



Responsible Care Management

Basic Stance

Responsible Care (RC) activities refer to the voluntary initiatives undertaken by business operators in the chemical industry, with the goals of ensuring safety, the environment, and health throughout the life cycle of chemical products, from development through to the manufacture, sales, use, and disposal after final consumption, maintaining and improving the quality of those products. These activities also strive to gain the further trust of society through continuous dialogue.

The Sumitomo Chemical Group has positioned Responsible Care activities as one of its most important management pillars. Based on the core principle of "Making safety our first priority," the Group has set goals for each of the following fields: occupational safety and health; industrial safety and disaster prevention; environmental protection and climate change; product stewardship, product safety, and quality assurance; Responsible Care audits; and logistics. The entire Group is working in unison to achieve the goals it has set.

Corporate Policy on Safety, the Environment and Product Quality

Sumitomo Chemical has set forth safety, the environment, and product quality as top priorities for all phases of its business activities in its Corporate Policy on Safety, the Environment and Product Quality. This policy has been communicated to all employees of Sumitomo Chemical and its Group companies to ensure that each and every employee is fully aware of it.

In conformity with Sumitomo's Business philosophy, our Company fulfills its responsibility to develop, manufacture, and supply a variety of products that satisfy the fundamental necessities of human life and contribute to the growth of society. Under the concept of "Making safety our first priority," which is fundamental to all the Company's operations, Sumitomo Chemical has based management of its activities on the principles of (i) maintaining zero-accident and zero-injury operations, (ii) ensuring customer satisfaction, and (iii) promoting mutual prosperity with society.

Paying due respect to these principles, our Company is determined to conduct all activities, including production, R&D, marketing & sales, and logistics, in accordance with the following policy related to safety, the environment, and product quality.

1. Maintain zero-accident and zero-injury operations and the safety of neighboring communities and our employees.
2. Ascertain the safety of raw materials, intermediates, and products and prevent our employees, distributors, customers, and consumers from being exposed to any possible hazard.
3. Supply high-quality products and services that satisfy customers' needs and ensure safety in their use.
4. Assess and reduce our environmental impact at all operational stages, from product development to disposal, and undertake all practical environmental protection measures.

All sections and employees of our Company shall be made fully aware of the significance of this policy and shall constantly strive to improve operational performance, while at the same time abiding by all relevant laws, regulations, and standards.

Revised: November 1, 2005 (Established: April 1, 1994)



Responsible Care Management

Policy on Responsible Care Activities

Sumitomo Chemical has summarized its key Responsible Care initiatives in its Policy on Responsible Care Activities, which is incorporated into the specific activity targets and plans formulated annually by each Sumitomo Chemical workplace and Group company.

In accordance with the Sumitomo Chemical Charter for Business Conduct and the Corporate Policy on Safety, the Environment and Product Quality, the Sumitomo Chemical Group as a whole will strive to promote Responsible Care Activities, thereby earning the trust of society, promoting business activities, and contributing to the sustainable development of society.

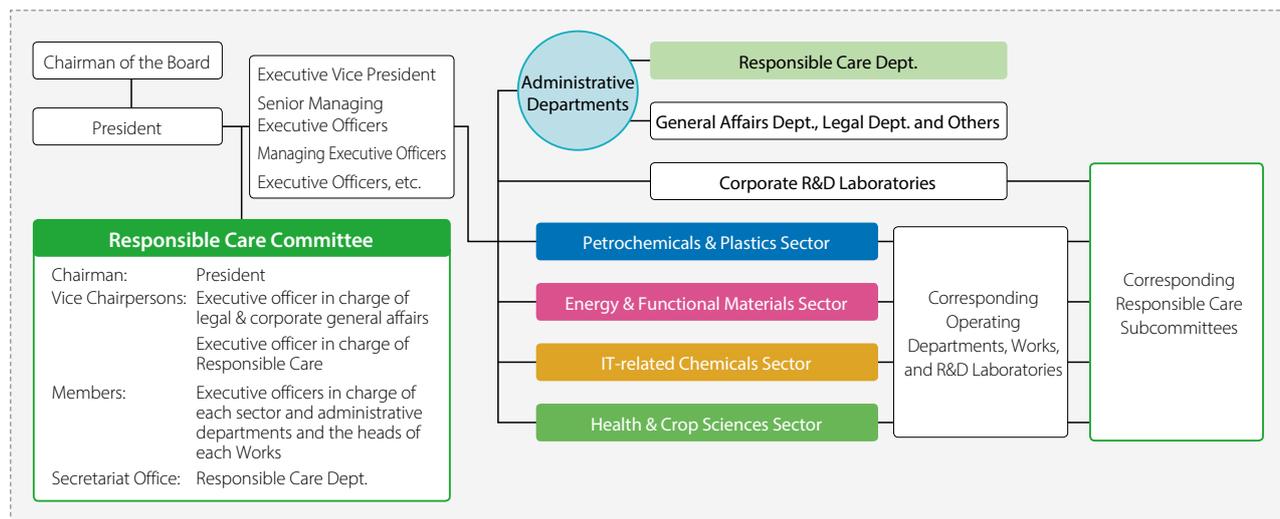
1. We will achieve zero-accident, zero-disaster targets to ensure safe and stable operations.
2. We will conduct risk management throughout the life cycle of our products, from the stages of development to manufacturing, logistics, use, and disposal and strive to ensure the safety of our employees, those involved in logistics, customers, and general consumers as well as the local community while also preserving the environment.
3. We will strive to develop safe and environmentally friendly products and manufacturing processes.
4. We will promote energy and resource conservation and waste reduction, thereby easing the environmental burden.
5. We will comply with all domestic and international laws, regulations, and ordinances related to safety, the environment, and product quality, and further enhance our related voluntary initiatives.
6. We will implement the requisite education and training related to safety, the environment, and product quality.
7. We will disclose information on Responsible Care Activities and engage in dialogue with society to ensure we meet society's expectations, respond to its interests, and remain accountable to the same.
8. We will continuously improve Responsible Care Activities based on Responsible Care auditing and third-party verification.
9. We will support the Responsible Care Activities of Group companies, contractors, and other business partners and help them carry out initiatives to enhance the same both at home and abroad.

Revised: July 15, 2013 (Established: January 1995)

Organization of Responsible Care Activities

Sumitomo Chemical's RC activities are classified into the fields of occupational safety and health, industrial safety and disaster prevention, environmental protection and climate change, product responsibility and product stewardship, Responsible Care audits, and logistics. As the highest body for deliberating and approving RC activities, the Responsible Care Committee is chaired by the president and comprises executive officers supervising the administrative departments and the four business sectors of the Company, and the General Manager of each Works. The Committee puts in place annual policies on activities, medium-term plans, and specific measures as they relate to Responsible Care. The Committee also analyzes and assesses the results of Responsible Care activities.

■ Organization of Responsible Care Activities





Responsible Care Management

Implementing Sumitomo Chemical's Medium-term Plan for Responsible Care Activities

	Medium-term Plan (for Fiscal 2016 to 2018)
Occupational Safety and Health	Improve the Group's culture of safety by strictly following safety requirements
Industrial Safety and Disaster Prevention	Bolster safety assurance capabilities by improving process risk assessment and promoting safety measures
Environmental Protection	Properly respond to more stringent laws and regulations and proactively address trends in new environmental regulations
Addressing Climate Change	Work to improve unit CO ₂ emissions and energy consumption Establish an internal certification system for products that help address climate change and promote the development and adoption of said products
Product Stewardship, Product Safety, and Quality Assurance	Further promote voluntary product quality control by actively using the comprehensive chemical management system (SuCCESS) and encourage the use of product safety risk assessments, including at Group companies
RC Audits	Reduce risks by expanding the scope of RC audits
Logistics	Reduce the number of logistics safety- and quality-related incidents

Note: More details on the key activities for each field can be found in the following sections.

Promoting Responsible Care Activities as a Unified Group

Sumitomo Chemical shares policies and targets regarding RC across the entire Group. We are working to maintain safe and stable operations, which is one of the basic policies outlined in the Corporate Business Plan. We are also striving to ensure safety, environmental friendliness, and health throughout the life cycle of products as well as to improve the quality of chemical products the Company manufactures.

At present, we have stationed Responsible Care specialists at regional headquarters in Europe and the Americas as well as China and the wider Asia Pacific region. This has enabled us to develop RC activities rooted in each area. We established the Sumitomo Chemical Group's Safety Ground Rules in 2016 as a measure to further secure safety at all Group locations. We have since been working to promote awareness of the rules among all Group employees while further raising the level of Group-wide safety activities and eliminating work-related accidents. Moreover, we strive to ensure the safety of community residents and protect their environment while promoting mutual understanding by providing residents with information concerning our initiatives and engaging in dialogue.

Also, we continually work to develop human resources that are capable of implementing Responsible Care, for example, through training and practice at each production site as well as global meetings attended by the Responsible Care managers of Group companies in Japan and overseas. In addition, we formed a team to support the RC activities of Group companies. The team holds regular face-to-face meetings and publishes a newsletter that covers various topics and information on accidents and disasters that have occurred within the Group in the hope of preventing similar occurrences. The team also promotes various kinds of RC activities through RC awards for excellent RC activities of Group companies.



Responsible Care Management

Progress in Fulfilling Eco-First Commitments

Sumitomo Chemical has participated in the Eco-First Program of Japan's Ministry of the Environment since November 2008. As a leading company in the chemical industry, Sumitomo Chemical is committed to fulfilling its Eco-First commitments to the Japanese Minister of the Environment while ensuring legal compliance and enhancing RC activities.



Results ● Very favorable/ ○ Generally favorable

Management of Chemical Substances and the Promotion of Risk Communication

Reviewing Safety Information on Chemicals and Conducting Risk Assessments

- Completed hazard assessments for all substances included in the initial plan, performed risk assessments for 537 products, and publicly released 41 safety summaries (<http://icca.cefic.org/>)



LRI*1 Initiatives

- Promoted research by actively participating in the LRI program implemented by the Japan Chemical Industry Association as a member of the steering committee, planning and management task force, and research promotion panel*2

Enhancing Information Disclosure and Risk Communication

- Published the *Annual Report*, *Sustainability Data Book*, the *Report on the Environment and Safety* (at all worksites), local PR newsletters, etc., made information publicly available on the official website, made school visits, accepted student interns, and engaged in dialogue with local residents

Realizing Safe and Secure Water Treatment by Developing and Applying Management Technology that Helps Reduce Environmental Impact

Considering Appropriate Water Treatment Methods and Standardizing Methods for Assessing Various Process Waste Water Expelled from Works

- In light of current operating conditions, we considered the necessary standardization and optimization of each Works' methods for assessing and treating effluent from new manufacturing processes



Using Microbiota Analysis, Microbial Immobilization, and Other Proprietary Technology to Increase the Sophistication of Activated Sludge Treatment

- We use the latest genetic analysis methods to assess the biota comprising the activated sludge, which is processed at each Works independently. We are considering tying the operating requirements for activated sludge treatment to the biota that comprises the sludge. In addition, in the area of process wastewater, which has long been used on an industrial scale, we are working on determining the relevant issues and responses with regard to activated sludge treatment using microbial immobilization technology.

Helping Create a Sustainable Society

Starting Sumika Sustainable Solutions

- We launched initiatives to internally designate products and technologies that contribute to global warming countermeasures and environmental impact reduction. A total of 44 products and technologies have been designated, with combined sales of ¥335.7 billion in fiscal 2017 (consolidated). They are projected to contribute to a collective 53 million tonne CO₂ equivalent reduction in greenhouse gases throughout their life cycles in fiscal 2020.*3



Improving Energy Efficiency

- As a result of working to improve energy efficiency, the Company-wide unit energy consumption in fiscal 2017 improved 4.0% year on year, and unit CO₂ emissions from energy improved around 20.4% compared with fiscal 2005.

Holding Dialogues with Internal and External Stakeholders

- Explained to internal and external stakeholders the importance of the Company helping to create a sustainable society and the Company's related measures, thereby deepening mutual understanding through dialogue.

*1 Long-range Research Initiative:
Long-term support for research into the effects of chemical substances on human health and the environment

*2 Research Promotion Panel:
Commissioned expert research into the development of new risk methods, assessments, and related activities; held a meeting to report on the results of the research

*3 This value represents the amount contributed to the reduction of greenhouse gases over the life cycles of designated products expected to be sold in fiscal 2020, based on the guidelines of the Japan Chemical Industry Association and the ICCA.



Responsible Care Management

The Role of Responsible Care (RC) Audits

The RC audit is a management system to verify that the RC activities such as ensuring safety and the environment, and maintaining and improving the quality of chemical products are properly implemented. It also promotes process enhancement if areas for improvements are found in those activities.

To promote the Sumitomo Chemical Group's RC global management, RC audit activities fulfill the functions of improving management and building, maintaining, and improving the internal control system through the following four-step approaches.

Step 1: Sharing Sumitomo's Business Principles and Philosophy

Step 2: Promoting an understanding of and sharing in the Corporate Policy on Safety, the Environment and Product Quality; Policy on Responsible Care Activities; RC management systems; and Group Responsible Care Standards

Step 3: Establishing and developing RC management systems at each Group company

Step 4: Carrying out modifications to the direction and adjusting levels of RC activities by undergoing RC audits

Through face-to-face communication through each of the aforementioned steps, we have successfully provided assistance so that the RC management system is set in place by taking the scale, type of business, and attributes of each Group company into consideration. Relationships with Group companies that have been nurtured through these RC audits are utilized in various initiatives including individual support and the lively exchange of opinions aimed at resolving a wide range of issues at the Group companies.



Responsible Care Management

Responsible Care Auditing Framework

Sumitomo Chemical has an independent RC audit team. The RC auditors, who have a wealth of knowledge, experience, and technical expertise, take the lead in directly visiting internal Works as well as Group companies and conducting audits. In addition, RC audits of internal Works and research labs are conducted from a management perspective by Sumitomo Chemical’s executive officers in charge of RC.

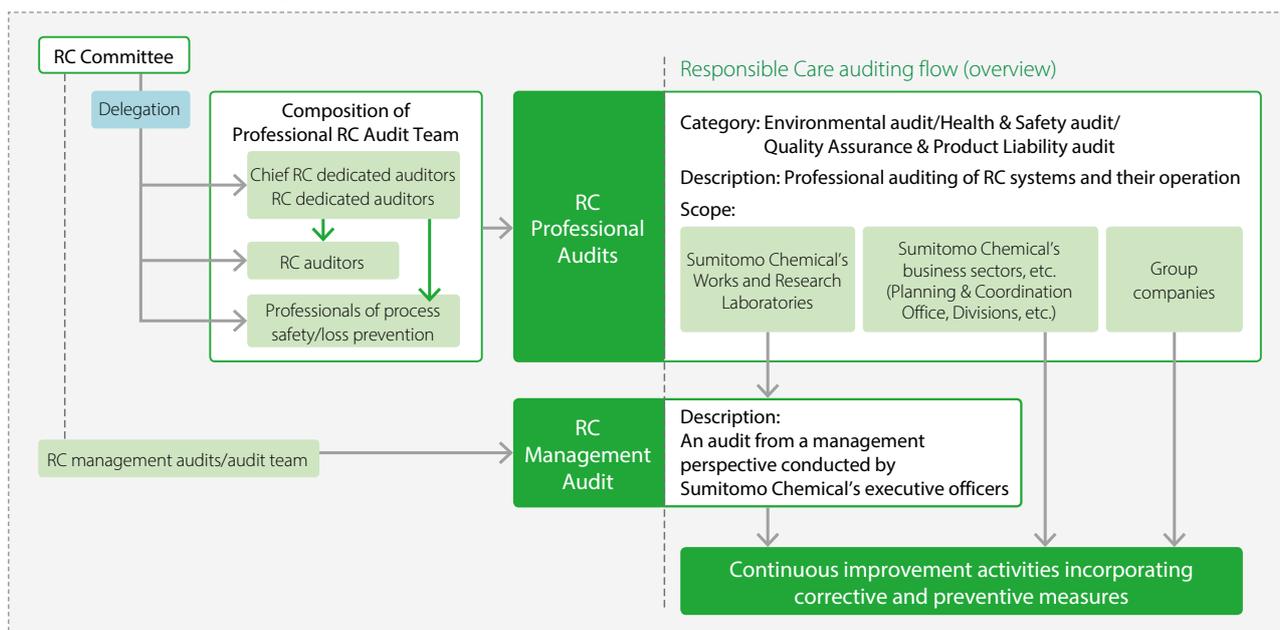
Features of Sumitomo Chemical’s RC audits:

- Support is provided in the form of advice and proposals to ensure improvement at Group companies.
- Throughout RC audits, human resource development programs are incorporated to train Manufacturing Section Heads of Sumitomo Chemical and RC staff of Group companies.
- Local consultants are engaged to ensure the thoroughgoing and comprehensive check of compliance at overseas Group companies.

The Scope and Cycle

In principle, RC audits are conducted every one or two years at Sumitomo Chemical’s Works and business sectors, and every three years at Group companies.

Responsible Care Auditing Framework



Looking Ahead

We continually work to prevent compliance violations, corruption, and errors as well as to improve the management of both Sumitomo Chemical and Group companies while building, maintaining, and improving their internal control systems as needed.