MGC MITSUBISHI GAS CHEMICAL COMPANY, INC.

Editing division and Contact for MGC Responsible Care further information

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Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

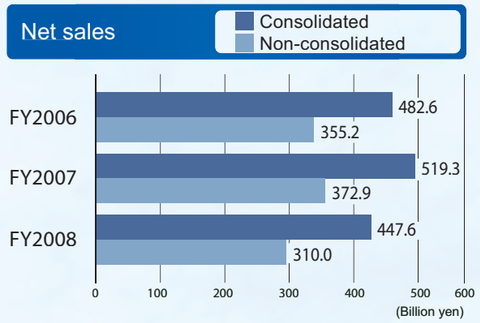
Responsible Care Status Report 2009

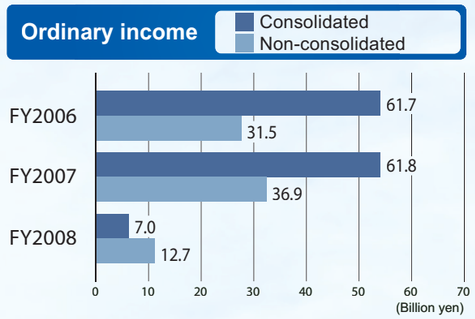
Environment, Health and Safety activities of Mitsubishi Gas Chemical Company, Inc.

MGC

Profile of MGC (As of March 31, 2009)

Company Name
MITSUBISHI GAS CHEMICAL COMPANY, INC.
Head Quarters Address
Mitsubishi Building, 5-2 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8324, Japan
Original Establishment January 15, 1918
Incorporation April 21, 1951
Capital ¥ 41.97 billion
Number of Employees
4,902 (Consolidated)
2,258 (Non-consolidated)
Main Business Sites in Japan
Branch offices :
Osaka branch and Nagoya branch
Research laboratories :
Tokyo research laboratory, Niigata research laboratory and Hiratsuka research laboratory
Plants :
Niigata plant, Mizushima plant, Yokkaichi plant, Yamakita plant and Kashima plant
Number of consolidated subsidiaries : 34





Main Products

Natural Gas Chemicals Company

MGC manufactures commodity chemicals such as methanol, ammonia, formalin etc. and uses these chemicals to produce their derivatives, and life-science products.

Methanol
Formalin
Ammonia
Methylamines
Methyl methacrylate
Methacrylates
Polyols
Dimethylether
Ubidecarenone (Co-enzyme Q_{10})
ASC Super (Catalase)
Hydrogen generation device from methanol
Catalysts

Aromatic Chemicals Company

Through MGC's unique xylene separation and isomerization technology, OX, MX, PX isomers are separated and used as raw materials to produce functional aromatic products.

m-Xylene
o-Xylene
Methaxylylene diamine
1, 3-BAC
MX nylon resin
Toluic acid
Aromatic aldehydes
Trimellitic anhydride
Pyromellitic anhydride

Specialty Chemicals Company

MGC is developing basic chemicals such as persulphates, super-pure hydrogen peroxide for electronic industry, and engineering plastics such as polycarbonate etc.

Hydrogen peroxide
Persulphates
Hydrosulfite
Chemicals for electronic industries
Monomer for photo resist
Monomer for plastic lens
Polycarbonate resin (Iupilon®)
Polyacetal resin (Iupital®)
Modified polyphenylene ether (Iupiace®)
Polyamide MXD6 (Reny®)
Polyamideimide (AI Polymer®)
Iupilon Sheet®

Information and Advanced Materials Company

MGC supplies high-performance, high-value added products such as electronic materials, oxygen absorber (AGELESS®) etc.

Epoxy • BT resin copper clad laminates
Materials for multi-layer printed circuit board
BT resin®
LE SHEET®
AGELESS® (Oxygen absorber)
Anaero Pack®
RP System®
AGELESS OMAC®
PharmaKeep®

Contents

Explanatory Note

The Mitsubishi Gas Chemical Company, Inc. (MGC) has been publishing the environmental report since 2001, has changed the report title to "Responsible Care Report" in 2007, and has been announcing it's approach to the environment, health and safety activities.
This Responsible Care Report 2009 is issued in order to publicize MGC's Responsible Care (RC) Activities (Occupational health and safety, Process safety and disaster prevention, Environmental preservation, Product stewardship, and Distribution safety) widely to the public, and to promote MGC's own RC activities.
This Report is compiled in reference to the "Environmental Report Guideline 2007 edition" of the Ministry of Environment, and is written in an easy-to-understand way for a better understanding.

Scope of This Report

[Sites covered]
All MGC's domestic business places. The environmental performance data are based on only those of 8 plants where the production is carried out.
[Period covered]
From January 1, 2008 to December 31, 2008. (In a part of this report, activities in 2009 are described.)
As for the environmental performance data, the period is from April 1, 2008 to March 31, 2009.
[Publication]
October, 2009
[Next publication schedule]
October, 2010

Message from the President

Building up the deserving MGC group in the globalization age with the courage not to fear change

In the entire MGC group, "Putting Corporate Social Responsibility (CSR) into action in all business activities and aiming at world class sustainable growth as a chemical company dedicated to excellence with a character and presence based on its unique technology" is given as the MGC group vision, and it is important to encourage the growth of our deserving MGC group in the age of globalization with the courage not to fear change.

We recognize that "it is indispensable to earn the trust of society for sustainable development of our corporate activities by ensuring safety and environment". And we aim at the establishment of a culture of safety through the practice of RC activities with full staff participation in addition to thorough corporate compliance, and a company that can be trusted by the public.

We especially recognize that the starting point of a manufacturing industry is to ensure safety and stable operation, and achievement of zero accidents and zero occupational injuries is the basis of CSR. We are working on various safety activities with the aim of "Zero accidents, Zero occupational injuries and Environmental Preservation" based on the safety principle of "Top priority of business activity is to ensure safety"

Furthermore, energy saving activities, efforts to reduce our environmental burden from business activity, the development of environmentally friendly products, and appropriate measures to various chemical management regulations have steadily advanced.

And, we conduct these activities with participation of our affiliated manufacturing companies as part of our policy of developing Responsible Care (RC) activities across the entire MGC group.

These RC activities are described in this RC report, and we hope you will take the opportunity to understand our dedication to achieving our RC aims.

In addition, we welcome any feedback or requests you have regarding our activities in the future.

October 2009

Representative Director, President

Kazuo Sakai

MGC Corporate Behavior Guidelines

Mitsubishi Gas Chemical Company, Inc. ("MGC", "the Company" or "we") aims to be a company that acts with sound judgment and maintains the trust and understanding of society. The Company operates under six behavioral principles, presented and explained below, and will share knowledge of these principles widely throughout Group companies.

Senior managers recognize that it is their role to embody the spirit of these principles, and while ensuring that they have a full understanding of the necessary information inside and outside the Company, they will take the initiative to promote a high level of corporate ethics, and strive to develop and operate an effective framework for this purpose through the internal control system. Furthermore, if an incident takes place in contravention of these guidelines, they will take command and fulfill their obligations for internal and external disclosure, strive to identify the cause of the incident and prevent its recurrence, and deal with the matter strictly and fairly in respect to all parties, including management itself.

1. MGC will ensure customer and consumer satisfaction and trust by providing high-quality products and services that are useful, safe and reliable

2. MGC will voluntarily and proactively address environmental issues

3. MGC will comply with laws, regulations and rules, and will conduct fair, transparent, appropriate and open business activities

4. MGC will endeavor to ensure broad-ranging communication with society through appropriate disclosure of information

5. MGC will engage in business activities that are useful for society, and actively contribute to society as a responsible corporate citizen

6. MGC will provide comfortable and productive working conditions for employees, and will ensure a safe and rewarding working environment

Environmental and Safety Management

At MGC, we are understanding activities to promote "sustainable development", "creation of a recycling-based-society", and "safe operation" as important business objectives, and we are working on Responsible Care activities in all companies as a means to perform "Environment and Safety".

Safety Philosophy

Top priority of business activity is ensuring of safety.

Safety is the basis of business activity and safety ensuring is the duty to society.

Fundamental Policies on Environment and Safety

MGC, as an important member of the community, makes an effort to earn social trust by recognizing our responsibility to contribute to the community and to secure the environment and safety, and by thinking of how to put our corporate activities in harmony with the protection of the global environment under the principle of sustainable development.

Environmental and Safety Targets

Zero Accident, Zero Occupational Injury and Environmental Preservation

Fundamental Policies

- Ensuring of health and safety in our operations
- Securing security management of facilities and increasing self-maintenance technologies and skills
- Reducing environmental loads in business activities
- Ensuring safety in use, handling and disposal of products
- Developing of environment-friendly and safety-conscious products and technologies
- Ensuring environmental preservation and safety in the logistics of obtaining raw materials and storing and delivering our products
- Enhancing of society's confidence to us
- To provide support to our subsidiaries and affiliates in implementing their own RC activities
- Continuously improving our RC management system

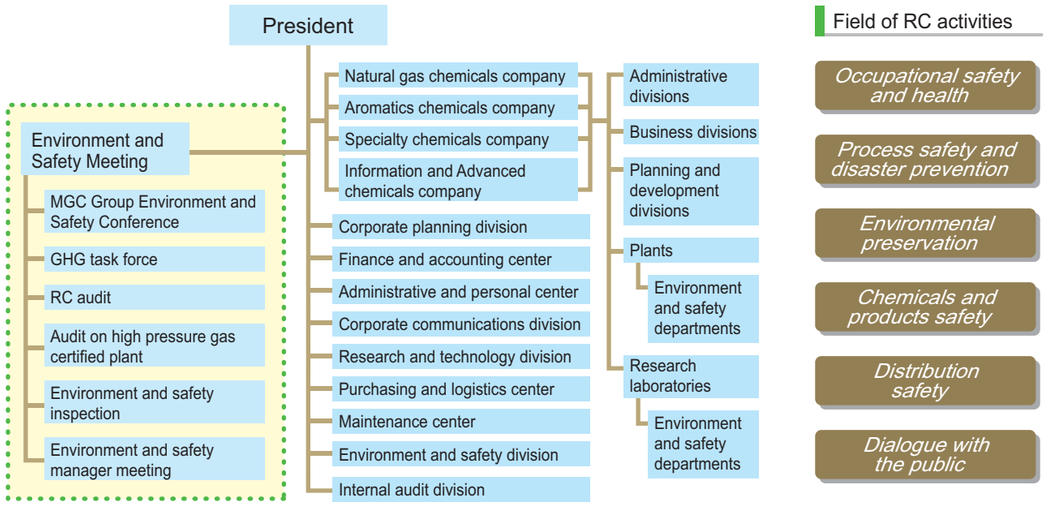
We shall comply fully with applicable domestic laws and foreign rules and shall also cooperate with related international organizations, international and national administrative organs, and nongovernmental organizations whenever needed.

Message from the Director in charge of environment and safety

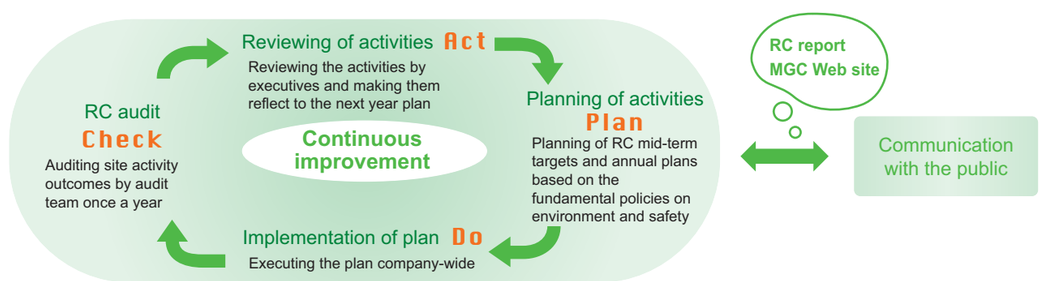
Learning from the tragic accident that occurred two years ago, MGC has initiated action to cultivate a heightened culture of safety. When looking at the cause of current accidents including MGC's, the problem of not conforming to what has been decided is a conspicuous feature of these accidents. However, when looking at the cause more deeply, a lack of communication buried away in a series of actions is discovered, and surprisingly that is the greatest part of the cause. Conforming to what has been decided is the basis of safety, but by assuming that there is always a person who has not understood the rule well, if the communication of the worksite is good enough, it is possible to prevent accidents. This is a great performance of "Site Power". There is no a cure-all for improving communication, but it is important to build up a culture that makes everyone feel comfortable to consult with and talk to each other, to superiors and specialists through the efforts and idea of each worksite. "Zero Accident, Zero Occupational Injury" is not a goal of the distant future.I believe that it is possible to achieve it if we have a strong will "Never cause accident or disaster", and put our heads together at the worksite.

Director, Managing Executive Officer
Kuniaki Ageishi

Responsible Care Promotion System



PDCA cycle of RC activities



Targets and Results of Responsible Care Activities

Rating scale　Achieved :　More efforts required :　No activity :

	Medium-term RC targets (2006-2010)	Activity Plan in 2008	Actual results of activities	Estimation	Relevant page
Occupational health and safety	Achieve zero occupational injury	❶ Promote plenary participation in the *Hiyari-Hatto* (near miss) suggestion activities ❷ Make a study of risk assessment criteria ❸ Strengthen leadership of MGC to prevent occupational accidents in subcontractors	❶ Devised disclosure of the number of the *Hiyari-Hatto* (near miss) suggestions and case work etc., in order to promote participation rate. ❷ Enacted a new risk assessment guideline, and standardized assessment criteria of all the company. ❸ Ensured application of MGC construction safety rules to subcontractors and neighboring subsidiaries.		10
Process safety and Disaster prevention	Achieve zero accident	❶ Reinforce safety management for aged equipments (including piping) ❷ Enhance the crisis management system in case of an accident ❸ Promote AZ (Accident Zero) project activities	❶ Implemented inspection, repair and renewal sequentially, according to the priority from risk or importance. ❷ Contrived initial action system for accidents, and devised precise provision of information to the fire-brigade. ❸ Addressed the fostering of the culture of safety with act of assigned safety management officers as leader.		11 12
Environmental preservation	Reduce energy consumption rate below 85% compared with 1990	❶ Reduce energy consumption rate by 1% or more compared with the previous year	❶ In spite of energy saving measures corresponding to about 12,000kL crude oil equivalent, the energy consumption rate has acted up by 6% compared with the previous year, because of product decline resulted from the global economic downturn. (94.4% compared with FY 1990)		13 〜 19
	Reduce greenhouse gas emission rate below 80% compared with 1990	❶ Reduce GHG emission rate by 1% or more compared with the previous year	❶ GHG emission rate has acted up by 0.9% compared with the previous year. The effect of fuel switching from crude oil to natural gas has made the drop smaller. (82.2% compared with FY 1990)		
	Reduce PRTR chemical emissions by 10% compared with 2004	❶ Formulate and execute reduction plan (with goals) for substances with large emission amount	❶ Emission of chemicals in the PRTR list of JCIA (Japan Chemical Industry Association) has been reduced by 22% compared with FY 2004.		
	Reduce VOC emissions by 10% compared with 2004	❶ Formulate and execute reduction plan (with goals) for substances with large emission amount	❶ VOC emission has been reduced by 27% compared with FY 2004.		
	Achieve zero emission of waste (0.3%≦Final disposal÷Waste generated)	❶ Set a target of zero emission of waste or landfill reduction ratio, and strive in each business site ❷ Promote green purchasing (office and stationary supplies)	❶ Achieved the zero emission of waste in five plants. ❷ Promoted the green purchasing through utilization of a purchase system of office and stationary supplies.		
Chemicals and products safety	Provide latest MSDS (Material Safety Data Sheets) Conform to GHS (Globally Harmonized System) Implement safety assessment of products Participate in Japan Challenge Program Respond to REACH regulations Undertake appropriate evaluation of new chemicals Pursue the development of environmentally friendly products and energy-saving technologies	❶ Make and affix GHS labels compliant with the Industrial Safety and Health Law ❷ Review and offer MSDSs compliant with the Industrial Safety and Health Law ❸ Investigate contaminants in our products and register on a database ❹ Implement the Japan Challenge Program ❺ Implement pre-registrations, and prepare registrations for REACH regulations ❻ Promote safety assessments for newly developing products ❼ Pursue the development of environmentally friendly products and energy-saving technologies	❶ Identified products corresponding to lowered threshold concentration items in the Industrial Safety and Health Law, and made and affixed GHS labels. ❷ Reviewed the MSDSs of newly notifiable products based on the Law, and offered them. ❸ Registered the investigation outcomes on the database, and made searchable. ❹ Attended to the implementation of safety data collection program in four substances, and tested as scheduled. ❺ Completed all pre-registrations, and made provision for registrations. ❻ Carried out "Risk assessment of newly developing products" aimed for promotion of safety assessment. ❼ Promoted the development of environmentally friendly products and energy-saving technologies, such as new soil remediation technology, high performance damping materials, depurant for oil contamination, etc.		20 〜 22
Distribution safety	Respond to GHS requirements Ensure safety in distribution activities	❶ Confirm GHS labeling complied with lowered threshold concentrations in the Industrial Safety and Health Law ❷ Enhance audit and oversight for contracted logistics companies ❸ Analyze troubles in logistics and ensure preventative measures	❶ Confirmed that GHS labeling has been certainly affixed. ❷ Carried out the safety audit in six logistics companies, and ensured oversight. ❸ Analyzed the troubles in logistics, shared results with interested departments, and validated its effectiveness at the scene.		22
	Reduce the environmental burden in distribution activities	❶ Promote CO_2 emission reduction scheme in our distributions ❷ Enhance the modal shift and evaluate its benefit quantitatively	❶❷ Promoted improvement of energy consumption rate per ton-kilometer aiming at 1% per year, but acted up by 0.9% compared with the previous year, because of decline of burden rate in shipping resulted from the global economic downturn.		16
Dialogue with the public	(Promote the annual goals of action)	❶ Enrich RC Report 2008 ❷ Publish Environmental Site Reports ❸ Participate in JRCC activities (Information exchange meeting, Regional dialogue meeting, etc.) ❹ Promote social environmental activities and regional communications	❶ Enhanced contents of E&S activities in the business sites of MGC and the members of MGC group Environment and Safety Committee. ❷ Three sites have published their Site Reports. ❸ Communicated with local administrative, neighboring companies and local residents where the plants are located, through participating regionally held RC community dialogue meetings, as a member company of JRCC. ❹ Carried out volunteer activities such as cleaning campaign around the business sites, reception of plant visits and opening welfare provisions to the local residents. Participated in activities and events in local communities actively.		23 〜 32
General RC activities	Support subsidiary and affiliate companies in introduction of RC activity Audit affiliates in Japan and overseas	❶ Assess activity outcomes in 2008 at the member companies of MGC group Environment and Safety Committee, and confirm with their goals of action in 2009 ❷ Supply the Committee member companies with E&S information via MGC group Environment and Safety Meeting or E-mails ❸ Enhance data collection of environmental performance in MGC group affiliates ❹ Carry out the RC audit to 4 domestic Committee member companies ❺ Carry out the RC audit to 2 overseas subsidiaries and affiliates	❶ Carried out information exchange between the member companies, through assessing the activity outcomes in 2008 and confirming with the goals of action in 2009. ❷ Promoted sharing of E&S information among the member companies. ❸ Considered clarifying and expanding data collection categories, and applied from the actual performance in fiscal 2008 data. ❹ Carried out the RC audit to 4 domestic Committee member companies. ❺ Carried out the RC audit to 2 overseas subsidiaries and affiliates in Indonesia and Singapore.		33
	(Promote the annual goals of action)	❶ Review the company regulations ❷ Work on induction of the RC verification (JRCC) ❸ Carry out RC educations and trainings	❶ Conducted amendment of company regulations and site regulations. ❷ Passed over the consideration of RC verification in order to launch the AZ project. ❸ Carried out development of education program and conducted education and training as program in each business site. Enhanced the system to determine the level of understanding.		24 〜 31

Responsible Care Audits and Goals of Action

MGC carries out the RC audit annually. The results are reported in the Environment and Safety Meeting and reflected in the RC activity program for the following year, with the aim of achieving continuous improvement.

The RC Audit in 2008

MGC's RC audits are carried out by the audit team headed by the director in charge of Environment and Safety. The team audits progress of RC activity program and general RC activities in each business site. The team also assesses implementation of the PDCA cycle of the safety management system for high pressure gas equipments, boilers, and class I pressure vessels in certified plants. In 2008 audits, we started top and field interviews in order to comprehend "status and issue in the culture of safety" in the site.

- Audit period: June 2008 to October 2008
- Auditee: 6 plants (including Tokyo Techno-Center), 3 research laboratories, 4 internal companies and the corporate headquarters
- Audit outcome: Full conformity: 20 cases Non-conformity: 0 case
  Improvement orders: 9 cases Comments: 31 cases
- Follow-up: The team confirmed that all the items directed for improvement in the previous audit had been properly addressed.

Investigation of evidence

Overall audit

Goals of Action in 2009

The Goals of RC Action in 2009 was formulated at the Environment and Safety Meeting in December 2008.
We continue to strive to achieve the RC Medium-term targets for 2006-2010.

Note: Distribution safety, Dialogue with the public, and General RC activities are omitted in this table.

RC Medium-term targets (2006-2010)	Goals of Action in 2009
Occupational health and safety Achieve zero occupational injury	●Promote plenary participation in the *Hiyari-Hatto* (near miss) suggestion activities ●Promote risk assessment ●Strengthen construction safety management
Process safety and disaster prevention Achieve zero accident	●Promote AZ (Accident Zero) project activities (Fostering of the culture of safety, Confirmation and compliance with the rules of safety, Enrichment of education and training, Promotion of precautionary maintenance) ●Reinforce safety management for aged equipments
Environmental preservation Reduce energy consumption rate below 85% compared with 1990	●Reduce energy consumption rate by 1% or more compared with previous year, through energy saving and stable operation
Reduce greenhouse gas emission rate below 80% compared with 1990	●Reduce GHG emission rate by 1% or more compared with previous year, through energy saving and fuel replacement
Reduce PRTR chemical emissions by 10% compared with 2004	●Formulate and execute reduction plan (with goals) for substances with large emission amount
Reduce VOC emissions by 10% compared with 2004	
Achieve zero emission of waste (0.3%≦Final disposal÷Waste generated)	●Set a target of zero emission of waste or landfill reduction amount, and strive in each business site
	●Promote green purchasing (office and stationary supplies)
Chemical and product safety Provide latest MSDS and conform with GHS	●Promote revision and offer of GHS complied MSDSs ●Promote efficient work of GHS classification and edition of label elements
Implement a product safety assessment program Participate in the Japan Challenge Program Respond to REACH regulations Carry out appropriate evaluation of new chemicals	●Address to the Japan Challenge Program accurately ●Promote the REACH registration accurately ●Promote safety assessments for newly developing products
Pursue the development of environmentally friendly products and energy-saving technology	●Pursue the development of environmentally friendly products and energy-saving technologies

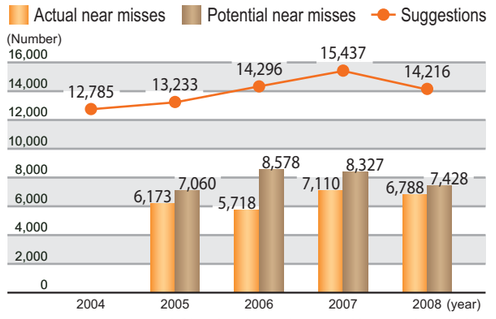
Approach to Occupational Health and Safety

As part of its RC initiative, MGC has a range of measures in place aimed at preventing occupational injuries.

Occupational safety activities

MGC is striving to the RC activities under the Environmental and Safety Target "Zero Accident, Zero Occupational Injury and Environmental Preservation". In order to achieve the Target, a range of occupational safety activities are conducted in each business site. They include daily safety activities such as *hiyari-hatto* (near miss) suggestion, 5S and risk reduction activity, as well as education, training, and risk assessment. As for the risk assessment, MGC has established the "Guideline of Risk Assessment for Occupational Safety and Process Safety - Disaster Prevention" in June 2008. We have started risk assessments under company-wide standardized criteria in each business site.
Also, we continue to address the *hiyari-hatto* (near miss) suggestion activity which is able to nip a bud of risk, and is good for better sensitivity against danger. In business sites, an array of fostering action are taken, such as plenary participation campaign, information exchange of the *hiyari-hatto*, and utilization as a material of risk assessment.

Trends in *hiyari-hatto* (near miss) suggestion



* Sites has been decreased by two since 2005.

Occupational Injury Prevention for Subcontractors

MGC addresses occupational injury prevention for subcontractors. For example, requesting application of MGC's construction safety rules, offer of information for safety, and mutual attendance in the Occupational Health and Safety Committee Meetings.

Results of Safety Activities

In 2008, the numbers of lost time injuries were five for MGC, and four for subcontractors.
The number of lost time injuries at subcontractors was two-thirds of the previous year, but that at MGC increased 2.5-fold to our regret.
Primary causes of the injury were
1) Lack of knowledge, skills and risk prediction activity
2) Habituation, Inattention
3) Impatience, Absorbed in thought
All of them are included in the human factors, and are possible causes in anywhere. We have to see those cases as own case, and to strive to prevent similar injuries.

Safety assembly

Safety lecture

Trends in lost time injury frequency*1

	2004	2005	2006	2007	2008
MGC	0.28	0.29	0.92	0.59	1.43
Chemical industry	0.88	0.90	0.88	1.10	0.84
Manufacturing industry	0.99	1.01	1.02	1.09	1.12

*1 Number of injuries or fatalities per 1 million total number of working hours

Trends in lost time injury severity*2

	2004	2005	2006	2007	2008
MGC	0.001	0.001	0.20	0.01	0.03
Chemical industry	0.06	0.07	0.10	0.04	0.07
Manufacturing industry	0.11	0.09	0.11	0.10	0.10

*2 Number of days lost per 1 thousand total number of working hours

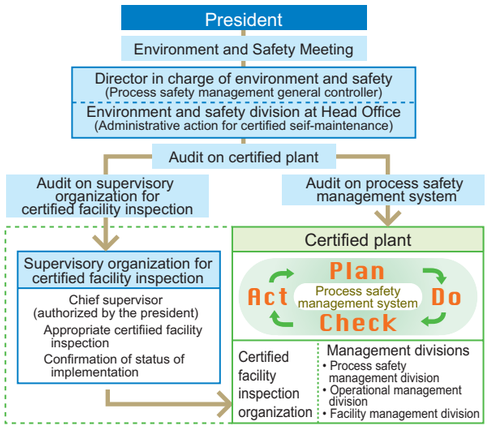
Approach to Process Safety and Disaster Prevention

MGC has positioned the safety as a top priority issue. We are strongly committed to the achievement of zero accidents and zero occupational injury, which we pursue by promoting self-maintenance based on RC activities. We also have an emergency system in place to deal with accidents should they occur.

Process Safety Management

MGC implements process safety audit as part of annual RC audit at each plant. As for the Niigata and Mizushima plant, which are certified as a self-maintenance plant of high pressure gas facilities, the audits for the certified plants are carried out by the Director in charge of environment and safety, based on MGC's "Certified Process Safety Management Regulations for High Pressure Gas". This is aimed to assess whether the PDCA cycle of the process safety management system is being implemented surely, and whether the supervisory organization for certified facility inspection is working properly.

Certified Process Safety Management System of High Pressure Gas Process



Number of Accidents

Accidents in 2008 counted twelve cases including those at subcontractors. That was worse than eight of that in the previous year.

Safety Management Activities for Facilities

The prevention of accidents requires us to ensure the safety of process and the facilities well maintained, as well as to carry on stable operations.
At each plant, inspection/renewal program of aged facilities has been developed. And inspection, repair and renewal are implemented sequentially, according to the priority from risk or importance.

The Maintenance Center of MGC has improved "Facility Management System" that was established and operated in Mizushima plant, and has introduced as a "Company-wide Facility Management System." We improve the facility management in MGC with this system, for example "*Mieruka* (visualization)" and “having in common” of the facility management work, accumulation of information and improvement of technology in the facility management, and patrimony of technology.

Main safety management activities at each plant	
Niigata plant	•Reinforcement of initiatives to eradicate equipment malfunction •Reinforcement of facility inspection, and execution of replacement plan •Risk assessment and systematic improvement of high pressure gas equipment
Mizushima plant	•Promotion of inspection and repair of aged facilities in three-year plan
Yokkaichi plant	•Confirmation and management of facilities subject to inspection
Kashima plant	•Planning and execution of fortified management measures to the aged facilities
Yamakita plant	•Planning and execution of renewal plan to the aged facilities

Response to Emergency

MGC has established an emergency system at each plant to deal with accidents should they occur, and carries out a range of emergency drills based on the safety program of the year. We always improve ourselves with the findings from drills, and we found that night or day-off emergency response is especially significant. So, we have contrived initial action system, and have devised precise provision of information to the fire-brigade.

Accident Eradication Project (Project AZ)

Background and aims of the project

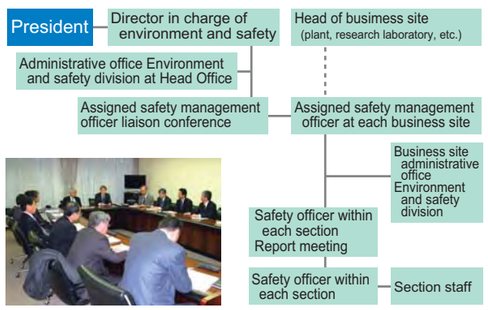
In order that we may never repeat a tragic accident or disaster like the fatal explosion that occurred at the natural gas drilling facility of our Niigata plant on December 6, 2007, and in order to halt the trend of increasing incidences of accidents and operational irregularities at MGC facilities, we have initiated a special project as part of our RC activities, Project AZ (Accident Zero), which is aimed at eradicating accidents.
The first objective of this project is the sharing MGC's newly formulated safety principle "Top priority of business activity is ensuring of safety" among management and all staff, and the implementing it. The second objective of the project is to enhance our education and training system for employees, to foster onsite safety technicians, and to upgrade our overall safety management. Furthermore, it is aimed to establish this as a lasting system which develops independent human resources educated in knowledge of rules and safety technologies. This will result in the achievement of our third objective: zero accidents.

Project duration

We have decided on a first project stage of three years in length, during which time we will establish accident eradication initiatives. If it is judged that the initiatives have not been fully established during that timeframe, we may extend the period as necessary.

System for implementation

Project implementation system is as follows.



The president has appointed assigned safety officers as the officials in charge of project implementation at each business site.

Progress of Project AZ

The company-wide kick-off meeting was held in February 8, 2008. And the site kick-off meetings were held in March with participation of the president and the director in charge of the project. The Safety Philosophy, and the aim and program confirmed by all participants.

(1) Meeting, Communication

Activity progress information is exchanged in the assigned safety management officer liaison conference. And the progress is disseminated by the AZ report.

(2) Education, Training

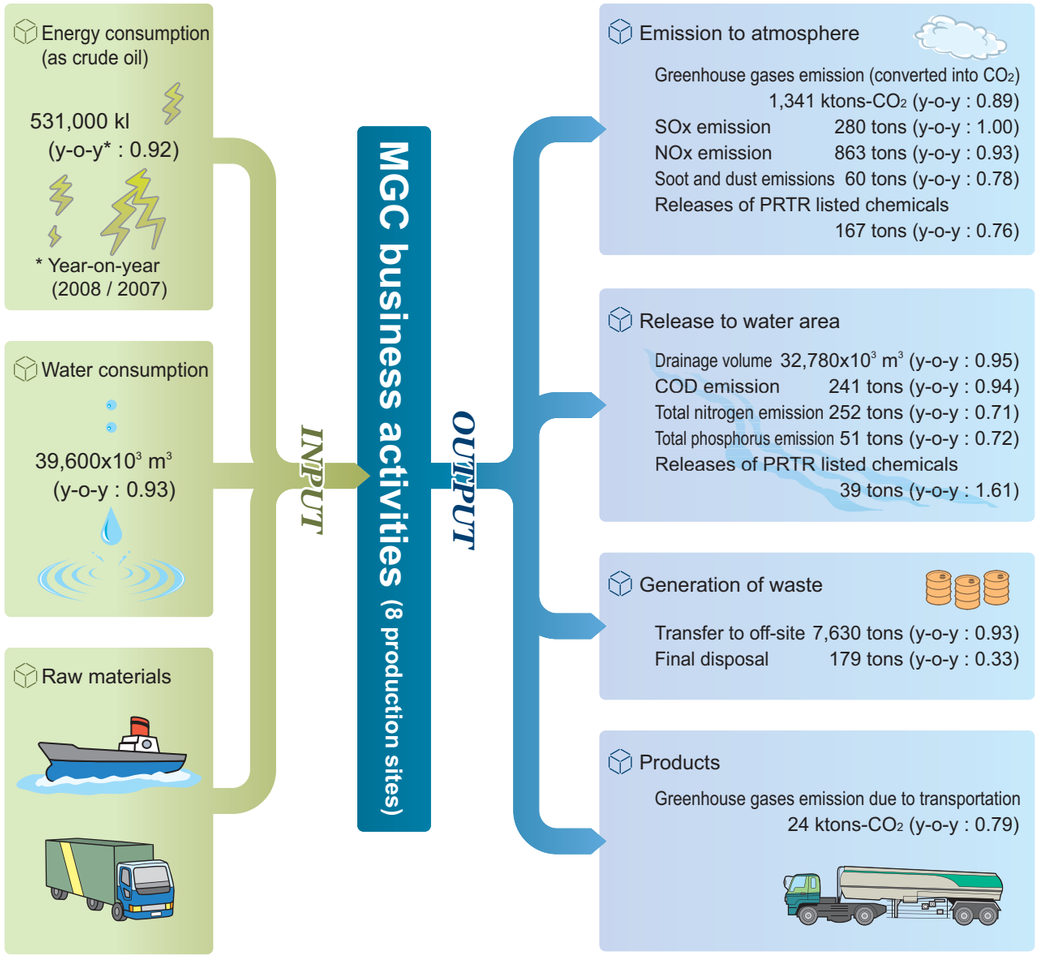
①Preparation and utilization of instruction material of accident case
We've prepared instruction materials of past accident case, and distributed them to each business site.
②Reconfirmation and education of applicable law
We've reconfirmed applicable laws in each business site, and have reeducated employee about them.
③Safety lecture, External training
We've held lecture of human error at each business site, with calls on neighboring affiliates to participate and lectures of safety sensory by visiting lecturer.

(3) Activity monitoring

Effectiveness of the activities is monitored in RC audits.

Environmental Burden from Business Activities

The overview of our environmental burden status in fiscal 2008 (from April 1, 2008 to March 31, 2009) is as shown below. Each plant makes efforts to ensure the efficient use of inputted resources and materials as well as the reduction of emission and waste.



Production site

Niigata plant,
Mizushima plant,
Kashima plant,
Yokkaichi plant
(including Naniwa plant
and Saga plant),
Yamakita plant,
Tokyo Techno-Center

Energy consumption	Total amount of fuels (heavy oils, etc), purchased steam and purchased electric power consumed in our business activities
Water consumption	Total amount of drinking water and industrial water used for business activities
Greenhouse gases emission	Total emission volume of 6 Greenhouse gases (including purchase of steam, electricity power)
SOx emission	Total emission volume of SOx contained in exhaust gas
NOx emission	Total emission volume of NOx contained in exhaust gas
Soot and dust emissions	Total emission volume of soot and others contained in exhaust gas
Releases of PRTR listed chemicals	Release volumes of the listed chemicals to the air and waters
Drainage volume	Volumes released to the public water area after treatment of drainage from our business activities
COD emission	Volume obtained with multiplying drainage volume by COD concentration in drainage
Total nitrogen emission	Volume obtained with multiplying volume of drainage by nitrogen concentration in drainage
Total phosphorus emission	Volume obtained with multiplying volume of drainage by phosphorus concentration in drainage
Transfer to off-site	Volume of waste transferred to off-site for external treatment

Environmental Accounting

MGC quantitatively calculates cost and benefit of environmental preservation in its activities, through the environmental accounting along the guideline of the Ministry of the Environment. And we utilize it for the cost management of environmental preservation and for the disclosure of our activities.

Environmental Preservation Cost

The cost of environmental preservation activities is separated into investment and expense.
Investment is the cost to introduce facilities aiming at environmental preservation. Expense is the cost for operating and managing the introduced facilities, and cost for conducting research and development of environmentally friendly products.

● Investment
The total amount of the investment in fiscal 2008 was 2,060 million yen. Main works of them were renewal of exhaust gas treatment facility in Mizushima plant, and renewal of waste water treatment facility in Niigata plant.

● Expense
The total amount of the expense in fiscal 2008 was 9,360 million yen. Among this, the expense for research development was 2,890 million yen, and the largest part with 30%. And then, expense for water pollution prevention was 2,230 million yen with 24%.

Benefits of Environmental Preservation Activity

As a benefit of environmental preservation activity, environmental preservation benefit was obtained, as well as the economic benefit such as expense reduction.

● Environmental preservation benefit
In fiscal 2008, emission of green house gas and release of the PRTR listed chemicals have been decreased compared with the fiscal 2007. Details of actual values are summarized in the environmental burden status in the previous page. reduction.

● Economic benefit
The profit on sale of valuable waste and the benefit of cost reducing by energy saving activities were obtained.

Economic benefit

Title	Item	Account (million yen)
Income	Profit on sale of valuable waste	109
Cost saving	Effect by energy saving	435

Environmental preservation cost in fiscal 2008

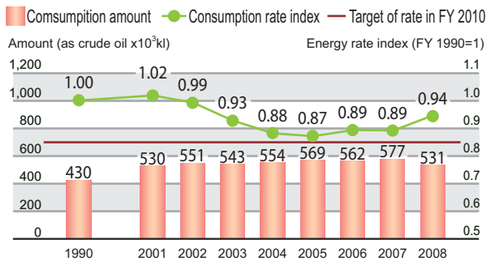
Breakdown			Main items for activity	(Million yen) Invest.	Expense
Onsite cost	Pollution prevention cost	Air pollution prevention	Off gas scrubbrer, etc.	446	724
		Water pollution prevention	Waste water treatment facility, etc.	510	2,228
		Soil, Noise	Prevention of soil infiltrarion, etc.	56	9
	Global environmental preservation cost		Replacement to energy-saving equipments, etc.	338	1,742
	Resource recycling cost		Recycle or treatment of waste	1	1,014
Up or down stream cost			Retreval and reuse of product container	0	36
Management activity cost			Maintenance fee of environmental management, etc.	11	592
R & D cost			Development of environmentally friendly products, etc.	698	2,891
Social contribution cost			Supporting local community	0	16
Environmental damage cost			Compensation for environmental preservation	0	105
TOTAL				2,061	9,358

Approach to Global Warming Prevention

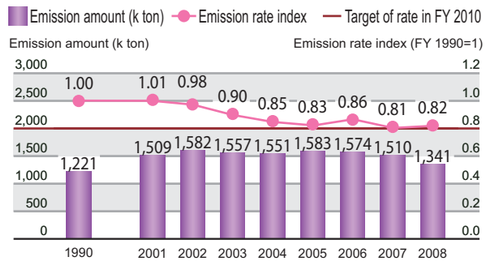
MGC has been working against the global warming (GW) issue in manufacturing section, transportation section, office section, and home section. Actual achievements in the manufacturing section which occupies major portion of the activity is as follows:

Energy consumption rate : 0.94 compared to FY 1990 (Target : 0.85 or less by FY 2010)
Greenhouse Gas (GHG) emission rate : 0.82 compared to FY 1990 (Target : 0.80 or less by FY 2010)

Trend of Energy Consumption Amount and Consumption Rate

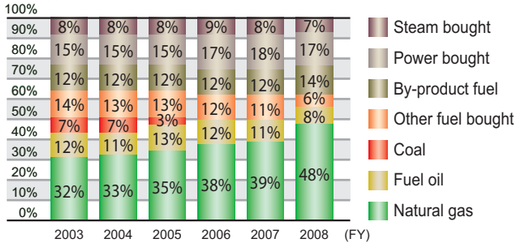


Trend of Greenhouse Gas (GHG) Emission Amount and Emission Rate



GHG emission amount data of the past is amended.

Trend of Energy Source Component Ratio



Breakdown of GHG Emission Amount (as k ton-CO_2)

CO_2 come from energy	1,133
CO_2 come from non-energy	198
Methane	1.0
Dinitrogen oxide	1.0
Hydrofluorocarbons	7.7
Perfluorocarbons	0.0
Sulfur hexafluoride	0.0
Total	1,341

Energy Saving Measures in Plant

Energy consumption amount in manufacturing sections in fiscal 2008 has decreased by 8% from the previous year. Meanwhile, the energy consumption rate has been aggravated by 6%, and the rate index has become 0.94 compared to fiscal 1990. This has been caused by considerable decline of production due to economic downturn.
In addition, MGC has implemented energy saving measures worth of more than 12,000 kL crude oil, and this is comparable to 2% or more of energy consumption.

Case example of energy saving measures in 2008

- Beef up of self generation by turbine modification
- Heat loss cut by optimization of reactor performance
- Efficient operation via improvement of catalyst
- Steam cut through optimization in purification process
- Avail of by-product hydrogene as boiler fuel

Measures for Reduction of GHG Emission

In fiscal 2008, the emission amount of GHG has been decreased by 17 tons (11%) than the previous year.
As for the breakdown of the emission, 1,330 k tons of CO_2 occupies more than 99% of the GHG, and other five gases are small.
The GHG emission rate has been changed for the worse due to decline of production, but fuel replacement to natural gas in Mizushima plant has minimized the change.

Development and Utilization of Clean Energy

MGC conducts exploration of natural gas in Niigata Prefecture, which is the clean fuel with fewer CO_2 emission per calorie and fewer impurity such as sulfur content. We use the obtained gas as a raw material and an energy source in Niigata plant. Furthermore, other plants have been promoting fuel replacement from coal or fuel oil to natural gas (city gas or liquefied natural gas (LNG)).

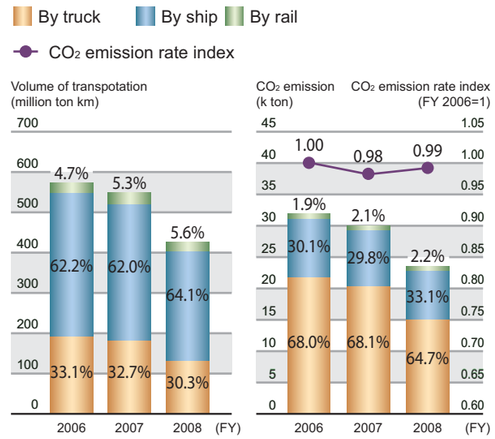
- Yokkaichi plant : coal ⇒ city gas (in FY 2005)
- Yamakita plant : fuel oil ⇒ city gas (in FY 2007)
- Mizushima plant : fuel oil, by-product gas from iron works ⇒ LNG (phase in since FY 2007)

Based on this, 48% of energy consumption in MGC has been from natural gas in fiscal 2008.
Also MGC takes part in a business of geothermal steam supply, which is a kind of renewable energy, to the adjacent power plant in Hachimantai, Akita Prefecture.

Approaches to GW Prevention in Distribution

The actual performance of energy consumption and emission amount of CO_2 in transportation section (transportation of own cargo) in fiscal 2008 are as follows:

- Volume of transportation : 426 million ton-km
- Energy consumption : 8,900 kL (as crude oil)
- CO_2 emission : 23.5 k tons



MGC has been working on energy saving through enlargement of cargo trucks and modal shift to railroad. As for these three years, the percentages of ship and rail transport have increased, and trucks and tanker trucks transport have decreased.
However, the lower shipping rate due to lower production amount has deteriorated both energy consumption rate per traffic ton-km and CO_2 emission rate by about 1% in fiscal 2008.

Approaches to GW Prevention at Office and Home

MGC is executing measures to GW prevention such as Cool Biz, Warm Biz, and turning off room lights and personal computers during nonuse at the headquarters and each research laboratory. In addition, we are pushing ahead with measures such as introducing high efficiency lights, introducing human sensor to rest room lights, and attaching thermal barrier films to glass windows of office.

Windows with thermal barrier films
(Hiratsuka research laboratory)

As for the approaches to GW prevention at home, we are making an appeal to employees for taking part in ABC (Acceleration By Chemical) activity which is promoted by the Japan Chemical Industry Association (JCIA).
In fiscal 2008, more than 500 volunteers of employees have participated and have achieved reduction of CO_2 emission by a little less than 3kg per day per household. In total, they have reduced 500 tons of CO_2 per year.

ABC activity promoted by the JCIA

ABC is an activity to promote energy saving measures at home life of chemical industry employees. Each participant sets one's activity target of energy saving measures and fills up check sheet with practical situations. As for MGC, we have introduced own in-house award system and extra energy saving measures list to improve the effectiveness of this activity.

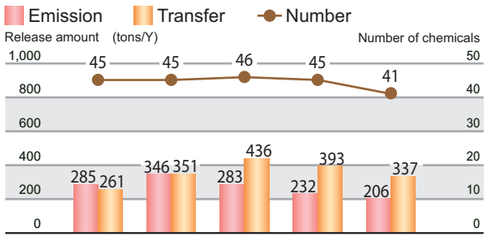
Approach to Chemicals Release Reduction

As for the chemical substances specified by the PRTR law and Volatile Organic Compounds (VOC), we have set up numerical targets of the reduction of the emissions in the Medium-term RC targets. And we are continuing efforts to reduce emissions.

Chemicals Specified in the PRTR Law

354 chemicals are listed in the PRTR Law. The chemicals registered by MGC counted 41 in fiscal 2008. Total emission amount of them was 206 tons. It was lower than the previous year by 26 tons and 11%. The major reason of it is that the emission of xylene has been cut by 24 tons and 36%.
The transfer amount was 337 tons with reduction by 56 tons and 14% than the previous year.

Trend of the chemicals on PRTR list



* The actual performance in fiscal 2007 has been corrected.

PRTR Chemicals in the JCIA List

The voluntary PRTR chemicals list by the Japan Chemical Industry Association (JCIA) has 481 chemicals including those in the PRTR Law.
Out of them, MGC emitted 71 chemicals with 393 tons in fiscal 2008. The emission amount has been decreased than that in fiscal 2004 (507 tons) by 22%.

Volatile Organic Compounds (VOC)

In fiscal 2008, the large emission amount VOC of MGC were dichloromethane, methyl alcohol, xylene, and 2-butanone.
The number of emitted VOC was 21 and the amount was 321 tons with reduction of 93 tons and 22% than the previous year. 24 tons of xylene, 19 tons of n-heptane as well, we have reduced the emissions of each substance.
The VOC emission amount in fiscal 2008 has been decreased than in fiscal 2004 (443 tons) by 27%.

The registered chemicals on the basis of the PRTR Law (results in FY 2008)

No.	Reg. No	Chemicals	FY 2008 (ton)				
			Emission amount				Ttrasfer Total
			Air	Water	Soil	Total	
1	145	Dichloromethane	102.4	0.0	0.0	102.4	7.5
2	63	Xylene	41.5	0.0	0.0	41.5	29.8
3	283	Hydrogen fluoride and its water soluble salt	0.3	31.8	0.0	32.1	0.1
4	227	Toluene	8.6	0.0	0.0	8.6	2.2
5	40	Ethylbenzene	5.7	0.0	0.0	5.8	0.0
6	310	Formaldehyde	2.0	2.1	0.0	4.1	11.2
7	304	Boron trifluoride and its compounds	0.1	3.7	0.0	3.7	0.7
8	224	1,3,5-Trimethylbenzene	2.1	0.0	0.0	2.1	7.8
9	253	Hydrazine	0.2	1.1	0.0	1.4	0.0
10	42	Ethylene oxide	1.1	0.0	0.0	1.1	0.0
11	320	Methylmethacrylate	1.1	0.0	0.0	1.1	43.5
12	299	Benzene	0.8	0.0	0.0	0.8	0.0
13	266	Phenol	0.0	0.5	0.0	0.5	17.4
14	312	Phthalic anhydride	0.2	0.0	0.0	0.2	9.9
15	54	Epichlorohydrin	0.2	0.0	0.0	0.2	0.4
16	108	Inorganic cyanide	0.0	0.1	0.0	0.1	0.0
—	—	Other chemicals	0.2	0.0	0.0	0.1	206.3
		Total (41 chemicals)	166.7	39.3	0.0	206.0	336.9

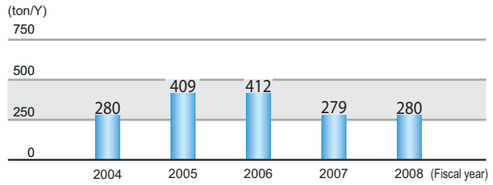
Approach to Preventing the Atmosphere, Waters and Soil Pollution

In order to prevent pollution and contamination of the atmosphere, waters and soil, MGC has been complied with the emission control value, and continues efforts to reduce pollution and contamination further.

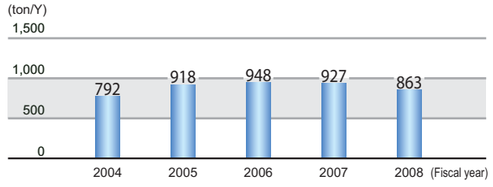
Prevention of Air Pollution

We strive for the operation management complied with the emission control value through measurement of sulfur oxide (SOx), nitrogen oxide (NOx), soot and dust etc. in the exhaust gas discharged from combustion facility, such as boiler.
The emission amount of soot and dust in fiscal 2008 was 60 tons with decrease by 16 tons and 27% than the previous year.

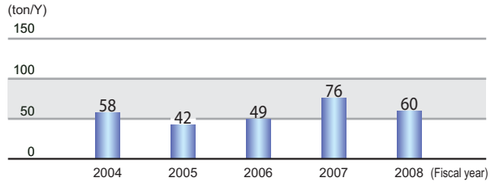
Emission of SOx



Emission of NOx



Emission of soot and dust



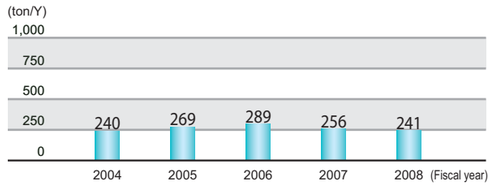
Investigation of Soil Contamination

In the case of facility abolishment or construction, it is required to investigate contaminations of soil and groundwater and to conduct measures of necessary in accordance with law.
We have carried out statutory investigations and voluntary measurements also in fiscal 2008.

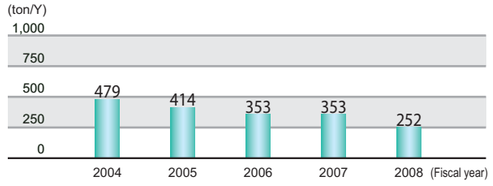
Prevention of Water Pollution

Waste water from the production process is discharged to the river, sea and sewer through treatment facility of pH control, biodegradable processing etc.
The operation of our waste water treatment facility is strictly managed to keep the emission control value through measurements of Chemical Oxygen Demand (COD), total nitrogen, total phosphorus, pH, etc.
The emission amounts of COD, total nitrogen, and total phosphorus have decreased.
Actual COD performance of the past has been corrected.

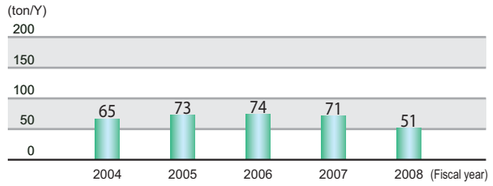
Emission of COD



Emission of total nitrogen



Emission of total phosphorous



Zero Emission of Waste

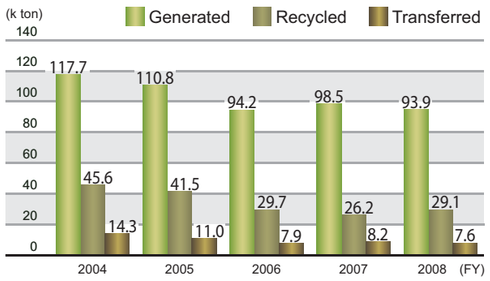
MGC defines "to reduce the amount of final disposal to 0.3% or less of total waste generated, through promotion of 3Rs" as the zero emission. We have been working on to achieve the goal by 2010, in each business site.

3Rs; Reduce, Reuse and Recycle

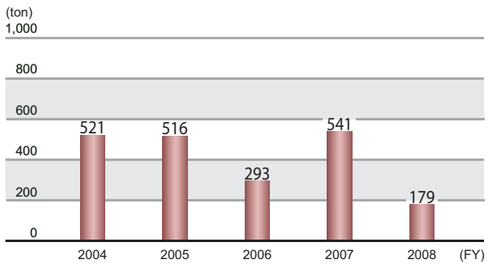
Results of Waste Reduction

In fiscal 2008, the amount of final disposal for landfill was reduced to 179 tons. The final disposal in fiscal 2007 had significantly increased, because of temporary generating of soil (285 tons) due to relocation of sludge treatment facility in Mizushima plant. The amount in 2008 has decreased by 30 percent compared to it except for the temporary generation in 2007 (256 tons).

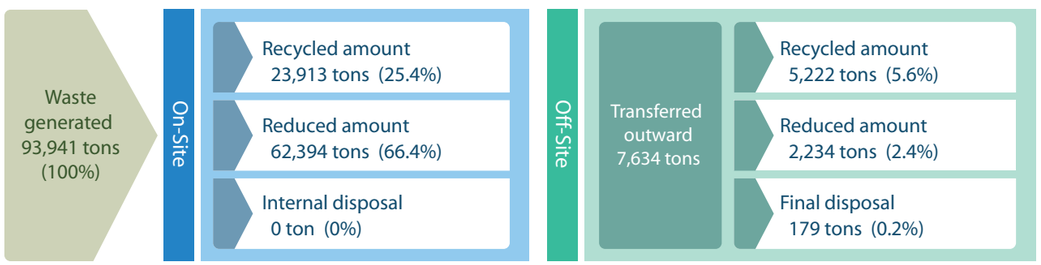
Trend of waste generation, recycling and transfer



Final disposal



Actual results of waste treatment in fiscal 2008



Zero Emission Status of Waste

Five out of 8 production plants has achieved the zero emission in fiscal 2008.
The Mizushima plant failed of it in fiscal 2007 because of the reason mentioned before, but has fulfilled it again in 2008.
Additionally, the zero emission has been achieved at last in total of all eight production plants.

Plants achieved Zero emission in fiscal 2008

	2007	2008
Niigata plant	0.23%	0.16%
Mizushima plant	1.09%	0.05%
Yamakita plant	0.19%	0.14%
Naniwa plant	0.12%	0.09%
Saga plant	0 %	0 %
All 8 plants	0.55%	0.19%

Zero emission : 0.3%≦Final disposal÷Waste generated

Control of PCB (Polychlorinated biphenyl)

Used equipments that contain PCB are under strict control by MGC based on the PCB Special Measure Law.
We have completed early disposal registration to the Japan Environmental Safety Corporation (JESCO), but there was no actual decomposition treatment in 2008.
The equipments containing dilute PCB are also under strict control until the final treatment procedure will be decided.

Environmentally Friendly Products and Research and Development

MGC regards the global environmental preservation as common issue of the world, and also has been focusing on development of environmentally friendly products. We do not have many products supplied directly to consumers but we make positive efforts to develop products and technologies considering energy and resource saving, low environmental burden, less waste, etc.

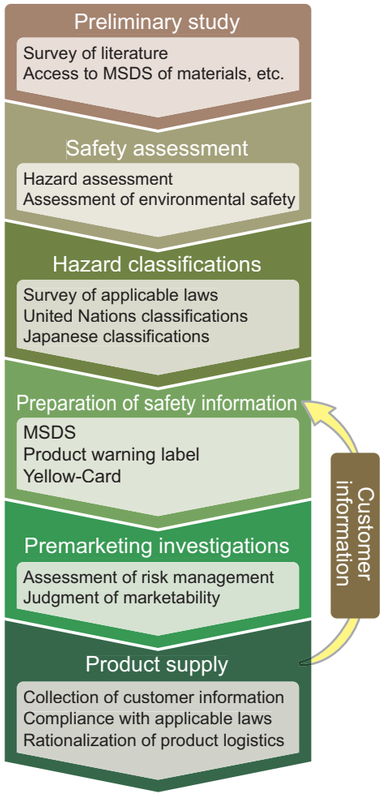
MGC's Environmentally Friendly Products and Technologies

	Products, Technologies	Contribution to Environmental Preservation
Plastics	MX nylon resin	Non chlorinated resin with high gas barrier capability, contributing to easy recycling and energy saving through weight saving of plastic bottles
	Iupilon® (Polycarbonate)	Resin with excellent transparency, durability and weatherability, used for various purposes, contributing to resources saving
	Reny® (Polyamide MXD6)	Mainly used for side mirror stay of vehicle, contributing to the energy saving by light weight property
	Iupital® (Polyacetal)	Resin with excellent mechanical properties and used as the substitute for metals in various purposes
	Iupiace® (Modified polyphenylene ether)	Resin mainly used for office automation equipment, contributing to the energy saving for its light weight property
	AI polymer® (Polyamideimide)	Contributing to smaller and lighter office automation equipment on the basis of excellent heat resistance
Water treatment agents	Diafresh® series	
	OR-SON AT	Agent making persistent organic materials decomposable and drastically reducing the generation of sludge
	F-SON	Agent for separation and treatment of fluorine compounds, which can easily reduce the fluorine content to 8 ppm or less
	NEOSOL	Agent to prevent the oil-base paint mist from adhering and to make easy the recovery of dispersed paint in the recycled water in a painting booth
	NEOPOCK	Chemical agent for effective aggregation and separation of water-based paint, water soluble polymer, etc.
	Deslime®, Contlime®	Water treatment agent for recycled cooling water in piping aiming both the cleaning and long-life of said water, and high thermal efficiency
	DEOPOWER®	Deodorant agent to solve the issue of bad odor at sewage-treatment plant, etc.
Keep quality and freshness	AGELESS®	Agent keeping quality and freshness in food sector and, as a result, reducing waste of foods and promoting efficiency of production and distribution
	AGELESS OMAC®	New packaging film as the substitute for canned food, contributing to weight saving and waste reduction
	RP System®	Oxidation and corrosion resistant system for metals and electronic parts, contributing to reduction of waste
	PharmaKeep®	Agent keeping quality and performance in medicines and medical device, and improving their shelf life
	AIR-G	Eco-friendly system for insect proof and preservation of cultural property, used as the substitute for methyl bromide referred to as ozone layer depleting substance
Chemicals	Dimethylether (DME)	Application of clean fuel DME made from natural gas to the automobile fuel, etc.
	Hydrogen peroxide	Substitute for bleaching agents containing chlorine, used in a pulp and paper production process
	GASKAMINE 240®	Reduction of solvent by applying it to non-solvent epoxy resin (two liquid type) because of its lower viscosity
Technologies, etc	Development of fuel cell	Research and development of methanol fuel cell which enables direct electricity generation without fuel reforming into hydrogen. Under test of introduction as a power supply for welfare electric vehicle
	Materials for environmentally friendly printed circuit board	Heat resistant materials for printed circuit board, suitable for lead-free solder Printed circuit board without brominated flame retardant
	Persulfates	Cleaning up the contaminated underground water and soil
	Mild Fenton method	Soil/underground water clean up technology that degradates organic substances under neutral conditions in combination with hydrogen peroxide and catalyst
	Production process of aromatic aldehydes	Reduction of harmful waste by the completely closed process of super acid catalyst
	MGC-MH process	Process for the production of high purity hydrogen gas from methanol and water
	Geothermal power generation	Capacitor mainly consisted of AR(carbon) and aluminum is the electricity storage system with benefit of long life and less harmful materials
	AR	Application of geothermal steam to electric power generation
	Neofade® (damping material)	High performance damping material, preventing vibration and noise

Approach to Safety Management of Chemicals and Products

As the responsibility of a chemicals supplier, MGC implements measures to ensure safety and health of our product users and to preserve environment through transparent product properties, product safety and handling instructions. And we participate in chemicals safety assessment activities in and out of Japan which publicly disclose chemicals safety information.

Flowchart of Safety Assessment for Chemicals and Products



Surveillance and Study of Chemicals Safety

Japan Challenge Program

The Japan Challenge Program is a collaboration between the Japanese government and industry aimed to accelerate collecting safety information of existing chemical substances and to disclose them to broad public. 126 organic substances covered by the program have no information collection schedule by High Production Volume (HPV) chemicals program of the Organization for Economic Co-operation and Development (OECD) or other countries, and have domestic production or import volume more than 1,000 tons per year. The programs for following four substances are executed by MGC.

- 3,4-Dimethyl benzaldehyde
- Pyromellitic dianhydride (Du Pont-MGC Co., Ltd)
- Cyclohexyl methacrylate (consortium formed)
- 1,3-Bis(aminomethyl) cyclohexane

(Submission to OECD HPV program scheduled)

Two draft reports have been submitted to the authority, one substance is under test, and the other has been completed the tests scheduled and is going to submitted to the HPV program.

REACH

In response to the enforcement of new European chemicals control law 'REACH', MGC and its group companies have completed pre-registration of existing chemicals by Dec. 1, 2008.
We are now carrying out confirmation of holding hazard data and their reliability needed for registration, and surveillance of exposure information by use required for chemicals safety.

Safety Tests of Chemicals

MGC has a Good Laboratory Practice (GLP) certified laboratory for biodegradability test and mutagenicity (Ames) test in Niigara research laboratory, which complies to legal notifications based on the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and the Industrial Safety and Health Law. (In addition, MGC's GLP certified laboratory for biodegradability test is one of nine laboratories in Japan, as of May 14, 2009.)
MGC also has laboratory for acute oral toxicity test, primary skin irritation test and pathogenicity test. The Niigara research laboratory has conducted 36 tests in 2008.

Provision of Product Safety Information

MGC provides material safety data sheets (MSDS) to customers handling our products via marketing and sales agents. We also affix information labels to the products and distribute Yellow-Cards to transporters to carry them about during product transportation.

Product labeling

MGC has been working to ensure users' safety by attaching warning labels on the containers of hazardous products. They provide hazard information, pictures illustrating procedures to avoid risk, and cautionary information concerning correct handling.
In December 2006, the Industrial Safety and Health Law was amended, requiring us to classify and label chemicals on the basis of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Following the amended law, we have reviewed the classifications and labelings of products listed under the law in order to bring them into line with GHS specifications, but qualities and other characteristics of our products have not changed.

GHS-compliant product labeling

The labels of product with certain content level of substance which is defined by government regulations has been reviewed and attached by Nov. 30, 2008.

Material safety data sheet (MSDS)

MGC provides MSDSs for all of its products, including products for which this practice is not required by law. We are also sequentially preparing GHS compliant MSDSs.

Industrial Safety and Health Act compliance

MSDSs for products with certain content concentration levels as defined by government regulations has been revised by the end of November, 2008.

Yellow-Card

MGC provides Yellow-Cards to transporters and insists to take along in transit in preparation of accidents.

Yellow-Card

The Yellow-Card is a document used to ensure preparedness for an accident in chemicals transportation. It contains details of emergency treatments and emergency contacts such as concerned parties, the fire department and the police.

Environmental Safety in Distribution

Oil boom extending drill

Oil boom extending drill is carried out every year, on the assumption of a leakage accident at sea.

Emergency response in transit

MGC has installed emergency equipments at each business site and is able to respond in the event of an emergency in transit. We have established a wide area supporting framework which enables us to act in case of accident being in touch with other site. Using this system, we also positively cooperate with requests by local police and fire department to provide assistance in an accident in transit of other company's products.

Contact drill of accident in transit

Environmental Communications

MGC is strongly aware of its role as a member of society, and strives to earn the trust of the public through its pursuit of a range of communication activities relating to the environment.

Disclosure of Information

MGC has been issuing a Responsible Care Report (Environmental Report) which outlines our initiatives in Environment and Safety since fiscal 2001. We distribute the report to industry group, related businesses and local communities. The report and also archives are available on the MGC website.

http://www.mgc.co.jp/eng/csr/environment/index.html

Working with the Community

MGC has participated in JRCC community dialogue meetings and has enhanced communications with local administrative, neighboring companies and local residents.

November 13, 2008
Community dialogue meeting in the Okayama area

February 20, 2009
Community dialogue meeting in the Kashima area

February 21, 2009
Community dialogue meeting in the north Niigata area

Participation in Environmental Exhibitions

MGC group had a booth at the ECO-MAnufacture 2008 convention, which was held in Tokyo Big Sight from November 10 to 12, 2008.
We presented our efforts in environment and energy category through demonstrations such as comparison of dumping materials, combustion of fuel DME and power generation with methanol fuel cell, as well as presentations of three products for "noise, vibration prevention", three products for "waste water, soil cleaning", and four products for "energy saving".

ECO-MAnufacture 2008

Exchanges with Vietnamese Ambassador Party

The Vietnamese ambassador party visited to Niigata plant and research laboratory and gave lecture. All of the workers listened with interest about the relationship between Vietnam and Japan.

Disaster Aid

MGC provided monetary donations through the Japanese Red Cross Society for victims of the Szechuan earthquake in China and cyclone Nargis in Myanmar.


感謝状

Responsible Care Activities in MGC Business Sites (1)

Niigata Plant

Address : 3500 Matsuhama-cho, Kita-ku, Niigata-shi, Niigata 950-3121, Japan
Phone : +81-25-258-3474

Plant Manager
Takuji Shitara

Message from the Plant Manager

Living in harmony with local community and nature is exactly our lifework at the Niigata plant that is surrounded in beautiful greenery and blessed with plentiful water and resource (natural gas). After half a century since the start of operation, we aim at the creation of the earth-friendly new value in the field of life science, polymer and energy with the efforts to improve the environment, safety and quality to earn the trust of society while attempting the infrastructure restructuring of the plant.

Main products

- Methanol, Ammonia, and their derivatives
- Methaxylene diamine
- MX Nylon
- Bio-related products

The day to swear for safety

Held a safety convention on December 5, 2008 with the participation of the Niigata plant employees and subcontractor employees (450 persons in total) to swear "never cause the serious accident again".

Disaster prevention drill

October 22, 2008,
Conducted a comprehensive disaster prevention drill with the participation of the Niigata North Fire Department and Niigata West Port joint disaster prevention department.

Held an experience-oriented training for fire, explosion and chemicals contact, that enables to experience real fear of disaster.

Conducted a test for fire prevention and fire extinguish equipments in accordance with the completion of dimethyl ether production plant that is expected as clean new energy.

Environmental burden data (FY 2008)

Water consumption (10^3m^3)	13,002
GHG emission (as CO_2) (k tons)	468
NOx emission (tons)	331
SOx emission (tons)	0
Total drainage volume (10^3m^3)	9,555
COD emission (tons)	33
Waste transferred offsite (tons)	2,423
Final disposal waste (tons)	91

PRTR substance	Emission (tons)	Transfer (tons)
Ethylene oxide	1.1	0
Methyl methacrylate	1.1	43.3
Vanadium pentoxide	0	5.4

Cleanup activity

Participated in cleanup campaign at the Niigata East Port area which is also the shipping base of the Niigata plant.

Responsible Care Activities in MGC Business Sites (2)

Mizushima Plant

Address : 3-10 Mizushima Kaigan Dori, Kurashiki-shi, Okayama, 712-8525, Japan
Phone : +81-86-446-3822

Executive Officer
Plant Manager
Shigenobu Ono

Message from the Plant Manager

At the Mizushima plant, we are working on the reduction of our environmental burden in a long-term viewpoint. The installation of energy-saving boiler / turbine and the fuel conversion project into natural gas completed successfully in FY 2008. And they have contributed to our environmental burden reduction. We also worked to improve the facility for reducing released xylenes, and have reduced by 30%, compared with the previous year. We will concentrate on the burden reduction and keep promoting further improvement in the future.

Main products

- Xylene isomers
- m-Xylene derivatives
- Specialty aromatic products
- Polyols

Working with the community

■ Plant tour

July 16, 2008
Explanation to Mizushima industrial high school students who visited the plant

October 19, 2008
Members of Mizushima Socie (Mizushima industrial complex, industrial-government- academia gathering)

■ Cleanup activity

July 26, 2008
Participated in "Mizushima Port cleanup mission" hosted by Mizushima Seikou-Kai association.

Disaster prevention drill

Explained to members of the fire department using the factory layout drawing

Participated in the actual fire drill at the Mizushima industrial complex

Introduction of commander vehicle

Dispatching the vehicle to the local headquarter at the time of putting the disaster prevention system into effect.

Environmental burden data (FY 2008)

Water consumption (10^3m^3)	12,468
GHG emission (as CO_2) (k tons)	596
NOx emission (tons)	493
SOx emission (tons)	277
Total drainage volume (10^3m^3)	11,096
COD emission (tons)	150
Waste transferred offsite (tons)	2,830
Final disposal waste (tons)	15

PRTR substance	Emission (tons)	Transfer (tons)
Xylene	41.5	29.8
Hydrogen fluoride and its water-soluble salt	32.1	0
Ethylbenzene	5.8	0

Kashima Plant

Address : 35 Higashi Wada, Kamisu-shi, Ibaraki 314-0102, Japan
Phone: +81-299-96-3121

Executive Officer
Plant Manager
Tsukasa Sawai

Message from the Plant Manager

We believe that "the trust of the local community and environmental preservation" is the basis for the existence of the Kashima plant. All employees at the plant are positively working on Responsible Care activities such as safety and stable operation through the promotion of self-maintenance activities and thorough AZ activities, reduction of environmentally burdensome substances including CO_2 and positive disclosure of information to the local community.

Main products

- Hydrogen peroxide
- Polycarbonate plastics

Education, Training activities

A safety lecture about tsunami flooding estimation was given from an officer of the prefecture.

Start of emergency drill

Conducted a drill with actual fire distinguisher to new employees.

Conducted emergency drill against toxic gas leakage every year.

Environmental burden data (FY 2008)

Water consumption (10^3m^3)	1,542
GHG emission (as CO_2) (k tons)	152
NOx emission (tons)	4
SOx emission (tons)	0
Total drainage volume (10^3m^3)	1,342
COD emission (tons)	11
Waste transferred offsite (tons)	495
Final disposal waste (tons)	15

PRTR substance	Emission (tons)	Transfer (tons)
Dichloromethane	95.1	2.5

Cleanup activity

Conducted a general cleanup inside and outside the plant periodically.

Receiving High Pressure Gas Safety Award from Ibaraki Prefecture

November 20, 2008
Mr. Kano, Manager of the production section was awarded as a person of merit at the Ibaraki High Pressure Gas Safety awarding ceremony.

Yokkaichi Plant

Address : 4-16 Hinagahigashi 2-chome Yokkaichi-shi,
Mie 510-0886, Japan
Phone : +81-59-345-8800

Plant Manager
Katsushige Hayashi

Message from the Plant Manager

Facing the Ise bay in the east and the Suzuka mountain range in the west, the Yokkaichi plant is located in the very scenic Yokkaichi industrial complex. In the past, there was also time that Yokkaichi was called "town of pollution", but there is no even such image at present. At the Yokkaichi plant, we have conducted our production activity in consideration of the living environment such as conversion of boiler fuel from coal to natural gas, assessment of environment risk for newly installed facility etc.

Main products

- Chemicals for electronic industry such as hydrogen peroxide
- Polyacetal plastics

Comprehensive disaster prevention drill

Conducting various training to prepare for the emergency

Working with the community

Traffic safety campaign

High school student internship

Cleanup activity around the plant

Occupational health and safety activity

Safety activity presentation

Mental health course

Environmental burden data (FY 2008)

Water consumption (10^3m^3)	6,997
GHG emission (as CO_2) (k tons)	80
NOx emission (tons)	25
SOx emission (tons)	2
Total drainage volume (10^3m^3)	5,754
COD emission (tons)	38
Waste transferred offsite (tons)	656
Final disposal waste (tons)	5

PRTR substance	Emission (tons)	Transfer (tons)
Hydrazine	1.4	0
Formaldehyde	3.4	11.2

Naniwa plant

Address: 3-27 Funamachi 1-chome, Taisho-ku,
Osaka-shi, Osaka 551-0022, Japan
Phone: +81-6-6551-3371

Main product

- Monomer for plastic lens

Safety training of high-place work

Disaster prevention drill

Saga plant

Address: 681-45 Kamikumakawa, Fuji-cho, Saga-shi,
Saga 840-0512, Japan
Phone: +81-952-64-2400

Main product

- Ultra pure hydrogen peroxide

AED training course

Cleanup activity

Disaster prevention drill

Yamakita Plant

Address : 950 Kishi Yamakita-machi, Ashigarakami-gun, Kanagawa, 258-0112, Japan
Phone : +81-465-75-1111

Plant Manager
Osamu Kondo

Message from the Plant Manager

The Yamakita plant was built in Yamakita in 1933 as the first hydrogen peroxide production facility in Japan. Since then, we have conducted our production activity while living together with the local community. In order to keep the bountiful environment of Sakawa river and Tanzawa mountains, we continue to work on reducing our environmental burden and strengthening further trust relationship with local residents through active communication.

Main products

- Derivatives of hydrogen peroxide
- Persulfates

Working with the community

Information forwarding to Kanagawa ECO Network
http://www.pref.kanagawa.jp/osirase/iso/98/econet00.html
◎Cleanup activity around the plant
◎Opening the factory gymnasium (local high school)
◎Acceptance of trainees for work-study
(local junior high school)
◎Participation to local activity and event
Yawata Shinto shrine festival
Summer festival organized by resident's association
Cosponsor for Yamakita-cho flower road (planting, weeding)

Environmental burden data (FY 2008)

Water consumption (10^3m^3)	5,429
GHG emission (as CO_2) (k tons)	25
NOx emission (tons)	4
SOx emission (tons)	0
Total drainage volume (10^3m^3)	4,877
COD emission (tons)	9
Waste transferred offsite (tons)	360
Final disposal waste (tons)	1

PRTR substance	Emission (tons)	Transfer (tons)
Hydrogen fluoride and its water-soluble salt	0	0.1

Disaster prevention activities

A banner of fire prevention campaign displayed on the ground fence

Toxic gas leakage emergency drill

Safety class for cultivating a culture of safety

Niigata Research Laboratory

Address : 182 Tayuhama Shinwari, Kita-ku, Niigata-shi, Niigata 950-3112, Japan
Phone : +81-25-259-8211

Laboratory Director
Takafumi Abe

Message from the Laboratory Director

The Niigata research laboratory is adjacent to the Niigata plant and we work together to promote our RC activities. This research laboratory has various safety test facilities in accordance with Good Laboratory Practice (GLP) and plays the role of chemical safety evaluation organization of the whole company. In addition, we are aware of the development of new products that can contribute to the formation of recycling-oriented society, and we are working on it with full staff participation.

Main research themes

- Process improvement
- Catalyst
- Pharmaceutical intermediates
- New energy source
- Biotechnology
- Life science

Participating in the local festival every year and warming up the gathered children.

Conducting cleanup campaign twice every year to keep the surrounding of the research laboratory clean.

Conducted a training course of AED in accordance with installation of it.

Hiratsuka Research Laboratory

Address : 6-2 Higashiyawata 5-chome, Hiratsuka-shi, Kanagawa 254-0016, Japan
Phone : +81-463-21-8600

Laboratory Director
Toshiya Takagi

Message from the Laboratory Director

The Hiratsuka research laboratory won an in-house Environmental Excellence Award for achieving zero emissions. We will continue this condition in the future. In order to improve the sensitivity of employees, the safety-related education has been enhanced by setting a goal of submitting *hiyari-hatto* (near miss) report (1 *hiyari-hatto* per person per month). We also conduct training in response to earthquake emergency warning every month because this laboratory is located in the area under stepped-up measures against the earthquake disaster of Tokai-Tonankai earthquake.

Main research themes

- Specialty resins
- Paints, adhesives
- Packaging materials
- Resist materials

Accepting the visit of students from Ohara high school in the Hiratsuka city and explaining to them while demonstrating molding process.

Planted shibazakura (moss phlox) and tulips in the flower garden of Sagami river area with Yahata elementary school pupils.

Conducted disaster prevention drill in cooperation with affiliates, and carried out water-discharge exercise by self fire fighting team.

Tokyo Techno-Center

Address : 1-1 Niijuku 6-chome, Katsushika-ku, Tokyo 125-8601, Japan
Phone : +81-3-3627-9411

Techno-Center Director
Takahiro Seki

Message from the Techno-Center Director

At the Tokyo Techno-Center, we have conducted our activities for "Ensuring of Occupational Health and Safety and Environmental Preservation" as our RC policy. Tokyo Techno Park (TTP) which opens in October 2009 takes a new step as an urban-oriented research and development base, and we continue our business activities with further consideration to safety and environment to keep trusted from the local community.

Main development themes

- Electronic materials
- Oxygen absorbers

Regular presentation meeting of risk assessment

Cleanup activity around the Center conducted on the first working day every month

Indoor hydrant training

Tokyo Research Laboratory

Address : 1-1 Niijuku 6-chome, Katsushika-ku, Tokyo 125-0051, Japan
Phone : +81-3-3627-9411

Laboratory Director
Masahiro Jono

Message from the Laboratory Director

The Tokyo Research Laboratory is going to newly start as TTP. In neighboring area, it is planned to construct condominiums and a college. We continue to conduct our safety activities by putting a high priority on risk assessment, *hiyari-hatto* (near miss), and KYT (risk prediction training) activity because we have lots of non-routine work at the laboratory. We will make efforts to keep "Zero accident and Zero occupational injury" and improve the community environment.

Main research themes

- Electronic information materials
- Communication materials
- Environmental, healthcare chemicals
- Packaging material
- Process research

Laboratory Director's exemplum in the safety week

Disaster prevention training for new comers

Safety patrol around the laboratory

October 1, 2009

Tokyo Techno Park (TTP) Opening

The area of Niijuku, Katsushika-ku, Tokyo, where the Tokyo Techno-Center and the Tokyo Research Laboratory are located, has been re-developed by the Urban Renaissance Agency (UR), and the surrounding area has greatly changed. The two sites have been managed as independent organizations because these sites were divided so far. However, acquisition of the land that divided both sites became possible by means of land exchange with the UR due to the re-development of this area. As a result of it, the Tokyo Techno Park (TTP) has opened as an urban-oriented research and development base focusing on the research of functional chemicals and functional materials through restructuring of the Tokyo Research Laboratory and Tokyo Techno-Center.

Outline of TTP

- Location
  1-1 Niijuku 6-Chome, Katsushika-ku, Tokyo
- Research area
  Electronic materials,
  Functional optical materials,
  Environmental chemicals,
  Life science etc.

April 23, 2008
A presentation meeting to neighboring residents' association was held at the training institute in Tokyo Techno-Center before starting TTP construction work.

TTP main building under construction

MGC Group Environment and Safety Conference

The 14 affiliates that deal with chemical substances in MGC group have been promoting the environment and safety activities in MGC Group Environmental and Safety Conference (hereafter, Conference).
The main activities are as follows.

MGC Group Environment and Safety Meeting

The meeting is held twice a year for reporting or reviewing the annual target, result of activities, status of accident and occupational injury etc. of MGC and each affiliate.

The meeting at MGC Head Office

Environment and safety inspection

The environment and safety activities of several affiliates are inspected every year by Director in charge of environment and safety in MGC. The inspections to Japan Finechem Co., Inc., Shin Sanso Kagaku Co., Japan Pionics Co., Ltd., and Yonezawa DIA Electronics Co., Ltd. were conducted in 2008.

Inspection at
Japan Finechem Co., Inc.

Inspection at
Shin Sanso Kagaku Co.

Inspection at
Japan Pionics Co., Ltd.

Inspection at Yonezawa
DIA Electronics Co., Ltd.

Environmental Burden by MGC Group

The following tables show the environmental burden by MGC group in fiscal 2007 and 2008.

The number of production sites in MGC group			
Fiscal 2007 (MGC and 14 affiliates)		Fiscal 2008 (MGC and 14 affiliates)	
MGC	8 production sites	MGC	8 production sites
Affiliates	32 production sites	Affiliates	32 production sites

INPUT		Unit	FY 2007	FY 2008
Energy consumption (as crude oil)		10^3kL	689	631
Water consumption		10^3m^3	47,781	44,565
Breakdown	Tap water	%	2	2
	Ground water	%	3	3
	Industrial water	%	55	58
	River water	%	36	34
	Others	%	3	2

OUTPUT	Unit	FY 2007	FY 2008
Emissions to atmosphere			
GHG emission (as CO_2)	ktons	1,772	1,577
SOx emission	tons	328	393
NOx emission	tons	1,006	956
Soot and dust emissions	tons	86	72
Emission of PRTR substances	tons	1,241	1,169
Release to water area			
Total drainage volume	10^3m^3	39,490	36,302
COD emission	tons	309	291
Total nitrogen emission	tons	381	278
Total phosphorus emission	tons	73	54
Emission of PRTR substances	tons	35	48
Release to soil	tons	0	0
Generation of waste			
Transferred off-site	tons	40,346	34,410
Final disposal	tons	1,954	3,508
Transfer of PRTR substances	tons	918	728

(Final disposal in fiscal year 2008 has been increased due to temporary waste generation)

Environment and Safety Inspection for Overseas Affiliates

Although overseas affiliates are out of the Conference member, the environment and safety inspection for them are also conducted to support their environment and safety activities. The inspections for P.T. Peroksida Indonesia Pratama, MGC Pure Chemicals Singapore PTE. LTD. were conducted in 2008.

At P.T. Peroksida
Indonesia Pratama

At MGC Pure Chemicals
Singapore PTE. LTD.

Topics of MGC Group Affiliates

JSP Corp. Yokkaichi 1st plant

Not only JSP employees but also subcontractors' employees take part in the cleanup campaign around the plant twice a year. The garbage amount decreases whenever repeating the activity and the effect of continuous activity is given.

Japan Circuit Industrial Co., Ltd.

A training course was given by a visiting lecturer (Occupational health consultant).
<Cheerful office (Mental health)>

Japan Pionics Co., Ltd

An evacuation drill was conducted. Reflecting on this training, we have increased the squawk box.

Electrotechno Co., Ltd.

Drills to use fire extinguisher and fire hydrant were conducted (every month from April to October). All participants took part in the training by actually using a fire distinguisher and fire hydrant.

Shin Sanso Kagaku Co.

Taking an opportunity to install AED in the office, the employees have had an emergency lifesaving drill from rescue staff and have improved skill of cardiopulmonary resuscitation and AED use.

MGC Filsheet Co., Ltd. (Osaka)

The cleanup and beautification campaign of the Kanzaki river area around the plant were conducted.

Toyo Kagaku Co., Ltd. Mitake plant

Mowing and cleaning around the plant were conducted.

Japan Finechem Co., Ltd. (Niigata)

Water-discharge training in Niigata plant under the guidance of the fire department. August 11 is set as "Finechem Safety Day", and disaster prevention drill is held every year.

Environment and Safety Activities in MGC Group Affiliates (2)

A.G. International Chemical Co., Inc.

Manufacture and sale of purified isophthalic acid

Tokyo Sakurada Bldg., 1-3, Nishishinbashi 1-chome, Minato-ku, Tokyo 105-0003, Japan
Phone:+81-3-3503-4811
http://www.agic.co.jp/e_agic/

We have started operation of a new plant in Matsuyama City, Ehime Prefecture in 2008. Including two plants in Mizushima factory, we have achieved "Zero accident and Zero occupational injury" under three plants framework. We continue to perform CSR by considering the environment and safety first. Now, we are continuing measures for energy saving and waste reduction, and working on risk assessment of non-routine work and study incidents in the past.

President
Yoshio Kawazoe

Eiwa Chemical Industrial Co., Ltd.

Manufacture and sale of blowing agents for rubber

Daido Seimei Co. Kyoto Bldg., 595-3 Manjuya-Cho Sanjio-sagaru Karasuma-dori, Nakagyo-ku, Kyoto-shi, Kyoto 604-8161, Japan
Phone:+81-75-256-5131
http://www.eiwa-chem.co.jp/en/

"Safety with just a shout is the soliloquy" is the in-house collected slogan in our Kinuura plant, which is the unique manufacturer of chemical blowing agents in Japan. It is located in Chita peninsula facing Ise Bay. We are ready to respond to the effluent standard to protect the fishery of the close water with our own technology. We have conducted KYT (risk prediction training) activity and disaster prevention drill with the cooperation of the local fire station, in order to protect the environment and safety day and night.

President
Yasuki Yamase

JSP Corporation

Manufacture and sale of foamed plastics

Shin-Nisseki Bldg., 4-2, Marunouchi 3-chome Chiyoda-ku Tokyo 100-0005, Japan
Phone:+81-3-6212-6300
http://www.co-jsp.co.jp/english/

Even if we have undergone a large fluctuation in raw material prices and the financial crisis originated in the United States and have been under severe business environment since last year, we think that "safety is the basis of corporate existence" and we have been working on safety measures and educational activities. In addition, as for the environment, the results such as the reduction in green house gas emission etc. are obtained by proceeding with the development of environmentally friendly products, energy conversion and rationalization of manufacturing process.

President
Rokurou Inoue

Japan Finechem Co., Inc.

Manufacture and sale of fine chemicals and electronic products

Kayaba-cho Nakano Bldg., 22-15, Shinkawa 1-chome, Chuo-ku, Tokyo 104-0033, Japan
Phone:+81-3-3552-7611
http://www.jfine.co.jp/eng/

Located next to MGC's plant, our Niigata plant receives the supply of hydrocyanic acid, utility such as steam and so on. We also have a close cooperation with MGC in disaster prevention system. As for the environment and safety, we have promoted the risk assessment and activity enhancement of *hiyari-hatto* (near miss), KYT (risk prediction training) and 5S etc. to achieve "Zero accident and Zero occupational injury" for the target of "Establishment of safety and stable operation".

President
Norio Hakuta

MGC Filsheet Co., Ltd.

Manufacture of polycarbonate sheet

4-2242, Mikajima, Tokorozawa-shi, Saitama 359-1164, Japan
Phone:+81-4-2948-2151
http://www.mgcfs.jp/en/

As the corporate name expresses, we produce film and sheet of polycarbonate plastics for optical applications. For stable production, it is indispensable to consider the environment and safety and to reply public trust. For the basis of it, employee sensitivity educations such as static electricity workshop, safety course for forklift driver, lifesaving course, and re-education of environment and safety rules were conducted in fiscal 2008.

President
Yukio Suzuki

Electrotechno Co., Ltd.

Manufacture of copper-clad laminate and multilayer prepreg

9-41, Aza-Sugiyama Oaza-Yone, Nishigo-mura, Nishishirakawa-gun, Fukushima 961-8031, Japan
Phone:+81-248-25-5000
http://www.ab.auone-net.jp/~electro/index.html

Our plant is located in the natural rich place of the Nasu mountain range. Realizing again that the main action of all activities of occupational health and environmental preservation is done by individuals, we proceed our activities with down-to-earth and continuous efforts in diverse group of employees and step up our efforts to future activities for the final goal of "Cultivating a culture of safety" that the safety will be created through usual unconscious actions.

President
Yuh Miyauchi

Shin Sanso Kagaku Co.

Manufacture of hydrogen peroxide

148-58, Yufutsu, Tomakomai-city, Hokkaido 059-1372, Japan
Phone : +81-144-55-7337
http://www.sskc.co.jp/

Located near Lake Utonai, a registered site with the Ramsar Convention on Wetlands, we have continued to operate in an area that combines natural beauty with an excellent distribution infrastructure for 22 years. We already completed the construction to increase the production capacity as a big turning point of our company, make full use of high production capacity to produce high quality products safely and stably. We are working together as a team for this biggest goal of the current term.

President
Kenji Koizumi

Toyo Kagaku Co., Ltd.

Resinous molding processing

51-497, Aza-Doudou, Oaza-Morowa, Togo-cho, Aichi-gun, Aichi 470-0151, Japan
Phone:+81-561-39-0531
http://www.toyo-kagaku.co.jp/

We have expanded the manufacturing of plastic molding products and sale business in Aichi Prefecture, Gifu Prefecture, Okayama Prefecture, and Guangdong Province in China. The measures to heavy load handling risk of the molding dies from the safety point of view, and further improvement of plastic recycling rate from the environmental point of view are our own tasks. We keep maintaining and improving the safety and environmental management system.

President
Jun Nakao

Japan Circuit Industrial Co., Ltd.

Manufacture and sale of printed circuit boards

2-1236, Kamiike-cho,
Toyoda-shi, Aichi
471-0804, Japan
Phone:+81-565-88-3718
http://www.jci-jp.com/

We recognize that "Environmental preservation" is the important topic of business management, and we work on the global environmental preservation with "Harmony, Responsibility and Creation" as our management principle to realize the environmental management that harmonized with the environment. With this environmental principle, we have been working together in each committee to proceed with occupational health and safety activity, 5S activity, *hiyari-hatto* (near miss) activity, and improvement proposal activity.

President
Kazuhiro Miyasaka

Japan Pionics Co., Ltd

Manufacture and sale of gas purifiers and manufacture of disposable body warmers

Tokyo Sakurada Bldg., 1-3,
Nishi-Shinbashi 1-chome,
Minato-ku, Tokyo 105-0003,
Japan
Phone:+81-3-3506-8801
http://www.japan-pionics.co.jp/en/

We have been working together as a team for the safety and environmental activities positively in response to the serious accident that occurred 5 years ago. Especially, we worked on activities such as risk assessment, pre-operation KY (risk prediction), *hiyari-hatto* (near miss), and 5S to put emphasis on "Continuation of Safety". As a result, we have received a commendation of "good standing company" from Kanagawa Labor Bureau the other day. We continue to keep the accumulated "Zero accident and Zero occupational injury" and will concentrate on safety activities in the future to prevent accident from actually occurring.

President
Ryoichi Takahashi

Mizushima Aroma Co., Ltd.

Manufacture and sale of purified terephthalic acid

2-3-1, Mizushima-nakadori,
Kurashiki-shi, Okayama
712-8072, Japan
Phone:+81-86-446-4570

We continued to achieve "Zero occupational injury" in fiscal 2008, too. And we have conducted the production activity on the basis of "Safety first" by working for continuous improvement without being satisfied with the current situation. In addition, we are also working on the reduction of CO_2 emission by using aluminum material for PTA product delivery tank lorry (weight saving) from the environmental point of view.

President
Kunisuke Usuda

Yonezawa DIA Electronics Co., Ltd.

Manufacture of mass molding laminates, Process development

446-3, Hachimanbara
3-chome, Yonezawa-shi,
Yamagata 992-1128, Japan
Phone:+81-238-28-1345

We have celebrated the 10th anniversary of the foundation of our company in June, 2009. We had an incident resulting in lost work time in the first year, but since then we have continued our production activity with "Zero accident and Zero occupational injury" up to the present date. Starting this year, we develop our "Policy of Occupational Health and Safety". And we declare to aim at creating a comfortable workplace without accident and occupational injury considering that to protect safety and health of the people surrounding our company is the top priority of our business activity.

President
Hidenobu Fujimori

Japan U-PiCA Co., Ltd

Manufacture and sale of unsaturated polyester

Madre Matsuda Bldg., 4-13,
Kioi-cho, Chiyoda-ku,
Tokyo 102-0094, Japan
Phone:+81-3-6850-0241
http://www.u-pica.co.jp/
English/

We have been positively working on "Cultivating a culture of safety" through abundant capital investment and education for safety under the philosophy that the safety is the top priority. In addition, we ensure the reduction of our environmental burden by energy saving activity and introduction of material flow cost accounting as a matter of course. We will contribute to CO_2 reduction and the global environmental protection by accelerating development of plastic for wind power generator propellers and biomass-related products.

President
Tomihiro Ogino

Fudow Co., Ltd.

Manufacture and sale of molding resin

Daigo Bldg. No.7, 20-5,
Nishi-Kamata 7-chome,
Ota-ku, Tokyo 144-0051,
Japan
Phone:+81-3-3737-0611
http://www.fudow.co.jp/
e-index.html

Four plants are located along the Tokaido Line. We continue to work on the reduction of our environmental burden at each plant, and produce molding materials and molded goods etc. on the basis of "Safety first". Following the establishment of CTPM and 5S activities, we aim at "Zero occupational injury" through improvement of the safety susceptibility of each and every person by strengthening KYT (risk prediction training) and *hiyari-hatto* (near miss) activities.

President
Yuuji Takamizawa

Main Environmental Products and Technology of MGC Group Affiliates

JSP Corporation

High performance•Next generation new type insulator [MIRAFOAM ™ Λ (lambda)]

MIRAFOAM ™ Λ is a high performance next generation new type insulator which was developed by using the plastic foaming technology that JSP cultivated so far. With the revolutionary insulation efficiency, we have succeeded in improving the performance of insulation efficiency which has been considered as reaching the limit in the extrusion process of polystyrene foam (thermal conductivity 0.022W/m•K). As a result, it becomes possible to produce thin-walled and lightweight insulator by such a feature. A high expectation has been rising in the promotion of high performance housing. And it conforms to the standards of Non CFC, Non Formaldehyde, and 4VOC out of consideration to environment, health and safety.

Toyo Kagaku Co., Ltd.

Undercover

It is a product, called undercover, to be used as a cover of the underpart of motor vehicles. The undercover is produced with 100 % of resin recycled from the bumper of disused cars. As for the product which is made of recycled bumper material, its appearance looks bad due to the mixing of coated fragments at the bumper surface. But it can be used for parts at the underpart of motor vehicles that do not attract attention in general without regarding to the appearance.