

RESPONSIBLE CARE REPORT 2008



Safety and Environmental Initiatives

Please direct opinions and inquiries to:

 **SUMITOMO SEIKA CHEMICALS CO.,LTD.**

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 **SUMITOMO SEIKA CHEMICALS CO.,LTD.**

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Scope of This Report

Organization: Works of Sumitomo Seika in Japan
 Period: April 1, 2007 – March 31, 2008
 Fields: Environmental safety initiatives and environmental performance data in summary form
 Publication date: October 2008
 (The next issue is scheduled for September 2009.)

Company Outline (as of March 31, 2008)

Company Name Sumitomo Seika Chemicals Company Limited
Head Offices Osaka: 4-5-33 Kitahama, Chuo-ku, Osaka, Japan
 Tokyo: 1-11-5 Kudan Kita, Chiyoda-ku, Tokyo, Japan
Website <http://www.sumitomoseika.co.jp/>
Established July 1944
Capital ¥9,698 million
Sales ¥62,255 million
 ¥47,150 million (non-consolidated)
Employees 1,019 (consolidated) 790 (non-consolidated)

Major Lines of Business

Chemical Businesses
 Industrial chemicals, pharmaceutical products, water-soluble polymers, fine-powder polymers, and functional products

Super Absorbent Polymers
 Super absorbent polymers

Gas Engineering Businesses
 Gases for medical use, chemical gases, standard gases, gases for electronics applications, generators of oxygen, nitrogen and hydrogen gas (PSA method), and general chemical machinery

Works

Befu Works 346-1 Miyanishi, Harima-cho, Kako-gun, Hyogo, Japan
 Himeji Works 1 Irifune-cho, Shikama-ku, Himeji City, Hyogo, Japan
 Chiba Works 1384-1 Kamikoya, Yachiyo City, Chiba, Japan

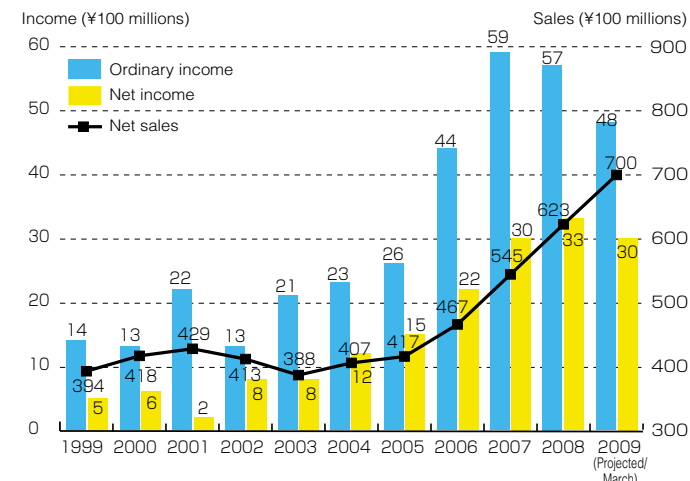
Domestic Subsidiaries

Seika Techno Services Co., Ltd.
 Seika Engineering Co., Ltd.

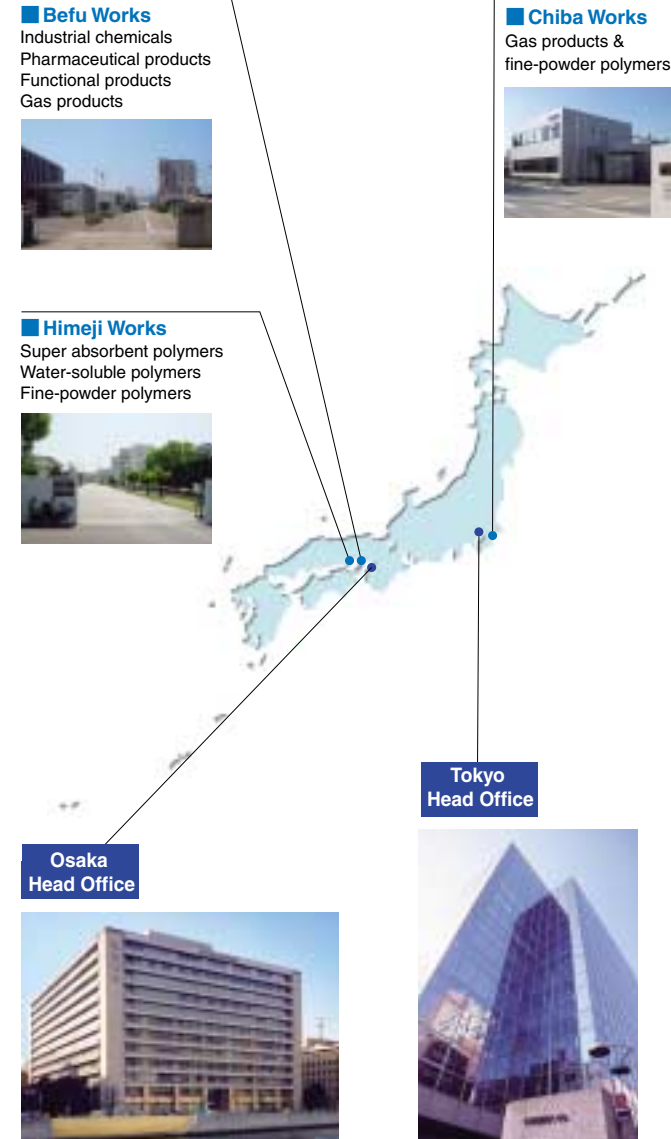
International Subsidiaries

Sumitomo Seika Singapore Pte. Ltd. (Singapore)
 Sumisei Taiwan Technology Co., Ltd.
 Sumitomo Seika Asia Pacific Pte. Ltd. (Singapore)
 Sumitomo Seika Europe S.A./N.V. (Belgium)
 Sumitomo Seika America, Inc. (USA)
 Sumisei Chemical Co., Ltd. (Korea)
 Seika Powder Plastics Co., Ltd. (Thailand)

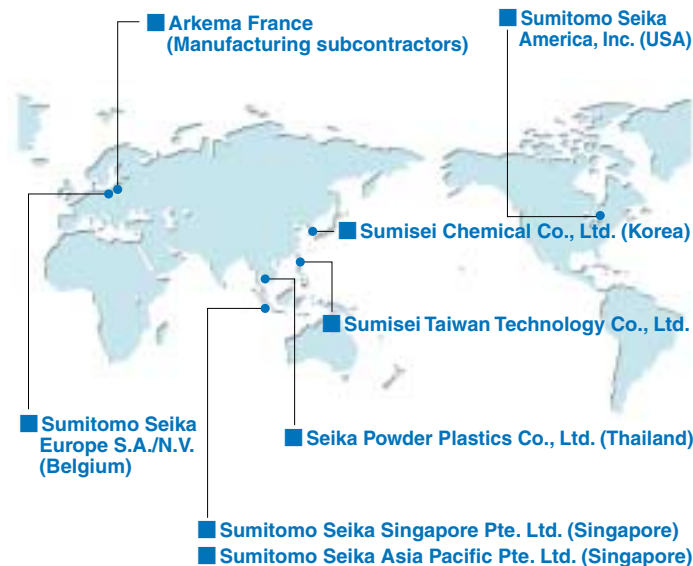
Trend in Business Performance



Locations in Japan



International Locations



Principal Products

Super Absorbent Polymers

Super absorbent polymers

- Household products (hygiene products such as paper diapers and pet sheets)
- Other products (waterproofing for electric cables)

Fine Chemicals

Water-soluble polymers

- Products for daily life
- Various thickeners (thickener for papermaking)

Fine-powder polymers

- Cosmetics, coatings

Functional materials

- NIR-photosensitive dye stabilizers (for plasma TVs)
- Photographic agent intermediates

Emulsions / Latexes

- Special adhesives/special rubber products

Pharmaceutical products

- Pharmaceutical intermediates (drugs such as anti-inflammatories, drugs for AIDS and diabetes)

Industrial chemicals

- Various organic sulfur compounds (IT materials)
- Chlorinators (insecticides, herbicides)

Gases & Engineering

Gases for electronics applications

- Raw material gasses for LEDs and LCDs
- Process gas for semiconductor dielectrics

Reference gases

- Gases for measuring hazardous air pollutants (HAPs)
- For various tests and analyses

Other gases

- Anesthetic gasses
- Food additive gasses
- Jet injectors (spray cans)

PSA hydrogen gas generators

- Oxygen generators for electric furnaces
- Hydrogen refilling stations

In keeping with our commitment to Responsible Care, we have continued to enhance our voluntary initiatives targeting environmental protection, occupational safety, quality assurance, and process safety and disaster prevention. We remain dedicated to contributing to society through development of our business.



Masami Nakamoto
President
Sumitomo Seika Chemicals
Company Limited

The Image Sumitomo Seika Seeks to Cultivate

This year, we formulated our new medium-term management plan, which is focused on enhancing the stability of our business foundation and initiating a business development targeting sustainable growth.

We will resolutely focus our efforts on all fronts in order to promote our business with a commitment to “safety comes first” in accordance with Corporate Policy on Safety, Environment and Quality.

The Image Our Corporate Group Seeks to Cultivate

As we accelerate our global development, our objective is to develop as an enterprise in which all employees contribute to society with a sense of self-awareness and responsibility. Our three specific aims are to become

1. an R&D-centered chemical company that continues to introduce distinctive new products on the market in growing fields;
2. a highly profitable enterprise that expands its business into global niches with technology that is used worldwide; and
3. a company that fulfils its social responsibilities with employees who enjoy a sense of pride and purpose.

In order to do so, we intend to further strengthen our initiatives targeting environmental protection, ensuring safety, and enhancing quality assurance with a global perspective. At the same time, we will respond actively and rapidly while fully supporting unqualified compliance with all relevant laws and regulations.

Our Perspective on Environmental Protection

This year marked the first year of implementation of the commitment to reduce total emissions under the Kyoto Protocol, or Framework Convention on Climate Change (COP3).

While emissions reductions for the period of the next reduction plan beginning in 2013 are under review, the G8 summit held in Sapporo in July 2008 issued a statement to adopt a global policy of reducing greenhouse gas emissions by 50% relative to current levels by 2050.

Clearly, maintaining harmony between the environment and the economy is a broad theme that cannot be ignored or bypassed.

In order to respond to these demands from society, our company will address global warming countermeasures and, as an enterprise, we intend to steadily address air pollution control measures and waste reduction measures. We believe it is crucial to post steadily improving results in this regard.

Improving Our Culture of Safety

We are dedicated to constructing a system in which a culture of safety naturally takes root in everyday conduct by further raising awareness of the need to ensure safety. With “safety comes first” as our slogan and “zero injuries, zero accidents” as our annual objective, we shall address this challenge voluntarily and continuously as the basis of our management as a top priority.

Regarding product safety, in February of this year we established a Quality Assurance Office with a system that maintains independent authority and rests under the direct responsibility of management. We aim to offer high-quality products and services that satisfy our customers and ensure peace of mind; moreover, we intend to continue improving our quality.

In this report, we summarize the challenges we addressed as well as the results we achieved in 2007. We also introduce our activity plan for 2008.

Through this report, we seek to inform the reader of our full commitment to Responsible Care activities.

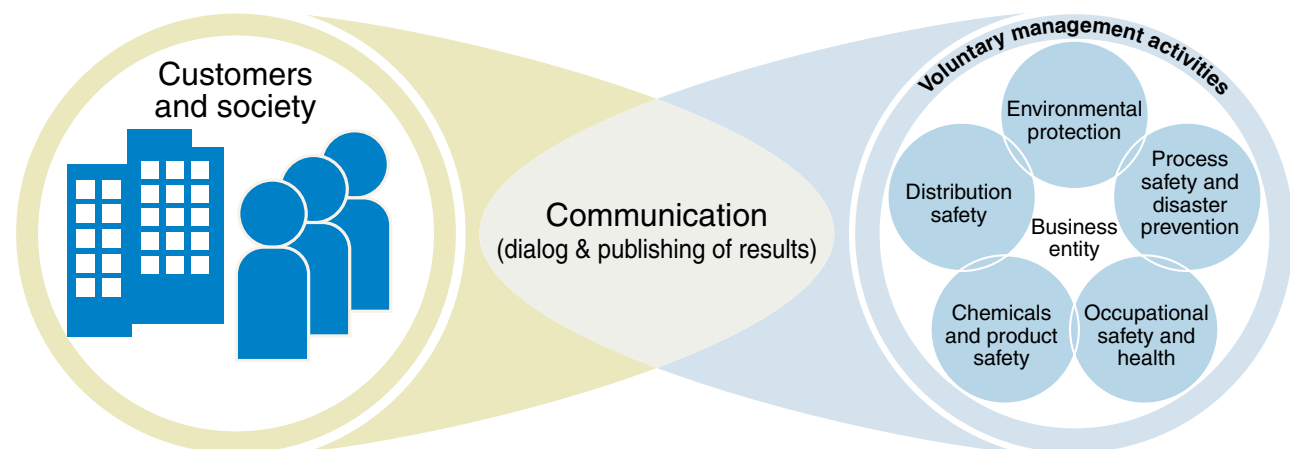
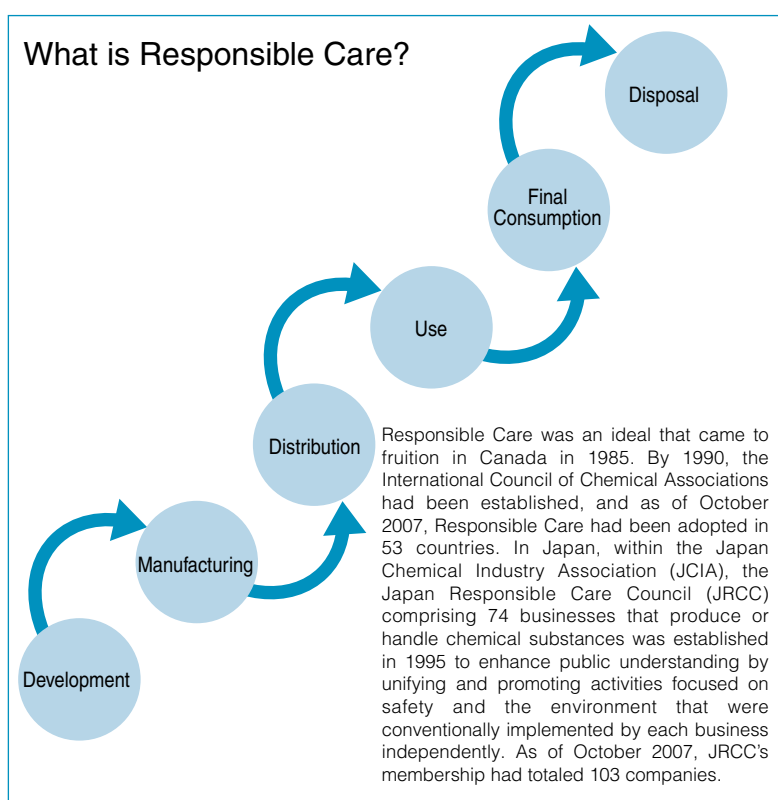
Going forward, we will continue to expend all possible efforts to ensure safety and protect the environment. With the objective of developing as a business that contributes to society, we intend to steadily implement this strategy.

As we continue to work toward our goals, we look forward to your invaluable support and understanding.

Responsible Care at the Sumitomo Seika Group

Since the 1990s, various issues that threaten the foundation of human existence have come to the forefront, including problems such as the threat of global warming. All countries are urgently required to address global environmental issues, and the international community must join together to work toward shaping a sustainable society.

As a member of the economy and of society at large, it is of course necessary that we comply with relevant laws and international regulations; but even more important, we must voluntarily engage in conservation of energy, resources, and the environment. At Sumitomo Seika, we seek to contribute to the development of a healthy society through fair competition. To meet this situation, our company has been taking steps to respond through Responsible Care activities and by conducting open dialog and communication with society. Through this, we are publicly announcing the results of these activities in every process from production, distribution, and end-use to final consumption and disposal. In this way, we are voluntarily addressing the environment, health and safety within each business that handles chemical substances.



Community dialog meeting sponsored by JRCC (Takasago City, Hyogo)

The Responsible Care Logo



This logo has been designed as "both hands and a molecular model" to show "careful handling of chemical substances." The logo was determined by the International Council of Chemical Associations (ICCA) as a mark for use by enterprises and associations that are committed to responsible care activities. Use of this mark is permitted only to the national chemical industry associations that belong to ICCA and their members.

In Japan, this mark can be used only by the Japan Chemical Industry Association (JCIA), the Japan Responsible Care Council (JRCC) and JRCC member companies.

Corporate Policy on Safety, Environment and Quality

In our chemical business, Responsible Care activities have proved extremely important to ensuring continued sustainable development and earning the trust of society.

In 1995, Sumitomo Seika declared its commitment to promoting Responsible Care activities and established its Corporate Policy on Safety, Environment and Quality.

Our corporate policy affords priority to specific objectives: achieving zero injuries and zero accidents, maintaining customer satisfaction, and ensuring co-prosperity with society. To promote our efforts to attain these goals, we require all our employees to strictly observe laws and

regulations and continuously strive to adopt further improvements. Moreover, we have established medium-term activity guidelines and are sharing our goals to ensure unity of purpose.

Corporate Policy on Safety, Environment and Quality

Sumitomo Seika, with the Sumitomo Spirits, while fulfilling its responsibility to contribute to the growth of society by manufacture and supply of a variety of unique and high-quality products utilizing innovative and advanced chemical technologies and, to contribute to formation of sustainable society in propulsion of business, manages its activities on the basic principles of (i) maintaining "zero-accident and zero-injury operations", (ii) ensuring "customer satisfaction" and (iii) promoting "co-prosperity with society" with the fundamentals of "Safety comes first".

With due respect to these principles, Sumitomo Seika is determined to conduct the following subjects as a priority with the Responsible Care spirit.

- 1 To maintain zero-accident and zero-injury and obtain the safety of our employees and neighboring communities;
- 2 To ascertain the safety of raw materials, intermediates and products, and prevent our employees, distributors, our customers and consumers from being exposed to any possible hazard;
- 3 To supply products and services of the high quality with customers' confidence and satisfaction in their use;
- 4 To assess and reduce the environmental load at all operational stages, from product development through to disposal, to exert all practical environmental protection measures.

All sections and employees of our Company shall be fully aware of the significance of this policy and settle each problem voluntarily, aggressively and rapidly and, besides, have an effort of continuous improvement with the fundamentals of compliance.

Mid-term activity guideline

[Common]

1. To enhance and promote exercise and to improve facility: prevention of trouble based on human factor
2. To promotion of "Visualization" of standards, procedures, progress state of objectives, and problems etc.
3. To enhance planned renewal, and maintenance & examination of facilities

[Prevention & Safety]

1. To assess process hazard by HAZOP and What-if analysis
2. To prepare OSHMS and to assess risks of operational hazard and chemicals followed by their improvement (OSHMS shall be certified)

[Environment]

1. To develop product and process with less environmental load
2. To reduce amount of air-pollutant release; i.e. PRTR-materials and VOCs
3. To promote energy saving and resource saving

[Quality]

1. To enhance quality assurance system (Quality, Cost and Delivery) and to raise user's satisfaction by promotion of technology development towards future
2. To promote aggressive quality assurance activities, i.e. to grasp potential risk and to prevent trouble etc.

HAZOP: Hazard and Operability Analysis

OSHMS: Occupational Safety and Health Management System

PRTR: Pollutant Release and Transfer Register Act

VOCs: Volatile Organic Compounds

Masami Nakamoto
President

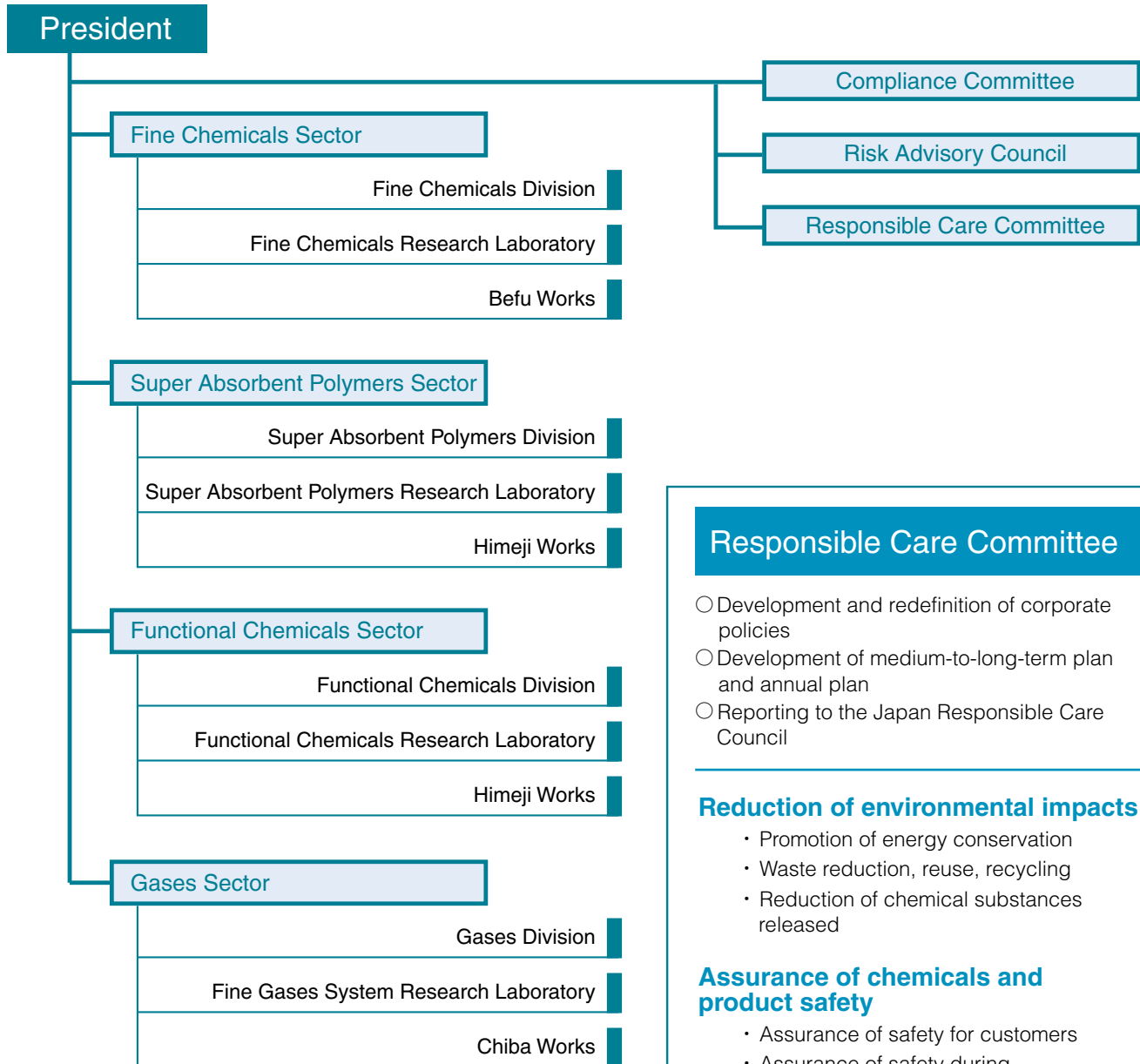
Sumitomo Seika Chemicals Company Limited

(Established March 1995, and revised June 1999, March 2001, July 2003, March 2006, July 2007, and August 2007)

Responsible Care: Organization and System

In order to promote Responsible Care within top management, Sumitomo Seika established a Responsible Care Committee chaired by the director in charge of RC and comprising officers and managers from the various divisions. The committee holds a discussion of issues and progress management every two months. In July of each year, it develops a medium-to-long-term plan and deliberates and formulates a fiscal year promotion plan to be launched in January following a management review by the president. The policies and plans so determined are reflected in the respective plans of the Works and divisions and initiatives are promoted. The Responsible Care Committee monitors the state of progress and results; in addition, each division undergoes a voluntary evaluation every two months.

Responsible Care Promotion System



Responsible Care Committee

- Development and redefinition of corporate policies
- Development of medium-to-long-term plan and annual plan
- Reporting to the Japan Responsible Care Council

Reduction of environmental impacts

- Promotion of energy conservation
- Waste reduction, reuse, recycling
- Reduction of chemical substances released

Assurance of chemicals and product safety

- Assurance of safety for customers
- Assurance of safety during transportation
- Evaluation of product safety
- Provision of product safety data

Assurance of safety, process safety and disaster prevention

- Assurance of safe operation
- Promotion of process safety and disaster prevention programs
- Assessment of substances and process safety

Accelerating Responsible Care Activities

Responsible Care requires voluntary planning, execution, and review through management cycles that steadily implement and achieve improvements. It is important to undertake new issues intended to exceed the performance of the preceding year.

Activity Plan

We implement initiatives in annual cycles based on medium-to-long-term plans in the fields of environmental protection; process safety and disaster prevention; occupational safety; chemicals and product safety; and distribution safety. We strive to achieve our targets by implementing the PDCA cycle and through compliance with laws and regulations.

Our specific initiatives are detailed below:

[Development of a medium-to-long-term plan]

In July, we draw up our medium-to-long-term Responsible Care Plan that reflects the company's financial results for the fiscal year as well as currents in society. The relevant issues highlighted in the plan are incorporated in the annual plan for the following fiscal year.

[Development of an annual plan]

In December of each year, we compile the results and issues of our initiatives at each division. In January, following deliberations by the Responsible Care Committee, we finalize our company-wide plan for implementation in April. This plan accommodates our medium-to-long-term plan, revision to laws that took place in the fiscal year, and social demand.

Following the release of the company-wide plan, each Works and department draws up its own plan.

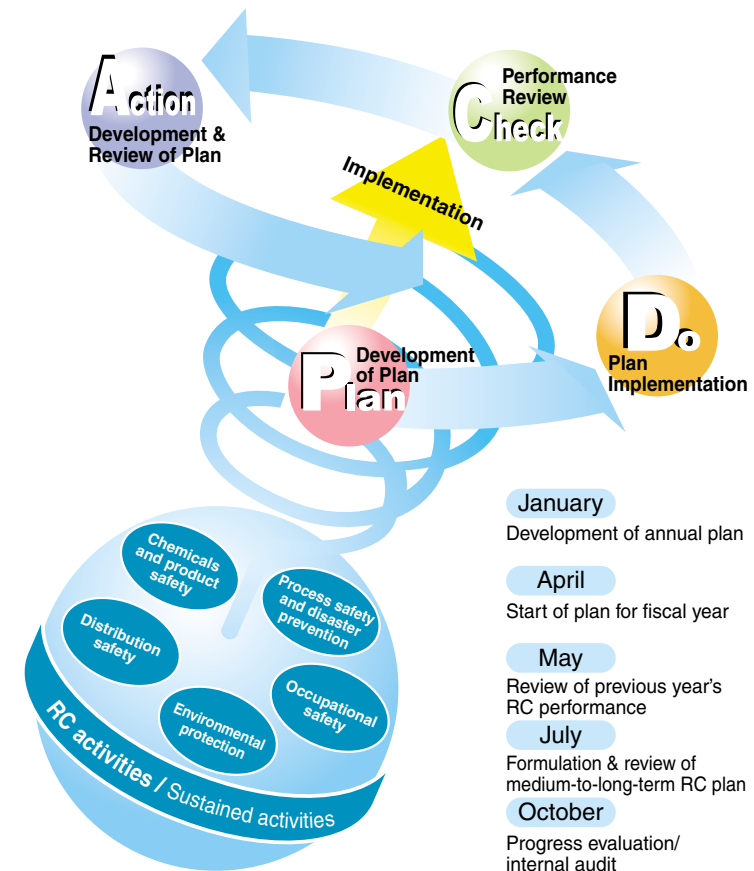
[Mid-term and annual progress evaluations]

During this period of activity, we implement initiatives for our fiscal year of April 1 to March 31. Each division undertakes progress management of the plan every two months. In October, an interim company-wide progress report is compiled covering the year to date, with subsequent reviews released in December and March. In May, we compile the final activity report when environmental data and the like are available. This summary is based on the plan's theme and achievements and is submitted to the president and other members of management. We revise the plan according to new instructions received as a result of the management review. We keep all relevant divisions informed about the revised plan.

[Review of initiatives]

We implement initiatives in annual cycles in the fields of environmental protection; process safety and disaster prevention; occupational safety; chemicals and product safety; and distribution safety. We believe that such reviews are particularly important to ensure that the issues in question are addressed consistently and effectively, that compliance with laws and regulations is ensured, and that the realities of these initiatives are correctly understood so that appropriate improvements are implemented.

Moreover, we believe that third-party reviews are especially effective. We have joined the Japan Responsible Care Council in order to promote Responsible Care activities. This council provides a review system with the goal of enhancing the quality of member companies' Responsible Care activities by objectively reviewing their implementation details and performance results. It fulfills its responsibility to explain these activities by publicizing the status of its compliance reviews, which we also receive. In addition, we have established a system of internal auditors who have obtained relevant qualifications and who undertake reviews. We also consign ISO examiners from authorized external certification bodies to conduct reviews of our ISO 14001 and ISO 9001 certifications.



RC Internal Audit

Having established an RC Auditing Subcommittee under the chairmanship of the director in charge of Responsible Care, we undertake an annual review of compliance with laws and regulations and the status of our activities targeting all Works including those situated outside Japan. In fiscal 2007, we addressed mainly the following items with a focus on Sumitomo Seika Singapore Pte. Ltd., Sumisei Taiwan Technology Co., Ltd., and the three Works located in Japan.

1. Promotion of visualization and mechanization
2. Systematic renewal and maintenance of facilities and strengthening of inspection
3. Disposal of unneeded substances and promotion of 4S
4. Identifying risks and promoting improvements

Acquisition of Environmental Management System (ISO 14001:2004) Certification

By enhancing awareness of environmental protection, an essential aspect of RC activities, and implementing the PDCA cycle as a means of achieving the target, we have acquired certification of registration with ISO 14001, the international standard for environmental management systems, as part of the integrated system encompassing all our Works. Accordingly, by utilizing the system, all divisions are implementing continuous improvements in the fields of quality and occupational safety and health.

Quality Management System

Sumitomo Seika has already registered with the revised ISO 9001:2000 standard for quality management systems companywide.

In our pharmaceutical and medical intermediate businesses, we

manage our production according to GMP (Good Manufacturing Practice), the quality management standard for drug manufacturing.

Occupational Safety and Health Management System

In order to decrease work-related accidents, it is important to stop accidents at the source by monitoring for hidden risks in the workplace and addressing them before an accident occurs.

Conventionally, in order to improve the safety management level, we implemented various accident prevention efforts such as KY campaigns, risk assessments of facilities, monitoring of near misses, and inspection tours of workplaces to promote safety awareness among all workers. However, the causes of occupational accidents have been growing more diverse as new tools and machinery are introduced and a new generation of workers is hired. Because it is

becoming more difficult to monitor all such risks, we have established a management system targeting occupational safety and health. We identify the hazard and risk factors at all workplaces and undertake a risk assessment using criteria such as the potential severity of the accident and the extent of the risk. In light of the above, we are promoting activities for sequentially decreasing risks on a priority basis, beginning with higher risks. We are scheduled to acquire certification of the Occupational Safety and Health Management System (OSHMS) in fiscal 2008.

Type	Target organization	Month and year of certification acquisition	Registration number	Standard designation	Certifying agency
Environmental Management	Befu, Himeji, and Chiba Works	June 2004	JCQA-E-0577	ISO 14001	JCQA
	Three Works combined certification	June 2006		ISO 14001:2004	
Quality Assurance	Befu, Himeji, and Chiba Works	December 1996	JCQA-0171	ISO 9002:1994	JCQA
	Sumitomo Seika (company-wide)	December 2002		ISO 9001:2000	JCQA
	Engineering Division	June 1997		LRQA-JBC0957996	ISO 9001:2000

* LRQA-JBC0957996 is scheduled to be integrated in JCQA in fiscal 2008.



ISO audits and inspections taking place in a meeting room



ISO audits and inspections taking place on the site



Certificate

Responsible Care Initiatives and Achievements in Fiscal 2007

Our fiscal 2007 targets and achievements for environmental protection, occupational safety, process safety and disaster prevention, distribution safety and chemicals and product safety are summarized below. For fiscal 2008, we are making further efforts based on our progress in fiscal 2007.

Achievements of Responsible Care Initiatives in Fiscal 2007 and Objectives for Fiscal 2008

Scope	Target	Fiscal 2007 Implementation Plan	Achievement of Initiatives in Fiscal 2007	Assessment of Activities	Fiscal 2008 Objective	Details
Environmental Protection	Implementation of energy conservation initiatives in order to reduce emissions of greenhouse gases	Maintaining a 1% reduction in the energy consumption rate	Implemented initiatives to reduce energy consumption by introducing a high-efficiency dryer, reducing the quantity of steam consumed, and adopting energy-efficient equipment in order to reduce the energy consumption rate by 1.1%	◎	Improving equipment and processes that consume large amounts of energy Implementing a modal shift Increasing the size of transport vehicles (lot size) Developing a plan to reduce the energy consumption rate (crude oil equivalent) by 2012	P13
		Reducing greenhouse gas emissions from transportation	Reduced the energy consumption rate by 2.1% by implementing a modal shift and increasing the size of transport vehicles (lot size)	◎		
	Waste reduction	Assessing and addressing ways of reducing the waste output rate	Implemented revisions to improve the manufacturing method for the four items with the worst output	○	Systematically improving the five items with top output rate	P14
		Maintaining the landfill disposal amount to the fiscal 2004 level	Reduced the contracting of external processing of sludge by installing sludge-drying equipment Reduced the landfill disposal amount by 48% from the fiscal 2004 level	◎	Implementing new and enhanced processes in order to undertake internal waste treatment	
		Maintaining the recycling rate to the fiscal 2004 level	Increased the thermal recycling rate from 52% to 60% by increasing the external contracting of processing to thermal recyclers	◎	Implementing in-process waste treatment in existing processes	
	Reduced release of substances subject to PRTR by March 31, 2010, 1 t/year of EDC and 1,3-butadiene; 3 t/year of trichloroethylene maximum	Reducing emissions by installing reduction equipment	Although the targets were not yet achieved for some substances, the installation of pollution control devices reduced emissions by 35% compared with the preceding year	○	Reducing emissions of the following substances subject to the Ministry of the Environment's program to reduce specific high-priority substances (March 31, 2010) 1. 1,3-butadiene 1 t/year max. 2. 1,2-dichloroethane 1 t/year max. 3. trichloroethylene 1 t/year max.	P18
1,3-butadiene and 1,2-dichloroethane: 1 t/year max. (scheduled for March 31, 2010) trichloroethylene: 3 t/year max. (scheduled for March 31, 2010)		1,3-butadiene: 8.3 t to 7.7 t 1,2-dichloroethane: 6.9 t to 5.3 t trichloroethylene: 17.6 t to 5.6 t				
Reduced release of volatile organic compounds (Reducing emissions to 30% of the fiscal 2004 level by March 31, 2010)	Continued examining technologies for reducing emissions of heptanes and n-hexane	We implemented our plan to reduce annual emissions by 200 t by completing sealing of equipment and installing recycling system. However, due to production increases, emissions remained flat compared with the preceding fiscal year.	○	Targeting a 30% reduction in emissions from the fiscal 2000 level by March 31, 2010 for heptane, hexane, pentane, methanol, and methyl isobutyl ketone	P16	
Disclosure of environmental information	Conducting research on the introduction of an environmental accounting system	Conducted trial calculation on the results in fiscal 2006 in order to establish a baseline	◎	Establishing and implementing environmental accounting	P10	
Occupational Safety	Achievement of zero injuries and zero accidents leading to suspension of operations and zero accidents not leading to suspension of operations	Preventing work-related accidents and injuries	Zero accidents leading to suspension of operations/4 accidents not leading to suspension of operations	△	Certification of registration and implementation of Occupational Safety and Health Management System Implementing a work risk assessment Creating and carefully promoting a system incorporating near misses	P23
		Preparing for certification and registration of Occupational Safety and Health Management System	Maintained internal regulations and implemented auditor training	◎		
Process safety and disaster prevention	Elimination of serious accidents	Implementing surveys and countermeasures for hazardous work	Conducted a survey on risk (436 items)	◎	Assessing based on facility design management standards in an appropriate and rapid manner Implementing systematic risk assessments (HAZOP/What-if) of existing processes Consideration of continued (accelerated) processing of long-disused gas cylinders and maintaining a prevention system Promoting systematic renewal and repair of aging facilities Promoting seismic reinforcement of high-pressure tanks containing toxic gas Promoting visualization, foolproof mechanization and elimination of human error	P22
		Continuing to promote technical training	Hired two full-time lecturers and strengthened technical training	△		
		Zero accidents	Minor fires: 1 incident Violation of effluent standards: 1 incident	△		
		Implementing assessments according to facility design manuals	Established facility design management standards	◎		
Chemicals and product safety	Zero accidents at the customer's premises	Implementing Hazards and Operability Analysis (HAZOP) of existing facilities and continuation of safety measures	Assessments of new and modified facilities: 3 cases Assessments of existing facilities: 5 cases	◎	Systematically complying with the EU's REACH regulations Systematic reform of MSDS and labeling based on the Industrial Safety & Health Law (GHS) Establish a 24-hour system to accommodate MSDS Procurement of MSDS for raw materials (compatible with GHS)	P20
		Obtaining and responding to chemicals regulations in Europe and information on labeling	Obtained and responded to chemicals regulations in Europe and information on labeling	◎		
Distribution safety	Elimination of serious distribution accidents	Supporting safe transportation by distribution contractors	Held a distribution safety meeting and implemented assessments for each contractor's activities Implemented emergency drills with distribution contractors	◎	Continuing to provide distribution contractors with support for safety guidance Providing emergency drills for accidents occurring en route during transport	P24
		Adopting Yellow Card labels for high-pressure gas products to support safe transport by truck	Introduced sweeping application of reforms of Yellow Cards for fuel mixtures and Yellow Cards affixed on containers Implemented training for all distribution contractors	◎		
Occupational safety and health	Reduction in rate of absenteeism due to personal injuries and illnesses	Strengthening the guidance of health care staff in cooperation with industrial physicians	Worker-days of absenteeism due to personal injury or illness totaled 1,681 days to 1,522 days	○	Strengthening the leadership of health care staff under the guidance of industrial physicians Implementing measures against metabolic disorders	—
		Implementing measures to counter metabolic disorders and ensure mental health care	Fully implemented health & hygiene lectures, cancer screening, and health guidance	○		
	Reduction of traffic accidents by half	Reduction of at-fault road accidents	Reduced number of incidents from 22 to 15	○	Reducing at-fault road accidents	

Environmental Accounting

Every year, we determine an environmental protection scheme through which we implement measures to ensure continued improvements. In fiscal 2007, we decided upon the following costs and investment expenditures. This total was based on the environmental guidelines issued by the Ministry of the Environment and the Japan Chemical Industry Association.

Investment Expenditures

Our investment expenditures are aggregate amounts categorized by the Ministry of the Environment as the following fields for introducing facilities for environmental protection. In fiscal 2007, we materially increased our investment expenditures to a significant ¥820 million in order to proactively

pursue three initiatives: (1) establishing sludge volume reduction equipment for industrial waste; (2) implementing emissions reduction measures for volatile organic compounds; and (3) introducing a high-efficiency dryer to increase our energy efficiency.

Expenses

Our expenses comprise maintenance costs for environmental facilities (running costs, operation and maintenance costs, and depreciation); the cost of research intended to reduce environmental impact; costs of implementing ISO 14001 standards for environmental management systems; and labor

costs. In fiscal 2007, our expenses totaled ¥2,042 billion. A breakdown of expenses reveals the largest expense to be the Global Environmental Costs, which include maintenance of cogeneration facilities (specifically, independent generators).

Category of Environmental Expense	Details and Effects of Main Initiatives		Investment Expenditure	Ratio	Expenses	Ratio	
Business Area Cost	Pollution Prevention Cost	Air Pollution Control	Measures to control chemicals emissions (pollution control tower, PRTR measures)	115	49%	64	3%
		Water Pollution Control	Installation of drainage isolation valve (Befu Works) Operation/management of activated sludge wastewater treatment facility	45	19%	178	10%
		Offensive Odor Control	Installation of activated charcoal tower and others	3	1%	1	0%
	Global Environmental Costs	Introduction of high-efficiency motors, thermal insulation measures Operation/management of independent generators	34	15%	1,114	60%	
	Resource Circulation Costs	Investments related to waste incineration facilities Disposal/efficient use of industrial waste	19	8%	282	15%	
Upstream/Downstream Costs	Procurement of eco-friendly products (green purchasing)	0	0%	0	0%		
Management Costs	Administrative costs of environmental protection system	0	0%	132	7%		
R&D Costs	Installation of equipment to reduce wastewater discharge and atmospheric emissions Research to reduce environmental impacts	17	7%	80	4%		
Social Contribution Costs	Tree-planting and beautification of the environs around Works	0	0%	0	0%		
Environmental Remediation Costs	Environmental remediation costs	0	0%	0	0%		
Total				233	100%	1,851	100%

Category of Environmental Expense	Details and Effects of Main Initiatives		Investment Expenditure	Ratio	Expenses	Ratio	
Business Area Cost	Pollution Prevention Cost	Air Pollution Control	Measures to control chemicals emissions (pollution control tower, PRTR measures)	173	21%	93	5%
		Water Pollution Control	Installation of drainage isolation valve (Befu Works: drainage isolation valve) Operation/management of activated sludge wastewater treatment facility	84	10%	203	10%
		Offensive Odor Control	Installation of activated charcoal tower and others	1	0%	5	0%
	Global Environmental Costs	Introduction of high-efficiency dryers Operation/management of independent generators	430	52%	1,132	55%	
	Resource Circulation Costs	Investments to sludge volume reduction Disposal/efficient use of industrial waste	95	12%	347	17%	
Upstream/Downstream Costs	Procurement of eco-friendly products (green purchasing)	0	0%	0	0%		
Management Costs	Administrative costs of environmental protection system	0	0%	154	8%		
R&D Costs	Consideration of reducing solvents in our products Research to reduce environmental impacts	37	5%	108	5%		
Social Contribution Costs	Tree-planting and beautification of the environs around Works	0	0%	0	0%		
Environmental Remediation Costs	Environmental remediation costs	0	0%	0	0%		
Total				820	100%	2,042	100%

Economic Benefits

Our investments in environmental protection resulted in two benefits: by expanding our activated sludge facility, we were able to reduce the cost of consigning waste treatment and disposal to outside contractors; and by reducing emissions of volatile organic compounds, we were able to reduce the cost of purchased solvent.

Category	Details	Amount
Cost reduction	Cost savings from expanding our activated sludge facility and reducing consignment of waste treatment and disposal to outside contractors	¥695 million
	Cost savings from reduced solvent purchases resulting from reduced emissions of volatile organic compounds	¥32 million
	Cost savings from reduced steam consumption due to introduction of a high-efficiency dryer	¥12 million
	Other	¥27 million
Total		¥766 million

Target period: April 1, 2007–March 31, 2008
Scope: Sumitomo Seika Calculation method: Proportion of total investment expenditures and costs allocated for environmental conservation

Performance of Our Works

Each of the three Works has implemented environmental initiatives and we have summarized some environmental performance data.

Befu Works

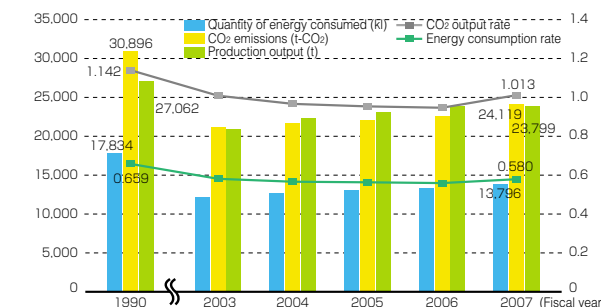


Location:
346-1 Miyanishi, Harima-cho, Kako-gun Hyogo 675-0145, Japan

Site area:
250,000 m²

Number of employees:
Approx. 290

Main products:
industrial chemicals, pharmaceuticals, functional products, and gas products



Environmental impact in fiscal 2007

Quantity of energy consumed (crude oil equivalent)	13,796 kl	Quantity of atmospheric emissions subject to PRTR	14.7 t
CO2 emissions	24,119 t-CO2	Wastewater discharge (specified discharge water)	1,625,000 m ³
Waste output volume	10,012 t	COD load	30.0 t
Recycling rate	58.4%	Nitrogen load	3.9 t
Amount of landfill disposal	23 t	Phosphorous load	0.10 t

Himeji Works

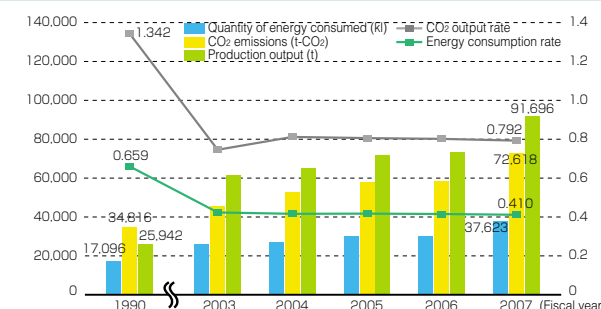


Location:
1 Irifune-cho, Shikama-ku, Himeji City Hyogo 672-8076, Japan

Site area:
270,000 m²

Number of employees:
Approx. 220

Main products:
Super absorbent polymers, water-soluble polymers, and fine-powder polymers



Environmental impact in fiscal 2007

Quantity of energy consumed (crude oil equivalent)	37,623 kl	Quantity of atmospheric emissions subject to PRTR	16.3 t
CO2 emissions	72,618 t-CO2	Wastewater discharge (specified discharge water)	1,221,000 m ³
Waste output volume	3,115 t	COD load	18.5 t
Recycling rate	65.3%	Nitrogen load	21.0 t
Amount of landfill disposal	51 t	Phosphorous load	0.24 t

Chiba Works

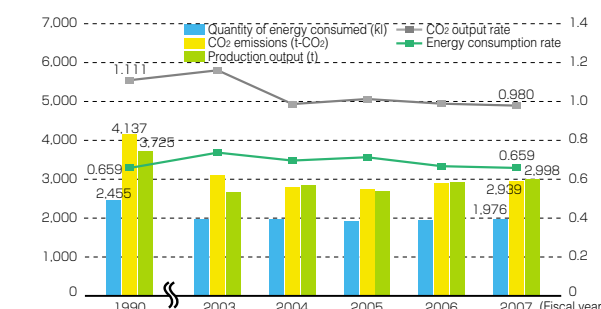


Location:
1384-1 Kamikoya, Yahchiyo City, Chiba 276-0022, Japan

Site area:
33,000 m²

Number of employees:
Approx. 70

Main products:
Gas products and fine-powder polymers



Environmental impact in fiscal 2007

Quantity of energy consumed (crude oil equivalent)	1,976 kl	Quantity of atmospheric emissions subject to PRTR	5.6 t
CO2 emissions	2,939 t-CO2	Wastewater discharge (specified discharge water)	340,000 m ³
Waste output volume	225 t	COD load	0.4 t
Recycling rate	40.8%	Nitrogen load	0.3 t
Amount of landfill disposal	4.8 t	Phosphorous load	0.05 t

RC activities

- Since 1989, we have maintained a record of zero accidents leading to suspension of operations.
- We have maintained our reduction of emissions of trichloroethylene, a substance subject to PRTR requirements.

Sumitomo Seika's Environment-Related Products

Our products are highly regarded and used in various industrial fields because of their functionality and quality. We have also been actively committed to supplying a variety of products that contribute to environmental protection and product safety.

Some of our environment-related products are described in this section. We will continue to be committed to the development of products that contribute to society.

Products and Instruments for Measuring Air Pollution

The Air Pollution Control Law identifies those substances that are considered the main causes of air pollution. Air pollution control is implemented through the regulation of emissions by factories and workplace facilities, the control of the total pollutant load in designated areas, and the establishment of maximum permissible limits for automobile exhaust emissions. The target substances are classified into smoke and soot (sulfur oxides, particulate matter, and five types of hazardous substances), particulates (general particulates and specified particulates), automobile exhaust emissions, and 28 specific substances, and an inspection system has been imposed.

However, some of the metals contained in suspended particulate matter are considered hazardous to human health. While the national government and other authorities have adopted measuring instruments to monitor their presence, research is lacking regarding indexes that represent comprehensive metal pollution.

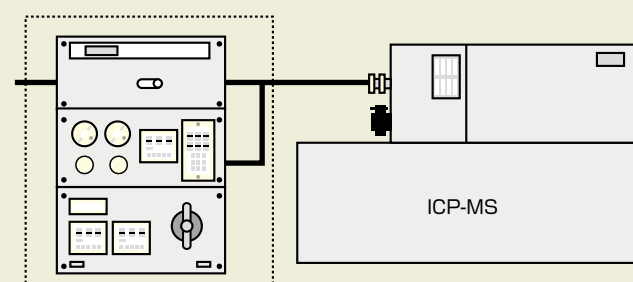
At Sumitomo Seika, we offer standard gases for use in various gas analyses in the measurement field that are used to detect these air pollutants. Moreover, we recently focused our attention on metal analysis and have developed a monitoring technology for hazardous chemical elements such as those contained in exhaust emissions carried in the atmosphere. We have adopted the aim of developing real-time measurement equipment for metallic elements. We anticipate that this innovation will be adopted for a variety of applications in the near future.

【Device for introducing gas sampling for ICP-MS】

This device directly analyzes fine chemical elements in the atmosphere. It makes possible ultra-sensitive simultaneous measurement of many chemical elements. It monitors moment-to-moment changes in the density of ultra-trace amounts of metallic elements in the atmosphere in real time and can be used to monitor fine particles in factory exhaust emissions.



Configuration Diagram of Analysis System



Device for introducing gas sampling

Moreover, as the global environmental movement has grown in recent years, we have marketed standard gases for analyzing the atmosphere and ecosystems in response to laws and regulations such as the protection of the ozone layer, prevention of global warming, and monitoring of hazardous air pollutants. As well, we aim to further contribute to the global environment under our "Ecology & the Environment" campaign.

Products for Environmental Measurement

Hazardous air pollutants	HAPs standard gas (nine components, 44 components)
Soil pollutants	Soil pollutant standard gas
Monitoring of photochemical smog	PAMS standard gas (58 components)
Indoor air pollutants	Formaldehyde, volatile organic compound standard gas
Response to California regulations	NMOG standard gas
Ozone layer protection	Chlorofluorocarbons (or CFCs and designated CFC substances) standard gas, hydrochlorofluorocarbons (HCFCs: alternative fluorocarbons) standard gas
Prevention of global warming	Perfluorated carbon (or PFC, an alternative fluorocarbon) standard gas, carbon dioxide standard gas, nitrous oxide standard gas
PRTR	Oxidized ethylene, benzene standard gas
Malodorous substances	ODOR standard gas

Energy Efficient Products

PSA Gas Generator

This energy-efficient device is used for oxygen supplies and to recover CO₂ and methane, which have been considered contributors to global warming. It also functions as generator of hydrogen, which has been anticipated as a form of clean energy.



General Standard Gas/Measurement Verification Standard Gas for Japan Calibration Service System (JCSS)

Since the 1960s, we have been contributing to environmental measurement and to society by developing various standard gasses such as standard nitric monoxide (NO), sulfur dioxide (SO₂), carbon monoxide (CO), carbon dioxide (CO₂), methane (CH₄) and propane (C₃H₈) in order to ensure accurate measurement of automobile exhaust emissions, boiler flue gas emissions, and the atmosphere.



Medical gases produced in a clean room



Gas canisters for the semiconductor industry

Efforts toward Preventing Global Warming

The need to address the potential for global warming is one of humanity's greatest challenges. International framework negotiations are about to begin to reduce the world's total greenhouse gas emissions by half relative to current levels over the long term by 2050. The short-term goal for Japan is to achieve the Kyoto Protocol Reduction Target (6%) by the first term (2008–2012); reduction targets for adoption in 2013 are on the table for consideration.

Against this background, the Japanese Cabinet decided in October 2008 to undertake a trial run of domestic greenhouse gas emissions trading between businesses. Because even greater reductions are sought by industry, we, as an independent enterprise in the chemical industry, have adopted the objective of reducing our energy consumption rate by 20% relative to 1990 levels. This marks an increase from our previous 10% commitment as we address the reduction of greenhouse gasses through energy conservation.

Our Energy-Efficiency Initiatives

In accommodating the chemical industry's target, which is a 20% reduction in the energy consumption rate compared to 1990 levels by 2010, we designed our program to reduce the energy consumption rate by 1% annually and have been implementing resource and energy conservation initiatives accordingly.

Past Major Initiatives

- Process improvements
- Introduction of cogeneration systems (Befu Works in 1989, Himeji Works in 2002)
- Conversion to alternative fuels
- Waste heat recovery and other initiatives

As a result, we reduced our energy consumption rate by 32% in fiscal 2007 relative to 1990 levels, and we are pleased to have greatly exceeded the industry target.

However, regarding the total amount of energy consumed, the upgrading of our production facilities has led to a dramatic increase. While we have taken steps to conserve energy by introducing energy-efficient devices, the situation remains difficult.



Cogeneration facility

Operational Results in Fiscal 2007

In fiscal 2007, our various initiatives succeeded in reducing our energy consumption rate by 1.1% relative to the preceding fiscal year.

However, the pressure to reduce our energy consumption rate is growing year by year. With the goal of achieving even greater improvements, we are implementing fundamental improvements such as upgrading our processes.

◆ Befu Works

We have initiated changes in steam management and steam transfer methods, introduced inverter-controlled electric motors, optimized transformers, and introduced energy-efficient lighting and air conditioning. Despite these efforts, however, manufacturing of

products with a high energy consumption rate increased our energy consumption rate by 3.6%.

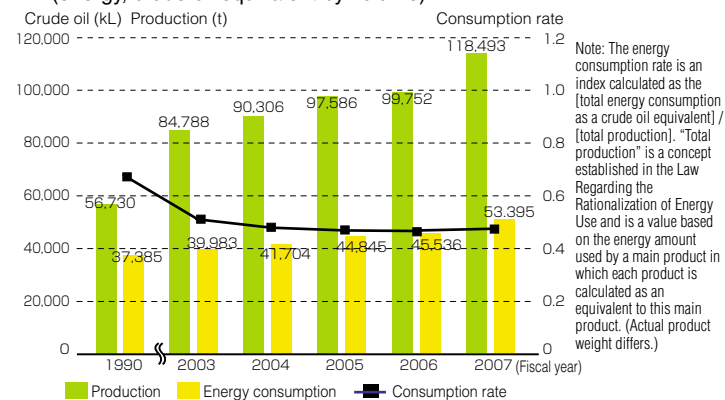
◆ Himeji Works

Despite a considerable increase in production output and amount of electricity consumed, our introduction of high-efficiency dryers and high-efficiency compressors, as well as the abolition of a freezer, helped us to achieve a reduction of 1.0% in our energy consumption rate year-on-year.

◆ Chiba Works

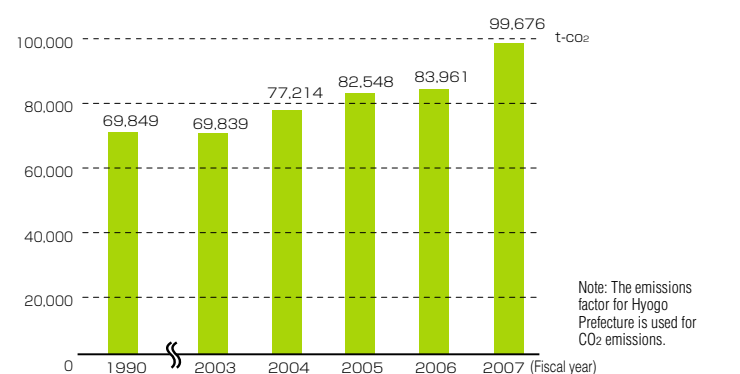
This Works achieved a reduction of 1.3% in its energy consumption rate by improving processes and by introducing a high-efficiency compressor.

Trend in Production and Energy Consumptions (energy, crude oil equivalent by volume)



Note: The energy consumption rate is an index calculated as the [total energy consumption as a crude oil equivalent] / [total production]. "Total production" is a concept established in the Law Regarding the Rationalization of Energy Use and is a value based on the energy amount used by a main product in which each product is calculated as an equivalent to this main product. (Actual product weight differs.)

Trend in CO₂ Emissions



Note: The emissions factor for Hyogo Prefecture is used for CO₂ emissions.

Transportation Initiatives

While our product shipments are largely carried by truck transport, we also use rail and marine transport.

To date, we have been promoting efficient transportation methods. The Law Regarding the Rationalization of Energy Use of 2007, however, requires shippers to submit reports; therefore, we are researching further rationalization of our energy usage.

As a result of our efforts to promote a modal shift to rail transport, increase the size of lot shipments, and improve loading efficiency, we succeeded in reducing our energy consumption rate by 2.1% in fiscal 2007 relative to the preceding fiscal year.

Efforts to Realize a Recycling-Oriented Society

The Basic Law for Establishing a Recycling-Based Society requires that the entire society strive to reduce waste emissions and ensure the effective utilization of resources by promoting the "3Rs" — reduce, reuse, and recycle.

Commitment to Waste Reduction

In order to contribute to the emergence of a society committed to recycling, we are addressing waste reduction with the following four basic approaches.

1. Reducing waste through a review of internal manufacturing processes

With a commitment to "curtailing waste generation at the source," we are implementing manufacturing improvements for those products with a high energy consumption rate, with the laboratory taking a central role.

2. Reducing waste through external consignment

1. Dehydration, separation or concentration

At each production facility, we have established facilities for collection, dehydration, and distillation, and we are pursuing effective use and volume reduction within the system.

Last year, we established an excess sludge volume reduction facility and planned for sludge reduction.

2. In-house utilization

In our workplaces and our Works, we are striving to identify effective applications such as using waste alkali discharged from the Himeji Works as a neutralizer for the Befu Works.

3. We have implemented detoxification (wastewater treatment) and volume reduction (incineration).

[Detoxification facility]

We operate an activated sludge facility in which many kinds of microbes multiply inside an aeration tank to produce clean

water. This method is most commonly used for the treatment of domestic wastewater. In the previous fiscal year, we further expanded this facility with another line.

[Volume reduction facility]

At a chemical plant, production results in the generation of various waste liquids, waste oil, and waste solvents that contain toxic substances. These waste liquids are disposed of by incineration as a means of detoxification, as identifying an effective application is difficult. As our handling facility, we have a submerged combustion-type waste liquid incinerator.

3. Promoting effective utilization when outsourcing waste disposal

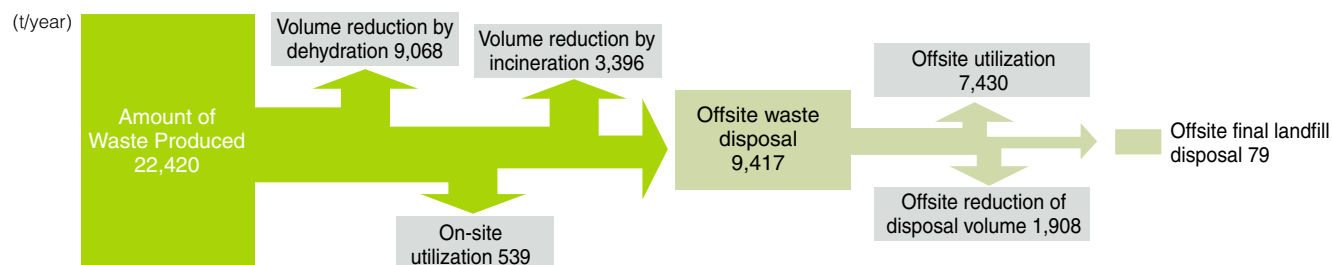
In order to promote the effective utilization of waste products, we consign disposal subcontractors according to the following priorities.

1. Waste recycling (Reclamation distillation treatment of waste solvents, reuse of scrap metal, use as a reducing agent)
2. Conversion of waste to fuel (waste plastic and waste oil)
3. Valid utilization (recovery of steam generated from incineration, power generation, and fertilizer)

4. Reduction of disposal of waste in landfills

Because landfill sites are dwindling nationwide, we strive to reduce the amount of waste disposed of in landfills by offering it to disposal destinations where it is used as a reducing agent by fertilizer and cement factories.

Waste Disposal in Fiscal 2007



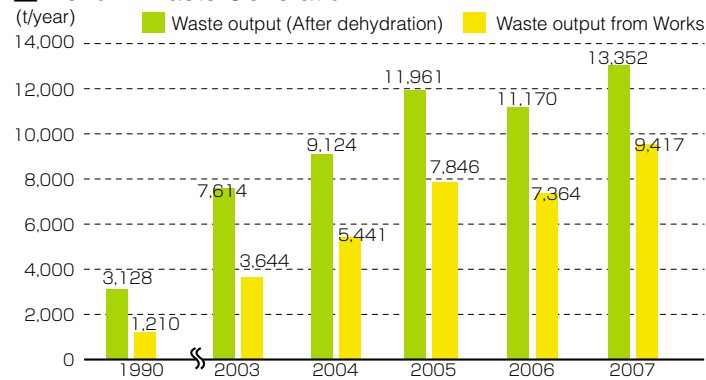
At Sumitomo Seika, we have been striving to reduce the volume of waste generated by introducing processes that reduce waste and upgrading waste-reduction facilities; however, following an extensive increase in production in fiscal 2007, the amount of waste generated also increased.

Our initiatives in fiscal 2007 were as follows:

1. conducting research into changing new processes for products with a high waste-generation rate; and
2. reducing the amount of waste consigned for external processing through the introduction of dehydration facilities for excess sludge.

In 2008, we will seek to reduce waste output by conducting research into ways of treating waste within existing processes as well as new and upgraded processes.

Trend in Waste Generation



Note: In conformity with research and statistics prepared by the Ministry of Economy, Trade and Industry, the measured amounts of waste generated in fiscal 2007 were changed to reflect values after dehydration treatment.

Improving Recycling Rates

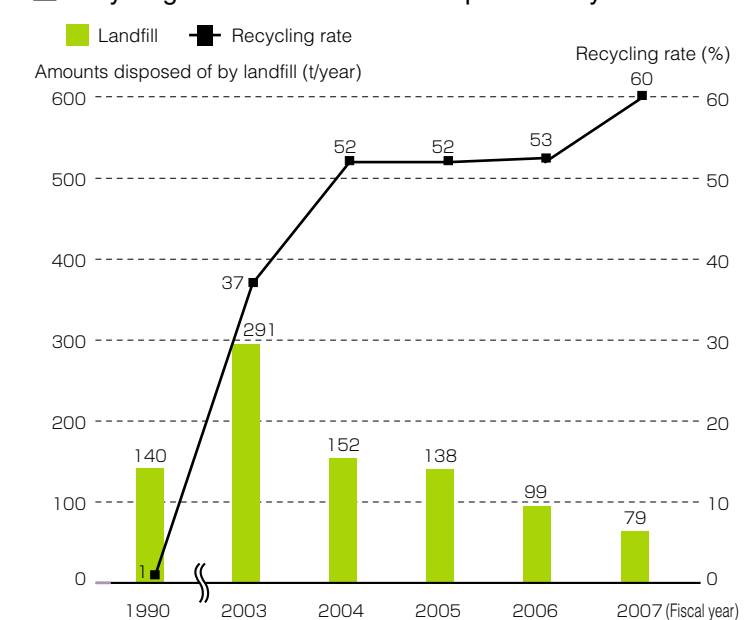
The majority of our company's wastes are in liquid form.

Depending on the type, some waste can be made into new products through regenerative distillation. In the past, however, most waste liquids were treated with incineration in order to reduce its volume.

While society's commitment to recycling has been growing in recent years, we have been seeking subcontractors who can utilize the recycled items as auxiliary fuels, as neutralizing and reducing agents, and in thermal recycling processes (through utilization of waste heat). In this way, we are taking steps to ensure the positive utilization of waste liquids.

Our recycling rate climbed to 60% in fiscal 2007 and we were able to effectively utilize a great deal of waste products.

Recycling Rates and Amounts Disposed of by Landfill



Reduction in Final Disposal by Landfill

At our Himeji Works, we purified wastewater in our activated sludge processing facility, but the excess sludge generated from the aforementioned facilities increased and was disposed of as excess sludge.

Conventionally, excess sludge was disposed of in landfills, but we have decreased the amount landfilled by promoting its use as a raw material in cement and in fertilizer.

Following a dramatic production increase in fiscal 2007, we anticipated an increase in the amount of waste outsourced for disposal; therefore, we introduced a dehydration facility for excess sludge with the goal of reducing this waste.

With the introduction of this facility, we were able to reduce the volume through large-scale dryer; moreover, with the change in the disposal destination, the amount of excess sludge disposed of in landfills was reduced to zero.



Sludge dehydration facility



Collection of carefully classified wastes

Air Pollution and Water Pollution Initiatives

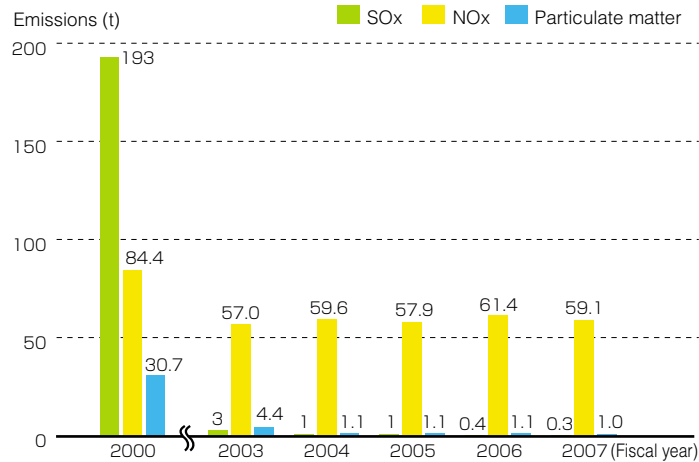
Emissions of sulfur oxides (SOx), nitrogen oxides (NOx), and particulates as well as auto exhaust emissions are regulated in Japan through the Air Pollution Control Law. However, observations by the Meteorological Agency and the Ministry of the Environment suggest that pollution is increasing. For example, ozone in the atmosphere has increased by 20% in the last 10 years. Some believe that one cause is the ozone formed from the nitrogen oxides generated from the industrial activities of East Asia. Although we are striving to reduce the environmental impact of our operations, this can be considered a global environmental issue.

Commitment to Air Pollution Prevention

In addition to the standard values stipulated in the Air Pollution Control Law and regulations, we maintain our operations in compliance with the agreed values negotiated with local municipalities.

While our production volumes have been increasing for the past several years, we have extensively reduced our output of SOx and particulates by shifting from heavy oil to city gas as the fuel for the steam production boilers in our Works. In addition, by reconstructing our business we have pulled out of the business we do with enterprises with a high emissions impact.

Emissions of Three Air Pollutant Types



Low NOx boiler using city gas



Volatile organic compound (VOC) recovery facility

Preserving the Atmosphere

In order to minimize air pollution and global warming, industry groups must take the initiative to implement appropriate solutions.

However, against the background of improved living standards, the increase in emissions rates from domestic households and the transportation sector represents the most notable and glaring issue. Therefore, at Sumitomo Seika, we are not only calling for emissions reduction through operations but also for employees to review their everyday behavior.

Specifically, beginning with a campaign to stop engine idling, we launched a commuter bus service to both our Befu and Himeji Works in the current fiscal year in order to promote self-restraint in commuting by private car. Through these initiatives, we are undertaking a review of our everyday life habits and are implementing a new approach to both sides our business operations and daily life activities.



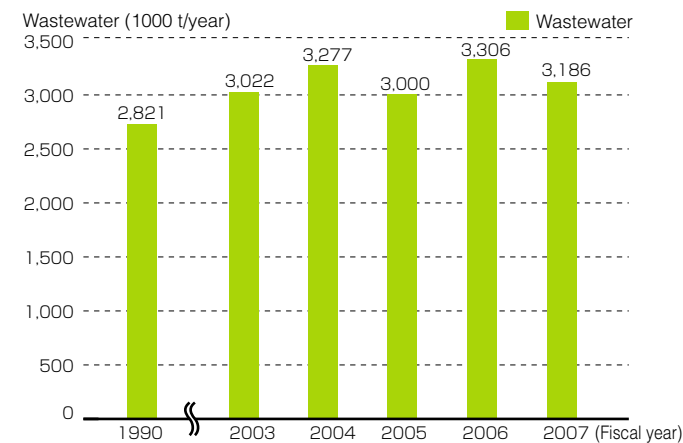
Commuter bus provided for employees

Efforts to Prevent Water Pollution

In addition to the effluent standard stipulated in the Water Pollution Control Law and regulations, we are conducting operations in compliance with the agreed values negotiated with the local municipalities.

Considering that the Befu Works and Himeji Works are located on the Seto Inland Sea, a body of water that is largely enclosed and which falls under the Law Concerning Special Measures for Conservation of the Environment of the Seto Inland Sea, these Works are upgrading their drainage facilities. In fiscal 2007, we reinforced our activated sludge treatment facility at the Himeji Works and took steps to purify our drainage. Moreover, according to the Total Emission Control Standard (6th Stage), we adopted an automatic measuring device for COD (chemical oxygen demand), nitrogen, and phosphorous. In addition to making observations, we are taking steps to reduce the pollution impacts.

Change in Wastewater Amounts



In light of the effluent problems experienced by the Befu Works and Himeji Works in fiscal 2006 and 2007, we are proceeding with an improved review of the drainage system in order to prevent the discharge of effluent that exceeds the standards. The system has been completed at the Befu Works.

In fiscal 2008, we will install an emergency cutoff valve at the Himeji Works and strengthen measures to prevent the discharge of effluent outside the Works.

< Emergency Prevention Measures >

- July 2003: Emergency shutoff valve installed at drainage outlet of Befu Works.
- July 2005: Befu Works installs an emergency shutoff valve for its indoor drainage system as well as a Total Organic Carbon (TOC) meter (1).
- September 2006: Befu Works installs an emergency shutoff valve as well as a TOC meter (2) for its indoor drainage system.
- November 2007: Himeji Works installs a TOC meter at the mouth of its drainage tank.
- September 2008: Himeji Works schedules installation of an emergency shutoff valve.

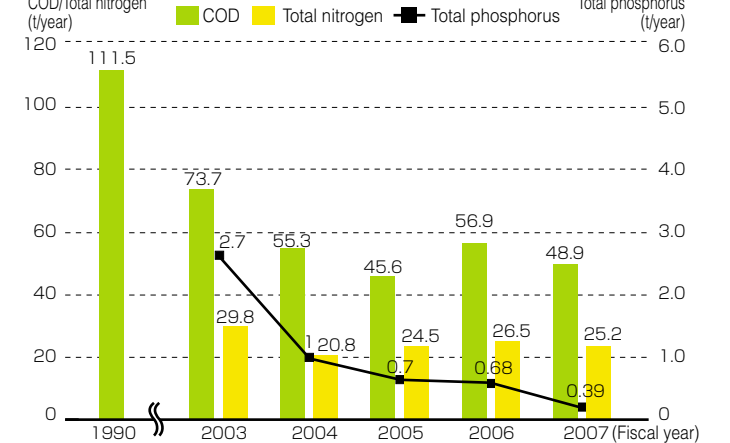


Emergency shutoff valve at Befu Works



Installation of emergency shutoff valve under way at Himeji Works

Change in Water Pollution Impacts



Wastewater treatment facility

However, as a result of experiences such as violating the regulated pH value due to leakage from aging facility piping, we are upgrading our management of drainage piping by increasing the number of the drainage monitoring meters for emergencies and installing automatic drainage shutoff devices.

< Efforts to reduce pollution impacts >

- April 2004: Nitrogen and phosphorus measuring instruments installed (Befu Works, Himeji Works)
- October 2004: Fluidized-bed activated sludge processing facilities enhanced (Himeji Works)
- June 2007: Fluidized-bed activated sludge processing facilities enhanced (Himeji Works)

Efforts to Reduce Chemical Substance Emissions

The Pollutant Release and Transfer Register (PRTR) Law was enacted in Japan in 1999 in an effort to control the amount of specified chemical substances released into the environment and to improve emission control methods. In compliance with this law, manufacturers handling chemical substances are required to report the amounts of chemicals they release and transfer and to remain committed to voluntary efforts to reduce emissions.

Reducing Emissions of Chemical Substances

The Pollutant Release and Transfer Register (PRTR) is a system for monitoring, calculating, and publicly disclosing data on the source of a wide variety of chemical substances with harmful properties as well as revealing the quantities emitted into the environment and whether any of these substances were carried outside of the Works in waste matter.

Surveys on the output of chemical substances have been conducted since 1995, before the implementation of the PRTR Law. Currently, 354 target substances are under review with the Ministry of the Environment playing the central role; however, we have been conducting research on a total of 480 substances since the law was implemented and are monitoring the emissions situation.

As one priority task of Responsible Care, we have focused on 12 substances that the chemical industry has identified for preferential voluntary emissions reduction. We have proactively and systematically addressed emission reductions by improving manufacturing processes, switching to alternative solvents, upgrading recovery facilities, and making tanks airtight. During this period, we experienced production increases and other changes; however, as a result of our systematic implementation of facility initiatives and policies to discontinue handling of some chemicals, we reduced output to about 90% relative to 1995 levels. Going forward, we are committed to promoting a series of emissions reduction policies.

Priority Substances Subject to Voluntary Emissions Control

The Central Environment Council of the Ministry of the Environment has identified 22 substances among its target substances as priority substances subject to emissions control. It also seeks voluntarily reduction plans from each entity handling these substances.

Meanwhile, the chemical industry has identified 12 of these 22 substances that have the highest frequency of use and is promoting voluntarily emissions control within each company.

Sumitomo Seika now handles nine of these 12 substances, and we have formulated a plan to reduce the atmospheric release of the

relevant priority substances.

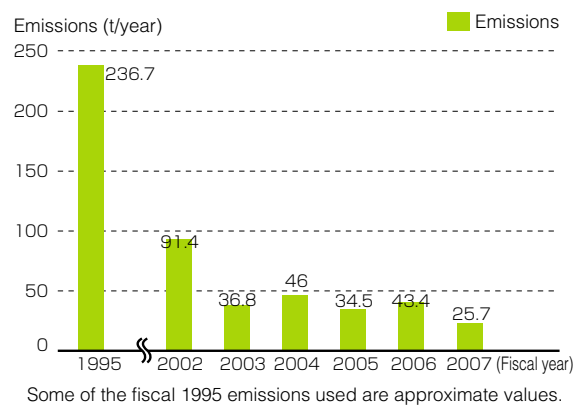
As a result of these initiatives, we have succeeded in eliminating the release of one substance and have taken steps to develop adsorption and pollution control facilities, achieving an 89% reduction relative to 1995 levels and a 75% reduction relative to 1999 levels.

In fiscal 2007, we introduced an adsorption recovery facility for trichloroethylene that remains in service throughout the year. Moreover, by implementing an emissions reduction policy for 1,2-dichloroethane and 1,3-butadiene, we have reduced the emissions of these substances by 41% compared with the preceding fiscal year.

Major Reduction Measures to the Present

Trichloroethylene	Enhancement of condensing-cooling recovery facility, extension of distillation time (1998, 2000, 2002) Installation of adsorption recovery facility (2006)
Dichloromethane	Adoption of alternative solvents for certain products (1998, 2002, 2003)
1,2-dichloroethane	Enhancement of recovery facility (1996, 1999, 2002, 2007)
Formaldehyde	Installation of equalization piping (1998, 2000)
Benzene	Disposal by incineration after modification of the exhaust gas line (2001)
Ethylene oxide	New changing scheme and transfer of production (2001, 2003, 2006)
Acrylonitrile	Total ban on use (2003)
1,3-butadiene	Execution of exhaust gas disposal by incineration (2003)

Emissions of Hazardous Air Pollutants Subject to Priority Emissions Control



Sumitomo Seika's Atmospheric Emissions Standards

No emission control or environmental standards have yet been specified for most of the substances that have been categorized as subject to the PRTR Law or as hazardous air pollutants.

This is because of the absence of any verified correlation between the amount emitted and the magnitude of the hazard presented by these substances. For this reason, chemical emissions manufacturers are required to reduce the emissions of such substances through voluntary determinations of emissions standards.

Therefore, Sumitomo Seika established voluntary emissions standards by referring to the guidelines of the WHO and the EPA, and has been verifying at regular intervals that the emissions of certain chemical substance do not exceed their control values.

In accordance with these standards, we have been strictly controlling the emissions of potentially hazardous chemical substances.

(NOTE) WHO: World Health Organization EPA: U.S. Environmental Protection Agency

Atmospheric Emissions Reduction Plan

In fiscal 2008, we plan to further reduce emissions of trichloroethylene; in addition, we are scheduled to decide on a further reduction plan and to undertake a survey of the reduction effect of 1,2-dichloroethane and 1,3-butadiene implemented in fiscal 2007.

Trichloroethylene: 1 t/year maximum (2010)
1,2-dichloroethane: 1 t/year maximum (2010)
1,3-butadiene: 1 t/year maximum (2010)



Exhaust gas pollutant removal equipment (Befu Works)



Adsorption recovery facility (Chiba Works)

Emissions of Hazardous Air Pollutants Subject to Priority Emissions Control

Substance	1995	2003	2004	2005	2006	2007
Acrylonitrile	9	2.5	-	-	-	-
Dichloromethane	70	3.5	11.7	4.2	4.2	2.4
1,2-dichloroethane	72	11.5	11.7	8.3	6.9	5.3
Tetrachloroethylene	1	0.5	0.7	0.6	1.2	0.6
Trichloroethylene	70	9.7	12.4	11.5	17.6	5.6
Ethylene oxide	4.7	3.7	3.2	3.0	2.8	1.9
1,3-butadiene	3	3.5	4.4	4.8	8.3	7.7
Benzene	4	0.0	0.0	0.0	0.0	0.0
Formaldehyde	3	1.9	1.9	2.1	2.4	2.2
Total	236.7	36.8	46.0	34.5	43.4	25.7



Gas recovery facility (Himeji Works)

Reduction of Volatile Organic Compounds

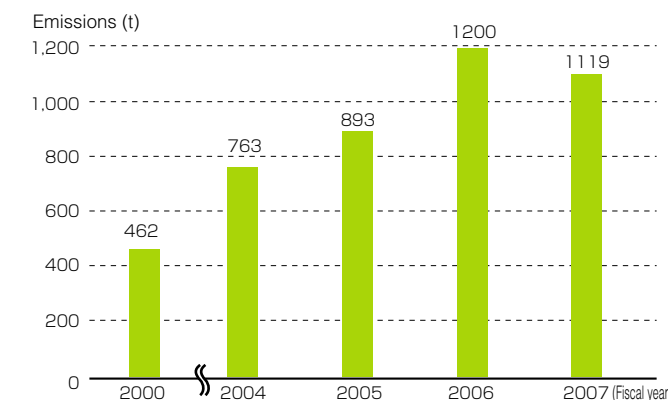
The Air Pollution Control Law was revised in 2004 for more stringent and systematic reductions of emissions of volatile organic compounds, or VOCs. (Our objective is to reduce the aggregate amount of VOC emissions by 30% relative to 2000 levels by 2010; however, the regulated reduction is 10%).

We are continuing to introduce and reinforce our production facilities, and output is increasing.

In 2007, we dramatically raised our production amount, yet achieved an emissions reduction of about 7% relative to the preceding fiscal year by further strengthening the environmental mitigation measures, by introducing VOC recovery facilities, and by making facilities airtight.

Going forward, we aim to achieve a 30% reduction compared with 2000 levels by 2010. We will achieve this by making the facilities airtight and by improving manufacturing processes.

Emissions of VOCs



Commitment to Chemicals and Product Safety

Chemical substances are indispensable for providing abundance and comfort to modern society.

However, certain chemical substances pose danger and can cause harm to people and the environment.

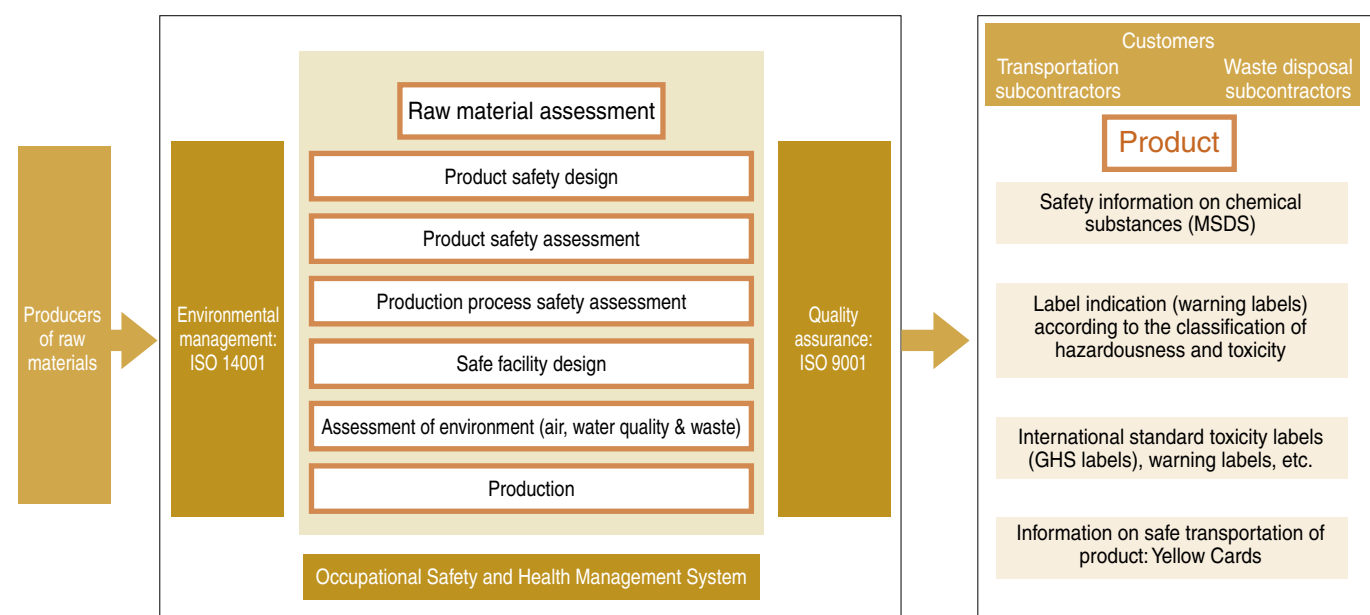
In the effort to ensure chemicals safety, learning the properties of chemicals and handling them carefully are critical.

Ensuring Chemicals and Product Safety

The issue of chemicals and product safety is considered a global problem, and the following common international rules are being formulated:

1. safety assessments of chemical substances;
2. classification and indication of hazardousness and toxicity; and
3. provision of product safety data.

The following conceptual illustration represents Sumitomo Seika's chemicals and product safety assurance initiative. At each stage, in addition to addressing our company's chemical safety assurance, we are providing relevant information to customers and subcontractors.



Assessment of New Chemical Substances

For newly developed chemical substances, Sumitomo Seika will carry out biodegradation tests, mutagenicity tests, and other safety

tests. Last year, we carried out safety assessments on 53 chemical substances.

Safety Survey on High Production Volume Chemical Substances

At the Earth Summit held in 1992, a proposal was made to promote the acquisition of safety data for existing chemical substances. The Organization for Economic Co-operation and Development (OECD) acquired and evaluated safety data on chemical substances with annual national production levels exceeding 1,000 tons.

In Europe, meanwhile, the new REACH chemical regulation (registration, evaluation, and authorization of chemicals) came into force. It requires the acquisition of material safety data sheets on all chemical substances in use as of June 2007. In addition to this requirement for MSDS, no chemical sale in Europe will be approved under this law unless the chemicals in question have been registered, evaluated and authorized.

In light of these requirements, we have completed the acquisition of safety data for sulfolane, an existing chemical, and following an inspection in Japan, we completed evaluations of the environment and human health at the OECD evaluation meeting (SIAM 19).

Moreover, through the REACH response, we have developed an order of precedence for products intended for export to Europe and are making progress with the acquisition and evaluation of this safety data.

Quality Assurance

Having acquired certification of and put into practice ISO 9001, the international standard for quality assurance systems, Sumitomo Seika remains committed to providing our customers with a sense of reliability and satisfaction. Furthermore, in manufacturing pharmaceuticals and their intermediates, we have implemented

comprehensive quality assurance practices that are compliant with cGMP of ICH.

- Notes:
- ICH is the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use. Its participants are Japan, the EU, and the USA.
 - cGMP stands for current Good Manufacturing Practice. These are guidelines for the production and quality control of pharmaceuticals.

Provision of Product Safety Information

Today, chemical substances are distributed around the world. The United Nations, therefore, has encouraged users to establish a globally harmonized system for implementation by 2008 to ensure information is provided in compliance with common rules and that the special characteristics of the specific chemical substances are transmitted to those handling them. This system is known as the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

In Japan, the Industrial Safety and Health Law was revised in 2006 stipulating that information is provided in accordance with the existing international system. To date, Sumitomo Seika has used product catalogs, material safety data sheets, and warning labels as a means of notifying customers and users on the correct uses of our chemical products. In the future, we will extend our commitment to provide labels and MSDSs that comply with international rules for their use.

Globally Harmonized System of Classification and Labeling of Chemicals: GHS labels

GHS Symbols and Names

Flame	Flame over circle	Exploding bomb
Corrosion	Gas cylinder	Skull and crossbones
Exclamation mark	Environment	Health hazard

Meanings of GHS Hazard Symbols and Pictograms

Explosives, self-reactive substances and mixtures, organic peroxides	Flammable gases, flammable aerosols, flammable liquids, others	Oxidizing gases, oxidizing liquids, oxidizing solids
Acute toxicity (class 4), skin corrosion/irritation (class 2), others	Acute toxicity (class 1-3)	Gases under pressure
Corrosive to metals, skin corrosion/irritation, others	Respiratory sensitizer, germ cell mutagenicity, carcinogenicity, specific target organ toxicity following repeated exposure, aspiration hazard, others	Acute hazards to the aquatic environment

GHS labels are depicted as "caution instructions and caution symbols" depending on the class of chemical danger or chemical hazard.

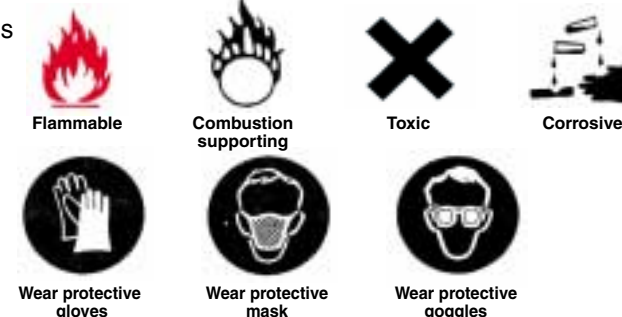
The frame of the diamond shape is colored red; black is used for the enclosed symbol. The displayed illustration differs depending on the type and class of danger or hazard.

Note: The items in **boldface** above represent physicochemical dangers; the items in plain face are health and environmental hazards.

Warning Labels (Product Liability Labels)

In addition to offering MSDSs, we provide warning labels that enable users to quickly determine the degree of hazard or toxicity associated with the product.

Warning Label Examples



Process Safety and Disaster Prevention Efforts

Sumitomo Seika has established the goal of zero injuries and zero accidents. With the revision of our management policy, we renewed our commitment to our belief that safety comes first, and we have repeatedly communicated the importance of safety for all our employees. For the past several years, in keeping with our safety policy, we have been emphasizing the importance of verifying process safety and monitoring the status of our facilities to prevent accidents in our Works.

Ensuring the Safety and Stability of Our Operations

We are striving to reduce accidents by implementing statistical management as a means of identifying their causes and preventing their recurrence. As a result, the number of accidents has been on a gradual downtrend, but more than 30 cases continue to be reported every year.

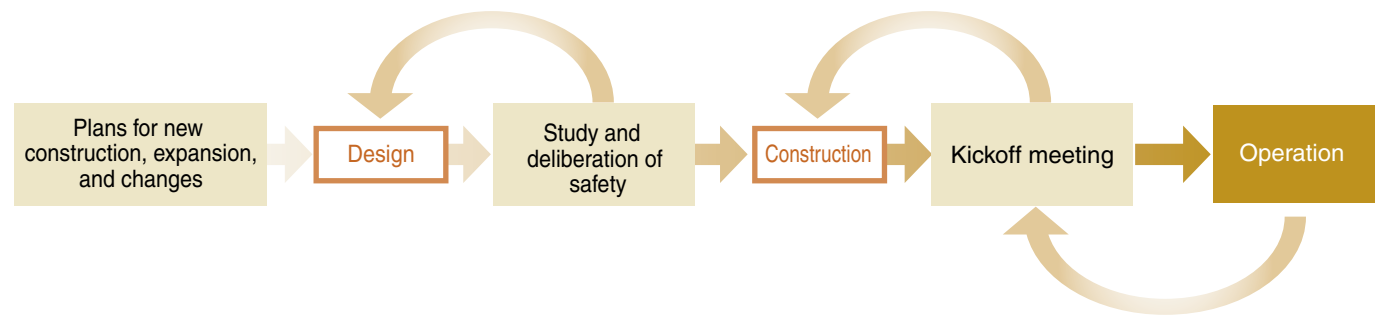
Roughly half of the accidents can be attributed to erroneous operation and degradation of facilities over time. As a result, in fiscal 2007 we maintained our fiscal 2006 commitment to maintaining a specific emphasis on the following initiatives.

- 1) Implementation of clear evaluations based on the facility design manual for chemical processes, and implementation of new or partially new management
- 2) Verification and prompt response with safety measures for highly hazardous or toxic facilities
 - Implementation of HAZOP assessment (a process safety analysis technique according to hazard scenarios)
- 3) Enhanced inspection and systematic maintenance of very old facilities
- 4) Implementation of measures to prevent human error (eradication of operation errors and failure to confirm)

Pre-assessments of Facilities

The following illustration shows the sequence of actions required to construct a new facility or change an existing facility. As shown in the illustration, representatives of the production, design, and environmental safety divisions preliminarily assess and discuss the

safety of facilities to prevent accidents. In fiscal 2006, in order to incorporate process safety assessments, we adopted approaches such as HAZOP for this assessment system.



Disaster Response Drills

Disaster response measures should be adopted and disaster response drills carried out to ensure safety and prevent disasters should at least minimize the damage resulting from a disaster. Our Himeji Works and Befu Works are subject to the Petrochemical Complex Disaster Prevention Act; therefore, we signed the Agreement on Regional Disaster Prevention and participated in regional disaster response drills in addition to our own disaster response drills. This approach has enabled us to construct a mutual support system with regional communities.



Large Squirt Chemical Fire Truck
Our Himeji Works is subject to the Petrochemical Complex Disaster Prevention Act. Because this plant stores massive quantities of hazardous materials and compressed gases, it is required to maintain its own fire truck as part of its voluntary firefighting system. We have replaced a conventional chemical fire truck with the latest large squirt chemical fire truck. With its 22-m extension, this truck has the capacity to spray 3,800 liters of water or 3,400 liters of chemical foam per minute.



Safety Assembly



Higashi Fire Department performing high-structure rescue drill



A disaster response squad takes part in fire-fighting drill

Commitment to Occupational Safety

At Sumitomo Seika, our own employees as well as our subcontractors have been conducting operations in keeping with our conventional belief that safety comes first. Specifically, management in the workplace has been underpinning basic safety measures with a bottom-up approach involving a campaign to detect near misses in the workplace, implementing 5S activities (keeping things tidy and in order and maintaining cleanliness through cleanups and discipline) practicing hazard prediction activities, and practicing the technique of "finger pointing and calling."

Occupational Safety Initiatives

In fiscal 2005, our record of zero accidents leading to suspension of operations since 1998 came to an end. As a result, the president of the company issued a safety message and requested that all our employees and subcontractors' employees stationed at our Works maintain a stronger focus on safety. At the safety meetings held at each Works during the annual Safety Week, the president delivers a safety address and visits each facility during safety patrols, requesting that management and all employees raise awareness of their accountability to ensure safety through instruction that targets items requiring improvement.

The Industrial Safety and Health Law was revised with a requirement for inspection of workplace risks and improvement of assessments. This effort was supported by our decision to acquire certification of registration with the Occupational Safety and Health Management System. Consequently, our Works have identified the following items:

- 1) investigation of risk factors and implementation of necessary countermeasures (risk assessment of operations);
- 2) improvement of occupational safety and health regulations;

- 3) acquisition of certification of registration with the Occupational Safety and Health Management System; and
- 4) continued promotion of technical education and training

As a result, between January and December 2007, we experienced zero accidents leading to suspension of operations and two accidents not leading to suspension of operations. Our operation suspension rate was zero (versus a rate of 1.83 for all industries and 1.10 for the chemical industry). Although we avoided any serious accidents leading to suspension of operations, we did experience two accidents not leading to suspension of operations.

Accordingly, while our basic approach is to ensure that each workplace identifies its own risks and takes measures to ensure safety, we remain committed to implementing our "safety first" policy.



Sumitomo Seika's president participating in a safety patrol



Detecting Hazard Factors (Risk assessment)

We advocate and have requested reports from each workplace in order to identify latent hazards in each workplace and implement necessary measures targeting each hazard factor detected. We received 436 reports from three Works.

The report items are categorized as follows: 1) immediate improvement required; 2) rapid improvement required; 3) systematic improvement of some problems required; and 4) few problems to be improved as needed.

Among these, item 1) is closely associated with the potential for serious accidents such as the risk of falling from a high location or being dragged into rotating machinery. We immediately implement all necessary measures to ensure worker safety.

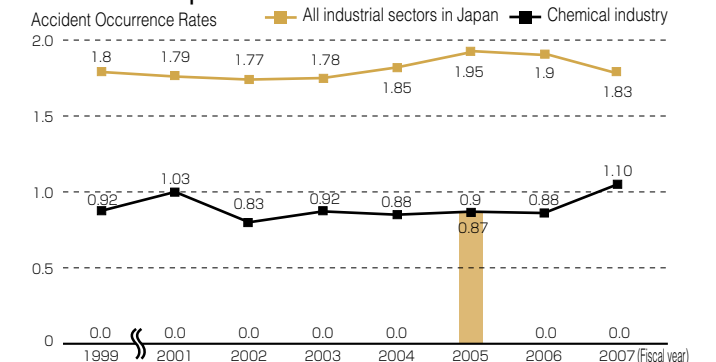


Rescue drill with protective gear



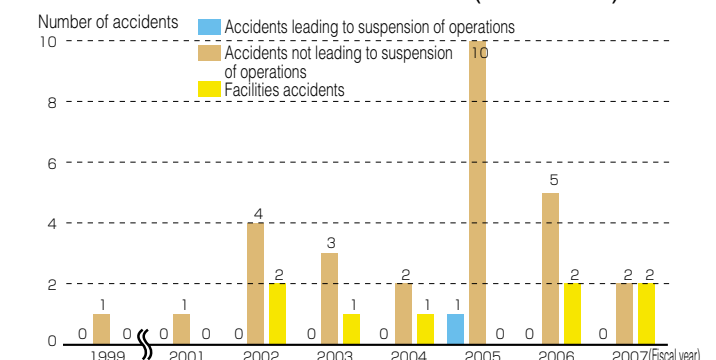
Shikama Fire Station staff practice CPR with an automated external defibrillator (AED)

Comparison of Job-Related Accident Occurrence Rates in Japan



Accident occurrence rate = (number of deaths and injuries caused by job-related accidents)/(total work hours) × 1,000,000 hours
The accident occurrence rate is for accidents that occurred in factories.

Number of Job-Related Accidents (at factories)



Commitment to Distribution Safety

Any accident occurring during the transport of chemical products could greatly impact the environment and the regional community. The safe transportation of our products is as important as safe production in our Works, but they differ in some ways. Safe transportation can be ensured only if we gain the cooperation of our transportation subcontractors.

Our Efforts to Ensure Safe Transportation

Sumitomo Seika established the Distribution Safety Meeting with the participation of our distribution subcontractors. In addition to communicating our safe distribution policies to our subcontractors

through this annual meeting, we receive safety reports, environmental action plan reports, and activity reports from each company while working diligently to improve the level of safety.

Provision of Safety Information

In order to ensure the safe transport of our products by our distribution subcontractors, we provide essential data such as the properties of chemical substances, the first aid response to be given, and the person or division to be contacted following an accident, thus ensuring a rapid response. We provide this information to our distribution subcontractors by including material safety data sheets (MSDS) and Yellow Cards (information on the first aid required in an emergency). In addition, we provide the necessary training. Drivers for our subcontractors are required to

carry these yellow cards while transporting chemicals so that appropriate emergency measures can be taken if necessary. The distribution companies must also bear materials with emergency instructions.



Yellow Cards and container labels summarizing accident response measures

Supporting Safe Transportation by Subcontractors

To confirm that transport drivers are fully knowledgeable about our products, we provide them with instructions on how to transport and move compressed gas products and how to store and handle our products. In addition, we visit our distribution subcontractors and conduct joint drills in order to train the drivers in accident reporting procedures and emergency response measures and the like so they can minimize the risk of emergency situations.



Joint response with distribution subcontractors



Joint response with distribution subcontractors



Subcontractors undergoing training

Hazard Assessment for Substances Being Transported

Before transporting our products, we review the hazards that could arise from each chemical substance by referring to the standards of the National Fire Protection Association of the U.S.A. These standards are based on three elements — health hazard, combustion hazard, and reaction hazard. Last year, we undertook assessments of the properties of 5 products and evaluated 60 transportation methods.

We use the results of our review to determine container construction, the unit amounts for transport, transportation routes, and the distribution subcontractors to be used for transport to ensure in-transit safety.



Tanker incorporating safety features



Transfer from transportation by lorry to safe JR cargo train

Transportation Accident Relief Drills

As a member of the High Pressure Gases Regional Accident Prevention Association, Sumitomo Seika is participating in regional accident relief drills held at its Works to prepare for possible accidents as well as to develop a liaison network in preparation for response to emergency situations.



Joint disaster response drill with distribution subcontractors

Harmony with the Regional Community

Our management philosophy is to promote co-prosperity with society.

As a member of the society and the regional community, we develop our business in a manner that enables us to grow together with the community.

This approach enables us to gain the confidence of the residents of these communities.

Therefore, we are committed to implementing environmental protection and disaster response initiatives. In addition, we are informing the regional community of our activities.

Therefore, we are committed to implementing environmental protection and disaster response initiatives to ensure the safe and stable operation of our Works. In addition, we are informing the regional community of our activities.

Establishing Communication with Local Residents

Over the years, the Befu Works has taken advantage of various opportunities to submit reports on various environmental initiatives and has offered factory tours to the public through annual environmental protection meetings sponsored by Harima-cho. The Himeji Works has done the same through their environmental protection meetings. Moreover, the Befu Works has invited local residents to observe disaster response drills and has encouraged them to engage in exchanges of opinions.

In addition, as part of our Responsible Care activities, we held a variety of meetings in cooperation with chemical companies in regional communities. This initiative has enabled us to maintain our community dialog meetings.

In 2002, we held our first dialog meeting with residents of the regional community, and in 2005 we held our second such meeting in Himeji. In 2007, we held our third community dialog meeting in

Takasago. At this meeting, we collected questionnaires that we had earlier distributed to local residents. This allowed us to obtain the residents' opinions on environmental protection and other issues, and we compiled the survey results. To reflect the resulting opinions, we introduced our Responsible Care activities and exchanged opinions. We will continue to promote these initiatives in an effort to gain the goodwill of neighboring residents.

In addition, we have made our own employee welfare facilities — including athletic fields, tennis courts, and gymnasiums — available for the use of local residents. As well, we first undertook accessible tasks such as cleaning the environs around the Works and participating in various events such as the Himeji Environmental Fair held annually by the city of Himeji.

As a member of the community, we are contributing to improved environmental awareness throughout our society. In this way we are retaining the goodwill of neighboring residents.



Himeji Environmental Fair 2007



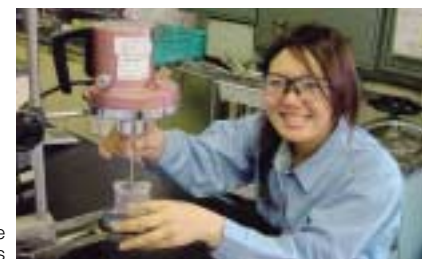
Community clean-up campaign

Acceptance of Internships

Internships were introduced 100 years ago in Europe and North America, eventually becoming an established part of business and society. Today in Japan, this approach has been attracting attention as a means of cultivating human talent in cooperation with industry, academia, and government. Moreover, it has been promoted with the goal of enabling young people to find their preferred type of work on a subjective basis and cultivating students with a high level of professional awareness. We intend to promote internships in a positive manner and accept interns in our

workplaces. As well, we will continue to support the development of personnel who can reform and create the world of the 21st century.

Gaining direct experience in analysis



Responsible Care at Plants in Other Countries

We maintain three international production bases in Singapore, Taiwan, and Thailand.

We operate our international plants in compliance with the relevant laws and regulations of the corresponding countries; however, we also apply the environmental protection and safety techniques we developed in Japan to these international plants. Singapore requires stricter controls than does Japan: our Singapore plant is required to carry out safety assessments (HAZOP and the like).

The workforces in our international plants are varied. They represent a variety of religions and races and have varied educational backgrounds. Under such conditions, maintaining safe plant operation can be more challenging than is the case in Japan,

but these plants have succeeded in maintaining a clean record of zero accidents since the start of operation.



Safety meeting at Singapore plant



Singapore plant