



HOKKO REPORT 2018



Start of our new 3-year management plan HOKKO Growing Plan 2020 looking toward our 70th Anniversary in 2020



Yoshikatsu Nakashima President

Hokko Chemical Industry Co., Ltd. was established as a chemicals manufacturer on February 27, 1950. Since then, we have achieved steady growth and development through our main business activities of manufacturing and selling crop protection and fine chemical products. In our Crop Protection Products Business, under the motto of "Hokko's products ensure crop protection from seed treatment to harvesting," we have manufactured and sold safe, high-quality products throughout our history. We offer these products both domestically in Japan and around the world to help sustain the stable supply of agricultural crops. In our Fine Chemicals Business, we have developed an extensive product portfolio encompassing organic catalysts, electronic materials, and pharmaceutical and agrochemical intermediates mainly using the Grignard reaction as one of our key technologies. These fine chemical products broadly contribute to industry and society.

We embarked on our new 3-year management plan HOKKO Growing Plan 2020 in the 2018 business year (Dec. 2017–Nov. 2018) as a first step toward achieving our stated targets of sales of 50 billion yen and ordinary income of 5 billion yen. These targets represent the corporate scale we aim to achieve in the near future as part of our long-term growth goals. In our previous 3-year management plan (business years 2015-2017), we aimed above all to improve our profitability and carried out business restructuring accordingly, including withdrawing from unprofitable businesses and discontinuing production of unprofitable products. Following this period of business restructuring, our new plan positions these three years as a growth period. We will implement a strategy aligned with the three basic policies of 1) improving the revenue base of our existing businesses, 2) expanding our business fields and domains, and 3) maintaining a sound fiscal structure to build a growth path toward 2020, the 70th anniversary of our company's founding.

This report primarily introduces the Hokko Group's business activities and initiatives for the Environment, Safety and Health (Responsible Care activities*). I hope that all stakeholders will be able to deepen their understanding of the Group's efforts and will be able to give us frank opinions for our future activities.

July 2018

Corporate Philosophy

With the goal of benefitting humankind and the management keywords of "social contributions," "the environment" and "technology," we offer safe and reliable crop protection products that contribute to food security, and fine chemical products that broadly support industrial activities.

Basic Management Policy

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Steadily implement our business plan to realize our Corporate Philosophy so as to achieve sustainable and stable growth, contribute to the development of domestic and overseas industries, and create a more affluent society. Under self-regulation from management led by our Board of Directors, we aim to improve our mid- to long-term corporate value and continue to be a company trusted by society.

* Responsible Care activities: In the chemical industry, companies that handle chemical substances voluntarily secure "environment, safety and health" in all processes from chemical substance development, manufacturing, distribution, use, final consumption, and recycling through to disposal, publicly release the results of those activities, develop the activities and communicate with society.

These initiatives are called Responsible Care activities, and Responsible Care is sometimes abbreviated as RC in this report.

HOKKO Growing Plan 2020 3-Year Management Plan (Business Years 2018–2020) **Challenge to Change** — Embrace all change to open up the future

Basic Policy Improve the revenue base of existing businesses Strengthen initiatives in global markets Reform and improve operational processes

Enhance the profitability of core

businesses to drive profit growth



Corporate Scale Targets to Achieve in the Near Term



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Responsible Care Report

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Company Overview

Non-consolidated Data (as of Nov. 30, 2017)

Corporate name: Hokko Chemical Industry Co., Ltd. Head office: Sumitomo Fudosan Building 1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341 Japan Established: February 27, 1950 Capital: 3,214 million yen Listed exchange: First Section of the Tokyo Stock Exchange President: Yoshikatsu Nakashima No. of employees: 637

Financial Highlights (Consolidated)





Business description:

Fine Chemicals Business

* These products are sold only in Japan.

Crop Protection Products Business

Manufacture and sale of insecticides, fungicides,

Manufacture and sale of pharmaceutical and

antifungal agents*, and related products*

URL: https://www.hokkochem.co.jp/english

herbicides, plant growth regulators, and related products

agrochemical intermediates, raw materials for electronics

polymers, raw materials for fine ceramics, preservatives*,

components, catalysts, raw materials for functional



Operating income by segment

* Amounts less than ¥100 million are rounded off



Fine Chemicals Business: Marketing base

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Fine Chemicals Business: Production base

Crop Protection Products Business: Develop. register, and market crop protection products in the Americas

Shareholder Information

Stock Information (as of Nov. 30, 2017)

Total no. of issua 92,000,000 Total no. of issu 29,985,531 No. of sharehold

| able shares: | Nomura Shokusan Co., Ltd. |
|--------------|----------------------------|
| | Sumitomo Chemical Co., Ltd |
| ed shares: | Resona Bank, Ltd. |
| | Hokko Chemical Industry em |
| ders: 4,168 | Norinchukin Bank |
| | Nomura Holdings, Inc. |
| | |

tomo Chemical Co., Ltd. na Bank, Ltd. Chemical Industry emplo chukin Bank ura Holdings, Inc. National Federation of Agricultu Nomura Real Estate Holdings, Japan Trustee Services Bank, The Master Trust Bank of Japa

Shareholder Composition (Ratio of Shareholding)



Results of Shareholder Survey

In March 2018, we conducted a survey of new individual shareholders in FY 2017. Some of the survey results are shown here (response rate: 51.6%).





2. Occupation

Company employee 23.8 Self-employed 13.1 Civil servant/association employee Company executive 4.8 Other No response 1.2 20.0 40.0(%)

3. Years of stock investing



Major Shareholders (as of Nov. 30, 2017)

| Shareholder name | No. of held shares (1,000 shares) | Shareholding (%) |
|--|-----------------------------------|---------------------|
| | 2,103 | 7.77 |
| | 1,968 | 7.27 |
| | 1,354 | 5.00 |
| oyee stock ownership | 1,315 | 4.86 |
| | 868 | 3.21 |
| | 836 | 3.09 |
| ural Co-operative Associations (Zen-Noh) | 801 | 2.96 |
| Inc. | 709 | 2.62 |
| Ltd. (trust) | 640 | 2.37 |
| n, Ltd. (trust) | 630 | 2.33 |

* Hokko holds 2,902,000 shares of treasury stock but is not included in the list of major shareholders. Shares of treasury stock are also not included in calculations of shareholding percentage.



4. Plan for holding Hokko stock

Business Description

Crop Protection Products Business

Hokko's products ensure crop protection from seed treatment to harvesting

In our Crop Protection Products Business, we have manufactured and sold safe and effective agricultural chemicals since our founding with the motto "Hokko's products ensure crop protection from seed treatment to harvesting."

Agricultural Chemicals R&D

Crop protection products protect crops from diseases, pests, and weeds to support the safety and affluence of our food supply with the stable supply of agricultural crops. They also offer other benefits such as reducing agricultural labor and are indispensable to agriculture.

Developing crop protection products involves not only tests of agricultural chemicals' efficacy and non-target phytotoxicity, but also many tests related to safety. For this reason, it can take more than 10 years and tens of billions of yen to develop a new agricultural chemical. Of all the new chemical compounds, it is said that 1 in 50,000 gets registered as an agricultural chemical.

Starting with kasugamycin (antibiotic fungicide for paddy rice and horticulture), which is highly effective at controlling the fungus that causes rice blast, a destructive disease found in cultivated rice, our development team has successfully developed many new active

components. Another is ipfencarbazone (paddy rice herbicide), which demonstrates a high level of safety in paddy rice and is effective against the lowland weed barnyard grass. We have earned a reputation for our expertise in chemical formulations that greatly contribute to improving pest and disease control technology and labor savings.



Test location

Production Structure

We operate three factories in Japan that are equipped with the latest facilities and technologies to produce highquality products. We give due consideration to both the surrounding environment and working conditions in our production operations and take all possible measures to prevent water, air, and other forms of pollution.

We also contract the manufacture of formulated products including some insecticides, fungicides, and herbicides as well as repacking.



Niigata Factory Liquid Plant No.1



We sell more than 200 products including insecticides, fungicides, and herbicides for paddy rice, vegetable crops, and fruit orchards through JA branches nationwide in Japan.

We have seven branches that serve as sales offices in Japan and sales representatives stationed in every prefecture to provide service at the local level.

We offer detailed information to distribution organizations such as JA, experimental farms, agricultural extension centers and other instructional organizations, and to the farmers who use our products

Support System



Global Business Operating business mainly in Asia and the Americas

We sell products that we develop in markets in Asia and the Americas, primarily kasugamycin, a fungicide and bactericide for paddy rice and horticulture, and ipfencarbazone, a paddy rice herbicide. To expand use of these products, we established Hokko Chemical America Corporation in North Carolina, USA, in May 2016. This subsidiary is engaged in sales promotion in the North, Central, and South American markets.

We constructed the Niigata Factory Branch Plant in November 2016 as a production plant exclusively for kasugamycin to build a stable supply structure for expanded exports.



to ensure that our crop protection products are used safely and effectively.



Leading products



Leading products sold globally



Kasugamycin for the USA



Niigata Factory Branch Plant

Fine Chemicals Business

Contributions to the development of industry and society by building up original technologies

Our Fine Chemicals Business supplies a wide range of business fields with products made using its core technology represented by Grignard reaction.

Hokko Fine Chemicals Products

We use the generic name of "fine chemicals" for highvalue added chemicals produced in small quantities versus mass-produced chemical products. To meet the needs of society and markets, our Fine Chemicals Business Unit supplies high purity, high performance,

and high value-added products made using our original manufacturing technology based on the Grignard reaction. These products are used in resins, electronics components, pharmaceuticals, and other fields to support the development of industry and affluent living.

Business Description



Hokko Technology Grignard Reaction

The Grignard reaction was developed in 1900 by the French chemist Victor Grignard. It is the generic name for reactions involving an organomagnesium halide compound (Grignard reagent). Grignard reagents are widely used in industry, but reaction temperature control

during reagent synthesis is challenging, and few companies conduct large-scale synthesis of Grignard reagents. We meet a wide range of customer needs using our world-leading technologies and production scale.

Fine Chemicals R&D, Manufacturing, and Sales System

We conduct integrated research and development through the coordinated efforts of our Fine Chemicals Marketing Department and Fine Chemicals Business Planning Department at the Head Office and the Fine Chemicals Research Laboratories.

Our Okayama Factory engages in efficient production with a total of eight workshops, including clean rooms able to produce pharmaceutical intermediates and raw materials for electronic materials. We are also developing our international operations, with our subsidiary Zhangjiagang Hokko Chemical Industry Co., Ltd. in China the second fine chemicals production site after the Okayama Factory.





Manufacture and Sale of Hokko Products and Contracted Manufacturing

Hokko Products

Based on our synthesis technologies and experience in organometallic compounds built up over more than 50 years since our founding, we have developed numerous products using the Grignard reaction as the key technology. Those fine chemical products include electronic materials such as a curing accelerator for epoxy molding compounds, organic catalysts, pharmaceutical raw materials and intermediates, and monomers for functional polymers.

Leading Products

| Organophosphine compounds | Grignard r |
|--|-------------|
| TPP···(⊘)₃P | Grigna |
| TTBuP…(tert-C ₄ H ₉) ₃ P | |
| TPPO…(<)₃P=O | Alcohols, o |
| TPP-PB····(| 4P10L |
| DPPE(())2PCH2CH2P()2 | 3B1OL |
| Crophos…(tert-C4H9)2PCH2CH=CHCH3 | |
| m-Crophos(tert-C ₄ H ₉) ₂ PCH ₂ CH=C(CH ₃) ₂ | DMBC |
| Xantphos、DPEphos、Amphos、DPPF | |
| Functional styrene monomers | |
| PCST ···CI -⟨]> CH=CH₂ | TPBX |
| ÇH₃ | |
| PTBST⋯CH₃-Ċ-O - CH=CH₂ | Hoksta |
| ĊH₃ | Hokcid |
| PVBA····HOOC - CH=CH2 | * These pro |

Contracted Manufacturing

In addition to our own products, we also contract manufacturing based on proposals using Hokko technologies and Hokko raw materials. Leveraging our advanced technologies and know-how built up over many years, we meet customers' detailed needs and requirements using our production system consisting of multipurpose manufacturing units of various sizes equipped with the latest facilities.

Global Marketing

We opened our Munich Representative Office in 2012 to serve as our new marketing base in Europe. Through this office, we are able to more quickly respond to our

customers in Europe and aim to capture new demand.



Munich Representative Office (building housing the office)

* All graphs on this page are based on non-consolidated data from FY 2017 actual results.









Laboratories

The Central Research Laboratories and Fine Chemicals Research Laboratories are located in Atsugi City, Kanagawa Prefecture, and we operate experimental farms in three locations in Japan.

Crop Protection Products Business

Central Research Laboratories

● Location: Atsugi City, Kanagawa ● Site area: 22,000 m^{2*} • No. of employees: 130* (as of Nov. 30, 2017) * Includes the Fine Chemicals Research Laboratories



Central Research Laboratories and Fine Chemicals Research Laboratories

The Central Research Laboratories opened in 1966 after relocating laboratories from Ofuna, Kamakura City, Kanagawa Prefecture. It is involved in creation of new technical products for crop protection products, developing new crop protection products, and providing technical support for sales. In 2016, it obtained certification of compliance with standards for proper testing of toxicity and residues of agricultural chemicals (Good Laboratory Practice [GLP] for Agricultural Chemicals).



Experimental Farms

Hokkaido Experimental Farm • Location: Yubari-gun, Hokkaido • Site area: 19,700 m² • Established: 1985



Shizuoka Experimental Farm • Location: Makinohara City, Shizuoka • Site area: 23,800 m² • Established: 1982



Conducts experiments to develop crop protection products meeting local needs, mainly using cultivated land designated for experiments. The Atsugi Experimental Farm is attached to the Central Research Laboratories.

Fine Chemicals Business

Fine Chemicals Research Laboratories

The Fine Chemicals Research Laboratories was established in 1989 on the grounds of the Central Research Laboratories to augment the R&D team at our Atsugi research facilities in conjunction with expansion of our Fine Chemicals Business. It conducts research and development on fine chemicals, raw materials for fine ceramics, and antifungal agents.





Factories

We have three factories in Japan and one in China for a total of four production bases.

Crop Protection Products Business

Hokkaido Factory

• Location: Takikawa City, Hokkaido • Site area: 53,000 m² • No. of employees: 51 (as of Nov. 30, 2017)

Our Rubeshibe Factory, located in Rubeshibe, Hokkaido, where we first got our start, was not located near the main rice-producing region of Hokkaido. We relocated the Hokkaido Factory to the major rice-producing region of Takikawa and completed the factory in 1970. The Hokkaido Factory is our leading crop protection product manufacturing facility in Hokkaido.

Crop Protection Products Business

Niigata Factory

● Location: Shibata City, Niigata ● Site area: 128,000 m²

• No. of employees: 89 (as of Nov. 30, 2017)

We established the Niigata Factory in 1961 in one of the leading grain-growing regions in Japan as the first crop protection product factory located along the Japan Sea. We built the Niigata Factory Branch Plant in 2016 for the purpose of creating a stable supply structure to expand exports of Kasugamycin, our original product.

Crop Protection Products Business

- **Okayama Factory** • Location: Tamano City, Okayama • Site area: 184,000 m²
- No. of employees: 253 (as of Nov. 30, 2017)

As the first factory attracted by Okayama Prefecture, the Okayama Factory was constructed in 1953 for the purpose of integrated production of crop protection products starting from synthesis of agricultural chemical technical products. In addition to crop protection products, the factory currently produces raw materials for electronics components and fine chemical products including pharmaceutical intermediates.

Fine Chemicals Business

Zhangjiagang Hokko Chemical Industry Co., Ltd.

- Location: Industrial Park in Zhangjiagang, Jiangsu, China
- Site area: 165,000 m² No. of employees: 96 (as of Nov. 30, 2017)

We established the wholly owned subsidiary Zhangjiagang Hokko Chemical Industry in 2002 as a manufacturing facility exclusively for fine chemical products. A new plant was added in 2009. In cooperation with the Okayama Factory, Zhangjiagang Hokko Chemical Industry is part of our global production structure.





Fine Chemicals Business





Company Trusted by Society

We at Hokko Group aim to achieve continuous growth and increase our corporate value by implementing our corporate philosophy and basic management policy.

Corporate Governance

We strive to enhance our corporate governance to achieve continuous growth and increase our corporate value in the mid- to long-term, with the belief that collaboration with stakeholders and maintaining strong awareness of compliance are essential.

We adopt the form of a company with corporate auditors. The Board of Directors supervises the execution of duties of directors, and corporate auditors conduct audits. We adopt a corporate officer system for the execution of operations. Corporate officers are tasked with this execution under the supervision of the Board of Directors. In addition to outside corporate auditors with a high level of expertise appointed to conduct audits, we work to strengthen our audit function through the integrated efforts of corporate auditors, an internal audit team independent of divisions in charge of execution of operations, and accounting auditors.

Corporate Governance System



Compliance

We position compliance as a management issue of the highest priority. To ensure that operations are conducted both fairly and efficiently, we have established our Compliance Basic Policy, the Hokko Chemical Industry Group Code of Conduct, and our Basic Regulations on Legal Compliance. Executives and staff base their conduct on laws and regulations as well as on common sense and propriety.

We have set up the Compliance Committee to propose our basic policy on compliance, conduct standards, and related matters as well as to implement education and training on compliance. Corporate auditors and the internal audit team conduct audits of compliance at business divisions and Group companies. We have set the month of September as Compliance Month for the purpose of increasing employee awareness of compliance with laws and regulations and hold trainings in business divisions and departments. On our

Basic Compliance Policy

Compliance with Laws and Regulation

We conduct our activities in compliance with Japanese and international laws, regulations, and rules as well as with our internal regulations, and with strong ethical values and social propriety.

Respect for Diversity

We respect the human rights, character, and individuality of all people irrespective of nationality, gender, age, or belief system, and strive to prevent harassment and other unfair treatment in the workplace.

Fair Company Activities

We conduct business under fair, transparent, and free competition based on reasonable conditions.

Proper Handling of Information

We appropriately manage information including that received from our business partners, and release information to our stakeholders and investors as appropriate.

Exclusion of antisocial and criminal elements

We have no relationships with anti-social forces with the resolve to eliminate their influence in society.

Protection of the Global Environment

Prevention of Misconduct

We strive to prevent environmental pollution to protect the global environment and reduce environmental impacts.

We enhance the effectiveness of systems to prevent misconduct in order to prevent damage to our corporate value.

Integrity in Responding to Misconduct

When misconduct does occur, we conduct an investigation, identify the causes, and take the appropriate action. intranet system, we publish four-panel comic strips illustrating examples of compliance violations and a quiztype compliance newsletter that can be used as compliance education materials in workplaces.

In addition to an internal hotline we have set up for reporting and seeking advice related to compliance, we have also set up an external reporting center to encourage consultations and reports related to compliance.

We have established explicit internal regulations for the hotline and reporting center to protect the privacy and confidentiality of people making reports or seeking advice, and ensure that people are not disadvantaged due to seeking advice or making a report.

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Compliance Newsletter

Compliance Promotion Structure



Business Continuity Plan (BCP)

We have drafted a business continuity plan (BCP) in the event of a large-scale disaster such as an earthquake striking directly under the Tokyo region for the purpose of minimizing the damage to our business assets, continuing our core business operations, and quickly recovering from the disaster.

This BCP defines the necessary policy, the structure, and other basic matters for sustaining a stable product supply, and aims to fulfill our supply responsibility as a manufacturer by continuing our business operations even in the event of a major disaster.

Each year, we conduct education and drills to test the effectiveness of our BCP and make revisions and improvements where they are needed.

We have also introduced a safety confirmation system to quickly confirm the safety of all of our employees in the event of a major earthquake or other disaster. We conduct regular tests of this system and make other preparations for unforeseen events to foster an awareness of crisis management among employees on an ongoing basis.

Complaint Response Team

We seek to improve our quality management system in manufacturing divisions to prevent the occurrence of product complaints. We believe that in the event of a product complaint, responding promptly, accurately, and with integrity and striving to prevent recurrences is of utmost importance to remain a company that is trusted by society.

We define complaints as the spectrum of expressions of dissatisfaction with our company, from complaints about our products to dissatisfaction with our sales, technologies, and other services, complaints related to our factories and laboratories, and other complaints from our stakeholders. We have put in place a response team to deal with complaints.

We use the PDCA cycle to investigate the causes, process complaints, and devise prevention measures. A robust system to deal with complaints facilitates improvements in our business activities, quality, and operations as well as improvements in our service to our customers and all other stakeholders.

Responsible Care Management

As a company that handles chemical substances, internally we prioritize ensuring safety, health and the protection of the environment from product development through to product disposal, publicly releasing the results of these efforts, and deepening understanding through mutual dialogue.

Basic Policy on the Environment, Safety and Health

We conduct Responsible Care (RC) activities, a voluntary management initiative of the chemical industry to protect the environment and ensure safety and health, based on our Basic Policy on the Environment, Safety and Health and our Responsible Care Activity Policy (established Sept. 1996, revised Aug. 2012). These activities encompass the areas of environmental protection, occupational health and safety, process safety and disaster prevention, distribution safety, chemical products safety, and communication with the public.

Basic Policy for the Environment, Safety and Health



Revision date: August 1, 2012 (Established in September 1996)

We are committed to giving the highest priority to the following initiatives for environment protection, safety and health throughout our business activities, including R&D, manufacturing and sales.

- 1. We ensure the safety of local communities and of our employees by keeping our operations free of occupational incidents and accidents.
- 2. We ensure the safety and health of our stakeholders, including our customers, general consumers, our logistics partners and our employees, through our gathering and organizing of the latest safety information on chemical substances and products, and by providing it to the parties concerned.
- 3. We provide products that can be used by our customers with satisfaction and assurance.
- 4. We strive to reduce our environmental impact throughout the product life cycle, from development to disposal

The personnel at all of our divisions recognize the importance of our basic policy and strive to make improvements in a continuous way, as well as complying with laws and regulations.

> Yoshikatsu Nakashima President HOKKO CHEMICAL INDUSTRY CO., LTD.

Responsible Care Promotion Structure

We have established the Responsible Care Committee, with the President serving as committee chair and officers in charge of business groups and others serving as committee members, to oversee our companywide RC activities.

The Responsible Care Committee deliberates on our Basic Policy on the Environment, Safety and Health and related targets and plans. Business locations and group companies also conduct RC activities and establish a system corresponding to their operations.

Our factories have obtained certifications in quality management (ISO 9001), environmental management (ISO 14001) and occupational health and safety management (OHSAS 18001).

Responsible Care Promotion Structure



ISO 9001, ISO 14001, OHSAS 18001 Certifications

| Location | | Certification Date | | | |
|--------------------|--|--------------------|-----------|-------------|--|
| | | ISO 9001 | ISO 14001 | OHSAS 18001 | |
| Hokko factories | Hokkaido Factory | Dec. 1995 | Jan. 2000 | Apr. 2006 | |
| | Niigata Factory* | Jan. 1995 | Mar. 1999 | Feb. 2006 | |
| | Okayama Factory | Jan. 1995 | Jan. 2000 | Apr. 2006 | |
| Group companies | Hokko Pax, Co., Ltd., Okayama Office | _ | Jan. 2000 | Apr. 2006 | |
| | Zhangjiagang Hokko Chemical Industry Co., Ltd | Nov. 2007 | Dec. 2007 | _ | |

* ISO 9001 certification does not include Niigata Factory Branch Plant.

RC Internal Audits (Environment & Safety Audits)

The Environment & Safety Team in the Head Office Planning and Management Department regularly conducts RC internal audits of our factories, laboratories, and Group companies. The locations carry out systematic improvements based on the guidance and instructions received in audits.



Responsible Care Committee (Head RC internal audit (Laboratories) Office)



RC internal audit (Okayama Factory) RC internal audit (Group company)

Targets and Results of Responsible Care Activities

We set targets for environment and safety issues and conduct an ongoing cycle of improvement activities. We also conduct and publicly release environmental accounting reports to evaluate the costs and benefits of our environmental protection measures.

FY 2017 Responsible Care Activity Results and FY 2018 Targets

| Item | FY 2017 Target | Result | Self- evaluation | FY 2018 Target |
|---|---|--|---------------------|--|
| Environmental protection | Reduce environmental load Companywide energy management and energy conservation | Unit energy consumption YoY: +5.3% (p. 16) | × | Reduce environmental load Companywide energy management and energy savings |
| | Manage wastewater at or below our voluntary management criteria | COD emissions YoY: -1.3% (p. 17) | 0 | Manage wastewater at or below our independent management standards |
| | Reduce and properly treat waste | Total waste produced YoY: -12.5% (p. 17) | 0 | Reduce and properly treat waste |
| Occupational health and safety | Eliminate occupational accidents Improve work environments | Lost time injuries: 0 (p. 19) | 0 | Eliminate occupational accidents Improve work environments |
| Process safety and disaster prevention | Eliminate plant accidents | Plant accidents: 1 (p. 19) | × | Eliminate Plant accidents |
| Distribution safety | Ensure distribution safety | Accidents in distribution: 0 | 0 | Ensure distribution safety |
| Chemical Product Safety | Ensure the chemical product safety | Serious product accidents: 0 | 0 | Ensure the chemical product safety |
| Social dialogue | Public release of information Exchanges with local communities | Publishing the Responsible Care Report 2017 Community exchanges at business locations (p. 21) | 0 | Public release of information Exchanges with local communities |

Environmental Accounting Scope: Non-consolidated Reporting period: Dec. 1, 2016–Nov. 30, 2017 Environmental conservation cost

| | | Category | Key Activity and the Outcome | Investment amount | Cost amount |
|---|---|--|---|----------------------|----------------|
| | Environmental impacts that rebusiness area | conservation costs to control environmental sult from key business operations within the (business area costs) | | 148 | 269 |
| 1 | | Pollution prevention costs | Prevention of air pollution, water pollution, etc. | 42 | 128 |
| | Breakdown | Global environmental protection costs | Global warming prevention, energy conservation, etc. | 82 | 0 |
| | | Resource circulation costs | Waste disposal treatment, waste recycling, etc. | 24 | 142 |
| Environmental conservation costs to control environmental impacts that result from key business operations upstream or downstream (upstream/downstream costs) | | conservation costs to control environmental esult from key business operations upstream or pstream/downstream costs) | Collection and proper disposal of used products, distribution accident prevention measures, etc. | 0 | 8 |
| 3 Environmental conservation costs stemming from administration activities (administration costs) | | conservation costs stemming from activities (administration costs) | Implementation and maintenance of the environmental management system, disclosure of environmental information, monitoring of environmental impacts, environmental training of employees, greening measures, etc. | 5 | 67 |
| 4 | 4 Environmental conservation costs stemming from R&D activities (R&D costs) | | R&D to curtail environmental impacts, evaluation and testing expenses, etc. | 0 | 221 |
| 5 | 5 Environmental conservation costs stemming from societal activities (societal activity cost) | | Disclosure of information to local communities, etc. | 0 | 1 |
| 6 Costs incurred for dealing with environmental degradation (environmental remediation costs) | | for dealing with environmental degradation remediation costs) | _ | 0 | 0 |
| | | | Total | 154 | 566 |

* Investment amount: Capital investment for environmental conservation

* Cost amount: Depreciation expenses, maintenance and administration expenses for environmental conservation

* Totals may not match due to rounding.

Environmental Conservation Benefit

| nvironmental conservation benefit categories | Environmental performance indicators (units) | FY 2016 | |
|---|---|---------|--|
| nvironmental | Total energy input (kl) | 11,862 | |
| elated to Resources Input to Business Activities | Amount of input water resources (clean water) (1,000 $m^3)$ | 382 | |
| nvironmental onservation Benefit elated to Waste and nvironmental Impacts riginating from Business ctivities | CO ₂ emissions (t-CO ₂) | 33,271 | |
| | COD emissions (t) | 15.1 | |
| | Total amount of discharged waste, etc. (t) | 6,272 | |
| | Recycled amount (t) | 4,002 | |
| | Amount of final waste disposal (t) | 644 | |

| FY 2017 | YoY Change |
|---------|------------|
| 11,698 | -164 |
| 361 | -21 |
| 32,302 | -969 |
| 14.9 | -0.2 |
| 5,539 | -733 |
| 4,113 | 111 |
| 434 | -210 |

Economic Benefit Associated with **Environmental Conservation Activities** Unit: ¥1N

| Benefit Details | Amount |
|---|--|
| Sale of valuable articles | 10 |
| Calculated in conforman Environmental Accountin published by the Japane Environment and the Env Accounting Guidelines for Companies published by Committee of the Japan Association. | ce with the g Guidelines 2005 se Ministry of the <i>i</i> ronmental or Chemical the Responsible Care Chemical Industry |

Unit: ¥1M

Environmental Protection

We calculate the amounts of energy and resources we use, product production volumes, and emissions of substances with environmental load as part of our business activities, and proactively work to save energy, reduce chemical substance emissions, and properly manage waste to protect the environment.

Hokko Chemical Industry Business Activities, Input, and Output

(Reporting scope: Non-consolidated Reporting period: Dec. 1, 2016-Nov. 30, 2017)



*1 Of the hazardous substances that contaminate the air (substances requiring priority action), only substances we emit in large amounts are listed.

Conserving Energy

We have put in place a companywide energy management organization, revised our facilities and manufacturing processes, and installed LED lights and other energy-conserving facilities as part of our energyconserving activities.

While our total energy input in FY 2017 was 1.4% lower than in FY 2016, due to changes in our product mix, our unit energy consumption*² increased 5.3% compared with FY 2016.

*2 Unit energy consumption expresses the intensity index against the FY 2013 baseline of 100 by calculating the total intensity rate of change from the weighted average of the intensity rate of change of each location. The total energy input for FY 2016 has been revised with other data revised accordingly.

Reducing Greenhouse Gas Emissions

The greenhouse gas CO₂ is emitted when using energy and incinerating waste. We are working to reduce our CO2 emissions by taking actions to conserve energy. We reduced our CO $_{\!2}$ emissions in FY 2017 by 2.9% compared with FY 2016.

Fluorocarbon refrigerants used in air conditioning and refrigeration equipment are a cause of ozone layer destruction and global warming. We inspect these types of equipment to help prevent leaks of fluorocarbon refrigerants.

Total amount of energy input [crude oil equivalent]





(t-CO₂)

50.000





Reducing Chemical Substance Emissions

Based on the PRTR Act*1, we report the amounts of Class 1 Designated Chemical Substances manufactured and used each year that we emit into the environment and transport. There were 69 applicable substances in FY 2016. We are introducing environment-related facilities such as those for exhaust gas treatment as part of our efforts to reduce emissions of chemical substances.

- *1 PRTR Act: Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof
- *2 PRTR: Pollutant Release and Transfer Register Emissions amount: Amount emitted into the environment Transfer amount: Amount contracted for waste treatment by a waste treatment provider

The chart lists substances with emissions of 0.1 tons or more, in descending order of volume. Figures are rounded to the nearest tenth of a ton. Totals may not match for this reason. Substances with emissions of less than 0.1 tons are combined and listed together.

Preventing Water Pollution

Wastewater generated in manufacturing processes is discharged to river and ocean waters after removing water contaminating substances through such treatment processes as neutralization, use of activated sludge, flocculation, and precipitation. We appropriately monitor and measure emissions based on laws and other regulations. COD*3 emissions in FY 2017 were 1.3% lower than in FY 2016.

One measure of wastewater contamination by organic matter, with a higher number indicating higher organic matter pollution. COD emissions are calculated by multiplying average COD by annual wastewater emissions.

Appropriate Waste Management

We appropriately treat waste and promote the 3 R's (Reduce, Reuse, Recycle).

Of the waste that we generate, we incinerate waste able to be incinerated at our locations in accordance with disposal standards. We contract treatment of waste that cannot be treated at our locations to treatment providers, and select reliable providers by conducting local inspections and other measures.

The total volume of waste*4 in FY 2017 was 12.5% lower than FY 2016.

*4 Waste, etc.: Waste and secondary materials generated during product manufacturing (including materials with value such as waste paper and metal)

| Emissions and | Transfer Volumes of PRTR Substances | 3 *2 |
|---------------|--|-------------|
| (EV 2016) | (Poporting poriod: Apr. 1, 2016, Mar. 31, 20 | 17 |

(Reporting period: Apr. 1, 2016–Mar. 31, 2017)

| (| , | (hoporaling policial) print () 2010 (mail of () 2017) | | | | | | | |
|-----------------------|-------------------|---|-------------|-------|----------|-------|--|--|--|
| Cabinet | Cubatanaa | Discharge | destination | Total | Transfer | | | | |
| No. | Substance | Air | Water | Soil | (t) | (t) | | | |
| 300 | Toluene | 2.4 | 0.0 | 0.0 | 2.4 | 66.0 | | | |
| 405 | Boron compounds | 0.0 | 0.8 | 0.0 | 0.8 | 0.0 | | | |
| 392 | N-hexane | 0.5 | 0.0 | 0.0 | 0.5 | 6.7 | | | |
| 400 | Benzene | 0.3 | 0.0 | 0.0 | 0.3 | 11.4 | | | |
| 438 | Methylnaphthalene | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | | | |
| 186 | Dichloromethane | 0.2 | 0.0 | 0.0 | 0.2 | 2.0 | | | |
| 342 | Pyridine | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | | | |
| Other (62 substances) | | 0.1 | 0.0 | 0.0 | 0.2 | 63.2 | | | |
| Total (69 substances) | | 3.7 | 0.9 | 0.0 | 4.6 | 149.4 | | | |





Total Waste Volume/Total Emissions, Final Disposal Volume



^{*3} COD: Chemical Oxygen Demand

Waste Treatment Flow (FY 2017)





Data by Location

FY 2016 & FY 2017 Environmental Load Data by Location

| Item | Hokkaido | Factory | Niigata | Factory | Okayama Factory | | Central Research Laboratories/ Fine Chemicals Research Laboratories | |
|--|----------|---------|---------|---------|-----------------|--------|---|-------|
| | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 | 2017 |
| Total energy input (crude oil equivalent) (kl) | 224 | 213 | 696 | 915 | 10,297 | 9,940 | 645 | 630 |
| Waterworks consumption (1,000 m ³) | 4.1 | 3.7 | 16.8 | 16.9 | 352 | 333 | 8.8 | 7.7 |
| CO ₂ emissions (t-CO ₂) | 582 | 534 | 1,464 | 1,881 | 29,812 | 28,530 | 1,413 | 1,356 |
| SOx emissions (t) | 0.3 | 0.3 | 0.0 | 0.0 | 6.7 | 5.9 | | |
| NOx emissions (t) | 0.4 | 0.4 | 1.0 | 1.3 | 17.7 | 16.9 | | |
| Total wastewater (1,000 m ³) | 4.1 | 3.7 | 11.3 | 12.5 | 2,669 | 2,546 | 14.1 | 12.8 |
| COD emissions (t) | 0.03 | 0.02 | 0.01 | 0.01 | 15.1 | 14.9 | | |
| Total waste emissions (t) | 87 | 111 | 312 | 357 | 5,545 | 4,782 | 74 | 97 |

Emissions and Transfer of Substances Subject to the PRTR Act, by Location (FY 2016) (Reporting period: Apr. 1, 2016–Mar. 31, 2017)

Hokkaido Factory

| Cabinet Order | Substance | Discha | irge destii volume (t) | Total | Transfer | |
|-----------------------|-------------------|--------|---------------------------|-------|----------|-----|
| no. | Cubotanoo | Air | Water | Soil | (t) | (t) |
| 21 | Chloridazon (PAC) | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 212 | Acephate | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 261 | Fthalide | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 360 | Benomyl | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 268 | Thiuram (thiram) | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Other (12 substances) | | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total (17 substances) | | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |

Okayama Factory

| Cabinet Order Substance | | Discha | irge destii volume (t) | Total emissions | Transfer | |
|----------------------------|-------------------|--------|---------------------------|--------------------|----------|-------|
| no. | | Air | Water | Soil | (t) | (t) |
| 300 | Toluene | 2.4 | 0.0 | 0.0 | 2.4 | 66.0 |
| 405 | Boron compounds | 0.0 | 0.8 | 0.0 | 0.8 | 0.0 |
| 392 | N-hexane | 0.5 | 0.0 | 0.0 | 0.5 | 3.9 |
| 400 | Benzene | 0.3 | 0.0 | 0.0 | 0.3 | 11.4 |
| 438 | Methylnaphthalene | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 |
| Other (34 substances) | | 0.2 | 0.2 | 0.0 | 0.3 | 62.7 |
| Total (39 substances) | | 3.6 | 0.9 | 0.0 | 4.5 | 144.0 |

Niigata Factory

| Cabinet Order | Substance | Discha | irge destii volume (t) | nation/ | Total | Transfer |
|-----------------------|---------------|--------|---------------------------|---------|-------|----------|
| no. | Cubotanoo | Air | Water | Soil | (t) | (t) |
| 53 | Ethylbenzene | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 80 | Xylene | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 422 | Ferimzone | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 261 | Fthalide | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 49 | Pendimethalin | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Other (20 substances) | | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Total (25 substances) | | 0.1 | 0.0 | 0.0 | 0.1 | 0.8 |

Central Research Laboratories/Fine Chemicals Research Laboratories

| Cabinet Order | Substance | Discharge destination/ volume (t) | | | Total emissions | Transfer | |
|----------------------|------------------------|--------------------------------------|-------|------|--------------------|----------|--|
| no. | Casciance | Air | Water | Soil | (t) | (t) | |
| 392 | N-hexane | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | |
| 127 | Chloroform | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | |
| 296 | 1,2,4-trimethylbenzene | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 80 | 80 Xylene | | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total (4 substances) | | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | |

* PRTR data lists the five substances with the largest emissions or transfer volumes, in descending order. Figures are rounded to the nearest tenth of a ton. Totals may not match for this reason.

Occupational Health and Safety, Process Safety and Disaster Prevention

With safe operations and elimination of occupational accidents given highest priority, we conduct independent health and safety activities as part of our efforts to create workplace environments that are safe and easy to work in.

Occupational Health and Safety Initiatives

With safe operations and elimination of occupational accidents given highest priority, we have put in place a health and safety management system and conduct a range of activities related to health and safety including activities to predict risk (called "KY") and 5S (translated as "Sort, Set in order, Shine, Standardize, Sustain") activities. All of our factories have also obtained OHSAS 18001 certification, the international standard for occupational health and safety management systems.

Education and training

We provide education on the health and safety information employees need to know in operations, including our basic approach to safety and safe handling of chemical substances, and promote obtaining of qualifications required in operations. To prepare for emergency situations, we conduct disaster preparedness drills and education in the unlikely event of a fire, chemical substance leak, natural disaster, or other type of disaster. In addition to the health and safety education we have conducted to date, we also conduct trainings on sensing danger using simulations of actual dangers to improve employees' ability to perceive danger.



Risk prediction training ("KY" training) Emergency drills (Niigata Factory) (Laboratories)



Emergency drills (Okayama Factory) Training on how to wear protective equipment (Okayama Factory)

Occurrence of Occupational and Plant Accidents

There was one incident of a plant accident in FY 2017. We have improved the facilities, revised the work methods, and put in place countermeasures to prevent recurrences of this incident. We also share information within the Hokko Group on accidents and disasters to prevent similar accidents or disasters from occurring. There were no incidents resulting in lost time.



LTIR: Indicator of the frequency of lost time injuries

(Number of lost time injuries) ÷ (Total working hours) × 1 million



Severity rate: Indicator of the severity of occupational accidents (Number of work days lost) \div (Total working hours) \times 1,000

Chemical Product Safety, Distribution Safety

Each business location takes measures to properly handle and manage chemical substances. We clearly specify the product properties and handling methods for the relevant parties and update information as necessary.

Chemical Substances Management

Chemical substances are useful and indispensable to our way of life, but their improper management can lead to environmental contamination and accidents, and carries the risk of adversely affecting human health and ecosystems.

We comply with laws and regulations in handling chemical substances. We also collect safety information, conduct safety tests and risk assessments, and implement appropriate management of chemical substances corresponding to the product stage (R&D, manufacturing, etc.).

Safety Data Sheets (SDSs)

We prepare Safety Data Sheets (SDSs), which list important information for the safe handling of chemical products, for all of our products, and use them when providing information to customers and conducting employee education. SDSs for our leading crop protection products can be found on our website and can also be provided upon emergency request.



https://www.hokkochem.co.jp/business/pesticide/product-sds



Safety Data Sheet (SDS)

Management of Electrical Machinery Containing PCBs

Based on the Act on Special Measures for Promotion of Proper Treatment of Polychlorinated Biphenyl (PCB) Wastes, transformers and condensers containing polychlorinated biphenyl (PCB) stored at our facilities are reported to the authorities and strictly managed as industrial waste requiring special management. We are disposing of these electrical devices containing PCB in accordance with legislation.

Distribution Safety

Our factories periodically hold consultations with shipping companies to mutually coordinate and implement environmental and safety initiatives in distribution. To prepare for the unlikely event of an accident while products are being shipped, drivers carry Yellow Cards^{*1} with them listing information such as who to contact and what measures to take in an emergency. To complement the Yellow Card system, we have introduced the Container Yellow Card labelling system^{*2}, which lists the guide number^{*3} and UN number^{*4} on cardboard boxes.

殺菌剤



Yellow Card



屋林水廠省發設第186

- *1 Yellow Card (emergency contact card): Yellow paper printed with instructions for the driver, fire fighters, police, and other relevant parties to take in the event of an accident. The instructions are given the name "yellow card" because they are printed on yellow paper to make them easy to find in an emergency.
- *2 Container Yellow Card (labelling system): To supplement the Yellow Card system, cardboard boxes and product labels list the guide number and UN number.
- *3 Guide number: In the emergency response guidelines published by the Japan Chemical Industry Association, chemical substances are classified into 62 groups and assigned numbers based on their common hazards and emergency response measures. In an emergency, information about the emergency response measures to take can be obtained from the guide number.
- *4 UN number: Four-digit numbers that identify hazardous materials, assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods and published in the *Recommendations on the Transport of Dangerous Goods (Orange Book).*

Social Dialogue

Our corporate activities would not be possible without the understanding and support of members of the communities in which we operate. We give tours, offer internships, and conduct social contribution activities and exchanges with communities for the purpose of building on the trustworthy relations established with local communities.

Tours and Field Trips

Our locations give tours and offer field trips and internships for students. At our factories, we introduce our product manufacturing processes and initiatives to ensure health and safety and protect the environment. At our laboratories, we introduce various efficacy tests and safety tests that are a necessary part of crop protection product development.



University student interns (Laboratories) Factory tour for local residents (Hokkaido Factory)



Factory tour for junior high school students (Okayama Factory)

Social Contribution Activities, Communication with Communities

Our locations open their facilities such as baseball grounds to the community. We participate in cleanups around our business locations, collect waste materials from the community, and participate in various community events.

We also take part in blood drives, with a mobile blood drive visiting our factories each year. Our laboratories have concluded memorandums with local governments to provide use of our sites as emergency shelters in the event of a disaster. The Niigata Factory holds ongoing Regional Dialogue Meeting together with member companies of the Japan Chemical Industry Association in north Niigata Prefecture to exchange opinions with local government representatives and residents and deepen mutual understanding.



Community festival (Laboratories)



Traffic safety campaign (Hokkaido Factory)



Neighborhood cleanup (Niigata Factory)



Blood drive (Okayama Factory)

Factory Greening

Since the Niigata Factory began operations in 1961, it has systematically implemented tree-planting activities including protecting pine groves that have historically been a part of the area but are now few in number, cultivating new pine trees, and protecting the many other trees and greenery on its grounds. There are also many cherry trees on its grounds, and the factory invites local residents and others to enjoy the cherry trees in bloom in springtime.

In FY 2007, the Niigata Factory received The METI Minister's Award for Excellent Green Factory, presented by the Ministry of Economy, Trade and Industry in recognition of being a factory with an outstanding record of environmental upgrades within and outside the factory.



Pine grove (left) and cherry trees (right) on factory grounds (Niigata Factory)

History of Hokko Chemical Industry

Hokko Chemical Industry was founded on February 27, 1950, from the spinoff of the chemical department of Nomura Mining Co., Ltd. for the purpose of manufacturing and selling crop protection products. Since then, the Fine Chemicals Business has also grown to be a key business unit.

| Feb. 1950 | Hokko Chemical Co., Ltd. founded, with the Head Office initially established in Chiyoda-ku, Tokyo | | | | |
|------------|--|--|--|--|--|
| | Rubeshibe Factory established in Rubeshibe, Tokoro-gun, Hokkaido (currently Kitami City), begin production and sale of crop protection products | | | | |
| Dec. | Head Office relocated to Sapporo, Hokkaido (currently Chuo-ku, Sapporo City) | | | | |
| Nov. 1953 | Company name changed to Hokko Chemical Industry Co., Ltd. (present name) | | | | |
| Dec. | Head Office relocated to Chiyoda-ku, Tokyo, and Okayama Factory established in Toji-cho, Kojima-gun, Okayama Prefecture (currently Muneage, Tamano City) | | | | |
| Nov. 1954 | Central Research Laboratories established in Kamakura City, Kanagawa Prefecture | | | | |
| Mar. 1961 | Niigata Factory established in Shibata City, Niigata Prefecture | | | | |
| Oct. | Listed on the Second Section of Tokyo Stock Exchange | | | | |
| Apr. 1963 | Hokko Vardal Co., Ltd. (currently consolidated subsidiary Hokko Sangyo Co., Ltd.) established | | | | |
| May 1965 | Kasugamycin registered | | | | |
| Nov. 1966 | Central Research Laboratories relocated to Atsugi City, Kanagawa Prefecture (present location) | | | | |
| Dec. 1967 | Biei Hakudo Industry Co., Ltd. established (currently a consolidated subsidiary) | | | | |
| Oct. 1968 | Hokko do Brasil Indústria Química e Agro Pecuária Ltda. established (Disposed of management rights in 1976) | | | | |
| Jan. 1969 | Head office relocated to Chuo-ku, Tokyo | | | | |
| Jan. 1970 | Hokkaido Factory established in Takikawa City, Hokkaido (present location), relocated from the Rubeshibe Factory | | | | |
| Feb. | Polyvinyl chloride stabilizer DOTO raw materials synthesis plant (currently Synthesis Plant No. 2) established at Okayama Factory | | | | |
| Jan. 1972 | Fine Chemicals Department established (currently the Fine Chemicals Business Group) | | | | |
| 1976 | Begin manufacture of DMBC, DMBCA and other raw materials for carbinol-based synthetic fragrances | | | | |
| Mar. 1982 | Shizuoka Experimental Farm established in Sagara-cho, Haibara- gun, Shizuoka Prefecture (currently Shirai, Makinohara City) | | | | |
| 1984 | Begin sample provision of PCST raw materials for functional polymers and their derivatives | | | | |
| Sept. 1985 | Hokkaido Experimental Farm established in Naganuma-cho, Yubari-gun, Hokkaido | | | | |

| Nov. | Toyama Experimental Farm established (closed in 2007) |
|-----------|--|
| May 1987 | Listed on the First Section of Tokyo Stock Exchange |
| 1988 | Begin sample provision of PTBST raw materials for functional polymers |
| Jul. 1989 | Fine Chemicals Research Laboratories established within the grounds of Central Research Laboratories |
| Sept. | Healthied wettable powder (developed jointly with Ube Industries, Ltd.) registered |
| Aug. 1991 | Hokko Pax, Ltd. established (currently a consolidated subsidiary) |
| Apr. 1994 | Manage wettable powder registered |
| Dec. 1995 | Hokkaido, Niigata and Okayama factories complete ISO 9002 certification |
| Mar. 1999 | Niigata Factory obtains ISO 14001 certification |
| Jan. 2000 | Hokkaido and Okayama factories obtain ISO 14001 certification, completing certification of the three factories |
| Aug. 2002 | Zhangjiagang Hokko Chemical Industry Co., Ltd. established in Jiangsu, China |
| 2003 | Announce raw materials for auto exhaust cleaning catalyst (intelligent catalyst) |
| Oct. 2004 | Synthesis Plant No. 1 (currently Plant No. 1) constructed at Zhangjiagang Hokko Chemical Industry Co., Ltd. |
| Apr. 2006 | Hokkaido, Niigata and Okayama factories complete OHSAS 18001 certification |
| Dec. 2007 | Zhangjiagang Hokko Chemical Industry Co., Ltd. obtains ISO 9001 and ISO 14001 certification |
| Oct. 2009 | Synthesis Plant No. 2 constructed at Zhangjiagang Hokko Chemical Industry Co., Ltd. |
| Dec. | Multipurpose synthesis plant (Synthesis Plant No. 8) with a clean room constructed at Okayama Factory |
| Jul. 2012 | Munich Representative Office opens in Munich, Germany |
| | Pilot scale laboratory constructed at Central Research Laboratories |
| Aug. 2013 | Winner (rice herbicide mixtures of ipfencarbazone) registered |
| Jan. 2015 | Head Office relocated to Nihonbashi-Honcho, Chuo-ku, Tokyo (relocated Head Office registered in August) |
| May 2016 | HOKKO Chemical America Corporation established in North Carolina, USA (begins operations in March 2017) |
| Nov. | Niigata Factory Branch Plant constructed in Seiro-machi, Kitakanbara-oun. Niioata Prefecture |

Origin of the company emblem symbolizing good harvests in Japan

Our company emblem is made of a "seed leaf" designed from the character for "north" (<code>:t</code>) used in the corporate name of Hokko. The round shape (\bigcirc) symbolizes the world, the universe, or perfection, and the seed leaf (Υ) suggests fledgling plants. The seed leaf symbolizes our power to grow in the world like agricultural products that grow large with crop protection products and water.

Business Locations

Head Office

1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341, Japan (Sumitomo Fudosan Nihonbashi Building) Phone: +81-3-3279-5151 Fax: +81-3-3279-5195

Central Research Laboratories 2165 Toda, Atsugi-shi, Kanagawa 243-0023, Japan

2165 Toda, Atsugi-shi, Kanagawa 243-0023, Japar Phone: +81-46-228-5881 Fax: +81-46-228-0164

Fine Chemicals Research Laboratories

2165 Toda, Atsugi-shi, Kanagawa 243-0023, Japan Phone: +81-46-230-2916 Fax: +81-46-229-7058

Experimental Farms

Hokkaido Experimental Farm 1-13 Nishi Sansen Minami, Naganuma-cho, Yubari-gun, Hokkaido 069-1473, Japan Phone: +81-123-88-3587 Fax: +81-123-88-0418

Atsugi Experimental Farm

2165 Toda, Atsugi-shi, Kanagawa 243-0023, Japan Phone: +81-46-228-2909 Fax: +81-46-228-0164

Shizuoka Experimental Farm

665 Shirai, Makinohara-shi, Shizuoka 421-0502, Japan Phone: +81-548-54-1156 Fax: +81-548-54-0729

Branch Offices

Sapporo Branch Office 6-2-2 Nishi, Kita-Gojo, Chuo-ku, Sapporo-shi, Hokkaido 060-0005, Japan (Sapporo Center Building) Phone: +81-11-231-1610 Fax: +81-11-231-0124

Sendai Branch Office

1-1-10 Kakyoin, Aoba-ku, Sendai-shi, Miyagi 980-0013, Japan (11th floor of Aioi Nissay Insurance Sendai Building) Phone: +81-22-263-4331 Fax: +81-22-265-7329

Akita Office, Sendai Branch

191-5 Aza Shimo-Yabase, Yabase, Akita-shi, Akita 010-0975, Japan Phone: +81-18-862-3841 Fax: +81-18-864-6213

Tokyo Branch Office

1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341, Japan (Sumitomo Fudosan Nihonbashi Building) Phone: +81-3-3279-5921 Fax: +81-3-3242-7808

Niigata Branch Office

4-4-27 Bandai, Chuo-ku, Niigata-shi, Niigata 950-0088, Japan (NBF Niigata Telecom Building) Phone: +81-25-240-3777 Fax: +81-25-247-2255

Toyama Office, Niigata Branch

387-2 Uwano, Tateyama-machi, Nakaniikawa-gun, Toyama 930-0200, Japan Phone: +81-76-463-1133 Fax: +81-76-462-1477

Osaka Branch Office

3-4-10 Honmachi, Chuo-ku, Osaka-shi, Osaka 541-0053, Japan (Honmachi Nomura Building) Phone: +81-6-6261-3571 Fax: +81-6-6264-7280

Okayama Branch Office

9-18 Togiya-cho, Kita-ku, Okayama-shi, Okayama 700-0826, Japan (Okayama-ken Nogyo Kaikan) Phone: +81-86-224-0388 Fax: +81-86-233-5112

Fukuoka Branch Office

2-14-8 Tenjin, Chuo-ku, Fukuoka-shi, Fukuoka 810-0001, Japan (Fukuoka Tenjin Center Building) Phone: +81-92-714-3821 Fax: +81-92-713-7607

Editorial Policy

As a company that handles chemical substances, the Hokko Group conducts Responsible Care activities to independently ensure safety and health and protection of the environment from product development through to disposal, publicly releases the results of these efforts, and deepens understanding through mutual dialogue.

This report primarily introduces Hokko Group's business activities and Responsible Care activities. The Corporate Profile and Responsible Care Report that were published previously have been integrated and redesigned in this report for FY 2018.

Factories

Hokkaido Factory

1470 Kitatakinokawa, Takikawa-shi, Hokkaido 073-0001, Japan Phone: +81-125-24-7261 Fax: +81-125-24-1669

Niigata Factory

2661-1 Sasaki, Shibata-shi, Niigata 957-0082, Japan Phone: +81-254-27-3111 Fax: +81-254-27-8388

Niigata Factory Branch Plant

6-1923-10 Higashiko, Seiro-machi, Kitakanbara-gun, Niigata 957-0101, Japan

Okayama Factory

402 Muneage, Tamano-shi, Okayama 706-0305, Japan Phone: +81-863-41-1515 Fax: +81-863-41-1069

Representative Office

Munich Representative Office

Parkring 11, 85748 Garching bei München, Germany Phone: +49-89-307 48 14 16

Our Group (Affiliated Firms) [Domestic]

[Domestic]

HOKKO Sangyo Co., Ltd.

Head Office

1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341, Japan (Sumitomo Fudosan Nihonbashi Building) Phone: +81-3-3279-5153 Fax: +81-3-3279-5065

Biei Hakudo Industry Co., Ltd.

Head Office

1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341, Japan (Sumitomo Fudosan Nihonbashi Building) Phone: +81-3-3279-5151

Biei Factory

Biei Kyowa, Biei-cho Aza Misawa, Kamikawa-gun, Hokkaido 071-0236, Japan Phone: +81-166-92-1654 Fax: +81-166-92-1890

HOKKO Pax Co., Ltd.

Head Office

1-5-4 Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8341, Japan Phone: +81-3-3279-5151

Okayama Office

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Reporting Scope

Reporting period: FY 2017 (Dec. 1, 2016–Nov. 30, 2017) Some listed activities encompass time periods outside the 2017 fiscal year. Reporting scope: Hokko Chemical Industry Group. However, quantitative data on health and safety and the environment cover only the main production and research facilities of Hokko Chemical Industry Co., Ltd., namely the Hokkaido Factory, Niigata Factory, Okayama Factory, and the Central Research Laboratories and Fine Chemicals Research Laboratories. Referenced guidelines: Environmental Reporting Guidelines 2012, Japanese Ministry of the Environment

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