


Related Materiality

- Responding to climate change
- Maintaining air, water, soil environments



Details on PRTR can be found on our website.
https://www.hodogaya.co.jp/english/csr/eco/environmental_data/#a21



Responsible Care Management

Responsible care (RC) is a voluntary management initiative intended for companies involved in the production and handling of chemical substances to implement and improve their environmental, safety and health measures across the product lifecycle, from development to disposal. The Hodogaya Chemical Group conducts its operation based on the principle that ensuring environmental conservation, safety and health, and product quality is fundamental to corporate management and the basis for all business activities.

Details on Responsible Care can be found on our website.
https://www.hodogaya.co.jp/english/csr/eco/safety_responsible/





Environment Basic approach


In protecting the environment, the Hodogaya Chemical Group continuously reduces the emission volumes of all chemical substances released into the air, water, and soil, and the volume of waste discharged in the course of its business operations. As its implementation structure, under the Basic Philosophy of Responsible Care (RC) the Group obtained integrated certification for the ISO 14001 environmental management system covering all Hodogaya Chemical offices and Group company offices located in Japan.

ISO 14001:2015 Environmental management systems

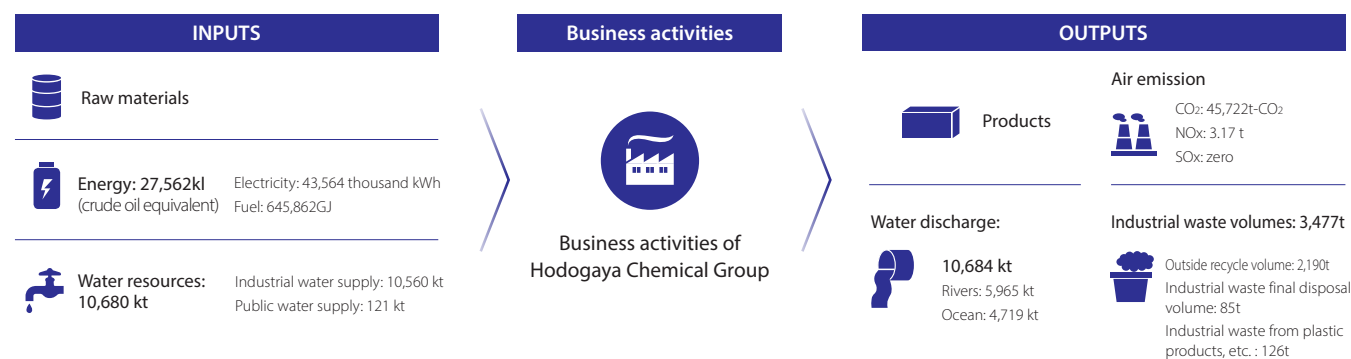
Certification body	Japan Chemical Quality Assurance
Registration no.	JCQA-E-0330
Compatible standards	JIS Q 14001:2015/ISO 14001:2015
Date of acquisition	December 25, 2001



Details of environmental data from the past 10 years can be found on our website.
https://www.hodogaya.co.jp/english/csr/eco/environmental_data/



Hodogaya Chemical Group material flow



Initiatives to Reduce Greenhouse Gas (GHG) Emissions

The Hodogaya Chemical Group considers responding to climate change to be a crucial management challenge. We have been actively promoting initiatives to reduce greenhouse gas (GHG) emissions, in order to fulfill our responsibilities toward the realization of a sustainable planet and society as set forth in the VISION of our Mid-term Management Plan.

Nearly all of GHG emitted by Hodogaya Chemical are CO₂ from energy-related sources. Total GHG (Scopes 1*1 and 2*2) emitted in FY2022 were approximately 45,722 t-CO₂.

In FY2022, we made investments utilizing Internal Carbon Pricing (ICP), which had been introduced in FY2021. Going

forward, we will continue our efforts to reduce emissions by adopting energy-saving equipment and switching to renewable energy sources through decarbonization investment from a long-term perspective to continuously improve energy intensity. With respect to Scope 3*3, we are currently at the stage of gathering information on the status of other companies' initiatives.

While ascertaining all Scope categories for GHG emissions and formulating reduction plans through analysis of the results, we will strive to reduce GHG emissions in accordance with the plans.

*1 Scope 1: direct emissions
 *2 Scope 2: energy-originated indirect emissions
 *3 Scope 3: other indirect emissions; separated into 15 categories

Initiatives to Lower Environmental Impacts

The water resources consumed, and the chemical substances released into the air, water, and soil during the course of business operations by the Hodogaya Chemical Group have the potential to impact the global environment. Taking into consideration the global environment and each of its stakeholders, the Hodogaya Chemical Group strives to lessen the environmental burden accompanying its business activities.

Prevention of air pollution

SO_x (sulfur oxides), NO_x (nitrogen oxides), and dust are discharged from our factories from the burning of fuel and other aspects of chemical manufacturing.

In FY2011, Hodogaya Chemical completed a switch to city gas for the raw fuel used in our plants, which has allowed us to continue to achieve zero emission of SO_x since FY2012. We are also achieving significant reduction of NO_x and dust emissions through measures such as adopting dust collectors and scrubbing towers, and using catalyzers. This has allowed us to mitigate discharge of these substances into the atmosphere.

Protection of water resources and prevention of water pollution

Hodogaya Chemical considers the securing of high-quality water resources and the prevention of water pollution from wastewater important for business continuity. 99% of the industrial water used by Hodogaya Chemical is procured from rivers and streams and only a small amount of public water (tap water) is used as drinking water. Furthermore, the Company does not use water from other sources, such as groundwater, which could cause land subsidence, or seawater.

Water released during the manufacturing process is treated in an advanced manner at the on-site wastewater treatment facility within the plant, and released into the public water bodies after the water quality clears regulatory values. Going forward, we will continue to thoroughly manage wastewater treatment facilities and work to reduce the environmental impact risks to oceans and rivers where wastewater is discharged.

Environmental accounting initiatives

Of the major expenditures related to environmental conservation in FY2022, the largest expense was resource circulation cost, which amounted to 189 million JPY.

Environmental accounting data 2023 P.61

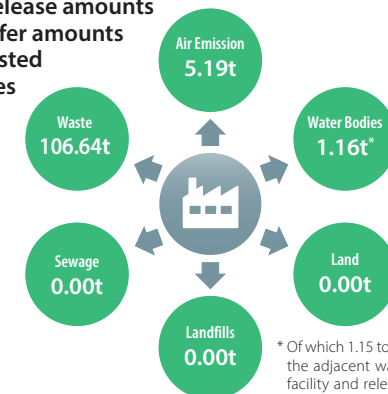
Industrial waste reduction

The Hodogaya Chemical Group promotes the 3R+Renewable initiative (reduce, reuse, recycle, renewable) and we have set a target to reduce the volume of industrial waste generated compared with the previous fiscal year, with initiatives underway. In FY2022, total emissions and final disposal volumes increased by 27% and 63%, respectively, compared with the previous year. Although there is also the impact of differences in the composition of production items and other factors, we take the facts of the increases seriously and will redouble our efforts as we strive to reduce industrial waste.

PRTR

Based on the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act), which is the legal regulation of chemical substances, Hodogaya Chemical manages the release and transfer of PRTR-listed substances that are manufactured or used and reports them to the national authorities. From the perspective of environmental conservation, we will ascertain the actual status of chemical substance emissions and transfers as waste, while continuing to strive to work to reduce the amounts of such substances released and transferred.

FY2022 release amounts and transfer amounts of PRTR listed substances



*Of which 1.15 tons have been sent to the adjacent wastewater treatment facility and released into the public water bodies after being treated.

VOICE

Energy Conservation Efforts at Koriyama Plant

Energy forms an essential element in our lives. However, global warming brought about by energy consumption has become a serious problem, and energy conservation is now an important issue on a global scale. As an energy saving initiative at the Koriyama Plant, we installed an ICP system-based heat pump in December 2022 to make effective use of the waste hot water, which had not previously been used, after the heat exchange process. Using this waste water as a heat source and efficiently heating boiler feed water is expected to reduce emissions by 171t-CO₂/year and city gas consumption by 113,000Nm³/year. There are many other energy-saving initiatives we can usefully do ourselves, such as saving electricity and water, rather than by installing equipment. Aware of the need to mitigate the effects of global warming, each and every person working at the Koriyama Plant will continue to engage in energy-saving activities.



Related Materiality	
<ul style="list-style-type: none"> Improving value and reliability of products Ensuring the safety of products and chemical substances 	<ul style="list-style-type: none"> Promoting health and productivity management and workplace safety and health

Details can be found on our website.
https://www.hodogaya.co.jp/english/csr/eco/chemical_product_safety/



Quality Assurance Basic approach

The Hodogaya Chemical Group's quality policy is commitment to quality-first, quality from our customer's perspective. The aim is to meet the demands of our customers and partner companies through our products, commercial goods, and OEM products, through which we contribute to society and business growth.

Initiatives for Quality Assurance

The Hodogaya Chemical Group is committed to; understanding facts, assessing the facts, and acting based on facts to maintain a quality-oriented principle and provide highly functional products and services with high added value to meet the trust and satisfaction of its customers.

To ensure customer satisfaction with respect to quality, the quality assurance activities relating to the products handled by the Hodogaya Chemical Group are divided into four systems by purpose at all stages, from planning and R&D to production and sales. We are working on quality assurance activities through the necessary screening, audit, and management systems required for each system, such as the creation of annual plans aimed at improving the level, and the reporting and discussion of results in RC/QM subcommittees. As a result, in FY2022 we achieved zero quality problems.

November of each year is Quality Month, and during the month we hold the All Company QC Presentation Meeting for the whole Hodogaya Chemical Group. We continue to manage and improve the quality of products, services, work, and other elements through QC circle activities. We tie the results of these circle activities to personal development, mutual development, and workplace vitalization by having reports and Q&A sessions at the All Company QC Presentation Meetings.

Four quality assurance activity system

1. Quality assurance activity system from the planning stage to stable production of products
2. Quality assurance activity system for the steady production operation of products
3. Quality assurance activity system for commercial goods and OEM products
4. Activity system to review the quality assurance activities



FY2022 All Company QC Presentation Meeting

Quality Day

November has traditionally been Quality Improvement Month at Hodogaya Chemical, and the Company has generally designated the third Friday of November as Quality Day since 2020 so as to further improve quality management.

The Hodogaya Chemical Group takes to heart the idea that quality is the source of trust. From the perspective of clarifying related roles and responsibilities, in October 2018 the Company restructured the Environment and Safety & Quality Assurance Department into the Quality Assurance Department and Environment and Safety Department to strengthen quality management functions.


As part of these initiatives, Hodogaya Chemical established a Quality Day, and on that day, all group executives and personnel gather together to read aloud the Quality Pledge. By doing so, we will raise awareness of improving quality and provide satisfaction to customers.

Quality Management

Today, corporate quality management systems with international qualities and standards have come to be recognized as the norm. Each of the Hodogaya Chemical offices have acquired ISO 9001 certification, the international standard for quality management systems. Then in 2010, the Group integrated the individual management systems of each office and successfully achieved an integrated certification as the Hodogaya Chemical Group that expanded the scope of certification to include domestic affiliated companies. Furthermore, a Group company, SFC CO., LTD. in South Korea, also obtained ISO certification from the South Korean certification body. In 2019, when the Hodogaya Chemical Group's integrated certification was renewed, its scope was again expanded, and HODOGAYA CHEMICAL KOREA Co., LTD., an overseas research base, also obtained ISO certification.

Under a more stringent quality management system, the Hodogaya Chemical Group has united to undertake quality improvement activities.

ISO 9001: 2015 Quality management systems	
Certification body	Japan Chemical Quality Assurance
Registration no.	JCQA-0184
Compatible standards	JIS Q 9001:2015/ISO 9001:2015
Date of acquisition	December 25, 1996



Chemicals and Product Safety Basic approach

The Hodogaya Chemical Group sets forth a set of internal rules on the use of chemical substances and measures to control the content in products, etc. based on the Basic Philosophy of Responsible Care (RC) to ensure environmental conservation, safety and health, and product quality, which forms the basis for all business activities. The aim of these rules is to voluntarily manage chemical substances that are likely to injure human health or impact the global environment in each process, from development, manufacturing, transportation, and use to disposal.

Chemical Substance Management

From the perspectives of environmental conservation, security and disaster prevention, workplace safety and health, and product safety, the Hodogaya Chemical Group manages chemical substances in all phases, from development, raw materials procurement, manufacturing, and use to disposal.

To the controlled chemical substances designated under national laws and regulations have been added those requested under customers' RoHS and REACH directive as well as green procurement policies.

The substances are categorized into three groups: prohibited substances, the manufacture, import and use of which are prohibited in principle under domestic law; release-restricted substances, on which domestic laws require that restrictions be placed on their release into the environment or that their environmental impact be reduced; and controlled substances in products, those that customers have requested either not be present in products or that the amounts contained be controlled. Having been made into a database, this system provides integrated management of information on all products, raw materials, and chemical substances handled by the Hodogaya Chemical Group.

We also ensure that information is provided to our customers in a standardized format, including confirmation of legal compliances with national and foreign laws and regulations, the automated production of safety data sheets (SDSs) and product labels in multiple languages as well as the compiling of safety information on the chemicals contained in our products.

Risk Assessment of Chemicals

The Hodogaya Chemical Group formulates procedures for risk assessments to prevent accidents and disasters, and measures to reduce risks based on the assessment results. The Group also sets forth the Risk Assessment Guidelines to clearly identify risks and take precise measures, and implements them on a regular basis.

The substances to be subjected to risk assessments are divided into two categories—the risk assessment of operations and the risk assessment of handling chemical substances—to enable the clearer identification of risks and more precise measures to be taken.

Compliance with Global Laws and Regulations

In addition to the conventional regulations such as TSCA (USA) and REACH (Europe), Asian countries including China, South Korea and Taiwan are actively enforcing new laws and regulations.

With an eye on expanding its business globally, the Hodogaya Chemical Group not only works in close collaboration with foreign affiliate companies and representative offices, but also takes active part in various industry activities to keep track of the latest trends in chemical substance management policies and legislation of other countries to be prepared to respond in a timely manner.

We share this legislative information and responses from other countries with the entire Hodogaya Chemical Group.

VOICE My Duty to Protect: Hodogaya Brand

Quality inspection work covers a wide range of tasks, including inspections of raw materials and products based on prescribed test methods, the issuance of test reports, the maintenance and management of inspection equipment as well as the storage of records.

Of all these tasks, the one that I am particularly mindful of in my eighth year with the Company is always to conduct product inspections from the customer's point of view, so that they are able to purchase Hodogaya Chemical products with peace of mind. So that I am able to quickly notice any minor differences and changes in inspection values, I carefully check the product status and inspection values on a regular basis. Also, when a question comes up with regard to the maintenance and how to handle the inspection equipment, I always try to find the answer by doing my own research or by seeking advice from someone with a lot more experience.

To continue to protect the quality of the Hodogaya brand in the years to come, I would like to fulfill my role as the last bastion of quality management in a responsible manner.



Maika Yoshino
Nanyo Plant



Details can be found on our website.
https://www.hodogaya.co.jp/english/csr/eco/safety_health_logistics/



Workplace Safety and Health, Security and Disaster Prevention Basic approach

The Hodogaya Chemical Group places highest priority on ensuring workplace safety and health as the basis of its production activities, and ensures thorough compliance with laws and regulations related to safety and health, to achieve disaster-free operation. In order to promote workplace safety and health, and security and disaster prevention, we spell out the basic rules on actions to be taken by the Hodogaya Chemical Group based on relevant laws and regulations in the Safety and Health Management Rules, the Disaster Prevention Rules, and the Logistic Safety Management Rules.

Initiatives for Workplace Safety and Health

The Safety and Health Management Rules set forth the basic rules on safety and health management to prevent occupational disasters and health disorders of all personnel. The aim is to engage both personnel and employers to collaborate in ensuring the safety and health of all personnel in the workplace, and to promote creating a more comfortable work environment, while streamlining operations and contributing to improving productivity.

Furthermore, the Group has designated February 3 as the Group's annual Safety Day to prevent personnel forgetting the fire accident at the Yokohama Plant on February 3, 2012, and the lessons learned from it, to enhance the culture of safety, and to spread among all personnel of the Group the efforts in structurally establishing safety in the business operation.

In FY2022, as a result of continuing to strengthen initiatives for each measure, the Hodogaya Chemical Group and subcontracting companies achieved zero lost-time injuries.



Initiatives for Disaster Prevention

The Group conducts its activities in accordance with its basic principle to deliver security and safety, including environmental conservation to the local communities and society. The Disaster Prevention Rules stipulate that education and training be carried out on a regular basis in preparation for an accident or other emergency. In addition to conducting disaster drills, fire extinguisher training, emergency lifesaving drills jointly with fire departments and other first responders, we are striving to instill an awareness of safety and disaster prevention among all personnel and enhance their ability to sense danger.

We are continuing the conventional KYT (*Kiken Yochi Training*, risk prediction training) and PYT (process error prediction training) activities, and conduct safety patrols, 3S (Sort, Set in Order, Shine) and inspection visits among offices. In internal audits of RC activities, the basis of activities was expanded to the five actuals (place, thing, fact, principle, rule) to implement safety measures and safety education that include mechanism and law principles, and rules such as routines and orders.

Personnel from plants are active participants in competitions in which teams pit their firefighting and disaster prevention skills against teams from other plants located in the same area.

Occurrence of Lost-time Injuries

FY occurred	Hodogaya Chemical Group			Subcontracting companies		
	2020	2021	2022	2020	2021	2022
Number of accidents / incidents	1	0	0	0	0	0
Number of work-related fatalities and injuries	1	0	0	0	0	0
Frequency rate	0.92	0.00	0.00	0.00	0.00	0.00
Severity rate	0.001	0.00	0.00	0.00	0.00	0.00

Frequency rate = Number of work-related fatalities and injuries / Total work hours x 1,000,000
 Severity rate = Total number of working days lost / Total work hours x 1,000

Initiatives for Logistic Safety

Hodogaya Chemical endorsed the spirit of the White Logistics Promotion Campaign* advocated by the Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Economy, Trade and Industry, and Ministry of Agriculture, Forestry and Fisheries in January 2021 and submitted a voluntary action declaration to the White Logistics Promotion Campaign Secretariat. In the voluntary action declaration, we reviewed the content of transportation, including greater logistics efficiency and modal shift, and listed our efforts to standardize contracts and ensure safety.

For the purpose of ensuring safety, we help maintain the safety and health of all local residents, including those involved in

logistics, and protect the local environment by following Logistic Safety Management Rules, which stipulate basic items concerning preventing accidents and disasters in logistics related to Group products and other items and measures in the case of an accident or disaster.

* White Logistics Promotion Campaign
 This is a campaign to realize not only greater productivity and more efficient logistics, particularly in truck transportation, but also a work environment welcoming to female and older drivers so as to ensure stable logistics, which are necessary for the lives of Japanese and industrial activities, in response to the shortage of drivers that is growing more serious and to contribute to economic growth.



Procurement Activities Basic approach

The Hodogaya Chemical Group specifies its commitment to the realization of a fair and appropriate supply chain in the Sustainability Policy, and implements the activities of procurement based on the Compliance Action Policy and the Procurement Policy. We have a fair deal with all partner companies in good faith when purchasing raw materials, products/consigned products, and facilities/equipment. We regard them as our good business partners in jointly addressing social issues.

Procurement policies

The Hodogaya Chemical Group has established the Procurement Policy and Procurement Guidelines. In addition to having a fair deal in good faith, the concept of sustainable procurement, that is, giving consideration to the environment while deepening mutual communication was incorporated into the Procurement Policy. The Hodogaya Chemical Group conducts procurement in line with this policy

In the basic purchasing contract concluded when doing business with the Hodogaya Chemical Group, there is a clause that covers compliance with the Procurement Guidelines. By having them comply with the terms of these guidelines, we work with our partner companies to conform with environmental, social, and governance needs, such as reducing the environmental impacts from raw material quality and the management and manufacture of chemical substances as well as respecting human rights throughout the supply chain, health and safety management, and ethics. Thus, the Hodogaya Chemical Group promotes compliance together with its partner companies.

Procurement Policy

1. Compliance with Laws and Regulations and Social Norms
2. Implementation of Environmentally Conscious Procurement Activities
3. Provision of Fair Transaction Opportunities
4. Deepening of Communications with Supply Chain



Details on the Procurement Policy can be found on our website.
<https://www.hodogaya.co.jp/english/company/philosophy/#a8>



Details on Procurement Guidelines can be found on our website.
https://www.hodogaya.co.jp/english/wp/wp-content/uploads/2018/09/procurement_guidelines_20180918.pdf



VOICE To Create Safe and Secure Workplaces

In its meetings held monthly at the Yokohama Plant, the Health and Safety Committee deliberates on measures to prevent industrial accidents and health disorders, workplace inspections and advice on health promotion by industrial physicians, risk assessments, and near-miss incidents. The content of the meetings is shared with promoters at each workplace, and workplace health and safety meetings chaired by the promoters are held. During these meetings, we conduct health and safety-related education, discuss near misses and case studies of past incidents, find dangers lurking in the workplace, and notify other people of dangerous areas, all of which helps to raise safety awareness and to prevent occupational accidents. We will continue to work toward building safe and secure work environments and achieving zero accidents and injuries.



Yoshiaki Iwano
 Manufacturing Department,
 Yokohama Plant