Basic Policy

Mitsubishi Chemical carries out Responsible Care (RC) activities,[1] which are voluntary activities in the chemical industry for ensuring environmental conservation, health and safety. In line with the Mitsubishi Chemical Holdings Group Charter of Corporate Behavior and with the aim of realizing KAITEKI, we implement RC activities based on the five pillars of process safety and disaster prevention, occupational safety and health, environmental conservation, chemical and product safety, and logistics safety.

1 Responsible care activities: Voluntary activities undertaken by companies that handle chemical substances to protect the environment, health and safety across all related processes, from the development of such substances to their manufacturing, distribution, use, final consumption and disposal. These activities also encompass the publishing of the results of such efforts and dialogue and communication with society.

Implementation Framework

Mitsubishi Chemical (MCC) has designated departments responsible for promoting each of the five pillars of its Responsible Care (RC) activities. These departments work together to carry out RC activities. The designated departments draft annual RC action plans that are then deliberated by the Environmental and Safety Promotion Committee, comprising the director in charge of RC, representatives of the business domains and plant general managers, before being discussed by the Executive Management Committee and then going to the President for final approval. The director quickly informs employees of the approved plans and orders the creation of action plans for plants and business domains based on said plans. The departments responsible for implementing RC activities monitor the action plans of the plants and business domains and their implementation status and provide support and instruction aimed at improvement, thereby helping to improve the RC activities of the MCC Group as a whole.

RC activity pillar	Implementation departments
Process safety and disaster prevention	Environment & Safety Dept.
Occupational safety and health	
Environmental conservation	
Chemical and product safety	Product Stewardship Dept. Quality Assurance Dept.
Logistics safety	Logistics Dept.

Environment and Safety

Basic Policy

Mitsubishi Chemical (MCC) has established the Environment and Safety Principles as well as Policies Related to Environment and Safety, and it implements activities related to process safety and disaster prevention, occupational safety and health, and environmental conservation.

Environment and Safety Principles

1. Safety lies at the foundation of the company's very existence, and ensuring safety is the company's social responsibility.
2. The company has an obligation to conserve and improve the environment and become an entity that is friendly to both people and the planet.

Policies Related to Environment and Safety

1. We will comply with social rules and standards, including corporate ethics in addition to applicable laws.
2. We will pursue zero accidents and zero occupational injuries.
3. We will reduce our environmental impact to prevent global warming and protect the natural environment.
4. We will educate our employees about the environment and safety so that they can act with awareness of their own responsibilities.
5. We will communicate closely with society to enhance understanding and trust.
6. We will continue making improvements by utilizing the latest technologies and available internal and external information.

Based on the above environment and safety principles and policies, every year, MCC creates a Group environment and safety action plan. The plan reflects the results of the previous year's plan and audits and lays out yearly targets, policies and key measures.

The fiscal 2019 plan included the annual targets of zero serious process safety incidents, zero serious occupational accidents, zero environmental incidents, and contribution to the global environment. The annual policy under the plan was to precisely understand workplace weaknesses and steadily make improvements. In line with this plan and the status of each workplace, we carried out environment and safety activities.

Audits of Environment and Safety Activities

MCC conducts safety audits and environmental audits covering 16 plants, two R&D centers, and 94 domestic and overseas Group company sites.

In fiscal 2019, MCC conducted safety audits of 11 plants and 33 Group company sites as well as environmental audits of two plants, one R&D center and seven Group company sites. Through the audits, MCC checked and evaluated the workplaces' PDCA cycles based on audit subjects designated in the fiscal 2019 audit plan and provided guidance related to needed improvements.

MCC checks to confirm that audited plants, R&D centers and Group companies are working to make necessary improvements by, for example, improving their facilities or reviewing their standards in response to guidance provided as a result of such audits.

	FY2019 audits performed	Total issues identified	FY2019 audit plan audit subjects
Safety audits by MCC	• MCC: 11 plants • Group companies: 33 sites	168	• Implementation of action plans • Implementation of measures to prevent occupational accidents, other incidents and their recurrence • Compliance with safety laws
Environmental audits by MCC	• MCC: 2 plants and 1 R&D center • Group companies: 7 sites	72	• Compliance with environmental laws • PDCA cycles for environmental conservation activities

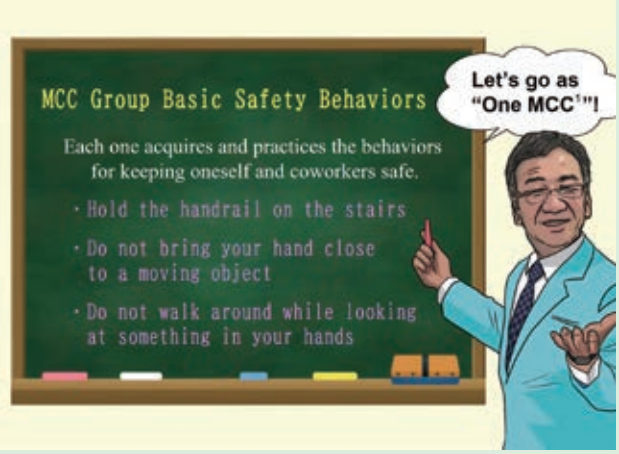
Process Safety and Disaster Prevention, Occupational Safety and Health

Basic Policy

Mitsubishi Chemical (MCC) creates action plans comprising annual targets, annual policies, and key measures reflecting the status of activities and results of the previous fiscal year and uses said plans to carry out process safety and disaster prevention and occupational safety and health activities. In fiscal 2019, we implemented activities in line with the annual goals of zero serious process safety incidents and zero serious occupational accidents as well as the annual policy of precisely understanding workplace weaknesses and steadily making improvements.

Focus The MCC Group Basic Safety Behaviors Initiatives

The MCC Group established the MCC Group Basic Safety Behaviors and began initiatives to ensure that employees know and consistently practice them in order to prevent employee behavior-related accidents throughout the global Group. The three basic behaviors were drafted based on opinions solicited from our 40,000 employees around the world. Under these initiatives, employees not only work to carry out the basic behaviors themselves, but remind one another and raise each other's awareness in order to prevent occupational accidents at the organizational level.



The MCC Group Basic Safety Behaviors

1 One MCC: A slogan for bidirectional globalization efforts aimed at becoming a truly global Group and Group-wide cross-border initiatives

Process Safety and Disaster Prevention, Occupational Safety and Health

Preventing Process Safety Incidents and Occupational Accidents, Key Measures

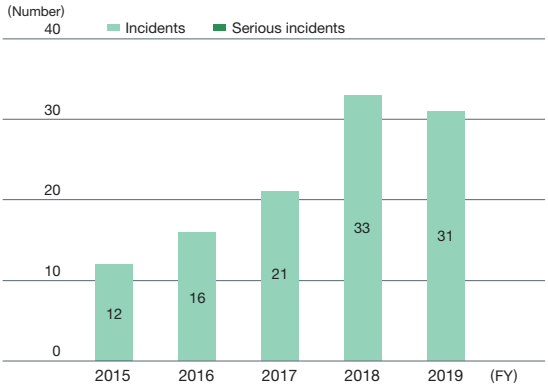
In fiscal 2019, there were 25 incidents, including small fires and leaks of hazardous materials, as well as six chlorofluorocarbon gas leak incidents.

The main causes of the incidents were the corrosion and degradation of facilities and insufficient checking during facility inspections and operations. Behind these factors, were management problems, including delays in response to facility aging, insufficient knowledge and insufficient education.

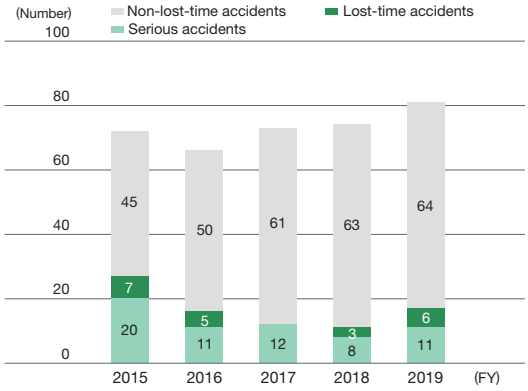
In fiscal 2019, 11 serious occupational accidents resulting in four or more days of lost work occurred in Japan. These accidents included such incidents as getting caught or entangled in machinery and falls on level surfaces and from high places. The main causes of these occupational accidents were lack of competency in basic practices and operations, inadequacies in work procedures and inadequacies in structure design and management. Behind these factors were management problems, including insufficient education and training, insufficient safety activities, and insufficient risk assessment.

Due to a focus on countermeasures to accidents related to being caught and entangled in equipment, which often lead to severe occupational injuries that result in lasting physical impairment, such accidents decreased. However, instances of falls on level surfaces and heat stroke have been increasing, and overall occupational accidents did not decrease. We will continue striving to reduce the occurrence of occupational accidents.

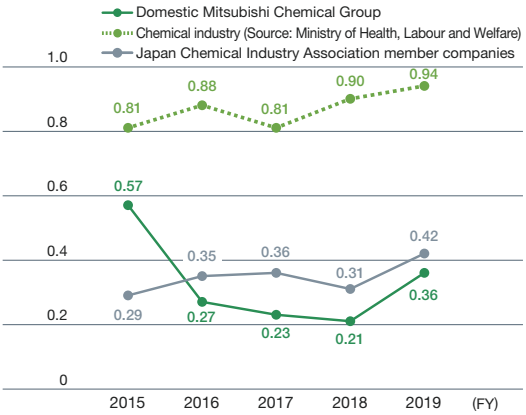
Mitsubishi Chemical Group Process Safety Incidents in Japan



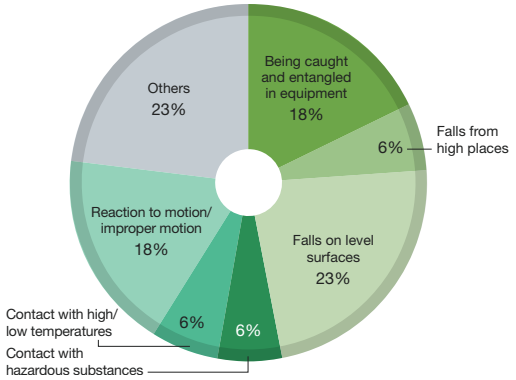
Mitsubishi Chemical Group Occupational Accidents in Japan



Annual Rate of Lost-Time Accidents



Mitsubishi Chemical Group Lost-Time Accidents by Classification (FY2019)



* Data for fiscal 2016 and earlier are the totals of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics and Mitsubishi Rayon and their respective domestic group companies. The same applies hereinafter.
* The figure for chlorofluorocarbon gas leak incidents represents leaks from refrigeration equipment with a capacity of 20 refrigeration tons or greater.

In light of the problems underlying these process safety incidents and occupational accidents, in fiscal 2020, we are implementing the following key measures.

- Thoroughness and Continuation of Safety Activities
  In addition to efforts to thoroughly ensure safe basic practices and operations, we are reviewing and working to ensure adherence to proper procedures and safety equipment use in construction and other operations, steadily implementing change management and risk assessment, thoroughly responding to incidents and occupational accidents, and effectively utilizing information to prevent the recurrence of incidents and occupational accidents as well as the occurrence of similar incidents and accidents.
- Thoroughness and Continuation of Facility Management
  To prevent incidents and occupational accidents, we properly inspect facilities for age-related deterioration and repair and replace them as needed while steadily performing regular monitoring to ensure that signs of irregularities in facilities are quickly detected and dealt with appropriately.
- Human Resources Training
  We strive to train people who can think for themselves, have good judgment, and take action. For inexperienced employees, we carry out education on not only operational procedures, but also on adhering to basic safety behaviors and operations and rules about prohibited behaviors. Furthermore, to enhance risk assessments, we are proactively developing human resources with specialized risk assessment knowledge and skills.
- Accident and Natural Disaster Response
  To minimize and contain harm in the event of an accident or natural disaster, such as an earthquake, we have in place systems for rapid response within plants and preventing negative impacts on the areas around our sites and containing harm and conduct training accordingly. In addition, we are advancing measures to deal with natural disasters caused by extreme weather due to climate change.

Focus **Creating People-Friendly Workplaces: Automating Cleaning Operations at the Kagawa Plant**

Based on the idea that “Safety lies at the foundation of the company’s very existence, and ensuring safety is the company’s social responsibility,” which is part of its Environment and Safety Principles, MCC strives to create people-friendly workplaces by minimizing operations that are physically or mentally burdensome. To this end, we are advancing facility improvements utilizing AI, IoT, robotics and other cutting-edge technologies.

At MCC’s Kagawa Plant, employees periodically have to clean accumulated grime off of equipment. Previously, employees used tools to directly scrape this grime off of surfaces. Because this work put them in danger of cuts and burns, it was physically and mentally burdensome. To address this, the plant adopted an automated cleaning system that uses robotic arms. This has not only reduced the amount of work presenting significant risk of occupational injury, but enabled the optimization of cleaning conditions, instead of relying on the experience of operators, thereby realizing an improvement in efficiency over manual cleaning.

Risk Assessment

MCC implements robust risk assessments of processes, operations and chemicals, striving to prevent process safety incidents and occupational accidents. In these risk assessments, we comprehensively identify, evaluate and work to reduce risks related to process safety, occupational accidents and health. This includes risks not only under steady conditions, but also unsteady conditions, such as when responding to a problem. Furthermore, to effectively reduce risks related to changes, we use mechanisms for identifying all changes and conduct risk assessments under the supervision of expert technicians.

Process Safety and Disaster Prevention, Occupational Safety and Health

Enhancing Self-Directed Process Safety

MCC's Ibaraki, Mie, Okayama and Hiroshima plants are accredited as having high-level process safety under the High Pressure Gas Safety Act. These plants maintain a high level of process safety by creating mechanisms in line with the requirements for accreditation under the High Pressure Gas Safety Act, such as 1. Process safety management and inspection frameworks, 2. Continuous improvement of process safety systems via PDCA cycles, 3. Risk assessments and 4. Education and training.

In recent years, the variety of accidents is increasing, plant facilities are aging and the number of highly experienced employees is falling. In light of such factors, we are working to further enhance the level of process safety by such means as using IoT and big data technologies, implementing sophisticated risk assessments and receiving third-party process safety assessments.

Working Environment Management

Some employees within the MCC Group perform work that requires occupational health considerations, such as the handling of specified chemical substances and organic solvents and operations performed in hot or noisy conditions. To prevent health problems in these employees, the MCC Group manages working environments based on ongoing working environment measurement performed in accordance with relevant laws and guidelines and its own rules. In addition, MCC carries out a range of occupational health measures, such as implementing specialized health checkups, workplace inspections by industrial physicians and initiatives to reduce risks identified by chemical substance risk assessments.

Focus COVID-19 Infection Prevention Measures During Regular Maintenance at the Ibaraki Plant

MCC's Ibaraki Plant halted normal operations from May 12 to July 4, 2020, for large-scale regular maintenance, comprising facility inspections and repairs. During this time, many individuals from partner companies across Japan were scheduled to come to the plant. In light of this, we worked with Ibaraki Prefecture, Kamisu City and medical professionals to implement thorough measures to prevent infection of COVID-19.

Main anti-infection measures

- Required visitors from contractors to make a log of their body temperature and whereabouts for a period beginning two weeks before their arrival and, prior to entering the plant for the first time, to undergo a medical interview with a doctor.
- Checked individuals' temperature and logs of physical condition and whereabouts when they entered the plant each day.
- Took thorough measures to avoid work in closed spaces, crowding and close contact, such as restricting entry to offices, holding construction-related meetings virtually, improving the efficiency of contractor reception operations by adopting DX technologies, and cancelling morning assemblies.

As a result of these measures, the regular maintenance was completed with zero cases of COVID-19 and zero accidents. The Ministry of Economy, Trade and Industry praised these efforts, saying that "the successful completion of the regular maintenance at the Ibaraki Plant is a model for such regular maintenance nationwide."

Medical interview with a doctor before entering the plant for the first time

Real-time body temperature sensing at the employee entrance gate

Providing instructions remotely using tablets

Human Resource Development Initiatives

MCC implements human resource development using educational plans tailored to specific types of work and levels of seniority.

We carry out education and drills for employees who conduct operations at manufacturing sites to ensure that they can correctly carry out basic practices and operations and follow rules about prohibited behaviors. We also use creative techniques to help employees apply the knowledge gained through education at actual work sites. Furthermore, we carry out experiential education using facilities that provide simulated experiences of process safety incidents and occupational accidents to increase employees' sensitivity to danger.

For technical staff, we also provide chemical engineering education and carry out such initiatives as mandatory participation in safety assessments of processes at their respective work sites. Through such efforts, we are developing chemical process safety engineers with specialized knowledge of chemical substances and reactions and risk assessment methods.

Focus **New Education Center at the Fukuoka Plant—Virtual Reality Training System**

MCC's Fukuoka Plant established a new education center (completed in January 2020), expanded its practice plant, adopted a virtual reality (VR) training system and set up an area dedicated to keeping the lessons of past accidents fresh. The practice plant enables employees to practice performing plant operations and on-site work (such as replacing pumps and performing work inside tanks), as well as to drill basic operations, such as the handling of tools and correct work posture and position. We expect that it will be very useful for developing plant operators. The VR training system allows employees to virtually experience accidents, such as falls and being caught or entangled in equipment, to heighten their sensitivity to danger and help prevent occupational injuries. The area dedicated to keeping the lessons of past accidents fresh provides information about serious accidents that have occurred at MCC to renew employees' determination to ensure safety.

The new education center

Expanded practice plant

VR training system

Area dedicated to keeping the lessons of past accidents fresh

Process Safety and Disaster Prevention, Occupational Safety and Health

Accident and Natural Disaster Response

MCC has in place a range of countermeasures to minimize and contain harm due to accidents and natural disasters. We evaluate potential external effects, including impact on surrounding areas, and establish response procedures to be implemented in the event of a disaster. We also conduct training based on scenarios in which accidents occur simultaneously at multiple facilities or plants due to large-scale natural disasters or other factors. Through such efforts, we maintain an emergency response system.

Earthquake-Resistant High-Pressure Gas Equipment

MCC uses earthquake resistance design standards to evaluate the earthquake resistance of such facilities as spherical storage tanks with welded steel pipe braces and high-pressure gas facilities designated as vital in terms of earthquake-resistant design. Based on such evaluation, MCC has drawn up plans to improve facilities where necessary and is advancing earthquake countermeasures in line with said plans.

(1) Spherical storage tanks with welded steel pipe braces
We have completed earthquake countermeasures for eight of the nine tanks found to require them. The installation of earthquake countermeasures for the remaining tank is currently under way and expected to be completed in fiscal 2020.

(2) High-pressure gas facilities designated as vital in terms of earthquake-resistant design
We have completed earthquake countermeasures for 24 of the 28 facilities found to require them. Earthquake countermeasures for the remaining four facilities are expected to be completed in fiscal 2020.

Focus **Countermeasures for Major Earthquakes at the Mie Plant**

MCC's Mie Plant has long implemented earthquake countermeasures based on a scenario of an earthquake occurring in the Tokai region. Following the Great East Japan Earthquake, we strengthened and revised countermeasures based on a scenario of a major earthquake in the Nankai Trough, took facility-related measures, revised related manuals and reinforced related drills.

Environmental Conservation

Basic Policy and Key Measures

Aiming to contribute to the global environment, Mitsubishi Chemical (MCC) proactively works to reduce its greenhouse gas emissions, conserve resources and energy, prevent contamination of the air, water and soil, limit waste generation, encourage reuse and recycling, engage in activities and develop technologies that help conserve the natural environment, and develop and produce environmentally friendly products. In these ways, MCC strives to reduce its environmental burden at every level of its business activities.

In addition, to ensure legal compliance, we carry out training on environmental laws and regulations, conduct environmental audits and hold twice annual liaison meetings at which MCC Group managers in charge of environmental issues exchange the latest information about legal amendments and other issues.

In fiscal 2019, we set the annual targets of zero environmental incidents and contributing to the global environment and implemented the following key measures.

- Reducing Environmental Risk
  We are implementing legal education and environmental audits to ensure compliance with environmental laws and regulations while systematically reducing environmental risk by implementing risk assessments.
- Reducing Environmental Impact
  We are working to reduce our environmental impact through such means as cutting greenhouse gas emissions, saving resources and energy, and reducing emissions of pollutants.
- Coexisting Harmoniously with Local Communities
  We are letting local communities know about our environmental conservation initiatives and promoting harmonious coexistence through communication.

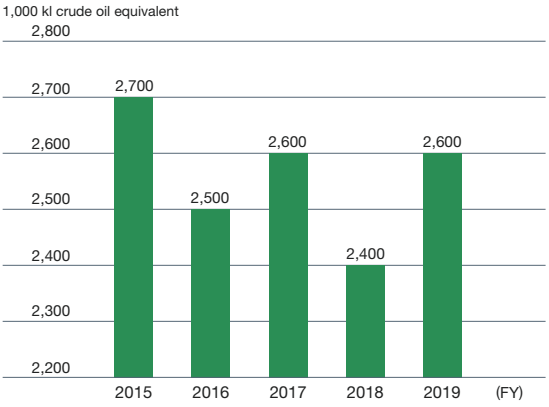
Environmental Conservation

Addressing Climate Change

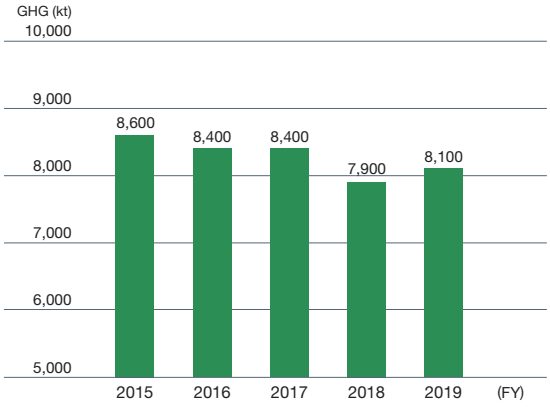
In line with the target set by Mitsubishi Chemical Holdings of reducing greenhouse gas emissions at least 17% compared with fiscal 2005 levels by fiscal 2015, MCC worked to cut its greenhouse gas emissions and achieved the fiscal 2015 target. We have maintained emissions at this lower level since fiscal 2016.

Going forward, we will expand the range covered by this measure to include overseas Group companies and advance initiatives to further reduce greenhouse gas emissions as we aim for the targets of the MCC Group medium-term management plan.

Energy Consumption



Greenhouse Gas Emissions



* Environmental data for fiscal 2016 and earlier are the totals of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics, Mitsubishi Rayon, and their respective domestic group companies. Energy consumption is given as the total of that for the three previous companies before the formation of the current Mitsubishi Chemical but does not include their domestic group companies.
** Since fiscal 2015, energy consumption and GHG emissions have been calculated based on the GHG Protocol.

Focus **Energy Saving via Solar Power Generation at the Shiga Plant**

MCC's Shiga Plant (Azai Area) has installed rooftop solar panels to generate solar power. With a maximum capacity of 250 kW, these solar panels help reduce net power consumption at peak demand times in the summer, when the use of air conditioning increases demand. From their installation in 2014 to June 2019, they generated approximately 1,600 MWh (reducing CO_2 emissions approximately 696 tons). MCC will continue to use clean energy to help prevent climate change.

Solar panels at the Shiga Plant

Life Cycle Assessments

Life cycle assessment is an approach that enables the quantitative evaluation of the environmental burden generated by a product or service over its entire life cycle (from resource collection through raw material production, product manufacturing, distribution, consumption, disposal and recycling) or at specific stages of said life cycle. The evaluation of the environmental impact of MCC's products and services over their entire life cycles better enables the company to develop environmentally friendly products and services and provide them to society.

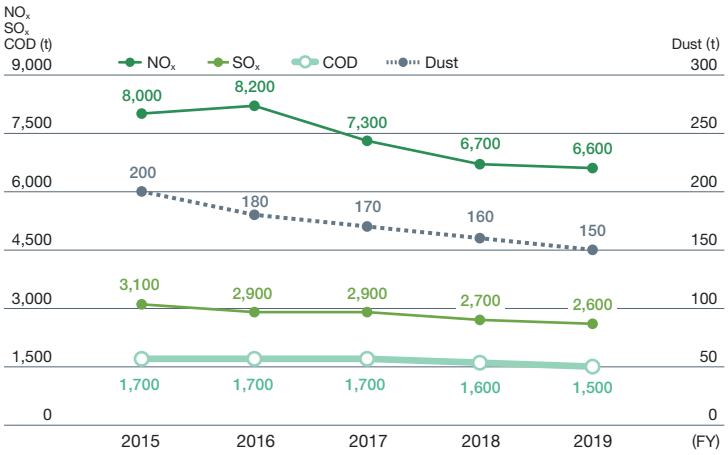
Preventing Air, Water and Soil Pollution

MCC handles a wide range of chemical substances and therefore maintains ongoing measures to reduce emissions of hazardous air pollutants and of pollutants into public bodies of water through such means as installing and improving emission gas and wastewater treatment facilities.

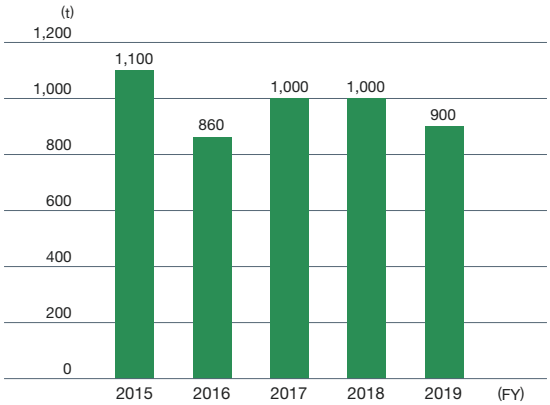
We have been reducing or maintaining at a steady level the environmental burden our businesses place on atmospheric and water quality, as measured by NO_X, SO_X and dust emissions as well as chemical oxygen demand (COD). MCC's emissions of PRTR-regulated substances[1] and VOCs[2] have also been declining.

1 Pollutant Release and Transfer Register (PRTR): A system for filing notifications of the amounts of chemical substances released and transferred. This system enables the identification, aggregation and publishing of data on the types, sources and amounts of hazardous chemical substances that have been released into the environment or transferred outside facilities as waste.
2 Volatile organic compound (VOC): Typical substances include toluene and xylene. These compounds became subject to regulation by the amended Air Pollution Control Act of 2006 as source substances of photochemical oxidants (photochemical smog).

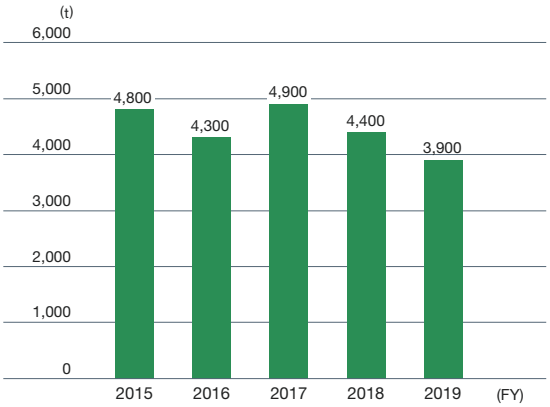
Reducing Our Environmental Burden on the Atmosphere and Public Water Sources



PRTR-Regulated Substance Emissions



VOC Emissions



Environmental Conservation

Focus **Okayama Plant Carries out Environmental Education Initiatives for Local Residents**

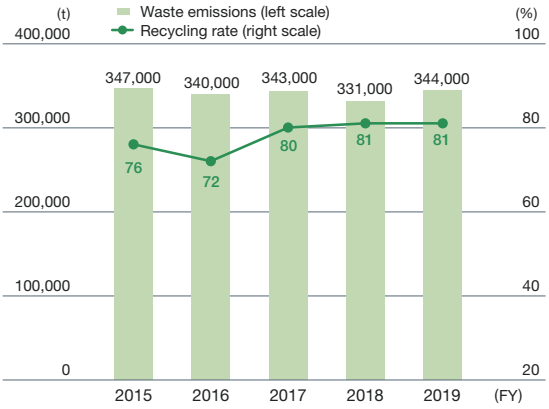
MCC's Okayama Plant invited local children on a plant tour, part of which was used for environmental education about ocean plastic issues and initiatives to solve them. In addition to providing information about plastics made with biodegradable polymers that MCC manufactures and employees' coastal clean-up activities, we taught the participants about the importance of each individual's efforts to properly sort garbage and recycle.

Environmental education presentation for local residents

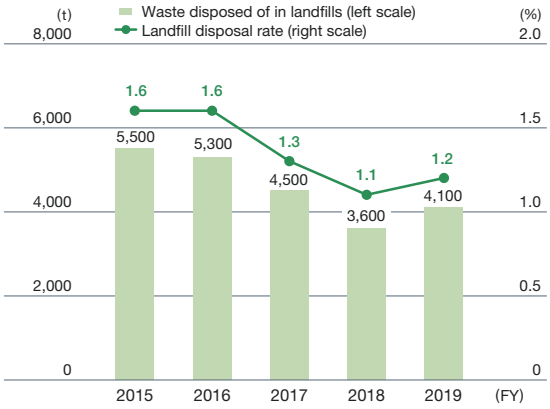
Waste Reduction and Recycling

MCC is advancing 3R activities (reduce, reuse, recycle) in an effort to reduce its industrial waste. As a result of such efforts, the industrial waste recycling rate is increasing, and the amount of waste disposed of in landfills has been decreasing. Going forward, we will continue working to improve our industrial waste recycling rate by strictly enforcing sorted collection and strengthening coordination with disposal contractors.

Industrial Waste Emissions and Recycling Rate



Waste Disposed of in Landfills and Landfill Disposal Rate



Biodiversity Conservation

Based on the Mitsubishi Chemical Holdings Group Biodiversity Preservation Policy, MCC pursues initiatives that contribute to the global environment and thus conserve biodiversity. Through these initiatives, we work to reduce environmental risk and impact, and thereby lessen our business activities' impact on biodiversity. In addition, we strive to conserve the natural environment by cleaning up neighboring areas and coastal areas and protecting our plants' green areas.

Environmental Accounting

MCC uses environmental accounting, based on the Ministry of the Environment's guidelines, to better understand the costs and effects of its environmental burden reduction and conservation efforts.

In fiscal 2019, MCC invested ¥4.7 billion in such areas as reinforcing wastewater management and air pollution prevention and incurred ¥33.4 billion in expenses, including those for the operation and maintenance of pollution prevention equipment and proper waste disposal. Meanwhile, such positive factors as revenue from the sale of valuable materials and savings from energy use and lower waste disposal costs totaled ¥1.9 billion.

Investment and Expenses Related to Environmental Conservation and Process Safety

Environmental conservation costs (Millions of yen)

Category		Main initiatives	FY2019	
			Investment	Expenses
Costs within business areas	Pollution prevention costs	Air pollution prevention, dust countermeasure reinforcement, dust collection system replacement, water pollution prevention, activated sludge consolidation, wastewater management reinforcement, response to deterioration of wastewater facilities and pipes, etc.	3,746	17,242
	Global environmental conservation costs	CO_2 emissions reduction, operational improvement, etc.	355	958
	Resource-recycling costs	Industrial waste reduction, proper waste disposal, resource conservation, energy conservation, etc.	452	7,504
Upstream/downstream costs		Waste reclamation, green purchasing, etc.	0	0
Environmental conservation costs in management activities		Operation of units to address environmental conservation, ISO 14001 compliance and renewal, national exams, environmental education, etc.	0	1,945
Environmental conservation costs in R&D activities		R&D for increased productivity	0	4,806
Environmental conservation costs in social contribution activities		Construction and upkeep of factory green spaces	114	389
Costs of dealing with environmental damage		Cleanup of contaminated soil, etc.	0	53
Other environmental conservation-related costs			1	550
		Total	**4,667**	**33,446**

Positive economic effects (Millions of yen)

	FY2019
Income from recycling	1,176
Energy cost savings	382
Income from resource conservation	306
Total	**1,864**

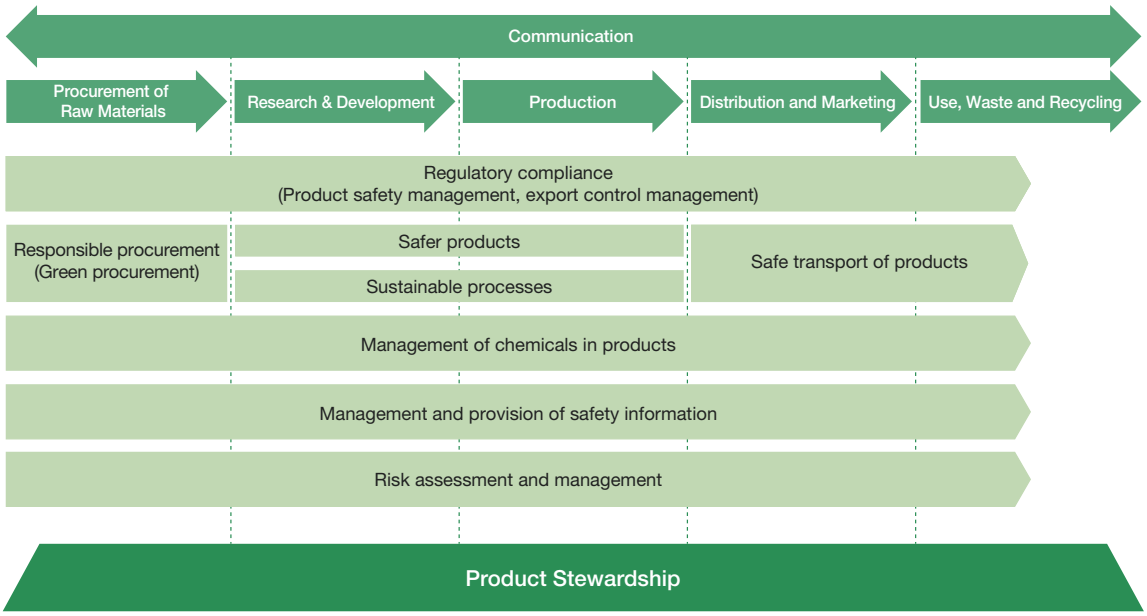
Product Stewardship

Basic Policy

Product stewardship refers to responsible product management in cooperation with stakeholders that protects the environment and the health and safety of people across the supply chain throughout product life cycles (encompassing the procurement of raw materials, research & development, production, distribution and marketing, and use, waste and recycling). Product stewardship initiatives are part of the foundation of responsible care.

In line with its mission of realizing KAITEKI and as part of its responsible care activities, Mitsubishi Chemical strives to implement product stewardship through safety management at every stage of its products' life cycles. In addition, we provide information about product risks to stakeholders and engage in dialogue to ensure proper management and work to ensure appropriate end use and end users of our products from the perspective of security export control.

Mitsubishi Chemical's Product Stewardship Initiatives



- Communication
  Communicate with stakeholders, both internal and external, including customers, regulators and the public, about the safe and secure use and potential hazards of the products we manufacture and any associated risks to ensure that our products are handled appropriately at each stage of their life cycles.
- Procurement of Raw Materials
  Set high expectations for the health, safety, security and environmental performance and social responsibility of suppliers and obtain information related to the safety of procured raw materials from business partners.
- Product Development
  Develop products that have no risk or minimize the risk of adverse health, safety and environmental impacts throughout their entire life cycles and deliver added value, and retain development information for security.

- Production
  Protect the health and safety of our employees and the local community by improving production processes and promoting a corporate culture that places the highest priority on human health and safety; and minimize our environmental footprint by avoiding chemical pollution, reducing energy consumption, supporting recycling and ensuring proper disposal of wastes from the products we manufacture, and keep production information for security.

- Distribution and Marketing
  Provide accurate and detailed information related to product safety and handling to business partners involved in the storage, transport, distribution, marketing and use of our products; and, if necessary, provide additional support to improve product handling practices or suspend sales to a particular entity or for certain uses for safety and security.

- Use, Waste and Recycling
  Work with our business partners to provide relevant information to ensure safe and secure use and to support the recycling and proper disposal of our products.

These initiatives are in line with the Strategic Approach to International Chemicals Management (SAICM).[1] Along with process safety and disaster prevention, occupational safety and health, environmental conservation, chemical and product safety, and logistics safety, these initiatives are aimed at realizing KAITEKI through risk-based chemicals management across product life cycles.

1 Strategic Approach to International Chemicals Management (SAICM): A strategic approach to international chemicals management adopted by the International Conference on Chemicals Management (ICCM) and approved by the United Nations Environment Programme (UNEP) in 2006.

Security Export Control

Basic Policy

At present, ongoing efforts are being made by international initiatives, mainly though the United Nations, to reduce the threat of weapons of mass destruction. At the same time, however, tensions between the United States and China as well as between the United States and Iran and elsewhere in the world are intensifying. The international security environment is changing rapidly, and security export control initiatives on the part of companies are growing in importance.

Mitsubishi Chemical (MCC) produces and possesses numerous products and technologies that can be used for both civilian and military applications ("dual-use" goods), such as carbon fiber. The appropriate application of not only Japan's Foreign Exchange and Foreign Trade Law, but also export-related U.S. laws and the similar laws of many other countries is necessary to prevent MCC's broad-ranging products and technologies from reaching countries of concern, terrorist organizations or other improper destinations or recipients. Accordingly, we have, 1. designated officers responsible for security export control in Japan as part of efforts to maintain and enhance export management and 2. established security export policies to support Group companies in and outside Japan. Furthermore, 3. as part of efforts to respond to U.S. sanctions, we have established a policy on said sanctions and provided it to Group companies in and outside Japan.

In particular, we took steps in 2019 to respond to the tightening of various regulations, such as those on exports from Japan to South Korea and U.S. economic sanctions. Specifically, we quickly revised our screening criteria and, in line with the addition of export control items to MCC's M&A Screening Guidelines, reinforced risk management within due diligence by preparing a manual of procedures for applying said guidelines. In addition, we built a network in each region to reinforce the export control functions of our regional headquarters.

Security Export Control System

MCC has established an export control system based on its Security Export Control Rules. The chief executive of this system is MCC's president and chief executive officer, under whom are the supervisor of security export control, the Product Stewardship Department and the chief export control officers of exporting departments. Through this system, we work to prevent legal violations, including improper exports, whenever possible, using such means as strict, thorough export screening, notifications about legal changes, raising internal awareness about security export control and internal audits of exporting departments.

Mega-FTAs and Mega-EPAs

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (TPP11) went into effect on December 30, 2018, followed by the EU-Japan Economic Partnership Agreement (EU-Japan EPA) on February 1, 2019. These agreements each address multilateral economic coordination between numerous countries. One advantage of the agreements is reduced import tariffs on trade with many countries. To take advantage of these reductions, enterprises must complete certificate of origin procedures. Previously, under bilateral trade agreements (such as that between Japan and Indonesia), to receive such certification, users had to submit the relevant documentation to the Japan Chamber of Commerce and Industry, which would then issue a certificate. Under the new agreements, however, users provide their own certification via a self-certification system. Accordingly, we designated the Product Stewardship Department to handle certification management. The department began considerations of certification procedures in fiscal 2018 and commenced internal screenings in April 2019. As of March 31, 2020, this system had been used for 136 cases, with savings on customs duties reaching approximately ¥1 billion.

Export Control Mechanisms

Security control comprises three steps: Item classification, customer screening and transaction verification. Each step is uniformly managed using a dedicated system so that the results can be used as part of an activity trail if needed.

Item classification is the process of determining whether the product or technology being exported or supplied is subject to legal restrictions (namely, listed as a restricted item). We implement a double-check process wherein, based on the latest restricted item lists, the exporting departments perform the initial check and the Product Stewardship Department grants final approval.

Customer screening entails using the export control system, which contains the latest risk information, to screen customers, including both customers in Japan who indirectly export and end-users at the item's final destination. This screening system is highly effective in preventing the circumvention of regulations through third-country exports and checking for customers of concern based on U.S. export laws. As with item classifications, a double-check process is applied to customer screenings.

For transaction verification, the exporting departments fill out a transaction verification form using the results of the item classification and customer screening as well as other information as needed. Based on this form, the export control system then automatically classifies the transaction by risk level and determines who will be responsible for granting final approval. In principle, the Product Stewardship Department grants final approval for items listed as restricted that are considered high-risk, such as carbon fiber.

In addition, in fiscal 2019 we created a new system for screening and approval under TPP11 and EU-Japan EPA. Screening is based on the security export control approval process, with a built-in double-check. The exporting departments first carry out origin certification for individual products and then refer items to the Product Stewardship Department for confirmation and final approval.

Training and Education

In fiscal 2019, MCC held 71 explanatory meetings targeting business domains, corporate function domains, plants and our R&D center, focusing mainly on export control related to the provision of technology. In addition, in light of the beginning of trade under the TPP11 and EU-Japan EPA, we held a total of nine orientations to provide an overview of relevant EPAs and FTAs and prepare to carry out origin certification.

Going forward, we will continue to carry out training and education that covers the basics of legal compliance while finding new ways to increase its effectiveness, such as introducing content important to the real-life practice of compliance and new educational tools.

Chemicals Management

Management System and Rules

Mitsubishi Chemical (MCC) maintains a system that ensures the rigorous product stewardship-based management of chemicals in all its business domains.

To effectively utilize the favorable properties of its chemical raw materials, MCC collects and shares within the company information on all substances related to its products, including that on chemical hazards, applicable domestic and international regulations, and the results of risk assessments. In addition, we have built a support structure to better enable the business domains to implement proper chemicals management.

Because chemical regulations vary by country and region, MCC has appointed persons responsible for overseeing product stewardship at the regional headquarters to reinforce the global management system.

We have laid out the essentials of chemicals management in our Chemicals Management Regulations, Standards for the Safe Management of Chemicals and Standards for Product Safety Management. Furthermore, we have formulated guidelines and manuals that provide concrete methods for working within regulations, authoring and issuing SDSs,[1] and implementing voluntary chemicals management. These efforts help ensure proper management.

1 Safety data sheet (SDS): A document for providing information on the properties, hazards and toxicity, safety measures and emergency responses concerning chemical substances when transferring or providing chemicals to other business entities.

Compliance with Chemicals Management Regulations

1. Japanese Laws and Regulations

MCC complies with wide-ranging laws concerning chemicals, including the Chemical Substances Control Law (CSCL), the Industrial Safety and Health Act's requirements concerning filing new chemical substance notifications, and the Poisonous and Deleterious Substances Control Law's requirements concerning the registration and management of manufacturing, importing and sale businesses as well as record maintenance. To ensure that such compliance is thorough and comprehensive, MCC has established internal guidelines and rules related to compliance with domestic laws and carries out centralized management using a database of notifications filed. In fiscal 2019, we revised our legal compliance confirmation procedures in line with the amendment of the CSCL and updated our internal guidelines, clearly laying out confirmation procedures for importing chemical substances, including the handling of internal product returns.

2. Overseas Laws and Regulations

In the run-up to 2020, the target deadline for achieving the overall goal of the SAICM,[2] countries around the world (including China, South Korea, Taiwan, the United States and Turkey) enacted and amended legal regulations on chemicals. In particular, the mandatory registration of existing chemicals, begun under EU REACH,[3] commenced in South Korea, Taiwan and Turkey. To respond to these changes, we are working with the regional headquarters and local Group companies to collect the latest information on legal requirements in each region or location and develop a system to ensure a more accurate response to regulations. In fiscal 2019, we focused efforts on dealing with issues related to EU REACH and UK REACH arising from Brexit, preparing for pre-registration under Turkey's KKDIK (a law similar to REACH), and standard registration and volume reporting under Taiwan's Toxic and Concerned Chemical Substance Control Act (TCCSCA).

2 Strategic Approach to International Chemicals Management (SAICM): A strategic approach to international chemicals management adopted by the International Conference on Chemicals Management (ICCM) and approved by the United Nations Environment Programme (UNEP) in 2006.
3 Registration, Evaluation, Authorization and Restriction of Chemicals (REACH): EU regulations regarding the registration, evaluation, approval and restriction of chemical substances.

Voluntary Chemicals Management Initiatives

1. Participation in Chemical Industry Activities

MCC takes part in the international activities of the Chemicals Policy & Health Leadership Group of the International Council of Chemical Associations (ICCA) and cooperates in promoting product stewardship in the chemical industry. In recent years, MCC has also actively participated in initiatives to address the global issue of microplastics.

Furthermore, looking toward new developments in chemicals management beyond the 2020 goal of SAICM and building on the SDG[4] vision established by the Japan Chemical Industry Association (JCIA), MCC aims to go beyond solving environmental and social issues as a chemicals manufacturer to contribute to the sustainable development of society and the planet, in line with its vision of realizing KAITEKI.

2. Mitsubishi Chemical's Voluntary Initiatives

As part of its GPS[5] activities, the MCC Group evaluates the risks of its chemical products, compiles the results as GPS Safety Summaries,[6] and publishes these summaries via a portal page (available in Japanese only) on the MCC website.

Furthermore, to prevent the theft and/or abuse of chemicals, MCC has established its own list of MCC specified chemicals, which includes voluntarily designated substances in addition to legally designated or restricted substances. We have established safety management guidelines for managing these substances at plants and laboratories, during logistics operations and during transfer to customers. In this way, we are working to reinforce the management of such substances.

4 Sustainable Development Goals (SDGs): A set of development goals aimed at realizing a sustainable world by 2030 that were adopted at the UN Sustainable Development Summit in September 2015.
5 Global Product Strategy (GPS): A voluntary initiative wherein companies appropriately manage and conduct risk assessments of their chemical products in order to minimize risks posed by chemical substances throughout the supply chain.
6 GPS Safety Summary (sometimes abbreviated as GSS): Documents that clearly explain methods for handing chemical substances and other information in detail that cannot be fully included on SDSs. These summaries are used in risk management-based chemicals management.

Chemicals Management

Providing Reliable Chemical Substance and Product Information (SDSs, etc.)

MCC has adopted comprehensive chemicals management systems (for example, K-Mates[7]), to support our expert staff in the proper provision of information to customers throughout supply chains in and outside Japan as well as management based on the most up-to-date information related to chemicals management.

The systems comprise databases of the chemical substances and components of products handled by MCC, their hazardous properties, relevant domestic and international laws and regulations, and other information. The systems are capable of performing the GHS[8] classification of chemical substances, determining the applicability of laws and regulations, and producing SDSs and labels in line with the laws and standards of a wide range of countries and regions, including Japan, Europe, the United States, and East Asian and ASEAN countries for review by expert staff. The system uses highly reliable data that is carefully reviewed by experts at Mitsubishi Chemical Research, an MCC Group company, to generate GHS classifications. Furthermore, we are implementing proactive product management using a function of the system that enables users to search chemical substances and products in the MCC database that may be subject to anticipated legal or regulatory amendments.

7 K-Mates: KAITEKI-integrated System of Risk Management & Technical Information Supports on Chemicals
8 Globally Harmonized System of Classification and Labelling of Chemicals (GHS): A system for classifying chemicals by the type and degree of their hazardous properties based on globally harmonized rules and communicating this information using labeling and the provision of SDSs.

In-House Chemicals Management Training

In addition to basic chemicals management education, MCC hosts the Chemicals Management Seminar (“PS Seminar”) on a monthly basis at MCC Group headquarters. This seminar serves to teach Group company employees about increasingly stringent regulations in and outside Japan and how to address them. In fiscal 2019, we used an online meeting system to enable remote participation, including for employees working from home, and a total of 691 employees participated. In particular, we conducted e-learning about the Poisonous and Deleterious Substances Control Law and laws related to pharmacological agents to prevent compliance violations due to inadequate understanding to the law, in which a total of 3,939 employees participated.

We also provided education to enhance understanding of the CSCL and Industrial Safety and Health Act and held liaison meetings on specific topics, such as food packaging material regulations and chemical product regulations in certain countries. Further, we provided basic training in relevant laws on 17 occasions at plants, our R&D center and Group companies, providing detailed, concrete guidance on working within laws.

In-house chemicals management training

Quality Assurance

Basic Policy

The Mitsubishi Chemical (MCC) Group believes that implementing thorough quality control (QC) is important to ensuring product safety and continuously improving quality so that MCC Group customers can use MCC Group products safely and with confidence.

As an integrated chemical company that provides a wide array of products and services to customers in a broad range of industries, it is MCC's duty to prevent quality and product liability issues while working to further increase customer satisfaction by offering safe, reliable products and services. We strive to fulfill this duty in line with the following basic policy.

- In order to realize KAITEKI for customers, we provide products and services that customers can use with confidence.
- We listen carefully to each customer's requests and respond rapidly and sincerely.
- In accordance with the basis of our responsible care activities, we strive to achieve continuous improvement in quality.

Quality Assurance Initiatives

The MCC Group established new rules and policies at the time of the merger that formed the new MCC in April 2017 and has since been working to ensure awareness of the basic policy throughout the company. We are building appropriate quality management systems (based on ISO 9001,[1] GMP,[2] etc.) at our manufacturing sites and working to strengthen our quality assurance framework. Furthermore, we hold regular quality assurance meetings to share and effectively utilize information about quality within the Group as part of continuous efforts to improve quality. At the same time, we are focusing on quality assurance training. In fiscal 2019, we held lectures with outside instructors for executives (a total of 200 participants). Through such initiatives, we are working to increase awareness of quality and translate this awareness into practice. The training for managers that was scheduled for March 2020 was cancelled in accordance with measures to prevent the spread of COVID-19.

Product Information Disclosure

Around the world, corporations are facing growing demands to exercise proper management of chemical substances in products throughout the entire product life cycle as well as to disclose information on such chemical substances. To accurately respond to these demands, MCC has established management standards for chemical substances in products and continues to contribute to the smooth operation of chemSHERPA[3] through the Joint Article Management Promotion-consortium (JAMP).[4] Furthermore, with regard to conflict minerals,[5] which present possible human rights issues, we have established a policy and strive to meet customer requests.

MCC is working with its business partners and customers to contribute to the creation of a social system capable of managing chemicals throughout the supply chain.

1 ISO 9001: An international standard for quality management published by the International Organization for Standardization.
2 Good Manufacturing Practice (GMP): Quality management standards for the production management of pharmaceuticals and related products.
3 chemSHERPA: A new private-public information communication scheme aimed at standardizing communications about the chemicals included in products.
4 JAMP: A cross-industry organization that works to promote the appropriate management, disclosure and communication of information on chemicals contained in "articles" (parts and final products) throughout the supply chain.
5 Conflict minerals: Tantalum (Ta), tin (Sn), gold (Au), tungsten (W) and other minerals extracted in the Democratic Republic of the Congo and neighboring countries that are used to fund armed groups.

Quality Assurance

Handling Product Complaints

Information about complaints related to products is compiled in a quality complaint database so that it can be effectively utilized. Business departments take the main role in quickly responding to customers as needed, striving to enhance customer satisfaction. Significant complaints are aggregated at the company-wide level and analyzed to prevent recurrences.

Logistics

Basic Policy

Mitsubishi Chemical (MCC) strives to put safety first and promote strict compliance, risk management, respect for human rights and communication with business partners in order to realize KAITEKI. Based on a product stewardship approach, we are promoting KAITEKI logistics to earn the trust of customers and society in logistics operations.

Hazardous Materials Transport Initiatives and System to Prevent External Harm in Case of an Accident

MCC focuses considerable effort on ensuring the safe transport of hazardous materials.

MCC's business domains regularly hold responsible care meetings with logistics subsidiaries, maintaining close communication and implementing measures aimed at reducing problems, accidents and occupational injuries.

We work with logistics subsidiaries to ensure that all shipments are accompanied by yellow cards[1] and educate our business partners about the chemical properties of our products and safety. In these ways, we work to enhance understanding of the products being transported and sensitivity to safety.

In addition to initiatives aimed at preventing accidents, we also conduct regular disaster drills with logistics subsidiaries and are taking steps to address the risk of a serious road accident through a contract and drills with the Maritime Disaster Prevention Center. Furthermore, for products that present particularly high risk if stolen or lost, we have established our own management standards that we use in the transportation and storage of such products.

1 Yellow card: A document that contains emergency safety procedures to be taken in the event of a transportation accident and contact information for MCC.

Participation in the Sustainable Logistics Movement

Japan's Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Economy, Trade and Industry and Ministry of Agriculture, Forestry and Fisheries are calling on listed companies and key companies in each prefecture of Japan to participate in the Sustainable Logistics Movement.[2]

As this movement aligns well with MCC's existing KAITEKI logistics initiatives, the company is participating by expanding initiatives aimed at achieving sustainable logistics based on the following eight-point voluntary declaration of conduct.

- We will work with logistics subsidiaries to improve the efficiency and stability of logistics on an ongoing basis and sincerely discuss any suggested improvements or questions from logistics operators.
- We will implement lorry and truck reservation systems to reduce waiting times.
- We will promote the use of palettes to reduce cargo handling that truck drivers perform by hand.
- We will consolidate product storage spread across warehouses near plants to improve shipment collection efficiency.
- We will formulate transport plans in advance to ease shipping rushes around long holiday periods, such as Golden Week and New Year's.
- We will promote modal shifts of long-distance truck transport to railways and ships to improve logistics stability and per-unit energy consumption.
- We will prioritize compliance with relevant laws when selecting and hiring logistics operators.
- We will clearly indicate safe work procedures, take steps to secure safe routes and, as needed, form security transport agreements to prevent occupational injuries and accidents.

2 Sustainable Logistics Movement: An initiative aimed at creating more worker-friendly working conditions in response to the increasingly serious shortage of truck drivers in Japan. Specifically, the movement aims to stably secure the necessary logistics operations for the livelihood of Japan's people and its industrial activity and thereby contribute to stable economic growth by improving trucking productivity and logistics efficiency and creating more worker-friendly working conditions, including those for women and drivers over the age of 60.

Company Data (Environment and Safety)

Mitsubishi Chemical Group Companies Promoting Responsible Care Activities

As of March 2020

Petrochemicals Business Domain

Japan Polychem

Japan Polypropylene

Japan Polyethylene

Mitsubishi Chemical Indonesia

Carbon Business Domain

Kansai Coke and Chemicals

MMA Business Domain

Mitsubishi Chemical Lucite Group

Huizhou MMA

Suzhou Sanyouli Chemicals

Thai MMA

Mitsubishi Chemical Polymer Nantong

Suzhou MRC Opto-Device

Ryoko

Diapolyacrylate

Advanced Polymers Business Domain

Mitsubishi Chemical Performance Polymers Europe

Mitsubishi Chemical Performance Polymers

Mitsubishi Chemical Performance Polymers (China)

RHOMBIC

High Performance Chemicals Business Domain

DIACHEM RESINS INDONESIA

Toei Kasei

Dianal America

Japan Coating Resin

ARKEMA Yoshitomi

Mitsubishi-Chemical Foods

MCC Unitec

Onahama Distillation

Information, Electronics & Display Business Domain

MC PET FILM INDONESIA

Mitsubishi Polyester Film Suzhou

Mitsubishi Chemical Converting Film Wuxi

Tai Young High Tech

Mitsubishi Chemical Infonics

Cleanpart

Shinryo

Mitsubishi Chemical Media

Taisei Kayaku

Kansai Kagaku Kogyo

High Performance Films Business Domain

J-Film

Tai-Young Film

DiaPlus Film

Mitsubishi Polyester Film (U.S.A.)

Mitsubishi Polyester Film (Germany)

Environment & Living Solutions Business Domain

Dalian Rayon Environmental Equipment

Wuxi Rayon Membrane Technology

Mitsubishi Chemical Aqua Solutions

Mitsubishi Chemical Cleansui

Resindion

Tai Young Chemical

Mitsubishi Chemical Agri Dream

Mitsubishi Chemical Infratec

Astro

DIATEX

Advanced Moldings & Composites Business Domain

Mitsubishi Chemical Advanced Materials

Toyama Filter Tow

Tosen

Ryoko Sizing

Mitsubishi Chemical Carbon Fiber and Composites (U.S.A.)

Challenge

MCC Composite Products

Aldila

Wethje Carbon Composites

Wethje Immobilien

ALPOLIC

Mitsubishi Chemical Composites America

Ryobi Techno

Shanghai Baoling Plastics

MCC Advanced Moldings

New Energy Business Domain

MC Ionic Solutions UK

MC Ionic Solutions US

Qingdao Anode Kasei

Corporate Domain

Mitsubishi Chemical Logistics

Mitsubishi Chemical Engineering Corporation

Ryouei

Ryoko Tekunika

Hokuryo Mold

Mitsubishi Chemical High-Technica

Company Data (Environment and Safety)

Safety Data

Data for years prior to and including fiscal 2016 are the sums of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics, Mitsubishi Rayon and their respective domestic group companies before the formation of the current Mitsubishi Chemical.

Mitsubishi Chemical Group Process Safety Incidents in Japan

Classification	FY2015	FY2016	FY2017	FY2018	FY2019
Incidents	12	16	21	33	31
Serious incidents	0	0	0	0	0

Mitsubishi Chemical Group Occupational Accidents in Japan

Classification	FY2015	FY2016	FY2017	FY2018	FY2019
Non-lost-time accidents	45	50	61	63	64
Lost-time accidents	7	5	0	3	6
Serious accidents	20	11	12	8	11

Mitsubishi Chemical Group Lost-Time Accidents by Classification

Classification	FY2015	FY2016	FY2017	FY2018	FY2019	Total
Cuts	1	6	1			8
Being caught and entangled in equipment	10	9	14	5	3	41
Falls on level surfaces	10	9	8	1	4	32
Contact with hazardous substances	3	6	2		1	12
Contact with high/ low temperatures	3	2			1	6
Reaction to motion/ improper motion	1			2	3	6
Collisions	3		5			8
Falls from high places	3	4	8	2	1	18
Struck by flying/falling objects	3	1		1		5
Others	2	2	4		4	12

Environmental Data

Data for years prior to and including fiscal 2016 are the sums of the figures for the previous Mitsubishi Chemical, Mitsubishi Plastics, Mitsubishi Rayon and their respective domestic group companies before the formation of the current Mitsubishi Chemical.

Mitsubishi Chemical Group Emissions of Pollutants into the Atmosphere and Water Systems (t)

Pollutant	FY2015	FY2016	FY2017	FY2018	FY2019
NO_x	8,000	8,200	7,300	6,700	6,600
SO_x	3,100	2,900	2,900	2,700	2,600
Dust	200	180	170	160	150
VOCs[1]	4,800	4,300	4,900	4,400	3,900
BOD	100	100	250	160	160
COD	1,700	1,700	1,700	1,600	1,500
Total phosphorus	50	60	50	50	50
Total nitrogen	5,500	5,700	5,800	5,400	5,500

1 Includes PRTR-regulated substances.

Mitsubishi Chemical Group Water Intake and Discharge Volumes (km^3)

Type		FY2015	FY2016	FY2017	FY2018	FY2019
Intake	Tap water	28,400	31,300	1,400	1,300	1,300
	Surface water	—	—	47,800	48,300	52,900
	Groundwater	22,300	23,200	25,500	25,900	26,000
	Industrial water	102,000	97,800	82,900	77,000	74,100
	Seawater	457,800	463,100	461,300	493,500	486,500
Discharge	Oceans	493,900	495,100	488,800	552,000	555,000
	Streams and wetlands	51,200	48,300	52,400	52,000	49,500
	Sewage	3,500	3,600	3,300	3,800	4,000

ISO 14001 Certified Mitsubishi Chemical Manufacturing Sites

Manufacturing Site	Certification body	Registration date
Ibaraki Plant	JCQA[1]	March 2001
Toyama Plant	LRQA[2]	July 2016
Aichi Plant	LRQA	July 2016
Mie Plant	JCQA	July 1999
Shiga Plant	JQA[3]	December 1999
Okayama Plant	JCQA	March 2000
Hiroshima Plant	LRQA	March 2016
Kagawa Plant	LRQA	December 2000
Fukuoka Plant	JQA	July 2000
Onahama Plant	JCQA	March 2003

Manufacturing Site	Certification body	Registration date
Tsukuba Plant	JCQA	February 2000
Tsurumi Plant	LRQA	October 2016
Hiratsuka Plant	JQA	March 2000
Ueda Plant	JCQA	October 2003
Ogaki Plant	SGS[4]	July 2001
Kumamoto Plant	SGS	July 2001

As of March 31, 2020

1 JCQA: Japan Chemical Quality Assurance Ltd.
2 LRQA: Lloyd's Register Quality Assurance Limited
3 JQA: Japan Quality Assurance Organization
4 SGS: SGS Japan Inc.