety at each stage from research and development through manufacturing, sales, logistics, use, final consumption, to disposal and recycling. Regarding the quality of products, Nichino Service has acquired ISO 9001 certification and is striving to maintain and improve the quality of products.

Regarding product liability (PL), we manage risks and try to prevent PL issues. We have also visualized the internal handling of the complaints received regarding products, and

#### 5) Response to Poisoning and Environmental Accident

We collaborate with Japan Poison Information Center to respond to inquiries from medical institutions, etc. in case of emergency poisoning accident.

There was no environmental accident, nor poisoning



Product Stewardship

#### What is GHS

GHS is the abbreviation for <u>G</u>lobally <u>H</u>armonized <u>System</u> of Classification and Labelling of Chemicals, which is recommended by the United Nations in July 2003. The outline is as follows:

- 1. Classifying the hazards of chemical substances and their mixtures in accordance with a method and definitions that are globally common.
- 2. The hazards are displayed on product labels and SDSs using standardized hazard symbols / signal words, etc.
- 3. Making the hazards of chemicals easy to understand by the global Standardization of these classifications and labeling.

we are making efforts to respond promptly and appropriately. Meanwhile, GMP (Good Manufacturing Practice: a standard for manufacturing control and quality control) compliance inspection was conducted concerning the manufacturing of active pharmaceutical ingredient that we are supplying, in which inadequacies in GMP management were pointed out. However, the issues have been improved. We endeavor to continue excellent quality control.

accident, that requires reporting to regulatory authorities, such as Japanese Ministry of Agriculture, Forestry and Fisheries, and Consumer Affairs Agency, for more than 20 years.

# **Communication with Society**

We are implementing initiatives aimed at providing accurate information.

## 1) Customer consultation service

We have established contacts in accordance with the fields of domestic products.

We also receive questions and provide consultation on agrochemicals in general from consumers. We strive to deepen the consumers understanding of agrochemicals by providing relevant information.

## 2) Disclosure of business information

The Nichino Group have been working to timely disclose accurate information and enrich information so that many stakeholders can understand our business activities. As a part of this effort, we renewed our website on December 21, 2016. We will continue to review and update the content.



Our website (Top page)

### **Consultation service**

Domestic agrochemical products TEL. +81-3-6361-1414 (TECHNICAL SERVICE & PROMOTION DEPT.) Pharmaceuticals, Animal Health Care products TEL. +81-3-6361-1418 (PHARMACEUTICAL DEPT.) Termiticide, Agrocemicals for turf and garden TEL. +81-3-6361-1417 (CHEMICAL PRODUCTS DEPT.) (Hours: 9:00 - 17:25 on weekday) URL of our website: http://www.nichino.co.jp/en/



Back Number of Responsible Care Report



#### **Community service**

#### Kawachinagano Citizens' College Course, Kuromaro Juku

We welcomed the students of Kawachinagano Citizens' College, Kuromaro Juku. They learned outline of Nihon Nohyaku as local company.



(Research Center; February 12, 2016)

#### **Open ground**

Since FY 2014, in order to cope with the baseball ground shortage after the Great East Japan Earthquake, Nichino Service Fukushima leases a baseball ground in site for children teams with no fee.

#### Holding off-site lectures

An off-site lecture on radiation safety was given at a junior high school in Osaka by a member of the Research Center. The lecture explained to the next generation correct information concerning radioactive isotopes and nuclear power plants as used by radiation safety managers in some chemical and pharmaceutical companies, including Nihon Nohyaku itself.



(January 12, 2017)

## Cooperation with "Nishiyodogawa Nanohana Project" \*

The event of "Nishiyodogawa Nanohana Project" which has been continued at Nichino Service Osaka for about 2 years, has been completed. We provided opportunities for cultivation and playing to parents and children who hardly touched the ground soil in the city to raise the awareness of safe and secure soil cultivation and community development in the area.

\* An attempt to raise field mustard (Nanohana) in a vacant lot and fallow field in the area, use the harvested rape seed oil for cooking, then collect it as waste oil and reuse it as an environmentally friendly alternative fuel.

## Acceptance of visitors for factory tours and laboratory tours

Although it decreased by 13% compared with the previous fiscal year, we accepted 1,716 visitors for Research Center, Naganuma Nursery and Nichino Service in total. In Research Center, the number of visitors has reached 15,000 in total since its opening in 1993.



#### Dialogue with neighboring stakeholders

The Research Center and Nichino Service Saga disscussed with the local governments and neighboring resident group concerning environmental conservation efforts and other in our business activities.

#### Set up an Owl nest box

The Kawachinagano Owl's Forest Project, hosted by the forest preservation volunteer group in Kawachinagano and the Japan Bird Rescue Association, set up a nest box in a bush in the premise of Research Center.



(Research Center; October 28, 2015)

# Cooperation with the neighboring irrigation association in the canal cleaning

We are cooperating with cleaning of help the irrigation canal managed by the neighboring irrigation association, which assists our rice field examinations every year.



Canal cleaning by neighboring irrigation association (Research Center; May 29, 2016)

#### Cooperation with Blood donation

We donated blood to Japanese Red Cross Society at Research Center, Nichino Service Fukushima and Saga.



Blood donation (Research Center; June 29, 2016)

#### Nichino scholarship fund

In 2008, we started the "Nichino Scholarship Fund" commemorating the 80th anniversary of our founding. This coming year marks the 10th year of this fund; we have provided scholarships to the students of 9 agricultural colleges in Japan and have supported over 150 students entering the field of agriculture.

We hope that this fund will help to foster successors of Japanese agriculture.



Group study for scholarship student (Research Center; July 21, 2016)

#### Dispatch of lecturers to universities, etc.

We dispatched lecturers from Research Center, Development Department, etc., to universities, agricultural colleges and secondary education schools in various areas, and organized public lectures in Research Center to provide lessons to gain correct understanding on agrochemicals.

# **Information and Topics of Each Facilities**

## **Research Center**

General Manager: Kozo Machiya Address:

345 Oyamada-cho, Kawachinagano-shi, Osaka



Kozo Machiva (Inaugurated in December, 2016)



Tour of the Research Center (November 18, 2015)



Celebrating the 15,000th visitor (July 12, 2016)



Information exchange meeting with key members of Kawachinagano-shi (May 19, 2016)

## Nichino Service Co., Ltd. Fukushima Plant

General Manager: Hitoshi Yamaguchi Address:

4-286 Hiraishi-Takada, Nihonmatsushi. Fukushima



Hitoshi Yamaguchi (Inaugurated in August, 2016)



Firefighting training (August 24, 2016)



New Welfare building (Started using December 27, 2016)

## Nichino Service Co., Ltd. Kashima Plant

General Manager: Michihiko Kawaguchi 19 Sunayama, Address: Kamisu-shi, Ibaraki



Kawaguchi



Local Cleaning Activities (November 10,2016)

## Nichino Service Co., Ltd. Osaka Plant

General Manager: Kousaku Nishimura Address:

5-1-34, Tsukuda, Nishiyodogawa-ku, Osaka-shi, Osaka



Kousaku Nishimura



Overall Safety Inspection (August 5,2016)

Event of Nishiyodogawa Nanohana Project This plant was reorganized under the Nihon Nohyaku Osaka Office in August, 2016.

## Nichino Service Co., Ltd. Saga Plant

General Manager: Hideki Utaka Address:

180-1, Aza-Nihonsugi, Oaza-Tsutsumi, Kamimine-cho, Miyaki-gun, Saga



Hideki Utaka (Inaugurated in December,2016)



Fungicide "Fujido L flowable"

# Introduction of Sipcam Nichino Brasil S.A.

### **Corporate Outline**

Establishment :	1979
President :	Luiz J. Traldi
Capital :	R\$ 223,896,546.67
Number of Employe	ees:
	152 (in Nov.30,2016)
Head office :	Uberaba-MG / Brazil
Main business :	Product development, registration,
	production and sales of pesticides in Brazil



Company location

## **Business Philosophy (Mission)**

Introduce solutions through products and services developed by us, our shareholders and strategic partners, contributing to the improvement in the quality, quantity and profitability of the agriculture production in Brazil.

Nihon Nohyaku Co., Ltd. has been searching for the possibility of establishing a direct sales system in Brazil, the world's largest agrochemical market, and acquired 50% of our company's shares from Sipcam<sup>\*</sup> in September 2014. At that time, we changed our company name to the current Sipcam Nichino Brazil S.A. On this occasion, Nihon Nohyaku dispatched the management council chairperson and the director in charge of strategy planning, and we strove to blend our corporate culture with that of Nihon Nohyaku in a short period of time.

Furthermore, Nihon Nohyaku dispatched formulation engineering staffs from the Research Center, which has activated the exchanges with our personnel responsible for formulation development at our factory.

\* Sipcam is our shareholder and cooperates with Nihon Nohyaku in Europe and Australia for the sales.

Currently, we are working to launch Nihon Nohyaku's new moleculars in the market as soon as possible and making proposals on mixed formulations. Regarding Nihon Nohyaku's existing products, buprofezin and fenpyroximate, we aim to

maximize the business value by conducting parallel sales with existing sales distributors. In October 2016, Nihon Nohyaku's orthosulfamuron was launched under "SPRINT" trademark for promoting the ripening of sugarcane, and we are striving to promote the sales.

We will continue to enhance our product portfolio and aim to add uniqueness and superiority in the market. Focusing primarily on customers, we will provide quick, high-quality customer service, keep working on environmental safety and health, and further improve our in-house system and sales promotion activities, while complying with laws and regulations.



\* WG: Water dispersible Granule, EC: Emulsifiable Concentrate WP: Wettable Powder, SC: Suspention Concentrate We appreciate your comments on "Nihon Nohyaku Responsible Care Report 2017", which we hope to use as references for our future activity and RC/CSR report.

https://www.nichino.co.jp/en/inquiry/form/index.php



(Inquiry)

**Environment Safety Department** 

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