

Emphasizing the Environment, CS & Quality and Human Resources to Contribute to Society through Our Business Activities

Corporate Social Responsibility Report

2007

# Sekisui Chemical Group develops and provides a wide variety of products used in various applications throughout the industry and in daily life

#### Main Products and Their Usage

#### Housing Company

Through our houses and housing environment businesses, which encompass the manufacture and sale of Sekisui Heim and Two-U Home modular houses, together with interior and exterior house products and house renovation services, we offer environment-friendly houses that can be lived in safely and comfortably for at least 60 years.



Housing Steel frame modular house (Sekisui Heim) · Wooden frame modular house (Two-U Home) Care facilities and equipment for nursing and elderly people



#### **Urban Infrastructure & Environmental Products Company**

We care about the water environment on which both people and nature depend. Our aim is to help develop a society in which future generations can live safely and comfortably. We offer this through our lifeline services, which include water supply and sewage piping materials, aged pipe renewal method, in-house water usage-related products and installation services.





#### Corporate Profile (as of March 31, 2007)

March 3, 1947 ¥100.002 billion Naotake Okubo (President)

Domestic Subsidiaries: 146 Net Sales: Overseas Subsidiaries: 52 17 Affiliated Companies: 215 Total: companies

Operating Income: Net Income: Number of Employees: ¥926.1 billion (consolidated) ¥45.1 billion (consolidated) ¥25.5 billion (consolidated) 18,905 (consolidated)

(of which 147 companies are consolidated subsidiaries)

#### **Editorial Policy**

Sekisui Chemical Group began taking a much more aggressive approach to CSR from fiscal 2005. Based on various approaches, corporate philosophy and guidelines used in the past, Sekisui Chemical Group has defined its Corporate Social Responsibilities (CSR) in terms of Three Prominences, Environment, CS & Quality and Human Resources along with Three Attitudes of Sincerity, Compliance, Risk Management and Disclosure & Communication. These items are reflected in the individual sections of this report.

Sekisui Chemical Group is divided into three division companies of different businesses. Efforts have been made to provide examples of activities being taken by each of these division companies. Some of the information and examples that cannot be covered in this report are continuously being introduced on our Website, which can be referenced at any time.

In 2007, Sekisui Chemical will celebrate its 60th year in business. To mark this important milestone, a special section has been included at the front of this report to review some of the approaches we have taken over our 60-year history to help solve problems confronting society.

The title of this report has also been changed from Environmental & Social Report to CSR Report. This is tied to the January 2007 review of our CSR Committee System and organization structure with the purpose of further developing our CSR Management. This has provided us with the opportunity to create a report that goes well beyond simple information disclosure to actually stimulate dialog with our stakeholders and expand our approaches to CSR.

This report introduces Sekisui Chemical Group's CSR philosophy, particularly the approaches and results for fiscal 2006, taking into consideration the Ministry of the Environment's Environmental Reporting Guidelines (2003 Edition) and the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines v3 (G3).

Information about Sekisui Chemical Group's business activities are being publicly disclosed through this report and the Annual Report (website only) outlining financial information for the Group.

#### Scope of This Report

Entities Encompassed by this Report:

The basic function of this report is to comment on the activities of Sekisui Chemical Group.

Timeframe Encompassed by this Report:

April 2006-March 2007 (including examples of activities up to June 2007).

#### Disclaimer

This report is not confined to commentaries on the past and current activities of Sekisui Chemical Co., Ltd. and its affiliated companies. It includes business plans and forecasts as well as future projections based upon management plans and directives that were valid at the time of publication. These forecasts are based on information available at the time of publication, and therefore the actual status and outcome of future business activities may differ from those projected in this report, due to changes in various conditions. Furthermore, because figures contained in the included graphs and tables are rounded up (or down), the actual totals may not always identically match those stated in the report. Reviews of methods of calculation and changes in the coefficients used for environmental impact have led to some revisions of data for previous years. We hope that readers will understand and take these factors into consideration.

# CONTENTS

Overview of Sekisui Chemical Group's Business	1
Sekisui Chemical Group CSR	3
Message from Top Management	5

# 60th Anniversary Special Report Continuing to Meet the Expectations of Society

CSR Management	System	13
----------------	--------	----

#### The Practice of CSR Management

1	Prominence	in	the	Fnvir	onme	ent

Midterm Environmental Vision,	
Environmental Top Runner Plan	15
Environmental Top Runner Plan – Core Strategy	
① Expansion of Environment-contributing Products ····	17
2 Preventing Global Warming	19
③ Efficient Utilization of Resources	21
④ Sekisui Eco Value Index	23
Conservation of Water Resources	25
Proper Control of Chemical Substances	26
The Foundation for Environmental Management	27
Environmental Consideration in Product Development and Business Activities	· 29
Environmental Risk Reduction	30
Midterm Environmental Plan:	
Environmental Top Runner Plan Part 1	31

# 2 Prominence in CS & Quality

Progress of Midterm CS & Quality Management Plan and Future Policy	33
Important Theme ① – Thorough Use of Customer's Feedback	35
Important Theme — Manufacturing Development Innovation	39
Important Theme ③ - Cultural Innovation	43

# 3 Prominence in Human Resources

Midterm Human Resources Vision	
– Overview & Results	45
Providing Opportunities to Take on Challenges	47
Corporate Culture Fostering Individual Learning and Growth	49
Refining Performance-based Evaluation	51
Creating Safe and Secure Work Environments	52

#### Foundation of CSR Management

Compliance	· 61
Risk Management	· 63
Disclosure and Communication	· 65
Conserving the Natural Environment and	
Contributing to Society	· 67
Data	· 71
ndependent Review Report	·81
listory of Sekisui Chemical Group/Editor's Notes	· 82

# CSR Realizing Sekisui Chemical Group's Corporate Philosophy

# Mission Statement

# Create social value while responding to stakeholders' expectations

Sekisui Chemical Group will strive to become a good company, one that has a favorable image and continuous growth. We intend to maintain business growth and maximize corporate value with customer satisfaction in responding to the expectations of our shareholders. We also actively support the self-realization of the employees who are the driving force of our corporate activities. We strive to deepen our partner-relationships with our business associates. Through our business, products and contribution to society, we aim to create value to the community and the global environment, which will also benefit future generations.

Sekisui Chemical Group will pursue high profitability and a prominent position in the marketplace while fulfilling our corporate responsibilities and responding to the expectations of our customers, shareholders, employees, business partners, local communities and the environment.



# **Corporate Activity Guidelines of Sekisui Chemical Group**

In order to continually enhance the confidence that society places in us, we, Sekisui Chemical Group, aspire to become an evermore highly acclaimed enterprise through our day-to-day business activities, in accordance with the corporate activity guidelines set forth as follows.

- Our business activities contribute to the positive development of our global society.
   We supply products and services that are highly appreciated by society, manufactured and provided with full consideration for the safety of the handlers and consumers, and for the environment.
   We are a forerunner in developing new technologies, new products and new markets.
   We develop our business continuously, by providing safe and comfortable work environments and establishing sound corporate guidelines.
- 2. We dynamize our operations by maximizing each employee's personal abilities.

We each aspire to become self-supporting persons through our perpetual efforts to expand our attributes and abilities. We seek speed and quality in fulfilling our roles and duties. We achieve maximum results by confidently facing every challenge and putting forth our utmost in teamwork, without being constrained by precedents.

3. We maintain an enterprise in which society has confidence and which is highly regarded by our customers, business partners, stockholders, local communities and the general public.

We obtain our customer confidence and satisfaction by supplying top quality products and providing excellent services. We communicate meaningfully with our customers, business partners, stockholders and local communities. We disclose our corporate information justly and timely. We protect personal information and customer information with the strictest security. 4. We comply with the laws and the spirit therein and act with sincerity, in all aspects of our business activities.

We conduct clear and fair trading by complying with all relevant laws and regulations both inside and outside of Japan, as well as with our internal rules and all international rules.

We conduct all our activities in a manner which will have only beneficial results to society at large, fully in accordance with our position as a responsible corporate member of the society. We maintain sound and normal relations with political and all other administrative bodies.

We fully respect human rights and refrain from any form of discrimination whatsoever.

5. We, as a good corporate citizen, work for global environmental protection and contribute to the well-being of society from the viewpoint of sustainability.

We tackle global environmental issues and are dedicated to global warming prevention and resources recycling. We support social contribution activities widely, such as nature preservation activities, culture, welfare and so forth. We respect the culture and customs of local communities for co-existence and co-prosperity both inside and outside of Japan.

> Enacted: May 1998 Revised: May 2006

# Through communication with our stakeholders, Sekisui Chemical Group is working to provide new social values while keeping in mind the responsibilities we are expected to fulfill.

Sekisui Chemical Group believes that realizing our corporate philosophy of "creating social value while responding to stakeholders' expectations" is the key to fulfilling our Corporate Social Responsibility (CSR). To this end we have been promoting CSR Management by creating Three Prominences: Environment, CS & Quality and Human Resources and fulfilling Three Attitudes of Sincerity: Compliance, Risk Management and Disclosure & Communication. While promoting the above CSR Management, it is very important to maintain frequent dialog with various stakeholders and continue to ask ourselves what we can and must do. We hope to continuously maintain communication with stakeholders in order to review our approaches, provide new values for society and work to build an even better society together with the stakeholders.



# We continue to conduct CSR Management in a trustworthy manner, remaining ever conscious of society's expectations



#### Meeting the Expectations of Society for 60 Years

This year Sekisui Chemical will mark 60th year in business. Over the past six decades we have developed products meeting the demands of society, established solid businesses and continuously provided value to society. This fills us with a great sense of pride and accomplishment. At the same time we are keenly aware and appreciative of all the customers that have valued and used our products over the years. It is thanks to their patronage that our business has flourished.

Sekisui Chemical Group has used our advanced plastic processing technologies to solve problems in both society and our daily lives. Building modular house at our own plants has also allowed us to provide stable, high quality houses with excellent cost performance. Because these businesses are so important for meeting the demands of society, we have worked to expand both their business range and product fields.

One example was our efforts in 1962 to help the Tokyo Cleaning Bureau remove trash cans from the street in a drive to clean up the city just before the 1964 Tokyo Olympics. At that time living standards were rising and homes were producing much more garbage than before. In order to respond to these needs, Sekisui Chemical developed a plastic trash bucket called the Poly-Pail that greatly contributed to Tokyo metropolitan city beautification efforts. This product went on to change the way that households across Japan disposed of their garbage.

With a true pioneering spirit we have continuously developed new business fields and produced new social values so that our business activities can contribute to solving problems confronting society. This driving spirit has remained unchanged since our founding. In fact, Sekisui Chemical Group sees this as one of our guiding corporate philosophy and the basis for our Corporate Social Responsibility (CSR).

#### CSR Took a Greater Hold This Year as We Promoted Activities Based on Our Three Prominences

Serious approaches to CSR were adopted from fiscal 2005 and since fiscal 2006, we began practical implementation of CSR, making it a main pillar in our contributions to society within the context of our Midterm Management Vision *GS21-Go! Frontier*. This has helped the CSR philosophy take greater hold throughout the entire Sekisui Chemical Group over the past year.

There has been greater awareness of Environment, one of the Three Prominences, and we are gaining more confidence concerning environmental measures as we win high praise from those outside our group. Products with environmental considerations that make a contribution to society have been redefined as environment-contributing products and each division company in Sekisui Chemical Group is now working to expand the sales of these products. We are also making steady progress in improving our environmental performance in such areas as reducing CO<sub>2</sub> emissions.

The basis for our CS & Quality Prominence is to ensure product quality, while promoting activities to better respond to our customers. Beyond this, we have now moved into a stage where we are promoting the development of products that can truly be appreciated by our customers. The important points are for customers to use and have confidence in and be impressed by Sekisui Chemical Group products and for us to promptly respond to any problems that might arise. This is not our final goal. Rather our aim is to create a more sophisticated CS & Quality approach that gives us the chance to always listen to the customer's feedback.

The basis for our Human Resources Prominence is to provide Sekisui Chemical Group employees with meaningful work that they will love, which in the end will generate more positive results. Along with cultivation of human resources, we introduced from fiscal 2006, new approaches that allow for more varied working styles and help to create safe and secure work environments. For example, we established the *Kirameki* Life Promotion Office in order to foster the performance and varied working styles of our female employees.

The global expansion of our business activities has resulted in an increase in the number of our overseas bases. We are aggressively employing local human resources that yearn to become members of Sekisui Chemical Group. Efforts to provide education and training for these local employees are also being improved.

# Bolstering the CSR Management Foundation to Better Handle Social Changes

In November 2006, Sekisui Chemical underwent an investigation by the Fair Trade Commission regarding the sales of polyethylene gas pipes. Taking this incident very seriously, we set up an investigation committee, including independent members, and have taken steps to not only root out the causes behind this case, but to also ensure that it never happens again. Each division company in Sekisui Chemical Group is preparing systems and conducting training to prevent such an incident from ever occurring again.

It is important to have in place systems that allow us to easily obey all pertinent laws and rules, but we must also be acutely aware that social rules and opinions can shift with changing times. We want to review the way we conduct our business and confirm that every employee has a solid awareness of this key point.

We will continue to address some of the remaining issues such as improving the level of efforts taken by Sekisui Chemical Group as a whole and promoting CSR through closer cooperation with our supply chains.

#### Main Results for Fiscal 2006

- Reorganization of CSR Committee System
- Reorganization of CSR-related departments (corporate headquarters)
- Steady expansion in sales of environment-contributing
   products and improvements in environmental performance
- Improvement of the system provided by Customer Information & Consulting Service
- Establishment of the *Kirameki* Life Promotion Office to support the activities of female employees
- Evolution of CSR Management Involving

#### Everyone from Top Management to General Employees In January of this year the CSR Committee System and

corporate headquarters departments were reorganized in order to promote the further evolution of our CSR management. Until now there were three committees in addition to the CSR Committee, but the reorganization placed the CSR Committee at the top and established individual subcommittees regarding the themes of Environment, CS & Quality and Compliance. A Human Resources Subcommittee was also newly established.

The CSR Committee has also started inviting three representative employees to serve as members. Having general employees participate in this important committee gives those in management a better opportunity to hear the opinions of employees. This committee has already met for a second time, enjoying unusually vigorous discussions that encompassed a broader range of viewpoints. The results from these discussions are now starting to be seen.

Departments related to Environment, CS & Quality and Human Resources, the main pillars of Sekisui Chemical Group's CSR philosophy, were reorganized into the CSR Department. This means that our approach to CSR is now in line with our organizational structure.

In the future we will assess our CSR activities in the same manner as sales and other business results. This can be seen in our environment-contributing products that are based on the idea that "the market will select products that help reduce the environmental impact placed on society, resulting in better sales." We are starting to feel the connection between answering the demands of society and showing corporate business results.

There is now a broad array of problems facing society and diverse expectations held by our stakeholders. Sekisui Chemical Group will continue communicating with society in order to better meet social expectations and we will continue to develop our CSR management to earn an even higher degree of trust from society.

Thank you very much.

June 2007

Naotake Okubo, President

# **60** Special Report **Continuing to Meet the Expectations of Society**

# **Providing comfortable new lifestyles through products that meet the demands of the times**



Since our founding in 1947, Sekisui Chemical Group has been manufacturing plastic products and modular houses, creating products that meet the needs of each age. Moreover, in addressing social problems, we uncover latent needs in society and provide products that create new values. We will continue making contributions by helping to address social problems through our products and services.





# The drive to always provide social value is behind our success in developing advanced products for society

Urban Infrastructure & Environmental Products Company

Indispensable Company for Building Social Infrastructures Continuing to Support People's Daily Lives – Eslon Pipe

# Meeting Demands for Piping Materials during Post-war Recovery Period

Sekisui Chemical was founded in 1947 soon after the end of World War II and so we always recognized the importance of contributing to rebuilding. For example, the reconstruction of water supply and sewage systems was a pressing matter for rebuilding the nation's infrastructure after the war. Sekisui Chemical's rigid polyvinyl chloride pipes, known as Eslon Pipes, were used as piping material for carrying water back then and have continued to be one of our most important products even to this day. We started commercial production of Eslon Pipes at Kyoto Plant from 1952. Compared to iron, stainless steel, ceramics and other conventional materials, Eslon Pipes offered superior quality, cost performance and safety and could be more easily mass produced. Eslon Pipes won high praise as water supply pipes and in 1954 the Tokyo Water Bureau even designated Sekisui Chemical as an official producer of polyvinyl chloride pipes. The development of Eslon Fittings in 1955 improved workability and accelerated the popularization of Eslon Pipes. According to records held by the Health Service



Impact-resistant Eslon Pipes



Installing Eslon Pipes

Bureau of the Ministry of Health, Labour and Welfare, the popularization of water supply was only 26.2% in 1950, just before the release of Eslon Pipes. However, in the following 10 years this doubled to 53.4%, then hit 69.4% in 1970 and 91.5% in 1980. During this time, the amount of Eslon Pipes produced continued to surge.

#### From Popularization of Water Supply and Sewage Piping to Advanced Pipe Renewal Methods and Overseas Expansion

In the 1980s, the sewage pipes installed during the Japan's recovery period after World War II began reaching the end of its durable life span and so there was a sudden surge in demand for pipe renewal work. Conventional renewal projects require the excavation of ground and roads, which causes traffic congestion and generates a great deal of waste material. In order to overcome these problems, Sekisui Chemical introduced its own Sewage Pipe Renewal (SPR) method. This method has won praise for providing a safe and high quality construction method that does not require excavation. The deterioration of sewage systems is not unique to Japan and is in fact a problem seen around the world. From fiscal 2004, we began to aggressively promote the SPR method overseas, with its successful implementation in Los Angeles, U.S.A. and Seoul, Korea. More than half a century has passed since we first began producing Eslon Pipes, yet it is still one of our main products and has continued to hold the top share of the domestic water supply and sewage pipe market. During this period, Eslon Pipe applications have spread from water supply and sewage to agriculture, industry and other fields. In order to meet the future needs of various fields, we will improve the properties of plastics itself such as impact- and heat-resistance, and also develop combined materials with metal, glass fiber, etc. in the pursuit of even higher added value.



SPR Method Renewal method for deteriorated pipes that sends out from above ground through a manhole a belt-shaped rigid polyvinyl chloride (profile) into the inside lining of an existing sewage pipeline. This rigid profile twists in a spiraling manner to renew the pipeline.

#### **Housing Company**

Meeting the Demands for Quality Houses with High Cost Performance Realizing the Idea of a Factory Built House – Sekisui Heim

The late 1960s was a period in which house ownership was finally within the reach of the average citizen. The main issues for those building these houses were construction cost and period. At that time the construction of a typical house required on average about 2,600 man hours and the sudden increase in demand for new houses meant that there was an overwhelming shortage of skilled house builders. So we came up with the novel idea of actually building new houses in the factory. Just like automobiles and other industrial products, we were able to construct pillars, walls and other units, which were later assembled at the construction site, at a factory that practices quality control. This Modular House Construction System helped to dramatically reduce the amount of time needed for construction at the site, while still providing solid houses with stable quality. In 1970, we completed the Sekisui Heim, Japan's first modular house. This became a hot topic and in just three years, Sekisui Chemical was ranked among

Japan's top prefabricated house manufacturers. In the 1990s, we began producing environment-friendly houses as awareness of the global environment began to rise. For example, we have offered a Zero Utility Cost House equipped with photovoltaic generators to greatly reduce



Production Line at a plant Creating not just components, but the entire room.

energy consumption in daily home activities, as well as extremely durable houses that are safe and secure and long-lasting. We have already sold more than 50,000 houses equipped with photovoltaic generators, making an important contribution to preventing global warming. We will continue providing better houses that take into consideration both the global environment and users' comfort.

#### **High Performance Plastics Company**

Supporting a Wide Range of Industrial Applications ... Expanding the Possibilities of Plastics – Softlon

Since our founding, Sekisui Chemical has conducted research and development with the aim of expanding the possibilities for plastics in order to meet the varied demands of industry. From 1962, we started the development of a material with the functions of foamed plastic. Based on our own technologies, we were able to create Softlon, irradiation cross-linked polyethylene foam. Taking advantage of its unique insulating



Use of Softlon as an automobile interior material

and impact-absorbing qualities, in 1968 we launched an organization specializing in the making of Softlon as a product that would meet the varied demands of the industry. One example of a product that uses the functions of Softlon to raise the level of comfort in our daily lives is our soft drain boards, commonly used in the bathroom. This product became enormously popular as it can provide many benefits. When you lay it down on the shower area floor, it feels warm and soft and it is very comfortable to sit on, while it effectively drains water and provides a non-slippery surface. The use of Softlon as a high-function foamed material has also spread to various fields. Softlon has been widely used as an industrial material for such applications as automobile interior materials and as a static-eliminating packing material for precision electronics. For example, the automobile industry takes advantage of Softlon's good elasticity and the fact that it can easily be molded and uses it as an interior material that is soft to the touch and has an excellent receptivity for a variety of design. We are now uncovering further ways that Softlon can be applied so that its excellent functions can meet the needs in a wide range of fields.



**Continuing to Meet the Expectations of Society** 

# We will continue to contribute to society through our business operations and fulfill social responsibilities in all of our business operations

**Housing Company** 



# We provide safe, secure and long-lasting houses

#### We ensure the complete safety of our houses

Providing safe, secure and sound houses is our fundamental responsibility. With "providing environment-friendly houses that can be lived in safely and comfortably for at least 60 years" as our business mission, Housing Company thoroughly implements safe design and appropriate construction practices.

Regarding house design, we ensure a high level of quake resistance and durability for our house structures. And in recent earthquakes, not only did our houses remain standing, but also the structural backbone of the houses achieved a status of

#### Urban Infrastructure & Environmental Products Company



#### Contributing to the construction and maintenance of a safe and comfortable water environment

#### We provide water environment solutions

Contribution to the construction of a safe and comfortable water environment centered around the pipe system is the business mission of Urban Infrastructure & Environmental Products Company.

Our product line contributes in a variety of different ways to the construction of lifelines that are strong during times of natural disasters such as earthquakes, flooding and droughts. Examples of our range of products are our polyethylene water supply pipes made of olefin resin, exhibiting superior flexibility

#### **High Performance Plastics Company**



# Providing components used in a variety of fields

# We respond to demand from a diverse range of industrial fields

With *Chemistry for your Win* as our business mission, High Performance Plastics Company responds to the diverse needs of customers with components based in plastic possessing technology and creates functions with high added value. We are currently focusing on the automobile, IT and medical fields, and developing business activities in a wide range of areas. Within these endeavors, we are keenly aware of the importance of responding to increasingly diversified and sophisticated customer needs, providing stable quality to requiring almost no repairs.

Moreover, we consolidate the building components information used for customer houses through our own original database. Even in the extremely rare event that a flaw occurs in a component, this system allows the specific house in which that component is being used to be found instantly, allowing speedy and accurate response service.

Furthermore, during construction we issue a construction process history complete with photographs to make sure the customer is satisfied with the progress and able to confirm the construction process as it occurs.

#### Our goal is sustainable houses

We feel that in Japan, with its scarcity of resources, energy conservation is a constant issue. Thus, focusing on

and the SPR method, wherein PVC profiles inserted in existing pipes reinforce and regenerate pipes on-site. Particularly in terms of the renewal of existing pipes, by providing comprehensive service from diagnosis to design, manufacturing, construction and after-sale maintenance, we are contributing to solutions for environmental problems such as waste generation, traffic congestion, sound pollution and vibration.

We are focusing on water recycling as a new business theme and commercializing a Rainwater Storage System that reuses rainwater while suppressing flood outbreak, household rainwater storage tanks, etc.

In this manner, we are providing products and services which offer solutions to various problems in the water environment. environmental concerns is essential. In addition to fully complying with the thermal insulation performance of the energy conservation standard set forth by the government, we continue to pursue the design of houses with a high level of environmental performance, including such endeavors as the Zero Utility Cost House.

In the future, we will strive to contribute to society by providing even more sustainable houses, such as self-sustainable houses wherein residents can live without worry even if lifelines are temporarily cut due to natural disasters or other causes.

# We are contributing to solutions for global water environment problems

The increase in social demand related to the water environment is not limited to within Japan. Water supply and sewage piping decay is a problem common to all developed countries, and there are countries and regions which are still anticipating improvements in water supply and sewage. Utilizing the know-how which we have cultivated within Japan, we are actively involved in the overseas expansion of water environment solution projects. We are establishing strongholds overseas, with examples such as reinforced plastic pipes already underway in China and aged pipe renewal business taking place in the U.S.A. and Korea. In the process of expansion, we maintain consistently high quality products in all of our companies and businesses and strive to be a division company worthy on a global scale. In addition, our goal is to continue delivering safe and sound water throughout the world.

customers in every region across the world and stable supply of products with a large market share. In order to facilitate this, we are devoted to developing new technology, thorough implementation of quality control at each base of operations and the cultivation of human resources which can actualize this.

# Focusing on quality control and human resources cultivation

In terms of quality control, we are maintaining a high level and stable quality by setting up a mother factory in Japan that manages from the prototype stage to mass production stage for various products and then expands the process and quality control know-how established at this factory to overseas production sites. In terms of human resources cultivation, in order for locally recruited employees in overseas sites to handle management, we are implementing training at overseas sites, including training in the High Performance Plastics Company's way of thinking about quality control, technology and service, and introducing a trainee system for sending Japanese employees to overseas sites.

With these endeavors as a support, we wish to continue providing components of high quality and high added value for diverse industrial fields and products, and to continue solving the problems of a wide array of customers.

# Working Towards the Evolution of CSR Management In order to continue to promote CSR Management, which will advance even further, we consolidated CSR into a new system

With full-scale involvement in CSR Management beginning in fiscal 2005, Sekisui Chemical Group established the CSR Committee in addition to the previously formed Environmental Committee, CS & Quality Committee and Compliance Committee. In close alliance with each other, these four committees have planned and discussed measures related to CSR, and the corporate headquarters departments in charge have advanced these measures.

In order to ensure that CSR activities move forward, we reviewed the committees system and corporate headquarters organization in January 2007.

We reviewed the composition of the four committees and created a system with a single CSR Committee and four subcommittees, which are the Environmental Subcommittee, CS & Quality Subcommittee, Human Resources Subcommittee (new) and Compliance Subcommittee. Problems which span the entire corporation are analyzed and discussed in the CSR Committee, and problems concerning individual items and the progress at individual division companies are analyzed and discussed in the relevant subcommittees.

Furthermore, in addition to the management, three employee representatives were added as new members to the CSR Committee. This was done after judging that employees comprise an important stakeholder group and understanding that including employee participation in CSR management will link to better discussions and measures.

We added a CSR Department to our corporate headquarters organization. The CSR Department is an organization that integrates Environmental Management Department, CS & Quality Management Department and the human resources function of General Affairs and Human Resources Department, which had all been advancing measures related to CSR. We also installed a CSR Planning Group in CSR Department to manage themes related to CSR.

Based on this new system, Sekisui Chemical Group is advancing efforts in the CSR activities, even more effectively than before.

\* Regarding corporate governance system, refer to annual reports (web site only) or the financial statement report.



#### Thoughts About the CSR Committee by One of the Employee Representatives

# Considering and proposing CSR from an employee viewpoint

As one of the employee representatives, I have joined the CSR Committee. Participating in this means a chance to stand on the starting line of an immense endeavor initiated by Sekisui Chemical Group and the perfect chance to reassess myself as an employee and as an ordinary citizen.

At the first committee meeting, I was truly amazed by the sincere attitude regarding the implementation of CSR by the management, including the president. And the speedy response of the company, best exemplified through its decision to quickly turn the CSR Pocket Guide, which was the wish of employees, over to the creation phase, is indicative to me of the company's strong approach.

Based on what I ponder about everyday and what I feel when I interact with customers through work, I hope to contribute to even better proposals and see the

implementation of these proposals in order to facilitate CSR.



Mie Matsumoto CSR Committee Member (One of the Employee Representatives)



# The Practice of CSR Management

This section introduces the Three Prominences, which together constitute the core of Sekisui Chemical Group's CSR philosophy

The Practice of CSR Management Prominence in the Environment

We aim to be an environmental leader, prominent in our approach to the environment, pursuing both ecological and economic goals



To fulfill our aim of being a sustainably-growing "environmentally creative organization," we will make an effort to successfully balance ecology (caring for, contributing to our global environment, and living in symbiosis with the local environment) and economy (ensuring economic benefits for both customers and enterprises).

These activities represent Sekisui Chemical Group's environmental management and we believe that by becoming a leader in this field, we hope to win the enduring trust of society at large.



# Management Policy on Environment and Safety

#### Philosophy

We, Sekisui Chemical Group, recognize that there can be no sustainable development without our total commitment to issues of environmental protection and safety. We are dedicated to the creation of a better environment by continually promoting environment and safety activities, enabling the structuring of a recycling-based society and global environmental protection through our businesses, products and contribution to society.

#### **Basic Policies**

It is our conviction that focus on the environment holds the key to our continued growth into the future, and therefore we are aiming to become an "environmentally creative organization," with a corporate culture based on our environmental concerns, in order to meet the expectations society has placed on us.

- We have utmost concern for the environment and safety of all our products and business activities from the stages of research and development through procurement, production, sales, use, and to disposal of products, and comply precisely with all requirements on the issues.
- 2. We promote effective utilization, reuse, and recycling of limited resources to reduce the environmental impact.
- 3. We enhance positively the environmental performance and safety in handling chemical substances and minimize chemical risks.
- 4. We not only comply with international and national laws and regulations, but also proactively set our own objectives and targets to promote continual improvements and also to enhance environmental concern through the education of all our staff.
- 5. We endeavor to secure accountability in cooperation and collaboration with local communities and society as a whole and with governmental and industrial organizations through close communication with them.

April 1, 2003

Naotake Okubo, President

# Midterm Environmental Vision, Environmental Top Runner Plan

# Steady successes toward realizing the established midterm environmental plan

# Development of the Environmental Top Runner Plan, Our Midterm Environmental Vision Through Fiscal 2010

In April 2005, we, Sekisui Chemical Group, finalized our Environmental Top Runner Plan, a midterm environmental vision detailing the targets the Group must achieve by fiscal 2010, based on issues to become an environmentally creative organization, external evaluations and requests, and social issues. The vision shifts the emphasis from environmental friendliness to actively contributing to the environment—i.e., setting the targets to reduce the environmental impact not only of our own businesses but also of our products when used by our customers, thus helping to reduce the environmental impact on society as a whole.



# Midterm Environmental Top Runner Plan Part 1 (fiscal 2006 - 2008)

As the first step in realizing this vision, we formulated and are implementing our new Environmental Top Runner Plan Part 1 covering the three years from fiscal 2006 through fiscal 2008.

This plan lays down specific activity guidelines and targets for all our business processes with the aim of achieving an environmental management that addresses both ecological and economic concerns, under the banner of "contributing to society and the global environment through our business, products and services."

The Plan also introduces further controls relating to matters such as reducing the environmental impact of transportation and conserving water resources, both of which have become serious issues in recent years. At the same time, it widens the scope of our environmental management to include our overseas offices and business sites, and the supply chain.

## Status of Environmental Top Runner Plan Part 1 (results for fiscal 2006)

The results for the Environmental Top Runner Plan Part 1 for fiscal 2006, the first year of the plan, are as follows.

In fiscal 2006, we reached the fiscal 2008 target for the Sekisui Eco Value Index and surpassed our fiscal 2006 target concerning CO<sub>2</sub> emissions reduction. Furthermore, in fiscal 2006, we almost reached our target for the sales of environment-contributing products.

We were 3% short of reaching our target of reducing generated waste, but we expect to achieve this target in fiscal 2007 thanks to improved measures utilizing material flow cost accounting (see page 22).

#### Status of Environmental Top Bunner Plan (results for fiscal 2006)

Status of Environmental Top Runner Flan (results for fiscal 2000)									
	Fiscal 2010	Fiscal 2008	Fiscal	2006					
	Target	Target	Target	Actual Result					
Sales of Environment- contributing Products* (percentage of overall sales)	40%	25%	15%	14.7%					
Reduction in CO <sub>2</sub> Emissions (compared to fiscal 1990)	10% reduction	8% reduction	6% reduction	6.8% reduction					
Reduction in Generated Waste (compared to fiscal 1998)	67% reduction	50% reduction	40% reduction	37% reduction					
Sekisui Eco Value Index (compared to fiscal 2004)	2.0 times higher	1.5 times higher	1.4 times higher	1.5 times higher					

\* The fiscal 2010 target sales ratio for environment-contributing products was reviewed and changed to 40% in October 2006.

## Environmental Top Runner Plan — Core Strategy **1** Expansion of Environment-contributing Products

# We have set the standards for environment-contributing products and have increased their sales ratio by 15%

## Approaches to Environment-contributing Products-Creating New Standards

In fiscal 2003, Sekisui Chemical Group established a set of environment-friendly product accreditation guidelines and began promoting the expansion of environment-friendly products and businesses. In fiscal 2006, we further developed these guidelines, and established and launched the Environment-contributing Product Standards. These new standards aim to make significant contributions to our customers and society as a whole, giving due consideration to environmental impact throughout our product lifecycles, and further spreading the effect of environmental impact reductions outside the Group through our business and products.



# Environment-contributing Product Standards

#### Definition

- Products and businesses that demonstrably help to reduce the environmental impact on our customers and on society as a whole.
- Products or systems having lower environmental impact compared to similar conventional products and systems.

#### Scope of Application

- Reduction of environmental impact and resource depletion related to customer's use, disposal and recycling (excluding production and transportation within Sekisui Chemical Group)
- Reduction of environmental impact on the natural environment, e.g. reduction in greenhouse gases (CO<sub>2</sub>, etc.), waste reduction, resource conservation, and water conservation/recycling

# Sales of Environment-contributing Products

The degree to which environment-contributing products can deliver benefits to customers and society as a whole in the form of reduced environmental impact will depend largely on the degree of popularization of these products. Therefore, Sekisui Chemical Group is using the sales of these products as an indicator for our environmental management. Specifically, our Environmental Top Runner Plan has set the target of raising the sales ratio for these products to 40% of total consolidated sales by fiscal 2010.

In fiscal 2006, sales of environment-contributing products rose to 135.8 billion yen, equivalent to 15% of consolidated sales.

As of the end of fiscal 2006, products and services falling in the environment-contributing products category amounted to 31 items, including the Zero Utility Cost House and the sewage pipe renewal (SPR) method.

# Environment-contributing Products Sales and Sales Ratio Trends



## **Benefits from Environment-contributing Products**

We believe we can contribute to society through environmental impact reductions by increasing sales of environment-contributing products and the popularization of

such products in the market. As an example, we refer to the effect of houses designed to reduce energy consumption in daily living. The Zero Utility Cost House, photovoltaic generation and Eco Cute systems have cumulatively reduced CO<sub>2</sub> emissions in homes by 112,000 tons through fiscal 2006.

#### Reduction in CO<sub>2</sub> Emissions in Everyday Home Activities



# Examples of Environment-contributing Products 1 Sekisui Heim: Chezdan and Be-ond Style Houses

Sekisui Chemical Group provides houses that take into consideration the environment and occupants through Zero Utility Cost House and Re-use System House, among others.



greatly reduce energy costs for heating, which is a pressing issue in colder regions of Japan like Hokkaido and Tohoku. These houses provide insulation performance well above the next-generation energy conservation

standards used in both regions and are equipped with Warm Airy, which maintains a stable level of warmth underneath floors. This helps to improve both energy conservation and customer comfort. The Chezdan (offered in Hokkaido) has reduced energy consumption by 34% compared to conventional houses and the Be-ond (offered in Tohoku) uses 36% less energy (in-house calculation).



#### We believe it is important for our sales staff to first experience these houses.

Yuichiro Suzuki Development Group for Snowy/Cold Regions, Technology Department, Housing Company, Sekisui Chemical Co., Ltd.

To effectively communicate with our customers the appeal of these houses developed for snowy and cold regions, members of our sales staff need to first experience for themselves the warmth they offer. We therefore developed a Hands-on Open House so that our sales staff can gain a better understanding of these houses.

FFU Production Volume Annual production of approx. 10,000m<sup>3</sup>

# Example of Environment-contributing Products 2 Lightweight, Corrosion-resistant Structural Material: Eslon Neo Lumber FFU

Elson Neo Lumber FFU is a unique building material developed by Sekisui Chemical that offers the feel and workability of natural wood and the corrosion-resistance of plastic. For example, if conventional railroad sleepers made from natural wood were replaced with FFU Synthetic Sleepers, approximately 200 m<sup>3</sup> in timber resources could be saved for every one kilometer of track (which typically uses about 2,000 sleepers). Since these products can be pre-processed at the plant, this also helps to

shorten installation time and reduce the amount of waste generated at the site. More recently, FFU has been used in underground tunnel construction projects and has helped significantly reduce the amount of chemicals used for ground (foundation) improvements.



FFU used on bullet train railwav sleepers



Our goal is to contribute to a better environment by expanding the use of FFU.

(including about 100,000 railway sleepers)

Yuji Ishijima FFU Technical Section, Composite Material Production Department, Shiga-Ritto Plant,

Urban Infrastructure & Environmental Products Company, Sekisui Chemical Co., Ltd. FFU is being used for railway sleepers, for deodorizing covers at sewage treatment facilities and in other applications. Thirty-three years have passed

since we first started producing FFU. Today we are continuing to improve the raw materials used to make FFU, its composition, as well as its processing method in order to realize new functions of FFU for each application. We are working to expand the applications of FFU as they not only satisfy customer needs, but their utilization helps to lighten the impact placed on the environment.

Data

# Example of Environment-contributing Products 3 Hot-melt Adhesive for Packaging: Advantra

The hot-melt adhesive Advantra used for assembling packaging materials reduces the negative impact on workers that conventional products are likely to cause, because there is little release of volatile organic compounds (VOC) and it produces hardly any stench. Advantra also has higher thermal stability. which reduces problems on the production line and contributes to lower maintenance costs. Moreover, improvement in the

adhesive property reduces the amount to be applied by 20% to 30%, and shortens the heating time. This in turn helps reduce the amount of materials, energy and costs



needed for packaging and assembly.



#### We strive for total cost reduction.

Hirokazu Teramoto Eastern Japan Sales Section Kazuho Kudo Technology Section, Packaging and Paper Converting Division, Sekisui Fuller Co., Ltd.

This product offers better performance, but comes at a slightly higher price and so initially we worried that customers would not recognize total cost reduction benefits. However, customers that adopted this product approved its merits and were extremely satisfied.

# Meeting our Environmental Top Runner Plan Targets

To achieve the above stated target of increasing the sales ratio for environment-contributing products to 40%\* by fiscal 2010, Environment-contributing product sales was added as an assessment item within our Environment Achievement Assessment System. Furthermore, we have added an assessment for environmental contributions to the framework for our environmental impact assessment. We plan to use this framework to give greater consideration to our contributions to the environment in every process from development to sales. \* In October 2006, we reviewed and revised our target sales ratio for environment-contributing products to 40%.

> 18 CSR Report 2007

Environmental Top Runner Plan — Core Strategy 2 Preventing Global Warming

# Achieving a 7% reduction in CO<sub>2</sub> emissions compared to fiscal 1990 level

# Working towards further emissions reduction across the entire product lifecycle

# Way of Thinking Towards Prevention of Global Warming

Just as Japan promised to reduce its greenhouse gas emissions by 6% compared to 1990 level during the First Commitment Period of the Kyoto Protocol, it is necessary to take effective measures to prevent global warming.

Sekisui Chemical Group provides customers and society at large with useful products. On the other hand, we recognize that we consume fossil fuels and emit greenhouse gases such as CO<sub>2</sub> while conducting our everyday business activities, starting with our manufacturing operations.

To this end, we are working hard to reduce the emission of greenhouse gases as a result of our everyday business activities.

#### Explanatory Column 🕖

# What is the First Commitment Period of the Kyoto Protocol?

A global environment summit held in 1992 adopted the United Nations Framework Convention on Climate Change with the goal of preventing global warming brought about by greenhouse gases. The Kyoto Protocol was then adopted by the participating nations at the Third Conference of Parties (COP3) (held in Kyoto in 1997). The Kyoto Protocol set the First Commitment Period as the five years between 2008 and 2012, and greenhouse gas reduction targets were set for each participating country. Japan has pledged to reduce its greenhouse gas emissions during this period by 6% compared to the 1990 level.

## Activities by Sekisui Chemical Group

#### Activities at the Development Stage

As part of environmental impact assessments at the development stage, Sekisui Chemical Group is conducting Life Cycle Assessments (LCA).

The LCA is designed to assess environment impact for the entire life cycle covering product development, production, transportation, sales, use and disposal. Sekisui Chemical Group develops products that take into account CO<sub>2</sub> emissions and other factors at each of these stages.

## Activities at the Production Stage

For fiscal 2010, we have set ourselves the target of reducing CO<sub>2</sub> emissions from energy generated at the production stage by 10% compared to fiscal 1990. In fiscal 2006, we made a steady progress, since Sekisui Chemical's Musashi Plant introduced advanced co-generation systems that boast very efficient power generation, which helped us to reduce CO<sub>2</sub> emissions by 6.8% from fiscal 1990.

# CO2 Emissions During Manufacturing Phase (1,000 tons-CO2)



## CO2-Emissions Free Activities Using Natural Energy to Avoid the Need for Fossil Fuels

#### Photovoltaic Systems

Sekisui Chemical Group has been installing at various business sites, photovoltaic systems that do not generate any CO<sub>2</sub> emissions. As of the end of fiscal 2006, these systems had been installed at 10 business sites and produced a total of 180MWh of energy during the year.

#### **Biomass Fuel**

Sekisui Chemical has started using biomass diesel fuel (BDF) to power its forklifts and other equipment at four business sites, including Shiga-Ritto Plant and Higashinihon Sekisui Industry Co., Ltd. This BDF is made from used tempura oil. When rapeseed and other plant materials that make up the tempura oil are burned, they return to the atmosphere, the CO<sub>2</sub> they absorbed during their growth process. So in this sense, these materials are considered to be carbon neutral and do not contribute to global warming like burned fossil fuels.



Data

#### **Highly Efficient Co-generation System**

In fiscal 2006, Sekisui Chemical introduced two advanced and highly efficient co-generation systems (6,000kW each) at our Musashi Plant. Careful consideration was given to optimizing the exhaust heat generation amount and heat demand balance in order to eliminate the generation of any surplus heat. This resulted in a more than 15% reduction in CO2 emissions for this plant (approximately 6,000 tons), even though production at the plant increased by 10%. \* In fiscal 2004, these businesses were certified as a Project for Supporting

New Energy Operators (subsidization program).



## Activities for Effective Utilization of CO2 In-house Utilization of CO<sub>2</sub> in Exhaust Gases

#### Drainage Water Neutralization Using CO2 from **Boiler Exhaust Gas**

Since fiscal 2003, Sekisui Chemical has been using CO2 contained in the gas emitted from boilers at our Shiga-Ritto Plant to neutralize alkaline water discharged from these boilers. This has helped to reduce CO<sub>2</sub> emissions from these boilers by about 500 tons-CO2 per year and did away with the need to use any hydrochloric acids as the neutralizing agent for the water.



## Activities at the Transportation Stage

In addition to trucks, Sekisui Chemical Group also uses trains and ships to transport our products, as these methods produce less CO2. However, in the past, effective methods for verifying energy consumption and CO2 emissions at the transportation stage were lacking. Therefore, in fiscal 2006, we developed and introduced the Transportation Energy Information Collection System. Sekisui Chemical Group handles a wide range of products including houses, pipes and resins, and so the transportation method will naturally differ for each product. Still, we managed to create a system that can cover the transportation of all of our products. As a result we were able to determine that in fiscal 2006, our CO2 emissions at the transportation stage came to 57,000 tons.

We believe the data obtained by this system will prove useful when drafting and implementing future improvement measures. \* Refer to page 74 for more information on transportation amounts and other related data.

## Activities in Offices

We are doing our best to save energy and reduce greenhouse gas emissions not just in our production sites but also in offices at our laboratories, corporate headquarters and elsewhere. In fiscal 2006, we were able to cut our energy consumption by 1.7% compared to fiscal 2004. Sekisui Chemical's activities were even featured on the Environment Ministry's Team Minus 6% website as a Team Members Activity Report.

In fiscal 2007, we have been extending these activities to every office at our branches, sales companies and other locations across the nation.

\* Refer to page 77 for more information about energy consumption at our laboratories (office sections) and corporate headquarters buildings and other such data.

# **Activities for Products**

The construction of Zero Utility Cost Houses and the installation of photovoltaic generation systems in new houses or existing houses helped to greatly reduce the amount of CO2 emitted in everyday activities (see page 17). The use of our interlayer film in automobile windshields can reduce heat rays entering the automobile on hot summer days, which helps to reduce energy consumption by removing the need for excessive air-conditioning. Sekisui Chemical has also developed a bath tub that keeps the bath water hot longer, reducing the amount of energy usually needed to reheat the water.

## Meeting our Environmental Top Runner Plan Targets

Sekisui Chemical Group's Environmental Top Runner Plan targets to reduce its greenhouse gas emissions by fiscal 2010 to 10% less than they were in fiscal 1990. To this end, we have been stepping up investments in equipment that can reduce CO<sub>2</sub> emissions at our various production sites. In fiscal 2006, we introduced the CO<sub>2</sub> Reduction Equipment Investment Promotion System to facilitate these efforts (see page 28). This system helps to reduce the burden of equipment investment for each business site as the amount of CO2 reduced by the equipment investment is converted into a monetary sum that is then covered by the corporate headquarters.

> 20 CSR Report 2007

# Environmental Top Runner Plan — Core Strategy 3 Efficient Utilization of Resources

# Reduce amount of generated waste by 37% compared to fiscal 1998 level Promote the efficient utilization of resources based on the 3Rs (Reduce, Reuse and Recycle)

## Basic Policy for Efficient Utilization of Resources

Sekisui Chemical Group uses various resources in the production of our products, which inevitably leads to the generation of waste, such as scrap materials at plants and construction sites. Furthermore, our products themselves, after being purchased and used, generate waste. Therefore, we have adopted the 3R approach in order to ensure that there is no waste in our consumption of resources and to hold down the amounts of waste we generate.

#### Explanatory Column >

#### What are the 3Rs?

The increase in waste materials in recent years has resulted in various social problems such as an insufficient number of waste disposal sites and illegal dumping. The 3Rs, specifically Reduce, Reuse and Recycle, have been adopted as a measure to overcome these waste disposal problems. The 3R approach was incorporated in Japan's Basic Law for Establishing the Recycling-Based Society enacted in 2000. Since then, government organizations have been calling on enterprises and others to also adopt this approach.

## **Reducing Amounts of Generated Waste**

#### At Production Sites

Sekisui Chemical Group has been promoting the recycling of generated waste as a Zero Emission Activity supporting the efficient utilization of resources used in the production of our products. Along with continuing these activities, we have also returned to the starting point for the effective utilization of resources with an added focus on reducing and reusing the generated waste materials.

At plants the generation of scrap waste is being reduced (improvements in production efficiency), the packaging of raw materials has been simplified, scrap materials are being reused while still maintaining the needed quality and materials used in transportation are being reused over and over again. As a result, in fiscal 2006, we were able to reduce the amount of generated waste by 4.9% as compared to fiscal 2004 and by 37% as compared to fiscal 1998.

# Total Amount of Waste Generated and Unit Waste Generation (Index)



#### At the Construction Site

Since over 80% of each Sekisui Heim and Two-U Home is made at the plant, the amount of waste generated at the construction sites is far less than that produced by other construction methods. However, interior finishing work and other jobs carried out at the construction site still generate scrap materials that end up as waste, so our construction sites and plants are working closely together to reduce this waste. These activities include the reusing of packaging materials and having a thorough grasping of the surplus materials at the construction site so that proper adjustments can be made at the plant to optimize product shipments. As a result, in fiscal 2006, we achieved a 42% per house reduction in waste as compared to fiscal 2000.





## At the Office

Production sites are not the only areas within the company that produce waste. The offices of our administration departments, sales departments and other locations use, for example, a lot of paper and other resources. In fiscal 2005, our headquarter buildings in Tokyo and Osaka achieved the Zero Emission target. From fiscal 2007, we want to expand these efforts to other offices in order to better grasp and reduce the amount of generated waste. Specifically, efforts are being made to reduce the use of copy paper, which is a source of waste.

OA Paper Usage Trends at Headquarters Buildings (Tokyo and Osaka)



# Using Waste Efficiently (Zero Emission)

One company's waste may be used as a resource for another company or industry. Since 1998, Sekisui Chemical Group has promoted Zero Emission campaign in order to efficiently reuse all generated waste as resources.

#### Status of Zero Emission Activities

Production sites	Introduced at 33 domestic plants and 2 overseas plants including affiliated companies as of fiscal 2005
Laboratories	Introduced at four domestic laboratories as of fiscal 2005
House construction sites	Introduced at all locations as of September 2003
House renovation sites	Introduced at all locations as of fiscal 2004
Osaka and Tokyo Headquarters buildings	Introduced as of fiscal 2005
House dismantling sites	As of end of fiscal 2006, 99% recycling rate for Designated Construction Materials (scrap concrete and wood) Target: 100% recycling rate by fiscal 2010

# Introduction of Material Flow Cost Accounting

Waste is a negative product that requires cost. Material flow cost accounting is a method used to locate areas where improvements can be made to decrease this burden. Sekisui Chemical Group is adopting this method across the entire group in order to reduce waste and cost, while promoting activities that balance both economic and ecological goals (see page 42).

#### Explanatory Column

## What is Material Flow Cost Accounting?

Material Flow Cost Accounting is a cost calculation and analysis method for making comprehensive cost assessment that account for not only the materials and resources used for making the product (positive costs), but also the materials and resources in the waste products, as well as the cost of the energy loss portion (negative cost).

This accounting will control the amount of resources used and the amount of waste generated, and help achieve reductions in the costs of purchased raw materials.

# Example of Product Supporting Resource Conservation and Recycling

#### EcoValue Wood

EcoValue Wood is a wood-based material made from scrap wood. EcoValue Wood is very strong and so can be used not only as boards, but also as pillars and other objects that require strength. The quality of this wood is so high that it was the first domestically engineered wood product to receive approval as a structural material under the Building Standards Act. This wood has also received ISO9001 and AQ certification\* (structural material and corrosion / termite-resistant treated material) and

in fiscal 2006 it won the 16th Nikkei Global

Environment Technology Award.

\* AQ Certification: Certification system developed by the Japan Housing and Wood Technology Center. This system is used to guarantee the quality of materials not covered by the Japanese Agricultural Standards (JAS).

The Manufacturing Process



#### Recycled Containers

Plastic containers used to transport products that would usually be disposed of by the customer are collected, recycled and reprocessed to create new containers.



## Reuse System House

These houses are made by dismantling Sekisui Heim that are to be replaced by customers, returning the components to the plant for repairs and then reassembling them for sale as new houses. Most of the materials that would usually be discarded as waste after being dismantled can now be reused, which helps to hold down the amount of generated waste.

#### Sekisui Heim's Reuse System House



## Meeting Our Environmental Top Runner Plan Targets

Sekisui Chemical Group is aiming to cut in half by fiscal 2010, the amount of waste we generate as compared to the fiscal 2004 level (equivalent to one-third the fiscal 1998 level). Based mainly on the utilization of the material flow cost accounting method, we are reducing losses during production, turning scrap materials back into products and reducing the amounts of disposed parts and materials.

# Environmental Top Runner Plan – Core Strategy 4 Sekisui Eco Value Index

# Improving environmental management efficiency by 1.5 times the fiscal 2004 level Will continue striving to efficiently raise the level of our environmental management

## Sekisui Eco Value Index-a Criterion for Environmental Management

When Sekisui Chemical Group established the Environmental Top Runner Plan as our midterm environmental vision in fiscal 2005, we also established the Sekisui Eco Value Index to serve as an independent gauge for measuring the efficiency of our environmental management activities.

This index is calculated by dividing the environmental added-value generated through our environmental management activities by the group's overall environmental impact resulting from our business activities. Under the Environmental Top Runner Plan, our target is to double the Sekisui Eco Value Index by fiscal 2010 compared with its fiscal 2004 value.

In fiscal 2006, this index was at 1.5 times the fiscal 2004 level, which was above the target of 1.4 times set for fiscal 2006. We have been able to expand the sales of our environment-contributing products in line with our targets, while at the same time reducing environmental impact including CO<sub>2</sub> emissions.

Sekisui Eco Value Index Trends





Group's overall environmental impact (coefficient conversion) (= JEPIX)

The nature of the impact an enterprise places on the environment will differ depending on its type of business and the products it manufactures. Considering the uniqueness of each business within Sekisui Chemical Group, we began using the Japan Environmental Policy Index (JEPIX) from fiscal 2003 in calculating our total environmental impact in order to better grasp the overall environmental impact caused by our group and to more efficiently reduce the impact.



#### Meeting Our Environmental Top Runner Plan Targets

Sekisui Chemical Group is working hard to raise sales of our environment-contributing products and reduce the impact placed on the environment by our activities in order to meet the target of doubling the value of the Sekisui Eco Value Index (environmental management index) by fiscal 2010.

We have taken several approaches to reducing the impact our activities place on the environment, including reductions in CO<sub>2</sub> emissions and generated waste. We are also expanding the sales of environment-contributing products and producing new products in this category in order to raise the value of our Sekisui Eco Value Index.

(unit: million ven)

Data

# **Environmental Accounting**

# Calculating environmental costs and benefits for use in environmental management

Sekisui Chemical Group's Environmental Accounting \* For data by division companies, see pages 73-74.

Efforts are being made to utilize environmental accounting as a means of better assessing the costs and benefits of environmental conservation activities to promote more efficient environmental management while fulfilling corporate accountability.

In fiscal 2006, costs were reduced by approximately 400 million yen from the previous year, thanks to cost cuts for waste disposal and related activities. On the other hand, because Sekisui Chemical's Shiga-Minakuchi Plant made among other investments an environmental investment in overall drainage measures, there was a 300 million yen increase in investments compared to the previous year. Furthermore, an increase in profits on sales of waste generated a substantial economic benefit.

#### Environmental Conservation Costs (whole group)

#### Explanatory Column

#### Use of Environmental Management Indexes

Until now environmental accounting has been used to grasp and evaluate the costs and internal benefits of environmental management. Now efforts are being made to implement JEPIX along with environmental accounting in order to raise the level of grasps and evaluations of these costs and benefits, and to grasp the impact and benefits from our products and business activities both for within the group and for society as a whole.

	0 17						(
	Items	FY2	2004	FY2	005	FY2	006
Category	Description of main activities	Costs	Investments	Costs	Investments	Costs	Investments
	Prevention of air, water and noise pollution, etc.	1,676	172	1,872	375	1,687	691
<ol> <li>Costs within business areas</li> </ol>	Countermeasures against global warming (energy-saving), etc	122	222	160	218	174	258
,	Waste reduction, recycling, disposal, etc	4,077	224	5,211	186	5,053	257
2) Upstream/downstream costs	Cost increases due to switch to packaging/packing methods involving reduced environmental impact, greener purchasing, etc	153	392	600	124	493	8
3) Administrative costs	Environmental education, EMS maintenance, running costs for green action organization, information disclosure	2,640	31	2,933	20	2,665	88
4) Research & Development costs	Research & Development on environmental conservation	1,195	182	1,347	82	1,644	48
5) Social activities costs	Social contributions, etc.	136	0	108	0	99	0
6) Environmental damage costs	Nature restoration, etc.	15	70	10	0	10	0
	Total	10,014	1,293	12,241	1,005	11,826	1,350
*1 Number of business sites of bo	using sales companies included in the scope of environmental accounting	EV2004:25 E	V2005-38 EV20	106-39			

#### Environmental Conservation Benefits (whole group)

Environmental conservation benefits									Environmental performance criteria: per unit of output; Total				0.11		
Description of effects		Item		Unit	FY 2004	FY 2005	FY 2006	Effects (2006-2005)	Reference pages	Item	Unit	FY 2005	FY 2006	Self evaluation	
	Effects on invested	Amount of	(1) Electricity	TJ	4,167	4,165	3,927	-238	74	(1) Energy usage per unit of output	G l/top	1.9/	1.95	~	
	resources	energy usage	9*2 (2) Fuel	TJ	2,645	2,693	2,826	132	74	(electricity + fuel)*2	00/1011	1.04	1.05	^	
Effects within		(3) CO2 emis	sions*3	1,000 tons	311.6	313.5	308.7	-4.8	19	_	—	_	_	0	
business areas	Effects on environmental impact and wastes	Effects on environmental impact and wastes	(4) Volume of pollutants	f environmental discharged*4	tons	534.8	476.5	391.2	-85.3	76	_	-	-	_	0
			(5) Wastes g	enerated*5	1,000 tons	48.6	47.6	46.2	-1.4	21	(2) Waste generation per unit of output	kg/ton	44.2	43.4	0
		(6) Outsource	ed disposal*6	1,000 tons	0.67	0.42	0.29	-0.13	75	(3) Outsourced disposal per unit of output	kg/ton	0.39	0.27	0	
Upstream/down- stream effects	Effects due to products/services	CO2 reductio generation, e	n by photovoltaic etc. (cumulative)	1,000 tons	78	95	112	17	_	_	_	_	_	0	
Other benefits on environmental conservation		IS014001	New acquisitions	sites	3	3	4	_	_	Number of business sites acquiring	Total number of	01	05	0	
	Othore*7	Certification	Renewals	sites	10	18	13	_	—	IS014001 Certification*8	business sites	91	90		
	conservation	Outers /	Number of b achieving zer	usiness sites ro emission*8	sites	42	5	0	_	21	Number of business sites achieving zero emission*8	Total number of business sites	119	119	_

<sup>12</sup> Conversion into thermal units uses the coefficient published by the Ministry of Economy, Trade and Industry. <sup>13</sup> Emissions at the time of manufacturing and conversion to CO<sub>2</sub> amounts use the coefficient published by the Ministry of the Environment (calculated based on the coefficient for 2000) <sup>14</sup> Applicable to Class I Designated Chemical Substances specified by PRTR Law. <sup>15</sup> Amount discharged + Amount disposed of at process the Amount incinerated within own premises. <sup>16</sup> Simple incineration + Landfill. <sup>17</sup> Including 7 overseas business sites. <sup>18</sup> A business site affiliated to multiple companies is counted as one.

#### Economical Effects Related to Environmental Conservation Measures (whole group)

Description of effects		FY2004	FY2005	FY2006	Remarks			
Revenue	<ol> <li>Profit on sales of valuable resources</li> </ol>	140	223	282	Profit on sales of valuable resources from promotion of waste segregation and recycling			
	(2) Savings from simplified packaging	7	14	9				
Cost-saving	(3) Cost-saving through energy-saving activities	298	319	275				
	(4) Cost-saving through waste reduction activities, etc.	851	841	881	Including resource-saving activities			
Sub-total (actual effects)		1,296	1,397	1,447				
(5) Contribution to environmental conservation activities*9		5,855	5,977	6,179	Contribution of environmental conservation activities to added value at business sites*10			
(6) External Economic Effect		5,770	6,840	8,050	Monetary conversion of impact from photovoltaic systems and non-excavating pipe renewal method			
Sub-total (estimated effects)		11,625	12,817	14,229				
Total			14,214	15,676				

\*9 Excludes housing sales companies \*10 (Added value from business sites) x [(Costs within business areas + Administrative costs) / [Total production costs excluding materials costs)]

(unit: million ven)

Working to Implement the Environmental Top Runner Plan – Conservation of Water Resources

# Approximately 8% cutback on water extraction from fiscal 2004. Along with efficiently utilizing water resources, we are developing products that contribute to environmental conservation

## Efficient Use of Water Resources

As can be seen through the statement "out of all of the water over the entire earth, the amount of water that can be used by human being is 0.01%," water resources are definitely not inexhaustible, and working towards the efficient use of water is very important. Meanwhile, due to concentrated heavy precipitation, flooding in urban areas is becoming a common occurrence. Thus, recycling rainwater is vital in order to prevent water damage caused by excessive rainfall.

Being aware of this situation, Sekisui Chemical Group is not only cutting back on the amount of water used at our plants, but is also endeavoring towards developing products that contribute to the efficient utilization of water resources.

## Working to Utilize Water Resources More Efficiently at Our Production Sites

Sekisui Chemical Group uses water mainly to cool metal molds and extruded products at our plants, and as a solvent in synthesizing resins.

Water is a precious resource, and all our production sites have been working on recycling more of it to use it efficiently. We now recycle almost all the cooling water we use in molding our plastic products, and so we only have to top up the system with enough water to replace that lost by evaporation from the cooling towers during recycling.

Our target in the Environmental Top Runner Plan Part 1 is to reduce by fiscal 2008 the amount of extracted groundwater to 5% less than the fiscal 2004 level. We have, however, already achieved a reduction of 7.8% as of fiscal 2006. In addition to continuing reduction efforts, we are considering setting higher target levels in the future.

#### Changes in the Amount of Groundwater Extracted for Use at Sekisui Chemical Group Plants (1,000 tons)



## **Developing Products That Contribute** to Water Resource Conservation

Sekisui Chemical Group offers products that efficiently use water resources by controlling the flow of rainwater through storage, infiltration and use of rainwater.

#### Rainwater Storage System

In addition to contributing to the reduction of water used, rainwater storage systems are used to control the amount of rainwater flowing into sewage and rivers, thus preventing them from becoming overloaded. Sekisui Chemical Group is developing Rain Station, a large scale rainwater storage and



infiltration system, and Cross Wave, a water-bearing material for underground reservoirs.

ross Wave in use

#### **Rainwater Infiltration Device**

By installing infiltration inlets and infiltration devices in urban areas to induce rainwater to infiltrate into subterranean areas instead of allowing it to flow out into sewage, we are contributing to building community areas resistant to flooding and impervious to to rainfall





Image of rainwater infiltration device installation

## Household Rainwater Storage Tank "Myraina"

Storing rainwater and using it as water for miscellaneous uses such as watering plants and trees saves tap water.



Image of product in use

Myraina

25 CSR Report 2007

## Working to Implement the Environmental Top Runner Plan — Proper Control of Chemical Substances

# Increased the number of prohibited chemical substances and halved Volatile Organic Compound (VOC) discharges in comparison to fiscal 2000

#### **Risk Reduction of Chemical Substances**

Sekisui Chemical Group uses a large variety of chemical substances as raw materials and secondary resources for products. Therefore, we regard as important responsibilities, the pursuit of product safety, occupational safety and health, prevention of environmental pollution, and reduction of environmental impact through proper management of chemical substances.

Accordingly, we strive to prevent health damage and environmental pollution caused by chemical substances by accurately implementing endeavors such as the Product Assessment System for Environmental Impact and the Green Procurement System.

Moreover, we are involved in setting our own targets for reducing discharges and transfer of chemicals into the environment and abolishing the most critical substances. On the other hand, social awareness regarding chemical substances and their use and handling is on the rise in recent years within Japan and abroad, resulting in a reinforcement of regulations pertaining to chemical substances.

In response to this, from fiscal 2005 to the first half of fiscal 2006, we reviewed the list of chemical substances that are candidates for control or usage regulation and increased the number of chemical substances for which usage is prohibited in principle from the previous amount of approximately 90 categories and groups to approximately 260 categories and groups.

- Substances for which use is prohibited or reduced, and substances for which production, handling, possession, etc. are restricted by pacts, laws, etc.
- (2) Substances which are deemed carcinogenic, acutely toxic, etc. or which can significantly affect human health, etc.



#### Reduction of Discharge and Transfer of Volatile Organic Compounds (VOC) into the Environment

Since fiscal 1999, we have been working to reduce discharge and transfer of environmental pollutants into the environment. As of fiscal 2005, we succeeded in our reduction plan of discharge and transfer into the environment of Class I Designated Chemical Substances specified by the PRTR Law\* by reducing approximately 60% compared to fiscal 1998 (which comes to approximately 800 tons per year).

In order to comply with changes to the Air Pollution Control Law (see the column below) and industry self-regulation, we have set the new target of "40% reduction of discharge into the environment in fiscal 2008 as compared to fiscal 2000 (50% reduction in fiscal 2010)", targeting VOC, and are working to meet this target.

As a result, as of fiscal 2006 we achieved a 49% reduction as compared to fiscal 2000.

\* PRTR Law

Law Concerning Reporting, etc., of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management.

#### Explanatory Column >

# Summary of Amended Air Pollution Control Law, VOC Regulation

In order to prevent air pollution caused by suspended particulate matter and photochemical oxidants (photochemical smog), the Amended Law set as a goal the control of VOC discharge, which is one of the causative agents of these phenomena.

Through law amendment and voluntary activities from enterprises (industry), the target is about 30% reduction by fiscal 2010 as compared to fiscal 2000.

## Total Abolition of Fluorocarbons Use

We are also advancing the disuse of fluorocarbons, which are known to cause global warming. By fiscal 2004, we completed total disuse of HCFCs, which we used in the past as foaming agents for foamed products such as foamed polyethylene and foamed polyurethane, and replaced HCFCs with hydrocarbons and HFCs, which do not harm the ozone layer.

However, although the HFCs we currently use are not designated as greenhouse gases under the Law for the Promotion of Measures against Global Warming, their global warming index is several hundred times that of CO<sub>2</sub>, so we will be doing our best to develop alternative technologies and change to alternative substances with the target of total disuse of HFCs.

#### <Summary of legal regulations, etc.>

 $\ensuremath{\mathsf{Target}}$  facilities: Large scale facilities using VOC and built at fixed areas, such as production plants

 Facilities other than target facilities are those which voluntarily work towards discharge control on an enterprise level and include chemical product drying facilities, drying facilities, for paint, adhesive agents, and printing, cleaning facilities, and storage tanks

Examples of VOCs: Solvents such as toluene, etc. which are contained in solvent type adhesive bonds and paints, solvents used in the production of tape, and cleaning solvents for molds, etc.

## The Foundation for Environmental Management

# We expanded EMS into the supply chain and started new equipment investment measures to reduce CO<sub>2</sub> emissions

#### Promotion System and Roles of Environmental Management

Sekisui Chemical Group's environmental management policies and targets are discussed and decided by Environmental Subcommittee, and corporate headquarters and division companies respectively develop and implement concrete plans. Performance by corporate headquarters and respective division companies is summarized and reviewed by Environmental Subcommittee on a semiannual basis, with findings reflected in the plan for the following term.



# Structuring and Rollout of Environmental Management System

We, Sekisui Chemical Group, have been developing our environmental management system (EMS) in an effort to effectively carry out environment-friendly business activities, including preventing environmental pollution and reducing environmental impact.

We have been progressively acquiring ISO 14001 certification since fiscal 1996. First to acquire certification were production sites with heavy environmental impact, followed by housing sales companies responsible for construction sites, and R&D laboratories promoting the development of environment-friendly products.

As a result, 95 business sites have ISO 14001 certification as of March 2007. Furthermore, the number of employees in these business sites represents 66% of all of Sekisui Chemical Group's employees (on a consolidated basis).

#### Extension to Overseas Business Sites

We are also encouraging overseas production sites to acquire ISO 14001 certification by fiscal 2010. Meanwhile, we conduct periodic semiannual environmental performance surveys concerning the impact being placed on the environment, then collect and sum up figures on environmental indicators such as energy usage, waste discharge, chemical substance discharge, and water usage, etc.

#### Rollout to Offices

In administration departments and sales departments of corporate headquarters and individual division companies, we are expanding EMS operations through activities directed towards environmental impact assessment and improvement initiatives, such as energy saving and zero emission activities being carried out at our headquarters buildings and offices in regions across the country.

In fiscal 2006, we conducted field surveys on the data grasping status and in fiscal 2007, started collecting data on energy, waste, etc.

#### Rollout to the Supply Chains

We also plan to expand EMS to supply chains and contractors by fiscal 2010. As part of this, Housing Company is requiring and supporting its small and medium-sized business partners to obtain certifications such as Eco Action 21<sup>\*</sup>. Also, we are cooperating with transportation companies to promote grasping and reduction of CO<sub>2</sub> emissions levels resulting from transportation.

\* Eco Action 21: Established by the Ministry of the Environment, this is an accreditation and registration system concerning environmental management systems. It mainly focuses on a wide range of small and medium-sized enterprises, schools, public organizations, and other entities. The cost and labor for accreditation and operation maintenance are less in comparison with the international standard ISO 14001, and it easily facilitates the participation of small and medium-sized enterprises.

## Acquiring Eco Action 21 by House Component Supply Companies, etc.

The supply chain for the housing business which uses several tens of thousands of components for each house, is expansive and diverse. In order to increase the green procurement rate and to continue to support the environmental management of component supply companies, etc., starting in October 2004, Housing Company has been proceeding with actions to acquire Eco Action 21 with its focus on *Heim Kyoei-kai*, composed of component supply companies.

Within the framework of these actions, under the cooperation of the non-profit organization Environmental Counselor Union, we are supporting the acquisition of accreditation for our partners through workshops pertaining to Eco Action 21 and follow ups, etc. As a result, as of March 2007, 60 business sites of 56 partner companies have acquired Eco Action 21 accreditation.

In the future, while increasing the green procurement rate further, we plan to enhance environmental impact reduction and environmental management across the entire supply chain.

Data

In order to facilitate continuous improvements in our environmental management system (EMS) and environmental performance, in addition to internal audits and independent audits undertaken at our ISO 14001 certified business sites, we perform environmental audits by CSR Department.

Targeting production sites and laboratories, these audits examine the status of compliance with environmental laws and regulations, improvement of environmental performance and future plans. In addition to notifying the management of audit results, directions and guidance are provided for prompt improvement of any deficiencies (see p. 77 for fiscal 2006 audit results).

#### Environmental Audit System



# Quantifying Evaluations with the Environmental Management Evaluation Sheet

We have been using an Environmental Management Evaluation Sheet since fiscal 2003 to quantify each business site's management and activity status. Scores are awarded at one of four levels between 0 (the minimum level required for ISO 14001 certification) and 3 (the ideal level aspired to by Sekisui Chemical Group).

The sheet is used not only for audits by the CSR Department, but also by each business site to asses its own performance. It helps our business sites to strengthen their administrative practices and grasp issues they need to improve upon.

# Environmental Performance Evaluation

In fiscal 2006, we added environmental items to the list we use to evaluate performance of Sekisui Chemical Group. By monitoring the degree of attainment of targets and degree of improvement and extension against the previous year for CO<sub>2</sub> emissions, waste generation, and sales of

environment-contributing products, we endeavor to accelerate and for the environment in all of our business activities.

## Investment Promotion Measures for Facilities for CO<sub>2</sub> Emissions Reduction

In order to achieve the target for CO<sub>2</sub> emissions reduction by fiscal 2010, we implemented measures for the promotion of capital investments in facilities in January 2007.

Under these measures, corporate headquarters bears a certain portion of the capital investments made by business departments in facilities effective for CO<sub>2</sub> emissions reduction, based on a certain fixed amount per every ton of CO<sub>2</sub> reduction. Bearing such costs based on the amount of CO<sub>2</sub> reduction rather than the investment amount, increases the effectiveness of the measures.

# **Environmental Education**

## Environmental E-learning

In striving to be the Environmental Top Runner, human resource training is an important issue. Based on this, we have been implementing such programs as environmental training based on the employee's level, Fundamental Training in Environmental Technology targeting persons engaged in development, Specialist Training which trains internal audit staff, and training which cultivates leaders in nature conservation activities (Sekisui Nature Study Course).

In addition to these programs, in fiscal 2006, we introduced e-learning, aimed at making all group employees more conscious about environmental issues and deepening their knowledge on such issues. The activities of Sekisui Chemical Group and of our individual employees regarding such environmental issues as global scale problems to smaller issues that exist around us are explained in an easy-to-understand manner.

#### Developing Nature Conservation Leaders (Sekisui Nature Study Course)

Since 1997, our Environmental Management Department has been running Sekisui Nature Study Course for environmental awareness and training sessions with the aim of fostering leaders for nature conservation activities in their local communities. The sessions are designed to teach the basics of natural ecosystems and how to guide volunteer work, and the participants are engaged in nature conservation programs at their business sites.

In fiscal 2006, 134 employees attended the training.



Leader training at the Nature Study Course

## **Environmental Consideration in Product Development and Business Activities**

# We manufacture environment-contributing products that contribute to the environment by adopting green measures throughout their entire lifecycle

#### Our Views on Environmental Consideration for Products

Complying with environmental legislation and social standards as well as pursuing the reduction of environmental impact in all of our business activities is a fundamental responsibility. On top of this, we also believe that the products we deliver to the public should make their own contributions to global environmental conservation.

#### Accordingly, we work to create products that thoroughly contribute to the reduction of environmental impact by enhancing recyclability, resource-saving and energy-saving features throughout the total product lifecycle, ranging from development, procurement, manufacturing, sales/distribution and use, to ultimate disposal.

## System for Environmental Consideration in Products (Three Greening Steps)

Sekisui Chemical Group is implementing the Three Greening Steps, for the three business process stages of development, procurement, and manufacturing. To promote these activities, we operate such systems as Product Assessment for Environmental Impact, Green Procurement, and Prior Assessment of Capital Expenditure at each stage. By periodically revising these systems and improving our approach, we will continue to thoroughly apply our environmental efforts for all of the products marketed by Sekisui Chemical Group.



# Greening Development (Product Assessment System for Environmental Impact)

At the product development stage, Sekisui Chemical Group has introduced the Product Assessment System for Environmental Impact, which is designed to assess the environmental impact of all products and their manufacturing processes at all stages of a product lifecycle, from development to disposal. Based on the results of this assessment, our goal is to develop products with reduced environmental impact and/or products that contribute to environmental conservation and improvement.

#### Greening Procurement (Green Procurement System)

We have used our Green Procurement System since fiscal 2001 to evaluate our suppliers and contractors and select raw materials and equipment that impose lower environmental impact during development and manufacturing.

The green procurement ratio for fiscal 2006 was 92.4%, which

surpassed the 90% target set for fiscal 2008. For the purchasing of office supplies and equipment, we have established and are enforcing Green Purchase Guidelines (see p. 78).

Also, we reviewed prohibited chemical substances in fiscal 2006 (see p. 26), and revised the criteria. Operation of the revised edition began in fiscal 2007.

# Greening Manufacturing (Prior Assessment of Capital Expenditure System)

Sekisui Chemical Group is implementing Prior Assessment of Capital Expenditures to assess capital investment proposals planned according to internal rules such as Plant Construction and Equipment Design/Maintenance Standards from an environmental perspective.

Through the implementation of this system, we pursue low-environmental-impact manufacturing processes by analyzing the environmental impact of proposed capital expenditures in order to determine the feasibility of executing such proposals.

# Foundation of CSR Management

# **Environmental Risk Reduction**

# We will reinforce legal compliance and strive for further pollution prevention and risk reduction

## **Preventing Air Pollution**

Sekisui Chemical Group strives to comply with prescribed legal and regulation requirements and to decrease air pollutant emissions by carrying out regular inspections and relevant maintenance of facilities.

In fiscal 2004, the flue gases from an incinerator at Sekisui Chemical's Shiga Minakuchi Plant were found to contain more than the legally-permitted levels of dioxin, so in fiscal 2005 we dismantled and removed it. We are still using two small incinerators at Sekisui Chemical's Shiga Minakuchi Plant and one at Tokuyama Sekisui Industry Co., Ltd., but the dioxin levels from both of these are far below the legal limit. Nevertheless, while continuing to ensure that these incinerators are always properly managed and operated, we will look for ways of doing away with them.

## **Preventing Water Pollution**

In addition to maintaining and managing wastewater treatment facilities at each business site, we periodically conduct emergency drills to prepare for accidents wherein wastewater leaks outside of the business site and thoroughly implement pre-event and post-event responses to such incidents.

There were no wastewater outflow incidents to the environment outside business sites in fiscal 2006.

## **Business Site Soil Investigations**

In fiscal 2006, we conducted surveys at four business sites and completed two of them. Out of these two, Chugoku Sekisui Industry Co. Ltd. cleared the criteria for all items. At Higashinihon Sekisui Industry Co., Ltd., groundwater levels were found to contain more than the maximum permitted levels of arsenic (a minute quantity of 0.008 mg/L over the maximum criteria\*). Also, levels of soil exceeding the criteria and burial of waste material partially containing arsenic were confirmed.

Based on the survey results, it is believed that buried waste material resulted in the exceeding of maximum permitted levels of arsenic on the north side of the site interior. For other cases, the following natural causes are assumed: (1) exceeding of maximum permitted levels was observed for soil 3m or deeper over the entire site, (2) underground water criteria excess was seen in underground areas outside of the burial areas, and (3) criteria excess was observed even in periodic underground water monitoring for surrounding areas implemented by the local government.

As countermeasures, in addition to excavating and eliminating buried waste material, we will replace the soil in and around burial spots, periodically monitor underground water, and continue to grasp the situation.

\* Underground water criteria are the same as drinking water criteria. Drinking water criteria are set so that no effect on health would occur in the case that a person weighing 50 kg consumes two liters of the water in question every day for a lifetime.

# Use and Storage of Machine and Equipment that Contain PCB

Including production sites newly targeted for management in fiscal 2006, transformers and condensers that use PCB are currently held in 20 business sites, and are used by one business site. The stored machines and equipment containing PCB are kept under lock and key to prevent loss. Also, we perform periodic inspections to make sure there is no fluid leakage.

While continuing to strictly manage such machines and equipment, we plan to properly dispose of them as soon as acceptance at nationwide regional treatment facilities is available.

#### **Emergency Response**

In order to prevent occurrence and spread of environmental contamination in the event of an emergency, our business sites carry out simulated emergency response and reporting, assuming a variety of hypothetical cases relevant to the nature of each business site. The following major exercises took place during fiscal 2006:

Simulated emergency situation	Number of exercises
Leakage and outflow of oils	40
Atmospheric discharge of solvents	1
Fire	77
Earthquake	6
Emergency communication training	8
Comprehensive disaster preparedness drills	3

# Environmental Incidents and Complaints

Although two spillage incidents occurred within production sites in fiscal 2006, due to prompt emergency countermeasures, there was no impact on areas outside the site. Currently, both sites have completed permanent measures and are working towards prevention of recurrence.

Incident description	Countermeasures
Regarding paint washing water, overflow of wastewater with insufficient percolation	In the case of tests, etc., do not let wastewater flow into gutters. Instead, transfer the water to a drum and discharge it into gutters, upon confirmation of its quality.
Leakage of percolation of wastewater containing cement	Use a pump to increase the discharge performance.

We received eight complaints in fiscal 2006 regarding the environment (for complaint descriptions and countermeasures, see p. 78). Furthermore, in the past, Kyushu Sekisui Industry Co., Ltd outsourced waste processing to a waste processor. Due to the processor's capabilities, the waste processor had to transfer the waste from the processing site, and therefore the local government assisted in the successful removal of the waste material discharged by Kyushu Sekisui Industry Co., Ltd.

# Midterm Environmental Plan: Environmental Top Runner Plan Part 1 We are steadily developing projects for achieving our targets

In fiscal 2006, the first year of the Midterm Environmental Plan: Environmental Top Runner Plan Part 1, out of the following 29 action items, six items exceeded targets, 15 items roughly achieved targets, and eight items did not achieve targets.

Within activities we have customarily pursued such as energy

conservation and waste material reduction, there are items for which room for improvement is shrinking. However, we are thoroughly implementing loss reduction by Manufacturing Development Innovation (see p. 41) and advancing activities for midterm target achievement.

Projects				Group Targets for Fiscal 2008			
Improvement of envi	ironmental efficier	icy (Environmental Mana	agement Indicator [Sekisui Eco Value Index])	1.5 times (compared to fiscal 2004)			
Environmental contribution by products and business operation(s)	Increase selling	of environment-contribu	ting products	Increase of percentage of consolidated net sales: 25 % or more			
		Preventing global	Reduction in emissions of greenhouse gases	CO <sub>2</sub> emissions: Reduction of 8% (compared to fiscal 1990)			
		warming and energy saving	Energy saving	Unit energy consumption: Reduction of 3% (compared to fiscal 2004)			
			Reduction of waste generation at production sites	Reduction of 25% (compared to fiscal 2004) Reduction of 50% (compared to fiscal 1998)			
			Maintaining and further promoting zero emissions standards	Achievement of zero emissions at 8 overseas production sites (Europe, US) Promotion of zero emissions at domestic production sites and five new production sites			
	Promotion of environment- friendly production and construction	Recycling of	Reduction of waste materials from new construction	Sekisui Heim: 45% reduction (compared to fiscal 2000) Two-U Home: 62% reduction (compared to fiscal 2000)			
			Recycling of waste materials produced during dismantlement and extension/renovation of houses	Increase of recycling rate of waste materials from house dismantlement: 100% (Zero emissions)			
			Reduction of costs derived from waste materials (Promotion of activities in all MECA business sites)	5 billion yen (Accumulated amount from fiscal 2006 to 2008)			
Thoroughness of		Reduction in emissions of chemical substances	Reduction in VOC emissions (Legal and voluntary controlled substances)	40% reduction (compared to fiscal 2000)			
environmental friendliness of		Efficient water use	Reduction of water intake	5% reduction (compared to fiscal 2004)			
business operations	Green Procurement Improvement and promotion of green procurement		otion of green procurement	Green-procurement rate: 90%			
	Green Distribution	n Reduction of CO <sub>2</sub> emissions in distribution of products		Unit CO <sub>2</sub> consumption: Reduction of 2% (compared to fiscal 2006)			
	Promotion of environment- friendly office and business operations	Promotion of activities to reduce creation of waste materials		Headquarters building and laboratories: Maintains zero emissions target fiscal 2006: Grasping of actual situation in all offices and setting of target in fiscal 2008			
		Promotion of energy saving initiatives (Headquarters, laboratories, branches and sales companies)		Headquarters building and laboratories: Power consumption; Reduction of 3% (compared to fiscal 2004) fiscal 2006: Grasping of actual situation in all offices and setting of target in fiscal 2008			
		Reduction of office paper use		Headquarters building: Reduction of 10% (compared to fiscal 2004) fiscal 2006: Grasping actual situation in all offices and setting target for fiscal 2008			
		Using environment-friendly company cars		Rate of introduction of cars achieving baseline of green taxation plan of fiscal 2005: 60% or more			
	Promotion and thoroughness of	Promotion of EMS in supply chains, offices, and overseas business sites	Procurement	Acquisition of MS external certification (ISO14001, Eco Action 21) by all house material suppliers supplying materials of 1 million yen or more per month			
			Office	Acquisition of environmental data in all offices and house exhibition			
			Overseas production	Promotion of acquisition of certification of ISO14001 in six business sites in Europe and US			
			Domestic production / construction	Promotion of acquisition of certification of ISO14001 in eight new production sites and 10 construction companies			
	management	Promotion of	Risk management of waste disposal	Compilation and management of database of subcontractors according to environmental information collection system			
Cultivation of eco-friendly		risk management	Management of chemical substance contamination in soil	Completion of investigation of 10 business sites			
culture		Improvement of education and development	Improvement of employee education for each classification	Introduction and operation of overall company education system (e-learning, etc.) Rate of participation in education programs by all employees and board members in Japan: 100%			
			Developing leaders for nature protection activities	Meeting of Sekisui Nature Study Course In 10 business sites or more (fiscal 2006 - 2008) Cultivation of leaders: 200 leaders or more (Accumulated number of leaders 600 or more)			
		Communication with external	Publishing site reports	Publication of site reports at production site, laboratories, and housing sales companies which acquired certification of ISO 14001 (as of 2007)			
	Promotion of social	organizations	Communication with local communities to improve environment	Continuous communication at 10 domestic production sites			
	activities	Activities to improve environment	Support of nature conservation activities by NGOs	Support of nature conservation activities by NGOs : Conducted by over 5 organizations per year			
			Nature conservation activities in collaboration with local communities	Implemented at over 35 sites (fiscal 2006-2008)			

We are continuing future improvement activities, refusing to remain satisfied regarding even items which show results above and beyond the targets, such as CO<sub>2</sub> emissions and VOC discharge.

#### "Evaluation" column

Explanatory note	◎ ······ Outperformed target
	<ul> <li>O ······ Performed close to target (achievement rate of about 90 to 110%)</li> </ul>
	imes Failed to reach target

Group Targets for Fiscal 2006	Results of Fiscal 2006	Evaluation	Page	Targets for Fiscal 2007
1.4 times (compared to fiscal 2004)	1.5 times (compared to fiscal 2004)	0	23	1.7 times (compared to fiscal 2004)
Percentage of consolidated net sales: 15% or more	Net sales of environment-friendly production: 135.83 billion yen Percentage of consolidated net sales: 14.7%	0	17	Percentage of consolidated net sales: 20% or more
CO <sub>2</sub> emissions: Reduction of 6% (Over 1990)	CO2 emissions: Reduction of 6.8% (Over 1990)	0	19	CO2 emissions: Reduction of 8.5% (Over 1990)
Unit energy consumption: Reduction of 1% (compared to fiscal 2004)	Unit energy consumption: Reduction of 0.4% (compared to fiscal 2004)	×	74	Unit energy consumption: Reduction of 3% (compared to fiscal 2004)
 Reduction of 8% (compared to fiscal 2004)	Waste amount: 4.9% reduction (compared to fiscal 2004)	×	21	Reduction of 17% (compared to fiscal 2004)
 Commencement of zero-emissions efforts at business sites concerned	Commencement of zero-emissions efforts at business sites concerned	0	22	Activities at each business site
 Sekisui Heim: 30% reduction (compared to fiscal 2000) Two-U Home: 50% reduction (compared to fiscal 2000)	Sekisui Heim: 21% reduction (compared to fiscal 2000) Two-U Home: 42% reduction (compared to fiscal 2000)	×	21	Sekisui Heim: 38% reduction (compared to fiscal 2000) Two-U Home: 55% reduction (compared to fiscal 2000)
 Achievement of zero emissions for demolition debris at model locations (of three housing sales companies)	Model location recycling rate: 90% Specific construction material recycling rate: 99%	×	21	Achievement of zero emissions for demolition debris at model locations (of three housing sales companies)
Completion of implementation of measures amounting to 900 million yen	Loss reduction: 2.45 billion yen	O	42	Loss reduction: 3.5 billion yen
Determination of reduction measures on individual division company basis	49% reduction of air pollutant emissions compared to fiscal 2000	0	26	Legal strategy (investment) planned Air pollutant emissions 50% reduction (compared to fiscal 2000)
Periodic determination of amount of water taken in and setting of targets at reduction-affected business sites	Water intake: 7.8% reduction (compared to fiscal 2004)	0	25	Maintenance of 5% reduction (compared to fiscal 2004)
Reappraisal of suppliers who are concerned with green-procurement and threshold requirements as well as assessment of vendors who have been recently added to green-procurement list	Completion of procurement criteria review, start of evaluations of new target transaction partners, green procurement rate: 92.4%	0	29	Green-procurement rate: maintenance of over 90%
Introduction of tabulation system to sum up CO <sub>2</sub> emissions that are produced while products are being transported Tabulation of actual CO <sub>2</sub> emissions in fiscal 2006	Completion of CO <sub>2</sub> aggregation system introduction, fiscal 2006 CO <sub>2</sub> emissions: 57 thousand tons-CO <sub>2</sub>	0	20	Notification to the government, reporting company improvement plan formulation
Headquarters building and laboratories: Maintenance of zero emissions Assessing actual situation at all offices and setting targets for fiscal 2008	Headquarters building and laboratories: Maintenance of zero emissions, all offices targeted for improvement and promotion, questionnaire survey, office greening activity promotion plan creation	0	21	Headquarters building and laboratories: Maintenance of zero emissions and grasping of data for the continuation of activities aimed at improving all offices
Headquarters building and laboratories: 1% reduction in power consumption (from fiscal 2004) Assessing actual situation at all offices	Headquarters building and laboratories: Reduction of 1.7% (compared to fiscal 2004) Fiscal 2008 target: 3% reduction (compared to fiscal 2007)	0	20	Headquarters building and laboratories: Power consumption; Reduction of 1% (compared to fiscal 2004) Assessing of data for all offices
Headquarters building: Reduction of 3% Grasping actual situation at all offices and setting targets for fiscal 2008	Headquarters building and laboratories: Reduction of 3.6% (compared to fiscal 2004 Fiscal 2008 target: 10% reduction (compared to fiscal 2007)	0	21	Headquarters building: Reduction of 7% (compared to fiscal 2004) Assessing of data for all offices
Introduction rate: over 45%	Introduction rate: 48%	0	74	Introduction rate: over 53%
 EMS external certification acquisition rate for target transaction partners: over 60%	EMS external certification acquisition rate for target transaction partners: 60%	0	27	EMS external certification acquisition rate for target transaction partners: over 80%
 Start of environment data collection using the environmental information system	Completion of preparation for data collection, collection to commence in fiscal 2007	0	27	Environment data collection using the environmental information system
 ISO 14001 acquisition activities for target production sites commence	Acquisition of 3 business sites (Sekisui S-LEC (Suzhou) Co., Ltd., Sekisui S-Lec Mexico S.A. de C.V., and Sekisui TA Industries, LLC., Brea Plant)	0	27	Acquisition activities at target production sites
ISO 14001 acquisition activities for target production sites commence	Certification acquisition for one construction company (Sekisui Hometechno Co., Ltd.), start of ISO 14001 acquisition activities by target production sites	0	27	Acquisition by 4 business sites
 Subcontractor list via environmental information collection system	Consideration of expansion of collection scope of waste material data via the environmental information collection system	×	—	Subcontractors list
Soil survey for 1 business site/company	Completion of 2 business sites	×	30	Survey of 5 business sites
 E-learning system introduction and contents maintenance system operation start	Start of e-learning	0	28	Education enrollment rate for all domestic employees and officers: 100%,
Opening of Sekisui Nature Study Course at 4 business sites	Start of Sekisui Nature Study Course at 5 business sites, total participants for 2006: 134	0	28	Start of Sekisui Nature Study Course at 3 business sites
 Publication of site reports at 35 production sites and laboratories which acquired certification of ISO 14001.	Publication of site reports at 29 production sites and laboratories which acquired certification of ISO 14001.	×	_	Publication of site reports at 39 production sites and laboratories which acquired certification of ISO 14001. Publication of site reports at housing sales companies.
Implemented at 3 business sites	Implemented at 1 business sites	×	_	Implemented at over 3 business sites
 Support of NGO nature conservation projects via nature conservation funds	Support of nature conservation projects by 5 NGOs	0	68	Support of NGO nature conservation projects via nature conservation funds
Implemented at over 15 sites	Implemented at 29 sites	O	-	Implemented at over 30 sites

The Practice of CSR Management

Prominence in the Environment The Practice of CSR Management Prominence in CS & Quality

Pursuing Customer Satisfaction (CS) to create the quality that customers expect and trust us for



Sekisui Chemical Group has been engaged in management (CS Management) prioritizing Customer Satisfaction (CS) since fiscal 1999 and has been promoting Sekisui Chemical Group's original CS & Quality Management since fiscal 2004.

Sekisui Chemical Group believes that the core value that manufacturers should provide is "Products = Quality of Products," and we consider satisfying customers who purchased these products as our central concept of management — this is the CS & Quality Management of Sekisui Chemical Group. In order to promote this management, we construct systems that are applied to the entire group. Rooted in the CSR Committee, the CS & Quality Subcommittee creates basic policy and develops execution plans and links with CS & Quality departments positioned in each division company to promote CS & Quality Management.

# Fundamental Concept of CS & Quality Management

We will consistently innovate to maintain the Quality of Products, continuously provide value that meets customer expectations, strive for selection by our customers on an ongoing basis, and develop and grow with the customer over the long term.

CS & Quality Management Promotion System



# Implementing innovation in manufacturing development and corporate culture through the thorough use of customer's feedback

#### Midterm CS & Quality Management Plan (fiscal 2004 – 2008) Road Map



#### Facilitating the best product quality through 3 stages

Our Midterm CS & Quality Management Plan, launched in October 2004, is a three-stage strategy for improving Quality of Products. We can achieve superb Quality of Products by having all management teams and employees

constantly think, understand and take action based on the value we are providing to customers, customers' evaluation of that value and any change in market trends.

Activity Progress for Fiscal 2006

In fiscal 2006, the first fiscal year for Stage 2 of the Midterm CS & Quality Management Plan, we proceeded with activities following 3 important themes.

# Important Theme Thorough Use of Customer's Feedback

At Housing Company, we are implementing the CAT (Customer and Top) Meetings (see p. 36) that we use to enable the management to listen to customer's feedback firsthand. As a result, we launched Grand To You Fiora (see p. 36), which incorporates customer's feedback. Furthermore, at Urban Infrastructure & Environmental Products Company and High Performance Plastics Company, we implemented customer satisfaction level surveys for each business unit.

In contrast, the number of customer complaints and claims reported to companies overall leveled out at 98% compared to the previous year, and further improvement in this area is necessary.

# Important Theme 2 Manufacturing Development Innovation

We have established a Manufacturing Development Innovation Center (see p. 41), which is responsible for creating a system spanning the entire company and promoting activities. This Center takes on the reduction of loss cost in 5 areas and has achieved 6% reduction compared to fiscal 2005. Furthermore, the number of business sites listed under Material Flow Cost Accounting, for which introduction has been progressing since fiscal 2004, increased to 35.

# Important Theme 3 Cultural Innovation

We implemented achievement evaluations for each business unit of each division company in accordance with CS & Quality Management Indicators (see p. 44), which were introduced in fiscal 2006. Determining tasks and targets for each business unit and breakdowns extending to behavioral targets for each individual employee based on these evaluation results are our next move.

Meanwhile, we have implemented the Senior Executives Workshop since fiscal 2005. Participating senior executives from group companies in Japan and abroad debated energetically with a desire to improve CS & Quality Management. At the conclusion of the discussion, all senior executives announced specific plans pertaining to CS & Quality Management for their respective companies and promised to execute those plans.

# Fiscal 2007 Policy

In fiscal 2007, we will thoroughly implement activities in all companies for the two innovation areas of Manufacturing Development Innovation and Cultural Innovation and thoroughly use customer's feedback, which serves as the base for such innovations. Moreover, we will further expand our activities based on the achievements and problems for fiscal 2006.

	(	Thorough use of customer's	feedback	2 Manufacturing De	3Cultural Innovation		
	Number of participants at CAT Meetings (number of customers who participated)	Respondents to customer satisfaction level survey	Number of complaints and claims Compared to previous year	External loss amount Compared to previous year	Material Flow Cost Reduction Amount		lanagement tors Achievement level
Housing Company (Number of business units: 2)	1,479 groups (1,842 people)	-	106%	82.3%	922 million yen	6 themes	103.6
Urban Infrastructure & Environmental Products Company (Number of business units: 13)	-	32 companies and 5,011 individuals	72%	115.1%	675 million yen	63 themes	105.2
High Performance Plastics Company	-	510 companies	109%	122.3%	818 million yen	50 themes	102.9

#### Fiscal 2006 Activity Achievements

## Important Theme **1** – Thorough Use of Customer's Feedback

# Installing Customer Information & Consulting Services at each business site Utilizing customer's feedback in product development

# System for Gathering Information and Reflecting It in Business Activities

#### Sekisui Chemical's Customer Information & Consulting Service System



Sekisui Chemical Group has established a system that facilitates gathering, analyzing and utilizing customers' dissatisfactions and expectations through a range of methods. In addition to Customer Information & Consulting Services installed within CSR Department, customer information & consulting service sections are installed at the branch offices and sales offices of each division company. In fiscal 2006, departments gathering customer's feedback were introduced at business sites in each region as well. We are involved in service improvement and product planning and development.

# Installing Customer Information & Consulting Services at Business Sites

In fiscal 2006, a system which responds to customer contact on a 24 hour basis, including holidays, was installed at most housing sales companies. Establishment of such a system is planned for all sales offices in both Urban Infrastructure & Environmental Products Company and High Performance Plastics Company.

Furthermore, a Living Environment Consulting Service Section was installed at the Yamaguchi branch of Sekisui Heim Chugoku Co., Ltd. in August 2006. Multiple consulting service sections, which were previously separate based on content, were combined into one section, and total response services, from concerns regarding issues such as inspection and repair after moving in to advising regarding house renovation and real estate, are being implemented.

Number of Incoming Calls Received and Total Number of Complaints and Claims Reported to Customer Information & Consulting Services by Year

	2004	2005	2006
Number of incoming calls received at Customer Information & Consulting Services (Number of complaints and claims)	13,312 (792)	12,696 (576)	9,780 (528)
Number of complaints and claims	109,000	120,000	118,000
External loss cost* (used the index 100 = fiscal 2004)	100.0	82.2	75.3

\* External loss cost: cost generated from making improvements to defective products and responding to complaints and claims.

Report and suggest

Added Basic Vocabulary Knowledge for Effective Communication with Customers Page on Intranet

In communicating with customers, unpleasantness or distrust can occur because words can be interpreted in different ways. Likewise, comprehending the customer's actual intent and responding beyond the customer's expectations can result in respect and gratitude as well as a strong feeling of trust from customers.

Keeping this in mind, a page for learning about Basic Vocabulary Knowledge for Effective Communication with Customers was added to the group intranet in November 2006 at Sekisui Chemical Group in order to strengthen the customer service skills of employees. This section contains examples of words which are often misunderstood or misleading and lists the basics and examples for gaining customer trust. This information is continuously being gathered and updated from each business site and is playing a useful role in employee self-checks and mutual checks at the workplace.



Basic Vocabulary Knowledge for Effective Communication with Customers Page screen
# The Practice of CSR Management

Data

# Examples of Products and Activities Building on Customer's Feedback

## Housing Company - Product Example

Sekisui Heim wood house, Grand To You Fiora

# • For the women who look for a home where they can enjoy everyday life

The Grand To You series has been garnering popularity among customers with features such as Zero Utility Cost as well as safety features such as strong quake resistance and security. Grand To You Fiora, released as a new model in that series in January 2007, was developed and designed to increase comfort and convenience in the living environment for women.

In discussions with customers thinking about purchasing a house, feedback from women in particular frequently showed that, "functionality, visual impression and convenience in the living environment are all important," and, "because I spend a lot of time at home, I want a house that is fun to live in, in a variety of ways."

#### Providing pleasant living environments open to the four seasons

"I want to enjoy everyday to the fullest in a house that looks and feels comfortable" — in order to answer to such feedback, persons in charge of development delved into a new spatial idea with the concept of linking the house interior and exterior. Windows which open onto natural scenery or surrounding cityscapes that change with the time of year and time of day, multipurpose spaces with an open feel and graceful curves that invoke the warmth of a wood house an assortment of ideas took shape.





A Bow Window (a window curving outward like a bow) opening onto the scenery of the four seasons. An abundance of light adds character to the interior.

The Conservatory, a space linking the interior and exterior. The Conservatory was originally a greenhouse attached to houses in Great Britain. Now it is a multipurpose space for enjoying gardening, tea time, etc.

• Listening to feedback from women and incorporating this into product development



Furthermore, ideas and opinions from women were heard at Housing Company with the aid of Herstory Co., Ltd., a company which handles marketing that specializes in the housewife group. The validity of this feedback was then tested in

We also received opinions and evaluation about the prototype house from housewife monitors.

house plans. Group interviews with housewife monitors in their 40's and 50's were conducted in Tokyo, Osaka and Okayama, in which evaluations regarding product color, facilities and spacing layouts, and opinions and desires regarding the creation of a product catalog were heard.

The result was Grand To You Fiora, which was evaluated in a positive manner: "I was impressed with the exterior and signed a contract," "I felt an affinity for the space layout" and "I went to the house exhibition because the catalog left a strong impression on me."



# Housing Company — Examples of Activities

# CAT Meetings, where feedback from customers living in Sekisui Heim is heard

CAT (Customer and Top) Meetings have been conducted since October 2005 at nationwide Sekisui Heim sales companies and Housing Company with the notion of a need for senior executives to listen directly to customer's feedback. Customers living in Sekisui Heim are invited to CAT Meetings, or the management visits customers at their homes, and opinions and thoughts are shared. Opinions heard in this way are put to use as can be seen with the establishment of After-sale Service Promotion Department in April 2006, with the goal of further enhancing after-sale service, and the launch of Grand To You Fiora in January 2007.

In order to produce houses which customers will enjoy living in, opportunities to listen to customer's feedback will increase at Housing Company during fiscal 2007.



CAT Meeting at a customer's home

#### Urban Infrastructure & Environmental Products Company – Product Example

# SPR (Sewage Pipe Renewal) Method, responding to demand from local governments within Japan and abroad

• Providing sewage pipe construction that does not result in traffic congestion and environmental impact Road cave-in incidents have occurred since the mid-1980s due to the aging of sewage pipes in areas such as Tokyo and Yokohama. Immediate counter-measure construction was necessary. However, because most sewage pipes were located under main roads, construction brought on new problems such as traffic congestion and generation of waste materials. Anticipating that this type of incident would only become bigger in the future, Tokyo opened to the public the challenge regarding finding a "method for reconstruction of existing sewage pipes without excavating roads." In answer to this, Sekisui Chemical proposed the SPR Method.

SPR Method inserts polyvinyl chloride belts (profile) from manholes to the inside of sewage pipes, creating a pipe structure in the inside of pipes, in effect rebuilding the pipes. Being able to proceed with construction quickly without interrupting sewage flow and without digging up the road garnered high praise, and this method was adopted first in Tokyo and Yokohama, moving on to be employed by local governments nationwide.

# • Continuing to answer the different needs of local governments around the country

However, as construction sites extend across the country, a new problem has become apparent. Because the shapes and diameters of buried sewage pipes are diverse, requirements for each project are different for each local government.

"Is work on sewage ducts with horseshoe-shaped cross-section possible?" "We need quick installation," "We want to keep labor costs required for construction as low as possible" — in response to these kinds of customer concerns, construction improvement and upgrading are a focus at Sekisui Chemical. We have continued to handle a variety of sewage ducts with horseshoe-shaped, rectangular and round cross-sections, and continued to develop a device that twists profile in a self-propelled manner into the sewage ducts (self-propelled duct making machine).

Furthermore, sewage pipe aging is a problem not limited to Japan. Demand for the SPR Method is growing in foreign countries as well including countries in Europe and the Americas, where sewage pipes were developed early on. Thus, we began global expansion of the SPR Method from fiscal 2004. We are answering demand from countries such as the U.S.A., Korea, Hong Kong and Russia.

#### Anticipating rising demand and increasingly complex construction conditions

In the future, demand for aged sewage pipe renewal is expected to expand from main lines which form the main axes of the sewage system to branch lines. Anticipating this trend, the development of construction methods that can handle small diameter pipes in which people cannot fit inside and the



reduction of above ground work space are being explored at Sekisui Chemical. We plan to keep listening to customer's feedback and offering proposals which continue to maintain sewage system functionality while

SPR Method

suppressing environmental impact and costs.



Construction method using self-propelled duct making machines

#### Urban Infrastructure & Environmental Products Company – Example of Activities

Implementing a customer satisfaction level survey in North America (Kleerdex Company, LLC.) A large-scale customer satisfaction level survey for North America was conducted in June 2006 at Kleerdex Company, LLC. (U.S.A.), a company which handles PVC-acrylic alloy sheet for vacuum forming. From customer service to sales, shipping, product quality and plant tours, survey questions were set taking into consideration the diversity of customer contact points and customer evaluation was obtained.

As a result, a very positive evaluation was obtained, wherein over 90% of participating customers reported satisfaction with all Kleerdex products and services. Furthermore, we confirmed that what customers deemed most important, in addition to product quality, was on-time delivery. At Kleerdex Company, LLC., in addition to announcing this survey result on their company website, further improvements are being made based on customer's feedback. For example, in order to obtain



Kleerdex Company, LLC. employees

an increase in customer satisfaction levels by thoroughly meeting delivery deadline promises, production planning and adjustments, taking into account all orders, are conducted every day. Moreover, unique product explanation meetings are being held, targeting sales representatives in order to deepen their knowledge on the products. In addition, a FAQ site listing simple Q&A regarding products and their processing is available. In the future, in order to further strengthen customer trust, the implementation of a similar survey is planned to take place every year and steps will be taken to make sure customers continue to receive the quality service they expect. Tube 21-S, a vacuum blood collection tube which separates blood serum without requiring a centrifuge, contributes greatly to reducing the strain placed on patients visiting a hospital

#### A need for quicker blood testing

In order to reduce the strain placed on patients visiting a hospital, most medical facilities try to provide a same-day diagnosis, which reports medical testing results on the day that the test occurred. However, the challenge to achieving this endeavor is the length of time required for blood testing.

In blood testing, it is necessary to coagulate the blood, place it in a centrifuge machine and separate and extract blood serum from the blood during the time between collecting a blood sample and test commencement. With standard blood collection tubes, this process takes as long as 40 minutes. And of course, hospitals that do not have a centrifuge machine cannot offer same-day diagnosis.

"I want to be able to give test results as fast as possible to visiting patients who are worried about their health," "There are quite a few patients who cannot come all the way to the hospital to hear their test results," "Is there any way to speed up blood test results for patients in an emergency situation fighting against time?" From early on, compelling appeals have been reported from medical institutions.

# Solution for separating serum inside blood collection tubes

In response to these needs, in 1996, Sekisui Chemical developed Insepack SQ, a vacuum blood collection tube with high-speed coagulating agent. The time required for coagulation of collected blood was reduced to one third of the time previously required. However, even with this new product, it took 30 minutes for test results to appear. The product which dramatically reduced this time was the Tube 21-S,\* a vacuum blood collection tube which separates blood serum without requiring a centrifuge.

Separate serum inside the blood collection tube without



collection tube In 1985, Sekisui Chemical developed Insepack, the world's first plastic vacuum blood collection tube. This product contributed greatly to the enhancement of safety from the transport phase to blood collection and disposal, with such features as being both unbreakable and burnable, characteristics not available in the previously used glass blood collection tubes.

World's first plastic vacuum blood

Tube 21-S Nitto Boæki Co., Ltd. began ship ments in August 2006.

requiring separation by centrifuge — based on this idea, Sekisui Chemical joined forces with Nitto Boseki Co., Ltd. and I-Design Co., Ltd. in a development project. The team focused on the development of a special filter that can separate serum from blood and development of technology for suppressing the tube size below a certain point while holding the filter in place within the blood sample tube. Making full use of plastic molding technology and polymeric technology, and through constant trial and error, this team successfully merchandised their idea approximately ten years after conception.

\* A product development together with Nitto Boseki Co., Ltd. and I-Design Co., Ltd., with Nitto Boseki Co., Ltd. as the selling representative. Tube 21 is a trademark of Nitto Boseki Co., Ltd.

#### Potential expanding from same day diagnosis to on-site diagnosis

Tube 21-S, which did away with the necessity of the centrifuge separation process, decreased the time required between blood collection and serum extraction to an incredibly short 2 minutes. This allows test results to be available in a short time span of ten minutes, at the fastest.

Furthermore, it has also made it possible for doctors to conduct blood tests during doctor visits outside the hospital. Emergency treatment at places such as devastated areas, house visit blood tests and even blood testing by veterinarians at ranches are now possible.

In the future, while continuing to successfully place this product in the hands of users, we will advance improvements and upgrades, such as increasing the extractable serum amount and downsizing blood collection tubes for small scale hospitals, which will respond to the appeals of medical treatment center staff, R&D institutes and patients.



The Practice of CSR Management

the

Prominence in CS & Quality

### Important Theme 2 – Manufacturing Development Innovation

# In order to consistently deliver value that answers customer expectations, our goal is production sites strong in manufacturing that ensure high key product quality

### Quality Management System Pursuing Product Quality

Sekisui Chemical Group strives to ensure the quality of its products at every stage of the production and marketing process, from the development of a product right through to its use by the customer. In our business operations, we follow the management cycle, Plan (make plans) – Do (implement and operate) – Check (monitor the result and take corrective action) – Act (improve and review) to ensure that we implement our plans and solve important problems consistently. We have done this by setting up quality assurance systems in each department for our products and services that suit the requirements of each of our businesses and comply with all relevant legislation, and by managing our work routines on the basis of quality indices and related target values for each process.

Moreover, in order to verify the appropriateness of planning and implementation regarding product development, specification changes and product improvement, we conduct necessary screening such as quality assurance and product safety, from a variety of different aspects.

# Acquisition of International Standard ISO 9001 Certification

To ensure that we keep on improving our quality assurance systems, we are also encouraging our business sites to become certified under the ISO 9001 international quality assurance and quality management standard. 19 business sites and departments were certified under this standard in fiscal 2006, bringing the total of certified business sites and departments in Sekisui Chemical Group to 73 (as of March 2007).

### **Promoting Safety Reviews**

The most fundamental aspect of product quality is preventing safety problems or failures. To ensure safety quality, all division companies in Sekisui Chemical Group conduct product safety reviews at each level of the design process, including reviews on concept designs, basic designs and specific designs. Furthermore, safety is screened based on a Product Safety Check List.

#### **Response to Product Defects and Accidents**

At Sekisui Chemical Group, rules such as the Complaint and Claim Solution Imperative and the Product Recall Problem Solution Guidelines have been designated. If product defects are found or accidents do occur, we strive to provide solutions to the problem through swift customer response and investigation and analysis of the cause. Moreover, if such a situation occurs, in order to prevent the recurrence of a problem with a similar cause, information related to the situation is shared at each process of the business and prevention measures are thoroughly implemented.

In addition, at Housing Company the component management system STACK, developed and operated independently, facilitates the tracking of all components and parts shipped from the plant, all equipment used and the specific customer for whom the shipment was made.

In fiscal 2006, there were no major defects or accidents related to Sekisui Chemical Group's products. However, in response to two incidents of fire that broke out in bath driers used by Housing Company, we identified customers using the same bath drier through STACK and immediately contacted them for equipment inspection and repair.

#### Overview of Sekisui Chemical's Quality Assurance System



## Group Improvement Activities Expanding to Overseas Subsidiaries

A small group activity began as a QC (Quality Control) group in 1966 at Sekisui Chemical Group and to this day it continues implementing activities to facilitate high quality manufacturing. With employees making great efforts at manufacturing sites to increase production and operation efficiency and to improve product quality, they are contributing to the establishment of a group culture that consistently strives for improvement. The results achieved from applying these activities at each site are reported at business site report assemblies and at a report assembly held once per year for the entire Sekisui Chemical Group, including overseas subsidiaries.

A total of 22 teams, made up of 21 teams selected at preliminary meetings held in several regions nationwide in Japan and the California Plant of Sekisui TA Industries, LLC. reported the results of their activities at the 41st Sekisui

Chemical Group Improvement Activities Report Assembly in fiscal 2006. Also, Youngbo Chemical Co., Ltd. in Korea and Sekisui S-Lec (Suzhou) Co., Ltd. in China made special presentations. Reported achievements are shared among all group business sites and steady improvement activities are implemented at each business site.





Sekisui Chemical Group Improvement Activities Report Assembly

Presentation by Youngbo Chemical Co., Ltd

# Transfer of Expertise to Successive Generations Aimed at Solid Manufacturing **Development and the Handing Down of Skills**

The foundation of product quality is solid knowledge and technology gained and gathered within the group and the skills of employees who use and strengthen that knowledge and technology. At Sekisui Chemical Group, we are engaged in the cultivation of employees possessing excellent knowledge, technology and skills, and the transfer of skills to successive generations

As one approach to employee skill improvement, for example, the Production Company Assembly Skill Exchange is continuously held at Housing Company's production companies. In fiscal 2006, the 36th Exchange Event was held in November.

This exchange event includes a skill contest where

employees responsible for the production of Sekisui Heim demonstrate their skills in welding, nailing and inspection. Moreover, there have been reports on examples of improvement at manufacturing and indirect departments, and endeavors which yielded product quality improvement or increased production process efficiency are shared between production companies.



Skill contest at Assembly Skill Exchange (welding, nailing and inspection)

Prominence

The Practice of CSR Management

in the

Prominence in CS & Quality

Data

## CS Penetration Program Promotes the Reform of Awareness and Behavior of Employees, the Backbone of Product Quality

Employees are the ones who engage in product development and manufacturing, take responsibility for delivering to customers their orders and are accountable for after-sale service. In other words, the awareness and behavior of employees are an important base supporting product quality.

Based on this train of thought, Sekisui Chemical Group has been rolling out a CS penetration program called STAR 55 (see p. 43) since fiscal 2002. We have been expanding this activity to overseas business sites from fiscal 2004, promoting the qualitative improvement of employee awareness and behavior. In fiscal 2006, the program was held in Shanghai in China and Roermond in the Netherlands.

In Shanghai, a program was implemented targeting 32 salespersons at Sekisui (Hong Kong) Co., Ltd. and Sekisui (Shanghai) International Trading Co., Ltd. By presenting from customer's point of view the ideal status for business and work, this program promoted the understanding and

reconfirmation of proper behavior and the roles that should be fulfilled by salespersons for CS improvement. The Leader Program was implemented in the Netherlands targeting 18 departmental leaders at the following three companies, Sekisui S-Lec B.V., Sekisui Alveo B.V. and Eslon B.V.

By continuing these activities at Sekisui Chemical Group in Japan and abroad, we will continue to pursue customer satisfaction along with product quality.



Program implementation in Shanghai



eader Program implementation in the Netherlands

CSR Report 2007 40

### Important Theme 2 – Manufacturing Development Innovation

# Our goal is zero claims and defects, zero accidents and zero waste through rigorous group-wide Manufacturing Development Innovation

#### Midterm Manufacturing Training Plan for Cultivating Human Resources and Strengthening the Human Resource Development System —the Foundation for High Quality Products

Sekisui Chemical Group has been implementing the Midterm Manufacturing Development Training Plan since fiscal 2005. This is a graded training system which covers everyone from the management to front-line employees in every department, clarifies the role that each individual must play in making our products, and systematically trains everyone in the skills to fulfill such role.

In the span of three years, from fiscal 2006 to fiscal 2008, we are developing specific training programs and from there implementing them. In addition to newly formulated training programs, we are also concurrently implementing graded mandatory training based on existing programs, including newly appointed assistant manager training and manager training targeting employees working in technical fields.

### Manufacturing Development Training Program<sup>\*1</sup>

- 1 Safety: Zero disaster training
- Quality: quality control, ISO internal auditor course, basics about reliability course, quality function development seminar
- 3 Maintenance: TPM<sup>2</sup> course, maintenance skill (specialty maintenance, operator), maintenance diagnostic technology training, control technology training and TPM college
- 4 Manufacturing development innovation methods: quality engineering (basic training – intermediate – advanced) IE/VE<sup>-3</sup> training, production innovation professional course
- General training: cost accounting basics, 55<sup>-4</sup>, visibility promotion leadership course
- \*1 Each program consists of three levels: Level I (basic level), Level II (implementation level), and Level III (professional/guidance ability level)
- \*2 TPM (Total Productive Maintenance): Company-wide equipment management method in the manufacturing industry
- \*3 IE/VE: Abbreviation of Industrial Engineering and Value Engineering
- \*4 5S: A slogan used in the maintenance and improvement of the work environments that refers to organization, orderliness, cleanliness, tidiness, and discipline (In Japanese, these 5 words all start with the letter "s").

#### Midterm Manufacturing Training Plan Timeline



#### Approaches by Manufacturing Development Innovation Center of Corporate Headquarters

Sekisui Chemical's new Manufacturing Development Innovation Center was set up in April 2006 within the R & D Technology Center of corporate headquarters. It is staffed with employees picked from the development and technology department of each division company.

This Manufacturing Development Innovation Center is tasked with building a system for achieving the goals of Manufacturing Development Innovation for the entire company — that is, respect for the customer (zero quality defects and claims), respect for the employee (zero accidents) and respect for the environment (zero waste). Additionally, the Center promotes effective improvement maneuvers in all processes, including development, design, production and construction as well as sales and after-sale service.



# Foundation of CSR Management

# Data

# Setting 3 Important Implementation Items and Promoting Activities

In fiscal 2006, in addition to advancing the development of Manufacturing Development Training programs, we set 3 important implementation items and advanced related company-wide activities.

We are continuing to advance these activities in fiscal 2007 as well.

# 3 Important Implementation Items and Fiscal 2006 Activity Descriptions

Important Implementation Items	Fiscal 2006 Activity Descriptions
Promotion of Priority Production Line Improvement Plan	Reduction of internal loss cost and environmental cost through material flow cost analysis     Expansion in the applications of quality engineering     Overall development of TPM activities     Advancement of group improvement activities
Promotion of innovation	Quality innovation, work environment innovation, on-site waste
group activities*	material reduction, and productivity improvement     Stable production, quality visibility     Improvement of supply capacity and environmental friendliness
Monitoring of items	<ul> <li>Reporting of monitoring results in monthly reports and</li></ul>
and above	semiannual reports

Companies or business sites targeted for innovation group activities: Housing Company: Tokyo Sekisui Industry Co., Ltd., Kansai Sekisui Industry Co., Ltd. and Kanto Sekisui Industry Co., Ltd.

Urban Infrastructure & Environmental Products Company: Sekisui Chemical Co., Ltd. Gunma Plant, Tokyo Plant and Shiga Ritto Plant.

High Performance Plastics Company: Sekisui Chemical Co., Ltd. Fine Chemicals Division, Amagasaki Plant Industrial Tape Production Department and Sekisui Film, Co., Ltd, Sendai Plant.



Innovation group activities at Tokyo Sekisui Industry Co., Ltd.

# Achievement of Reduction of Over-budget Loss Costs

Improvement activities aimed at Manufacturing Development Innovation are also linked to enhancement of a competitive edge and reduction of loss cost.

Based on this idea, the Manufacturing Development Innovation Center is focusing on loss cost reduction employing the method of Material Flow Cost Accounting. The five costs of External Loss Cost, Internal Loss Cost, Production Cost, Safety Loss Cost and Environmental Cost are being approached as loss cost reduction items\*.

In fiscal 2006, the company-wide target reduction of 4.6 billion yen from fiscal 2005 levels was set as the total reduction target for these 5 items. As a result of various activities undertaken, about 5.2 billion yen in reductions, 13% over the target, were achieved. Through such activities, we plan to continue to polish the quality of products and services and their respective creation processes as well as contribute to the facilitation of even more efficient management.

Loss cost reduction items:

External loss cost: Costs generated along with complaint/claim response and defect improvement related to products.

Internal loss cost: Costs associated with the disposal of defective products generated  $\operatorname{during}$  the manufacturing process

Production Cost: Costs necessary for manufacturing, such as raw material costs, energy costs, and labor costs (Reduce costs by productivity improvements such as labor and resource savings).

Safety Loss Cost: Costs generated along with damage to facilities, workplace injuries, etc. Environmental Cost: Costs for the disposal of waste generated at business sites

# Employing the Material Flow Cost Accounting in Manufacturing Development Innovation

Working towards cost reduction by efficient utilization of raw materials, Sekisui Chemical Group promoted the introduction of Material Flow Cost Accounting from fiscal 2004. At the end of fiscal 2006, it was introduced at 35 business sites. This is a cost calculation and analysis method which implements a cost evaluation that includes costs for materials and resources directly linked to products (positive costs) as well as costs for materials and resources that have become waste materials and the energy loss portion that follows (negative costs). The Manufacturing Development Innovation Center employs this method to the approach for Manufacturing Development Innovation.

# VOICE

#### Unifying our hearts and efforts to firmly establish Manufacturing Development Innovation

In fiscal 2006, the Manufacturing Development Innovation Center was able to largely reduce loss costs, including the External Loss Cost. However, I feel that the greatest achievement was the sense of momentum in the desire to promote Manufacturing Development Innovation and that activities began to take root at each business site to facilitate the innovation. I think that what made this achievement possible was the efficient melding of the three following elements: management level awareness and intent at each business site, cooperation between each division company's CS & Quality Department, and the know-how of each member of the Manufacturing Development Innovation Center.

However, our approach in this matter has only just started. The

number of claims and loss costs can still be reduced even further. And, there are still many issues such as Manufacturing Development Innovation in overseas production sites, the mother plant system, and the passing down of technology and skills. While planning solutions to these issues, we will continue to work towards the firm establishment of Manufacturing Development Innovation as part of Sekisui Chemical Group's culture.



Akira Kinumura Manufacturing Development Innovation Center, R&D Center

## Important Theme 3 – Cultural Innovation

# **Developing a variety of activities to promote CS** awareness penetration program STAR 55

### Implementing Job Specific Star 55 Programs at Each Division Company

Sekisui Chemical Group has been rolling out a CS penetration program called STAR 55 since fiscal 2002. STAR 55 is the collective name for a number of programs designed to develop a customer-oriented culture — what we call a CS culture. The Leader Program, which promotes awareness reform among all departmental leaders, was completed in fiscal 2004. In fiscal 2005, we commenced a number of Job Specific Programs at each division company oriented towards employees who have direct contact with the customer.

#### Launching the Sales Program Roll Out

In fiscal 2006, the Sales Program, which is one of the Job Specific Programs, started at the Yamaguchi branch of Sekisui Heim Chugoku Co., Ltd. in June. Targeting young employees with no more than 3 years of sales experience, this program aims to instill CS awareness based on customer's feedback and through communication with customers. Additionally, this program promotes activities through the following programs: the Basic Program, which encourages salespersons to be advisers to their customers, the Coaching Program, designed for superiors and supervisors and the Program for Sekisui Group Managers which promotes the above activities. In the future, we plan to measure and evaluate program results, revise the content, etc., accordingly and expand the revised programs to each business site.



Sales Program at the Yamaguchi branch of Sekisui Heim Chugoku Co., Ltd.

Enlarging and Expanding STAR 55 Structure



# Enlarging Our After-sale Service Standard to Housing Company Business Sites

Among the Job Specific Programs, the After-sale Service Program was implemented at Housing Company in fiscal 2005. This program is developing a new approach in making After-sale Service Standards the ideal behavior for employees. In order to strongly promote this program, the After-sale Service Promotion Department, a specialized organization, was established at Housing Company in April 2006. In May, the All-Japan After-sale Service Manager Study Session was held, and then its participants became the promoters for launching activities in every region nationwide. At business sites in each region, the improvement process, Plan (make plans) – Do (implement and operate) – Check (monitor the result and take corrective action) – Act (improve and review), is continuing to be implemented, aimed at refining the behavior standards of employees.

The After-sale Service Program is also being implemented at Sekisui Home Techno Co., Ltd., an Urban Infrastructure & Environmental Products Company, which has an After-sale Service Department. In the future, Sekisui Chemical Group plans to expand the target of this program to overseas subsidiaries and business sites.

### CS Seminars Held to Raise Awareness of CS

CS Seminars are held twice per year throughout Sekisui Chemical Group to raise awareness of CS among directors and employees. At these seminars, individuals from outside the Group who possess deep insight regarding CS and quality are invited to give lectures.

In fiscal 2006, CS advisor Mr. Shigeo Kawata of the Claim Management Research Group was invited in May and Mr. Yoshimoto Tanaka from Customer Marketing Department of the Sales Promotion Headquarters of All Nippon Airways Co., Ltd. was invited in December. Both lectures were an incredible success, with approximately 380 participants. In the future, we will continue to hold CS Seminars closely scrutinizing the contents.



Mr. Shigeo Kawata's Lecture Theme: Captivating the Customer when Dealing with Customer Claims Using actual examples of sincere

responses to claims and various corporate response examples from personal experience, Mr. Kawada spoke on the importance of incorporating the customer's perspective in daily corporate activities.



Mr. Yoshimoto Tanaka's Lecture Theme: ANA Customer Response – CS Activities from a Marketing Stance Through an introduction to the ANA Mileage Club framework, Mr. Tanaka spoke on efforts and innovations to increase the level of ANA flier satisfaction.

# CS & Quality Assessments Incorporating the Opinions and Evaluations of Customers

Sekisui Chemical Group carries out CS & Quality Assessments in order to ensure that all our activities are based on the CS & Quality Management philosophy. Corporate headquarters' CSR Department and the persons in charge of CS & Quality at each division company evaluate the status of activities at each business site within the Group and give advice on matters such as what they need to improve. This allows a variety of insights to come to the fore. For the evaluations, a multi-faceted approach taking the Japan Quality Management Award\* evaluation criteria into consideration is set. In addition to hearings and material reviews from each business site, customer viewpoints and customer satisfaction level survey results are also used as assessment criteria. Checks are made regarding the successful implementation of specific activities to achieve the satisfaction of our customer and business partner in line with management policy.

In fiscal 2006, CS & Quality Assessment was implemented at the following 3 business sites: the Fukuoka branch of Sekisui Heim Kyushu Co., Ltd. and the Miyagi branch of Sekisui Heim Tohoku Co., Ltd., both housing sales companies, and Sekisui Chemical Hokkaido Co., Ltd., a production company of Urban

#### CS & Quality Assessment Implementation Steps

#### First Step: Pre-inspection (interview)

· Recognition of present status (interview)

- Based on the pre-inspection
   Set up an assumption of "advantages" and "weaknesses" of the organization · Identify issues for innovation based on the assumption

Infrastructure & Environmental Products Company. At the housing sales companies, Mystery Shopping, an undercover survey, was implemented. The surveyors went to house exibition, where employees are able to directly interact with customers, and evaluated such criteria as installations and cleanliness from a customer standpoint. An interview independently held by Customer Information & Consulting Services was also utilized for an evaluation.

Based on the results of the assessment, areas for improvement, such as "thoroughly implementing the management policy," "enhancing after-sale service system," "refining strategies for improving priority areas and growth areas" and "establishing an information management framework for effectively employing customer's feedback," were recommended.

Follow-up assessments are conducted for business sites the year following the above assessments, and the level of improvements is also checked. In fiscal 2006, follow-up assessments were conducted for the following 2 business sites, Nagoya Sekisui Heim Co., Ltd. and the Yamaguchi branch of Sekisui Heim Chugoku Co., Ltd.

\* The Japan Quality Management Award: Established in 1995 by the Japan tivity Center for Socio-economic Development, this prize is awarded to companies whose overall management satisfies the Center's assessment criteria.

#### Third Step: Follow Up

Validation of assumptions (discussion)

Second Step: Full-scale Assessment

- · Agreement on innovation agenda
- · Drafting the Assessment Report
- Devising innovation plan
- Confirmation of progress of innovation and identifying new issues

## Original Management Indicators that Quantify the Value We Deliver to Our Customers

In fiscal 2006, we introduced a set of CS & Quality Management Indicators for measuring and evaluating the extent to which each of our division companies are practicing CS & Quality Management. By quantifying, measuring and monitoring customers' evaluations of what each division company does, these indicators make it possible for us to see how much value we are delivering to our customers.

By setting these CS & Quality Management Indicators on equal footing with management indicators such as sales and profit, our goal is to firmly establish CS & Quality Management. Moreover, based on the idea that increasing customer satisfaction levels generates new demand, we have set the CS & Quality Management Indicators as leading indicators for forecasting future sales and profit. By constantly improving products, services and business processes, we are linking these indicators to the long-term development of business.

Calculation Process for the CS & Quality Management Indicators for Each Division Company



#### Examples of Themes and Targets and Achievements for CS & Quality Management Indicators (fiscal 2006)

	Theme examples	Target values	Achievement values	Performance levels
Housing Company	Overall level of satisfaction (5 years after transaction)	70%	67.8%	0.99
Housing company	Overall level of satisfaction (1 year after transaction)	79%	79.3%	1.02
Urban Infrastructure &	Continued usage rate	Comparison to previous period 102%	Comparison to previous period 101%	1.01
Environmental Products Company	Level of satisfaction in dealing with customer claims	Comparison to previous period 105%	Comparison to previous period 106%	1.15
High Performance	Supplier evaluation	1st place	1st place	1.00
Plastics Company	Number of new uses of new products	6 cases	18 cases	1.15

Data

3

The Practice of CSR Management **Prominence in Human Resources** 

Building safe and secure work environments that support employees who positively set their own goals



Japanese society is experiencing a falling birthrate and a growing elderly population. At the same time, employee's attitude towards values and lifestyles are becoming more diverse. Against this background, Sekisui Chemical Group strives to create environments where employees can work with liveliness and with a sense of safety and security based on the idea that "employees are precious assets bestowed on us by society." We have created systems and opportunities that help each employee develop their own skills and grow as professionals.

We believe that encouraging each employee to be ambitious and realize their own potential at work will promote the further development of our organization and business, which in turn will allow us to better contribute to society.

In order to fully realize this belief, a Human Resources Subcommittee was established in January 2007 under the CSR Committee. This subcommittee is charged with deliberating and determining group-wide plans (human resources cultivation, stimulating the Intra-group Job Posting System, creating safe and secure work environments) based on our Midterm Human Resources Vision.

We are also taking steps to create safe and secure work environments for all employees by linking together all of the departments in charge of human resources for each division company so that we can start the cultivation of human resources across the entire group. We have also established the *Kirameki* Life Promotion Office with the aim of expanding the fields female employees work in, increasing the number of female employees and cultivating the successive generation of employees.



## Midterm Human Resources Vision – Overview & Results

# We have set targets for four main themes and are promoting activities to reform human resources



#### Fiscal 2006 Activities and Results

Theme	Goals	Measures for Fiscal 2006	Specific Activities
Providing opportunities to take on challenges (→P47)	<ul> <li>Applying human resources on a priority basis in business that is expected to grow</li> <li>Increase opportunities for employees to experience the challenges of "working with people from various companies"</li> </ul>	<ul> <li>Improve group recruiting of new graduates</li> <li>Ambition School</li> <li>Stimulate the Intra-group Job Posting System (expanded opportunities for women)</li> </ul>	<ul> <li>Expanding the scope of group recruiting to bolster the group recruiting of each group company.</li> <li>Earnestly starting the Ambition School project for the cultivation of successive generation of employees that will provide further growth for the company.</li> </ul>
Culture of volunteering to learn and grow (→P49)	<ul> <li>Clearly define growth (development) goals for all employees</li> <li>Refine and upgrade unique skills of employees</li> <li>Encourage greater communication between supervisors and subordinates to increase productivity at the manufacturing site</li> </ul>	Overseas training system for Japanese     MTP training for Chinese managers at subsidiaries in China	<ul> <li>Establishing new training programs that better meet the needs of each department and group companies. Starting activities targeting our overseas subsidiaries.</li> <li>Implementing management training in Beijing and Shanghai, targeting managers at all of our Chinese subsidiaries.</li> </ul>
Refining the performance-based evaluation $(\rightarrow P47)$	Continue to attach great importance to employee commitment and further improve their appreciation for performance appraisal     Encourage employees to develop long-term perspectives     Promulgating the idea of "contributing to society through business activities" to employees	Renew training contents for evaluators	<ul> <li>Providing managers with training so that they can better support the cultivation of their subordinates, allowing managers to provide effective education and guidance for younger employees and fairly evaluate those employees' results.</li> </ul>
Various working styles and safe and secure work environments (→P47)	Strengthen the steps to cope with the declining birth rates     Creating a workplace where every employee can work     actively     Promoting employee health and strengthening their mental     health care     Create a safe workplace	Extension of child-care leave and extension of period for shorter work days for childcare     Promote the activities of female employees     System supporting the cultivation of the successive generation of employees     System for the rehiring of elderly people     Implement mental health self-evaluations for the entire group	<ul> <li>Launching the <i>Kirameki</i> Life Promotion Office which is promoting opportunities for female employees and the fields female employees can work in. We are promoting the drafting of a plan for expanded recruiting of female employees and bolstering the measures supporting the cultivation of our successive generation of employees.</li> </ul>

### **Providing Opportunities to Take on Challenges**

# Supporting employees eager to take on challenges when they join the company, when they are assigned to a department and when they are moved to a different section



# Recruiting and Placement are Determined with an Emphasis on Individual Preferences and Wishes

We Seek to Avoid Job Mismatches by Letting Recruits Choose Their Placement and Job When They are Recruited According to the White Paper on the Labor Economy 2006

released by the Ministry of Health, Labor and Welfare, the separation rate by college graduates in the first three years of employment has risen to 34.7%. A common reason for early separation is "the job was not what I wanted to do."

To avoid this type of job mismatch between employee preferences and actual post-recruiting placements and jobs, Sekisui Chemical has implemented division company-specific and job-specific recruiting based on individual preferences since fiscal 2000. This enables each employee to work with a sense of fulfillment.

Candidates can select their desired placement and job during the time between the corporate information session and the preliminary interview. This process serves to maintain and increase motivation after the candidate commences employment, as illustrated by our 3.7% separation rate within the first three years of employment in fiscal 2006, much lower than the national average.

# Number of New Graduates Hired and Their Separation Rate in the First Three Years of Employment (Sekisui Chemical)

	Fiscal 2003	Fiscal 2004	Fiscal 2005	Fiscal 2006
New graduates (persons)	26	43	48	67
Separation rate within the first 3 years (%)	7.7	2.3	4.1	3.7

The Plastic Processing Field Has Followed the Housing Field (Sekisui Heim Group) in Enacting Group Recruiting The intra-group recruiting activities carried out by Housing Company's affiliated companies (Sekisui Heim Group) have also been adopted by the affiliated companies in the plastic processing field (Urban Infrastructure & Environmental Products Company, High Performance Plastics Company, Corporate Headquarters). In November 2006, the people in charge of recruiting new graduates in April of 2008 for 20 of the affiliated companies in the plastic processing field came together to launch the Group Recruiting Conference. Here they exchanged information and confirmed some of the points to consider regarding recruiting policies, PR activities targeting students and fair recruiting practices. A group recruiting site was also established on the Sekisui Chemical homepage and various tools were produced including a recruiting pamphlet that can be used by the entire group.

Then an orientation meeting between human resources staff and students began from May 2007. By providing such opportunities for students to meet with those people in charge of recruiting as well as younger employees, we are able to give the students a better understanding of Sekisui Chemical Group's business activities and provide them with information useful for their endeavors to find employment.

# Personnel Transfer and Promotion Is Based on Self-assessment

Sekisui Chemical Group has established an Intra-group Job Posting System that gives employees the chance to voluntarily apply for transfers to their desired department and job category.

In fiscal 2006, we again positively implemented this Intra-group Job Posting System, focusing on those business fields with solid growth potential. During fiscal 2006, a total of 15 employees (114 employees over the past 6 years) used this system to transfer to new positions, mainly in such areas as overseas sales for interlayer films for automobiles and business planning concerning M&A for the purpose of creating new businesses.

There is also a system for voluntarily applying for promotions. Employees that want a promotion are allowed to make a presentation of their business results and based on this presentation a promotion may be granted. Eliminating automatic, across-the-board promotions based on seniority and ones made without any clear standards has resulted in a promotion system that is more transparent and easier to understand.

# Providing Expanded Opportunities for Employees to Improve Their Knowledge and Skills

#### Providing Opportunities Globally

Sekisui Chemical has been actively participating in collaborative research and development with universities in Japan and overseas since it began assigning engineers to university research institutes in 1978.

From fiscal 2004, we included overseas joint research in the Intra-group Job Posting System and we began dispatching ambitious young engineers overseas as another opportunity for employees to take on new challenges. We also conduct language training (studying abroad), training programs that prepare employees for working abroad and human resources exchanges with overseas business sites to foster understanding of different cultures and personal growth and to cultivate human resources that can conduct business anywhere in the world.

# Two More Employees Make Use of the Career Development Scholarship System

There has been a growing number of employees that want to leave the company for a set period of time to dedicate themselves to acquiring specialized skills needed in society. To meet these needs, the Career Development Scholarship system was established in April 2005.

Employees who want to use this system can apply by submitting a statement of their objectives and the themes they hope to tackle in the future, along with a recommendation from their superiors. Accepted employees are granted a scholarship and are allowed to take leave from work to attend school.

In fiscal 2005, one employee in the Legal Department used this scholarship to attend law school and in fiscal 2006, two employees were granted scholarships, one for an MBA program and another to attend a graduate accounting school.

# VOICE

I was able to deepen my specialized knowledge and acquire an international business outlook by being surrounded by foreign exchange students with diverse values.



Toshihiko Hatae Nagoya Sekisui Heim Co., Ltd

A full year has passed since I entered Waseda University Graduate School of Asia-Pacific Studies. I have two motives for using this scholarship program to enroll in a graduate school program. The first is that I want to cultivate my international business outlook and the second is that I want to obtain the specialized knowledge needed for better decision making.

Roughly half of the students that joined this program at the same time as me are exchange students who have come to Japan from many different countries. Being able to conduct joint research and hold discussions with students that have such varied backgrounds and values has been a very valuable experience. When I talk to these students in class and during workshops and seminars, I am able to realize that the approaches taken by the Japanese are not always the standard used in the global society.

At this graduate school program, we are learning how to lower likelihood of failure and increase the chance of success by taking steps based on financial data. We also learn how to solve problems without a definite solution, through the formation and testing of hypotheses.

In my second year, I will finally start focusing on my thesis. I want to really devote myself to my studies and research so that I will have no regrets and I want to bring together everything I have learned so far. I am extremely grateful to have had this opportunity.

# Began Planning the Ambition School Project After a Training Camp for Learning Basics of Business Management and a One-month Overseas Training Program

In fiscal 2006, we established an in-house entrepreneurship development program called the Ambition School to launch new businesses that may evolve into major earnings pillars for the company and to cultivate the human resources needed to bring

about further corporate growth. Selections were made in April 2006 and the school was opened in May of that year for 6 applicants, who were chosen among many applicants, and 4 recommended employees, who from August were allowed to leave



Considering Proposed Business Plans

their previous duties to focus on their activities linked to this school. For the first two months, the participants learned the basics of business management directly from Professor Kazuhiro Mishina from the Kobe University Graduate School of Business Administration. Then they underwent overseas training for a month, after conducting surveys and making preparations for one month in order to experience firsthand the needs and conditions in overseas markets.

After this input period, starting in December, the participants will begin to consider on their own the kinds of businesses they hope to launch as they move toward the business planning stage. Some of the participants have a clear direction and have pushed forward with their research while others search for a clear starting point. Still, everyone is working toward the same goal of establishing a new business.

#### Voice: An Ambition School Member

boing everything to meet the challenge, while being grateful for the chance to experience the difficulties associated with creating a business.

Before we started creating a new kind of business, we found that we needed to study the threads running throughout human history and the history of the world economy starting from the pre-Christian era and learn from the great business

leaders of the world. Looking back at some of the systematic views held through the ages has served as a good measure for predicting the future. Learning about successful people in the past has been very useful in understanding the principles of human behavior.

Now I am starting to create a new kind of business. I hope to use the perspectives I gained during this training period to accurately read the times and have a keen perspective towards business opportunity. I want to make the best possible effort, while remembering how fortunate I am to have had the chance to experience the difficulties associated with starting a business.



Katsuya Nakano Ambition School Member



Foundation of CSR Management

### **Corporate Culture Fostering Individual Learning and Growth**

# Using various viewpoints to enrich our education and training systems, while creating an environment that fosters individual learning and growth



# Providing Employees with Opportunities to Examine Their Own Abilities and Growth

#### Career Plan Training by Age for All Group Employees

In order to provide each employee with the opportunity to examine their own career and life plans, we have been conducting Age-wise Career Plan Training, targeting employees around the ages of 30, 40 and 50.

This training uses themes appropriate for each age group and asks questions such as "what can you do?," "what have you done?" and "what do you want to do from here?" in order to help employees reflect on their work, life and values so that they can better plot their life plan and career course. This training has been very popular as it promotes exchanges among employees in the same age groups but in different departments and fields and so every year we have had a large number of participants from all across the group.

Based on requests from the group companies and individual departments, in fiscal 2006, we began offering workshops at individual workplaces, in addition to the conventional joint training.

	30's	40's	50's	Total Number of Participants
Themes by Age	Self- establishment	Market Value	Continuing to work even after retirement	—
Training Contents	Career Counseling with Superiors	Recognize your own specialized field	Employing workers in their 60's, adding programs for transferring skills	_
Number of Participants in Fiscal 2006	136	118	58	312
Total Number of Participants as of Fiscal 2006	1,269	824	536	2,629

#### Themes by Age & Results

#### First Career Plan Training at Kitanihon Sekisui Industry Co., Ltd.

Until now, Kitanihon Sekisui Industry Co., Ltd. has made the development of human resources, which is necessary for business growth, as its central policy of management, and has conducted education and training from various approaches.

To this end, the company, in fiscal 2006, conducted, on an experimental basis, career plan training twice based on employee age. This training used a curriculum that encourages each employee to look back on their life and work, recognize their strengths and weaknesses and then establish a life plan for the future. The aim is to raise the level of worker motivation toward their work, while fostering worker independence. The reaction to the training was mostly favorable with many employees making positive comments such as "I finally realized what skills I need to have in order to do the work I want to do." Furthermore, in order to ensure that the lessons learned from this training after several years based on materials produced by each participant.

#### Voice: A Career Plan Training Participant This was very valuable training

This was very valuable training that taught me a lot about myself and my co-workers.

The content of this training is designed so that employees in their 30's, who are responsible for the future of the company, can take a good hard look at their past achievements and future prospects and then make mid- and long-term career plans. The training



Takahiro Sakuraba Manufacturing Section, Kitanihon Sekisui Industry Co., Ltd.

was conducted in a very relaxing setting, but I am still able to think deeply about myself and exchange opinions. Another benefit of this training is that you get the chance to really communicate with some of the technical staff members that you might see around the workplace, but never really get the chance to sit down and talk to. This gives both sides the chance to listen to and learn more about each other. This training really helped me to pinpoint my strengths and weaknesses and hope to apply these lessons to my career in the future.

#### Elective and Recruitment-type Training to Freely Obtain Needed Knowledge and Skills

Sekisui Chemical has established an Elective and Recruitment-type Training program that allows employees to freely select and take the courses they want from a varied training and education menu in order to obtain the knowledge and skills they need for their individual growth and development.

There are corporate headquarters-sponsored and individual division company-sponsored trainings. For the corporate headquarters-sponsored training and education, a broad curriculum has been prepared covering such topics as basic business skill training and leader cultivation training. The individual division company-sponsored training provides training more in step with the business characteristics of each division company.

There is also a training recruitment system for all employees in the group, which is Sekisui Chemical Group's unique approach. With this system, the Group is not ordering employees to undergo training. Rather, this system provides opportunities to learn for those employees who, on their own, have a strong desire to learn.

The training recruitment system is divided into internal and external training. In fiscal 2006, the internal training consisted of such programs as Saijuku School, Sekisui Innovation School, open seminars and training conducted by technical sections. Some of the external training programs include sending employees to business schools outside the company and to Chinese Language Training Course in China as well as Dispatching Technical Experts Overseas.

#### Main Elective and Recruitment-type Training Programs Conducted in Fiscal 2006

#### <Internal>

#### • The Saijuku School (administered as a Management School until fiscal 2005)

combines intensive courses led by visiting university professors with practical themes so that participants can improve their skills and knowledge to become globally-oriented leaders with the ability to independently craft strategies. The aim of this course is to unearth and cultivate the successive generation of leaders from among the younger employees (140 participants from fiscal 2003 to fiscal 2006).

#### Sekisui Innovation School (from fiscal 2003)

A Sekisui Chemical director serves as the headmaster of schools and by creating a one-on-one relationship between teacher and pupils, the goal is to educate young employees (assistant managers or managers) responsible for the future of Sekisui Chemical Group. This school serves as a place supporting human resource exchanges that go beyond the frameworks of department and type of job (417 participants from fiscal 2003 to fiscal 2006).

#### Open Seminars

These intra-group seminars aim to improve the needed business skills regardless of business field and type of job. Employees can freely select the seminars that meet their needs. Presentations and coaching are used to provide them with skills that can be immediately applied to their daily work (104 participants in 9 courses in fiscal 2006).

#### <External>

#### Sending Employees to Business Schools Outside the Company (from fiscal 2002)

Courses for training business professionals are being taken at business schools outside of the company. The aim is to increase exchange with employees outside the company and to polish up business skills (147 participants from fiscal 2002 to fiscal 2006)

 Chinese Language Training Course in China (from fiscal 2003) The aim of this training course is to cultivate key people for our Chinese business, which is so essential for the global development of Sekisui Chemical Group. Participants in this program are allowed to leave their duties and spend one year at a university in China focusing on learning the Chinese language (17 participants from fiscal 2003 to fiscal 2006).

#### Management Training for Employees at Chinese Subsidiaries

Between July 2006 and January 2007, a Management Training Program\* (MTP) was conducted in Beijing and Shanghai for managers at Chinese subsidiaries, key Chinese bases for Sekisui Chemical Group.

This training aims to cultivate local managers, who will be the key to expanding business in China, secure needed human resources and bring more vitality to the overall organization by establishing a common understanding with the Japanese managers. There has also been the common opinion that this training really serves to convey to the local managers the expectations the company has for them and to raise their awareness of being members of Sekisui Chemical Group. Efforts are now being made to aggressively expand these MTP activities to all workplaces.

\* MTP (Management Training Program): MTP is a program for cultivating the core managers and leaders by helping them obtain leadership skills and an understanding of organizational management. Japanese corporations have long used MTP as a means for cultivating human resources.



MTP in Beiiing

 $O \mid C$ 

I learned about the important topic of cultivating subordinates. I have big expectations for institutional and systematic support in the future.



Administrative Department. Sekisui (Qingdao) Plastic Co Ltd

Through this training, I have learned how to cultivate my subordinates, which was an area of some confusion in the past. Now I have much more confidence in this area. I think that, by applying these

experiences, I should be able to remove both physical and mental obstacles by reaching understandings with subordinates and by empowering these employees. I also hope that our superiors will fully consider the work being conducted at each department and provide us with more support regarding institutional and systematic matters. I

also have hopes for a rational incentive-based evaluation

system that can help to seriously motivate our employees.

Accounting & Financial Section,

Foundation of CSR Management

### **Refining Performance-based Evaluation**

# Training to support the cultivation of subordinates began along with other steps to improve our performance-based systems, raise individual abilities and improve results for the organization

### Enhancing the Fairness and Credibility of Assessments

Supporting Individual Growth for the Mid- to Long-term through Better Communication between Superiors and Subordinates

Performance-based evaluation is not intended to create distinctions among employees. Rather, each employee works with a sense of individual growth and job-satisfaction and translates this into concrete results. The company impartially evaluates these results and rewards employees appropriately with benefits and rewards. This system encourages the setting of higher, more challenging targets, which in turn leads to personal growth and the development of the company. These are the objectives of Sekisui Chemical Group's performance-based evaluation.

For such a policy to be put into practice and take root, however, it is essential not only that the impartiality of evaluations be maintained and their credibility enhanced, but also that the company support employee efforts to achieve ever higher goals. In addition to the conventional evaluation and remuneration system, efforts to improve communication between superiors and subordinates are currently being made in order to encourage individual employee growth over the midto long-term.

# Sekisui Chemical Group's Conception of Performance-based Evaluation



#### Start of Subordinate Cultivation Support Training for Managers

From fiscal 2006, Sekisui Chemical launched a three-year program for the cultivation of young employees based on our mid- to long-term management policy.

This program does much more than simply providing the education and guidance suitable for young employees. It also incorporates Subordinate Cultivation Support Training for the managers in charge of evaluating and instructing subordinates. In the middle of January, we conducted group training in Tokyo and Kyoto for superiors in departments accepting new employees. During this training, participants look back over the past year to confirm the degree of growth and cultivation of new employees in their departments and the future challenges in training new employees. Starting with the basics of career development, the participants learn concrete methods for accurately grasping their subordinates' characteristics and abilities to support their professional development.

The ultimate goals are to apply the lessons learned through this training at the workplaces, realize human resources cultivation best suited for each new employee and provide sound advice to help them draw their own career plans.

#### Subordinate Cultivation Support Training Curriculum

	<u> </u>
Orientation	Significance of Subordinate Cultivation and Confirmation of the Superior's Role
Grasping the Current Status of Subordinates	Grasping Basic Skills for Professionals and Individual Characteristics Grasping Direction Based on Personality Type
Improving Career Management Skills	Career Consultation Practice Coaching Skills Stress Management
Summary	Introduction of Internal/External Career Support Measures Establishing Cultivation Themes and Drafting Action Plans for Superiors

#### Systems That Link Achieved Targets (Results) with Remuneration and Enhance Fair and Transparent Evaluations

Sekisui Chemical has created a system that links achieved targets (results) with remuneration in the belief that superior performance can be obtained if each employee is satisfied with the treatment he or she receives and finds a job satisfying and rewarding. Bonuses are calculated on the basis of the performance of the individual employee as well as each division company's and overall corporate business results, while salaries reflect not only business results, but also personal growth and progress in achieving targets.

We believe that enhancing the fairness and credibility of performance evaluations requires us to consider the opinions of both the evaluators who actually operate the system and the employees to be evaluated. Consequently, we conduct regular questionnaire surveys of both. The Evaluation System Council, established for labor-management discussions, uses the results of the surveys to improve the system and its operation.



### **Creating Safe and Secure Work Environments**

We are bolstering our framework for cultivation and support of the successive generation of employees to provide greater opportunities for women. We are dedicated to providing lively, safe and secure work environments that respect a diversity of values



# Creating Work Environments Where All Employees Can Work Lively

Launch of the *Kirameki* Life Promotion Office to Create Safe and Secure Work Environments for Women

In January 2007, Sekisui Chemical launched the *Kirameki* Life Promotion Office to expand the range of work supporting participation by women and strengthen the cultivation and support of successive generation of employees.

The *Kirameki* Life Promotion Office consists of six promotional members chosen from each division company as well as three members of the secretariat (CSR Department). It is tasked with crafting and guiding specific policies and plans to increase the number of women recruited and the areas and fields in which they are deployed, and to create work environments and atmosphere that supports, welcomes and



inspires women.

Sekisui Chemical recognizes that the participation of women is indispensable for our future growth. One approach we have taken to create lively work environments for women is to set 30% or more as the target of women recruited each year by fiscal 2008. By describing in our recruiting efforts the systems and projects established for this purpose, we are actively recruiting ambitious and talented women.

In our Housing Company, we are reorienting projects and workplaces to capitalize on female perspectives and sensibilities regarding areas as the sales of new house and house renovation business, and are actively working to attract female candidates.

# VOICE Work environments and home

environments are changing all the time. I want to help create work environments that offer the best possible modes of working to suit both the company and me.

Changes in the work and home environments mean that I have to change the way I work. Providing systems and environments that enable

employees to find workstyles that work best for them is the best way to give each employee the wholehearted support he or she needs.

For women, childbirth and child-rearing are events that take us away from the workplace for a certain period. If I can work at home during that time, for example, I feel better, knowing that I'm maintaining my connection to the company.

In the future, I hope that all employees can adopt the best work style for their needs, regardless of sex. To make *Kirameki* Life a reality, I'm working as a member of the *Kirameki* Life Promotion Office, helping to develop a variety of activities to create safe and secure work environments for everyone.



Fumika Kaneko Product Development I, Technology Department, Housing Company, Sekisui Chemical Co., Ltd. Foundation of CSR Management

# Expanding a Childcare Support System for Balancing Childbirth and Childcare with Work

Sekisui Chemical Group is working hard to foster work environments where everyone can balance family life with work, throughout life events such as childbirth and childcare. As part of that effort, in April 2007, we established a new childcare-support system, enhancing and extending the provisions of the previous framework.

In the new system, economic support for employees during childbirth and childcare are extended. Moreover, new paid-leave systems are offered: family leave (three days per year, which can be taken in half-day increments) and child nursing leave (five days per year).

We are also taking steps to promote and entrench an atmosphere that encourages employees to use this system. The Group is producing and distributing a guide, the Childcare Support Guidebook, enabling employees to share information with the workplace during their leave, and holding seminars to raise awareness among the management and superiors.

Currently the Group enjoys a 100% return rate from childcare leave.

# Number of Employees Taking Childcare and Nursing Care Leave



#### Childcare and Other Support Systems at Sekisui Chemical

Childcare leave	Leave which previously extended only until the child was a year and a half old now extends to the end of the month of the child's third birthday.
Childcare assistance	Employees on childcare leave are paid 30% of their salary before start of leave, until the child is a year and a half old (maximum ¥90,000/month).
Shortened work hours for childcare	Payment period which previously extended until the child was three years old now extends until the child enters primary school. This benefit can be taken twice for the same child. Work hours can be reduced by two hours per day.
Changes in work hours	Up to 60 minutes per day of work time can be advanced or postponed until the child enters primary school. Time can be taken in 30-minute increments.
Cafeteria plan	<ul> <li>For employees on reduced work hours for childcare, points are added until the child enters primary school.</li> <li>The period of use for childcare purposes (daycare fees, babysitting fees) is extended until the child enters primary school, instead of until the child's third birthday as previously. Male full-time employees are now also eligible.</li> </ul>
Child nursing leave	Child nursing leave (five days per year) can now be paid leave (using accumulated annual leave).
Family leave	All employees, including managers, can obtain three days paid leave per year until the child graduates from primary school.
Systems for rehiring of retirees	Examples of use: parents day, athletic meets, PTA meetings Reemployment of former employees who retired due to marriage, childbirth, childcare or accompanying a transferred spouse (to be introduced in fiscal 2007).

# Work Environments That Facilitate Opportunities for Elderly People

Against the backdrop of a rapidly aging society, when the revised Law Concerning Stabilization of Employment of Older Persons came into effect in April 2004, employers were obligated to take measures to effect the stabilization of employment for elderly people, including raising mandatory retirement ages and introducing systems for continued employment.

Sekisui Chemical established and has operated a reemployment system for employees up to age 65 since fiscal 1993, and with the adoption of the revised law, all group companies introduced such systems.

In addition to extending employment periods, we also plan to develop systems that will utilize throughout the entire group the extensive expertise that employees have acquired throughout their long careers and ensure it is handed down to the next generations. We are also taking a variety of measures to ensure that employees enjoy comfortable lives after reaching retirement age by creating work environments that allow for a variety of working styles including the option to work shortened hours.

#### Process Leading Toward Rehiring



# Work Environments That Facilitate the Employment of Disabled Persons

Sekisui Chemical is committed to creating work environments that are safe for disabled persons and enable them to use their skills to maximum effect. In fiscal 2006, the disabled comprised 2.17% of the Group workforce. The entire group continues to work hard to expand employment of disabled persons.

The government of Osaka has produced an instructional video to promote awareness regarding recruiting of the disabled, using Sekisui Chemical's activities as an example of good private-sector recruiting practices. Through this and other means, Sekisui Chemical is not only extending employment opportunities for the disabled within the Group but is also contributing on this front to society as a whole.

#### Percentage of Disabled Persons Employed



# Foundation of CSR Management

Data

# Many Peoples, in Many Different Nations, Are Active

Sekisui Chemical Group operates businesses on a global scale. The number of employees active outside of Japan, encompassing 12 nations, is 2,818. Regular meetings for employees are held for the various sectors of business to encourage exchanges across national and regional boundaries, gathering together members from each and every nation. In fiscal 2006, the Group held a Sekisui Chemical Group policy presentation, attended by representatives of overseas subsidiaries, and such forums for the exchange of ideas are gradually increasing.

In the future, as the opportunities for non-Japanese to work in Japan are gradually increasing, we intend to pursue actively the employment of non-Japanese nationals.

#### Number of Employees in Each Region



# VOICE

of my ability.

When I was a student, Japanese technology was catching on all over the world. For centuries, Japan has had close cultural exchange with China, and today I'm a big admirer of Japan's outstanding technological achievements. I came to Japan to bec

Working here is interesting and

can draw on my own strengths

to perform my work to the best

rewarding for me, because I

Xueyan Li Construction Piping Promotion Department, Sekisui Kanzai Technics Co., Ltd.

Japan's outstanding technological achievements. I came to Japan to become an engineer because I wanted to be active in the world of high technology.

When I joined Sekisui Chemical I was assigned to the Kyoto Research & Development Laboratories of the Urban Infrastructure & Environmental Products Company, where I developed a rainwater-storage system. Even though I was a new employee, I was entrusted with an important research theme. At last, I understood what was meant by career woman. Later, after six months' work at Tokyo Plant, I transferred to Sekisui Kanzai Technics Co., Ltd., and began working on operations in China.

I seek knowledge on a wide range of topics, from the basics to specialized fields. Sudden problems erupt constantly, and although my home country is China, the work is a daily struggle. But I always find it interesting and rewarding, because I draw on my own strengths to get the job done.

Sekisui Chemical Group is continuing to expand our operations throughout the world. I'm looking forward to making a difference in this field, inspired by the fresh imagination I bring to my work as a woman.

# Group-wide Extension of the Orphan Education Pension and Scholarship Systems

In fiscal 1991, Sekisui Chemical began operating the Orphan Education Pension System and the Orphan Scholarship System. These systems provide support for the sound development and education of the orphans of group employees who have passed away.

At Sekisui Chemical, we consider our employees to be precious assets bestowed on us by society. Testifying to this perspective and with the mark of Sekisui Chemical's 60th anniversary, we are extending these systems to the entire Sekisui Chemical Group, further promoting the aims of the Group's CSR activities.

Under these systems, children of Group employees who passed away while employed with the Group receive a payment of ¥30,000 per month until March 31 of the year in which they reach the age of 18. The pension and scholarship systems are funded by contributions solicited from each group company.

Sekisui Chemical Group is committed to the continued support and enhancement of these systems, as part of ongoing efforts to create safe and secure work environments and support the cultivation and support of successive generation of employees.

### Employee Awareness of Work Hours

From November 2006 to March 2007, Sekisui Chemical undertook a survey of our employees to grasp how thoroughly awareness of compliance issues had permeated Sekisui Chemical Group's workforce. Using a Compliance Checklist, employees graded themselves on their level of understanding about compliance, with questions covering such topics as sexual harassment, human rights and work hours.

On work hours, a crucial element in the construction of lively, safe and secure work environments for all employees, questions were set separately for general employees and managers to confirm whether general employees were working excessive hours or suffering excessive workloads. The survey revealed that, though on the whole the rules were being observed, improvement was still needed in some areas.

Based on these checklist results, the Group is working to draft fresh proposals for the improvement of work-hour management.



#### Labor-management Relations Based on Dialogs

Sekisui Chemical Group is deeply committed to ensuring good labor-management relations based on dialog and cooperation. The president himself explains the management vision in management meetings with employees, and division company presidents hold company management meetings with employees where they explain the management situation. In fiscal 2006, we held meetings with each of the corporate headquarters directors held a meeting to explain the role and policy of his department directly to employees.

Labor union leaders of each group company participated in these meetings, engaging in fruitful exchanges of opinions with the management on current conditions and the issues faced by each group company. This kind of exchange is leading to stronger group management.

To obtain feedback from employees, who are key stakeholders in group management, the CSR Committee, chaired by the president, invited the chairperson of Sekisui Chemical Labor Union to take a seat on the CSR Committee. Through the above framework, labor and management meet frequently to debate CSR Management topics.

Finally, in fiscal 2007, labor-management negotiations shift from a group-wide basis to separate negotiation with each division company, on issues specific to individual division companies.

# VOICE

After more than 10 years of drastic changes, we've developed a strong sense of unity. I want to help make that spirit more robust than ever.

In 2007, Sekisui Chemical celebrates the 60th anniversary of its founding. Over the past 10 years, Sekisui Chemical Group achieved a



remarkable revival through the implementation of a variety of different activities, and can be proud of its results which will satisfy former retired employees and successive generation of employees.

Fiscal 2007 is also an important year because it is the second year of the current midterm management plan. At a meeting with the president held in April, as I listened to the address by President Okubo, I thought about my past ten years after joining Sekisui Chemical Group. It was a decade of upheavals for Sekisui Aqua Systems Co., Ltd., including restructuring, liaison with division companies, entrenchment of consolidated group management and much more. As Mr. Okubo explained Sekisui Chemical Group 2007 Policy directly to us, I realized the closeness of the partnership between our union, a member of the All Sekisui Labor Union, and Sekisui Chemical and its division companies.

I also felt the importance of developing a strong bond of mutual trust between labor and management throughout the Group, to form a robust and effective group-wide management framework. I hope that we will all work together in the years ahead to form a labor-management relationship based on dialog.

#### Stress Diagnostic Tests Available on the Intranet Improve Employee Mental Health Care

Sekisui Chemical Group is working tirelessly to improve occupational health and safety, prevent accidents and bolster workplace safety. The Group is also committed to supporting the mental health of our employees, and provides a wide range of support services to ensure a lively and motivated workforce.

In October 2004, the Group established a counseling room in Tokyo Headquarters, offering employees the opportunity to meet with a dedicated counselor twice a month. This move was followed in fiscal 2005 with the establishment of counseling facilities at other group business sites, staffed by counselors, industrial physicians, specialists and others to assist employees regarding their mental health concerns. Mental health seminars are also offered.

Fiscal 2007 saw the introduction of stress diagnostic tests on the Group's Intranet, enabling employees to check the status of their mental health and stress levels on a daily basis. Sekisui Health Insurance Association accepts inquiries regarding mental health by e-mail or phone or through face-to-face consultations.

In the near future, Sekisui Chemical Group intends to provide comprehensive counseling and support services for employees based on the results of their stress diagnostic tests.

Results of Using Tokyo Headquarters Office Counseling Room (Persons)



Sekisui Chemical Group's Activities on Four Mental Health Care Guidelines (Ministry of Health, Labor and Welfare)



# Five Pillars of Occupational Health, Safety and Accident-prevention Activities

In conjunction with the start of the Midterm Management Vision GS21-Go! Frontier in fiscal 2006, Sekisui Chemical Group also adopted a new Midterm Health, Safety, and Accident-prevention Plan to establish solid safety foundations, one of the Group's key management policies. The Group

conducts occupational safety, health and accident-prevention activities based on the five pillars of management, education, equipment, risk prevention and auditing.

#### **Group-wide Policy**

"Safety Takes Priority Over Everything Else" Making Safety an Unshakeable Key Management Policy Five Pillars of Occupational Health, Safety and Accident-prevention Activities

# Management • OHSMS Equipment • Intrinsic safety of equipment Education/training/development efforts • Education/training/development efforts • Education/training/development efforts • Risk Assessment • Risk assessment • Hazard-prediction (KY) efforts • Bactivities, etc. • Sa activities, etc. • Sa activities, etc.

#### The Midterm Health, Safety and Accident-prevention Plan-Overview of the Midterm Plan (fiscal 2006 - 2008)

	Fiscal 2008 goals		Main activity themes			
	(vs. fiscal 2004)	Priority activity	Main activities			
	Work-related accidents	Enhancement of OHSMS operation	Reinforce risk assessment and enhance intrinsic safety of equipment			
Production sites/R&D institutes	Zero accidents requiring suspension of business     Reduce accidents requiring no suspension of business by 50%     Zero equipment-related accidents     Commuting-related accidents     Commuting-related accidents     Caro accidents requiring suspension of business (that inflict injuries on others and on those causing accidents)     Reduce accidents requiring no suspension of business by 50%     Reduce long absences due to iillness by 50%	Overlaps of personnel with strong safety skills	<ul> <li>Reconstruct the systematic education and conduct education and training activities based on the reconstructed system</li> <li>Introduce learning by experience (into the model sections at each company)</li> </ul>			
		SPromote intrinsic safety of equipment	Create the Equipment Safety Design Standards system     Implement electrical equipment safety inspections			
		Strengthen safety auditing and daily management at business sites	<ul> <li>Conduct auditing at all the business sites (five new business sites added)</li> <li>Organize the "one-two-ten (twice a day, for 10 minutes) patrol movement at the sites"</li> </ul>			
		Encouraging activities for reducing commuting- related accidents	Analyze the cause of accidents and implement preventive steps at business sites that have frequent accidents			
	Reducing the loss costs by ¥500 million	O Promote mental-health exercises	Monitor adherence to Industrial Safety and Health Law as revised     Implementing company-wide mental-health activities			
	Work-related accidents	Strengthen safety management at the construction site	<ul> <li>Strengthen the safety management system at the construction site (at Housing Company and at Urban Infrastructure &amp; Environmental Products Company)</li> </ul>			
Construction	<ul> <li>Zero accidents requiring suspension of business</li> </ul>	Conduct safety checks	Create a mechanism for conducting safety checks and keeping tabs after improvements have been made			
sites	<ul> <li>Reduce accidents requiring no suspension of business by 50%</li> </ul>	OIntroduce risk assessment	Carry out priority tasks at the construction site and perform the tasks in other areas, too			
	<b>2</b> Zero equipment-related accidents	Promoting the "development of human resources strong in safety"	Reconstruct the safety education system and carry out educational and enlightening activities based on the reconstructed system			
	• Werk related encidents	Carry out monitoring activities	Continue monitoring activities			
overseas business sites	Reduce the occurrence of accidents by 50%	Conduct fact-finding surveys and auditing	Conduct fact-finding surveys (2004-2006)     Conduct periodical auditing (from 2007 onward)			
	Zero equipment-related accidents	Senhancement of intrinsic safety of equipment	Apply Sekisui Chemical Group's Equipment Safety Design Standards system overseas (from 2007 onward)			

#### Main Activities in Fiscal 2006

#### Production Sites and Laboratories

#### **Continuous Improvement Activities Based on OHSMS**

Sekisui Chemical Group has constructed Occupational Health and Safety Management Systems (OHSMS) at 37 domestic production sites and laboratories and conducts continuous improvement activities following the management cycle; Plan (make plans) – Do (implement and operate) – Check (monitor the result and take corrective action) – Act (improve and review).

#### Main Activities in Fiscal 2006

	Five pillars	Main activities
Management	Proper operation of the OHSMS	<ul> <li>Operation, entrenchment and evaluation of OHSMS</li> <li>Strengthening of risk assessment</li> </ul>
Education	Development of personnel with strong safety skills	<ul> <li>Safety training based on position</li> <li>Introduction of interactive training</li> <li>Re-establishment of the safety training system</li> </ul>
Equipment	Promotion of intrinsic safety of equipment	Establishment of a system of design standards for equipment safety     Conducted intrinsic safety of electrical equipment auditing
Risk prevention	Promote greater risk assessment and prevention	<ul> <li>Minimized risks through risk assessment, KY (risk detection) and HH (risky act prevention) activities at the business sites</li> </ul>
Auditing	Implementation of auditing	<ul> <li>Conducted safety, sanitation and accident-prevention auditing</li> </ul>

#### Systematic Education and Training Activities Based on the Midterm Manufacturing Development Training Plan

Based on the Midterm Manufacturing Development Training Plan established in April 2005 (see page 41), Sekisui Chemical Group is re-establishing our safety training system to focus on cultivating human resources who are experts in safety. As part of this process, we introduced interactive training equipment at model business sites in each division company. By simulating accidents that may occur at each location, this equipment enables workers to learn how to respond, the kinds of further accidents that can occur, and the degree of hazard in each situation (for the results of training, see p. 80).

#### Newly Established Safety Training System

Р	rograms	Description
	Required programs by position	<ul> <li>Targeting new managers and new senior managers</li> <li>Training in safety awareness and management</li> </ul>
Basic	Qualification upgrading programs	<ul> <li>Programs focused on technology and knowledge</li> <li>Group study along with practical training</li> </ul>
	Technology and skills transfer programs	<ul> <li>Survey and research in technology and skills transfer methods and systems</li> <li>Technology and skills transfer conducted at each business site</li> </ul>
Supplementary	Special training programs	<ul> <li>Retraining programs for persons responsible in departments where safety monitoring results indicate problems</li> </ul>

#### Sample activity: Opening of an Interactive Safety Workshop at Shiga Minakuchi Plant





Introduced interactive training equipment

In August 2006, Sekisui Chemical Shiga Minakuchi Plant launched an interactive safety workshop, where employees learn about the dangers inherent in equipment and tools. Since the launch, the plant has been conducting the workshop on a regular

Notice board for safe work



Training with fire extinguishers

monthly basis, and so far 123 people have taken part. The plant plans to introduce more interactive equipment in the near future.

Voice: A Participant in the Interactive Safety Workshop I'm really glad I took part. We got valuable hands-on experience about routine accidents that can happen in the workplace, like getting pinched or caught in equipment.



I'm going to apply this experience to do every task calmly and correctly, to prevent accidents.

Kenji Kawata Interlaver Film Section. Sekisui Minakuchi Kako Co., Ltd.

#### Activities to Ensure the Intrinsic Safety of New and **Existing Equipment**

Intrinsic safety, which is the implementation of appropriate safety and accident-prevention measures relating to equipment, is essential for preventing occupational and

equipment-related accidents. To promote intrinsic safety of new equipment, Sekisui Chemical Group has drafted a set of equipment safety design standards.

In fiscal 2006, along with starting the application of B standard as common safe design standard, we also promoted the creation of C standard as individual safe design standard (see figure below). With respect to existing equipment, we have been conducting equipment safety auditing with the primary objective of bolstering accident-prevention (fires and explosions) and taking intrinsic safety measures since fiscal 2004. Inspections of electrical equipment (one of the leading causes of fires and incipient fire accidents), begun in fiscal 2005, were conducted again at 10 business sites in fiscal 2006.



\* C standard expected to be completed in fiscal 2007

#### Health, Safety and Accident-prevention Auditing **Conducted at All Production Sites and Laboratories**

Health, safety and accident-prevention auditing are conducted at all production sites and laboratories each year to verify that appropriate occupational health, safety and accident-prevention activities are being conducted in accordance with OHSMS. People in charge of safety at corporate headquarters and each division company visit each production site and laboratories and assess the status of occupational health, safety and accident-prevention activities, based on the 82 items prescribed in the Health, Safety, and Accident-prevention Assessment Booklet. The auditing results are reported to the corporate president and director in charge of safety matters.

#### Health, Safety and Accident-prevention Costs

The costs related to health, safety, and accident-prevention in fiscal 2006 (see p. 80) increased by 4.8% from the previous year. Investment rose by 20.4%, while expenditures as a percentage of total investment increased by 0.1 of a point to 7.0%. Loss costs dropped by 39.6% compared to the previous year, achieving the target set in the midterm plan of not more than ¥300 million in loss costs. We aim to reduce losses further over the near term.

In response to work-related accidents that occurred during fiscal 2006, we have taken such measures as improving our equipment, work procedures and employee training.

#### Amount of Loss



Loss costs: Expenses, including man-hours, required to respond to occupational accidents, equipment accidents, commuting accidents and long-term hospitalization.

#### Number of Work-related Accidents

The number of work-related accidents in Sekisui Chemical Group during fiscal 2006 declined significantly from the previous year, with significant improvement in the frequency of accidents. However, severity was essentially unchanged. We will continue to conduct safety activities under OHSMS with the aim of achieving a zero-hazard workplace.



\*1 Frequency = (number of casualties per total working hours due to a disaster/total work hours) x 1,000,000 \*2 Severity = (days of labor lost/total work hours) x 1,000

\*3 Source of information for Japanese manufacturing industry: Ministry of Health, Labour and Welfare "Survey on Industrial Accidents"

\*4 Sekisui Chemical Group data: 33 production sites and 3 R&D laboratories

#### Number of Equipment-related Accidents

As a result of thorough efforts towards the daily management and intrinsic safety check of our equipment, and the planned renewal of aging equipment, the Group repeated its feat of the previous year in achieving zero equipment accidents.

#### Number of Equipment-related Accidents\* (Calendar Year)



Number of Commuting-related Accidents

There were 75 commuting-related accidents (including personal injury, damage to property, and disability incurred while commuting to or from work) in fiscal 2006, an increase of 15 from the previous year. In fiscal 2007, we plan to apply the Safe Driving Rulebook we prepared in fiscal 2006, providing training and guidance to raise each employee's awareness of hazards, in a bid to reduce commuting-related accidents.

#### Number of Commuting-related Accidents\*



\* Total number of cases including cases of both damage inflicted and damage incurred. Includes damage to both persons and goods.

#### Long Absence Due to Illness

The number of extended employee absences due to illness (absences of 30 work days or more) was 38, roughly unchanged from the previous year. To reduce the number of long absences, the Group is taking measures to increase the percentages of employees undergoing health checkups and conducting thorough post-checkup follow-ups, as well as taking steps to promote measures for mental health.





\* Long absence due to illness: Absences due to illness or injury that last 30 days or more (according to Sekisui Chemical Group standards)

#### Kyushu Sekisui Industry Co., Ltd. Wins the Saga Labor Bureau Award of Excellence

At the Saga Prefecture Occupational Health and Safety Conference convened in October 2006, the director of the Saga Labor Bureau conferred the Award of Excellence on Kyushu Sekisui Industry Co., Ltd., for that company's independent development of health and safety management activities.

## Safety Activities at Kyushu Sekisui Industry Co., Ltd.



#### Voice: A Safety Staff Member

I feel that the Award of Excellence we received from the director of the Saga Labor Bureau is recognition for the results of constant efforts in health and safety activities at Kyushu Sekisui Industry Co., Ltd., which we conducted in sync with activities across Sekisui Chemical Group. This award will encourage us to press even further in enhancing our safety efforts, to ensure the safety and health of every employee.



Shinji Tashiro

Safety Staff Member, Management Control

Co., Ltd.

Department, Kyushu Sekisui Industry

#### House Construction Sites

#### Safety Checks and Whole-site Safety Patrol Check Implemented at House Construction Sites

Sekisui Chemical Group conducts safety checks at all house construction sites to ensure the safety of our employees and those of partner companies working there as well as that of customers and others in the vicinity of the sites.

In addition to these activities, in fiscal 2006, we increased the frequency of patrols by construction site managers, to make



sure that measures were being taken to prevent any building structural collapses and accidents. A Whole-site Safety Patrol Check system was implemented, in which items are recorded on a safety check list and submitted to superiors.

Construction site safety diagnosis

25	t•1	拠点: 施工管理者·		_		्यः	1	리 : -		_	ĩ	_	(D) #
9	No	チェック項目	35	4.2	2.4	1 2		:			7 25		4 8
-			***	/	7	/	, 	/	1	١,	1	/	1
	,	設定の定規の事件(無対応症)の検知性(に近った)目を認 や安全気がに基下したか	Ø.,			$\square$		-		1			<u> </u>
	2	料モン連進の確認に立ちの が調査しているか	an kan		-	<u> </u>				<u> </u>			<u>†</u>
	ſ,	#11.00em204235359126-645		-	$\vdash$		-				-		-
	4	発展すりやの点312時1,75cmが1.3557 (1750年)又1m37 場合に、発告すりの時によりの時に中5人の場合の	1.1	-	⊢		+ -		-		-	-	
	L	内に対応必須では効果が起これ、必予想を活用しているか。			÷	-		-		-	+ -	-	-

#### Introduction of Risk Assessment Methods at Construction Sites

In fiscal 2006, we began introducing to construction sites the risk assessment methods already applied in production sites and laboratories. The purpose of this initiative is to uncover, identify and evaluate risks in construction work. To get rid of the risk factors at construction sites, we review and improve work procedures and methods regarding the serious risks. In fiscal 2006, the methods were introduced at 21 new-house sales companies (974 people), and implementation is in progress.

#### **Number of Work-related Accidents**

Although the number of work-related accidents declined at Fami S (renovation business) department by two incidents, the number increased by three incidents in 2006 at new-house sales companies, raising the annual total by one, to 43 cases. We will continue to introduce and deploy safety diagnoses and risk assessment methods, to strengthen safety management at construction sites.

#### Number of Accidents at Construction Sites (Calendar Year)



#### **Overseas Production Sites**

#### Survey of Health, Safety and Accident-prevention

Until recently, safety audits were carried out at only a few of Sekisui Chemical Group's overseas production sites, so an accurate grasp of the status of work-related accidents there was unavailable. To correct this status of affairs, in fiscal 2004, the Group undertook a survey of health, safety and accident-prevention measures at its overseas production sites. This survey was completed in fiscal 2006 as scheduled.

The Group plans to implement regular audits based on the results of this survey. Using these audits, we intend to raise the level of safety activities at each business site, and to extend the intrinsic safety measures and safety activities conducted in Japan to the Group's overseas production sites.

#### **Monitoring Work-related Accidents Overseas**

To obtain an accurate grasp of the status of work-related accidents at overseas production sites, and to deploy appropriate safety activities to tackle them, the Group began monitoring the status of work-related accidents at overseas production sites (United States, Mexico, Thailand, Australia, South Korea, China and various European countries) in fiscal 2005. Although an overall declining trend was discovered (a reduction of 51 from the previous year), the number of accidents was found to be on the rise in China.

By continuing this monitoring program, we intend to obtain an accurate grasp of work-related accidents and carry out safety activities tailored to the needs of each business site, to bring the number of work-related accidents relentlessly downward.

#### Status of Work-related Accidents at Overseas Production Sites (Calendar Year)



Results of Survey of Health, Safety and Accident-prevention at Overseas Production Sites

Fiscal 2004	Fiscal	2005	Fiscal 2	006
China 5 companies	United States	3 companies	United Kingdom	1 company
	Mexico	1 company	Netherlands	3 companies
	Thailand	2 companies	South Korea	1 company
	Australia	1 company	China	5 companies



# Foundation of CSR Management

Introducing the "three attitudes of sincerity" that form the basis of Sekisui Chemical Group's CSR Activities

### Compliance

# In order to continue earning the trust of society as a whole, we foster a corporate culture that values compliance

#### **Basic Policy and Promotion System**

In March 2003, Sekisui Chemical Group began to seriously focus our activities on compliance. And in October of the same year, Sekisui Chemical Group announced that it would promote Compliance Management that not only complies with laws, regulations and internal rules, but with corporate ethics and international business rules as well.

Since then, based on a basic policy of, "striving to be a company which is trusted throughout society, in which honesty and integrity are the guiding principles for every employee," we have worked towards the creation of a compliance system which promotes the increase of employee awareness and the proactive prevention of problems and the introduction of education and training programs that develop a compliance-oriented atmosphere. Also, in March 2006, we established compliance as one of the foundations of CSR Management.

The Compliance Committee, which was established in April 2003, was renamed the Compliance Subcommittee in January 2007, when it became a special subcommittee of the CSR Committee, which is chaired by the Group President. The Subcommittee, which convenes twice a year, is responsible for:

- Discussing basic corporate policy related to complianceDiscussing, determining and managing the progress of
- compliance action plans, and
- Determining policies and countermeasures regarding major company-wide compliance issues.

Basic policies and measures discussed by the Subcommittee are initially communicated to promotion managers at each business site through Compliance Promotion Committees set up within each division company and at the corporate headquarters and are then promulgated throughout Sekisui Chemical Group.

In addition to the Compliance Subcommittee, a Compliance Advisory Board is in place to discuss countermeasures and measures to prevent recurrence in the event a compliance problem actually occurs.

### Development of a Compliance-oriented Culture

In November 2003, Sekisui Chemical Group developed a Compliance Manual (First Edition) and distributed it to all Group employees (including employees of sub-subsidiaries and temporary workers) to help individual employees comply with laws, regulations, internal rules, and corporate ethics. Furthermore, portions of the manual affected by amendments to laws, regulations, and internal rules made after the issuance of the First Edition were revised in October 2006 to correspond with these amendments, and two items were added. This revised Second Edition was subsequently published. Moreover, meetings explaining the revisions of the Second Edition targeted at Sekisui Chemical Group employees were held 6 times (from November to December 2006), with a total of 144 participants.

In addition, we are also holding compliance training sessions for employees, executing monitoring surveys to check the compliance status in each department and promoting employee awareness of this issue.

**Compliance Management Philosophy** 



#### Compliance Promotion System



# Compliance Promotion Example

A compliance system is being constructed at the three companies of Sekisui Heim Keiji Co., Ltd., Sekisui Heim Osaka Co., Ltd., and Sekisui Heim Hanna, Co., Ltd. based on instructions from the Compliance Promotion Committee and Kinki region branch of Housing Company. Since these three companies were conducting improvement on a case by case basis when problems pertaining to compliance occurred, the creation of a structured compliance system was considered to be an urgent necessity. Over a one year period beginning in April 2006, a compliance policy was developed, a housing-business-oriented compliance manual and compliance evaluation index were created and a compliance committee was established.

In the future, together with efforts to raise the level on compliance related activities using the compliance evaluation index, these three companies will implement compliance training for business partners as well as company employees.

Data

Compliance training consists of three basic categories: • Regular seminars for specific employee groups, <sup>(2)</sup>Ongoing seminars for all employees and <sup>(3)</sup>Seminars on individual laws, regulations and incidents.

These seminars are organized according to employee grade and subject matter and conducted according to a yearly schedule.

#### Compliance Trainings in Fiscal 2006

Description	Number of participants
Regular seminars for specific employee groups • Sekisui Chemical Senior Executives Training • Sekisui Chemical Group Directors Seminar • Newly Appointed Key Staff Seminar • New Recruits Compliance Seminar	55 63 128 70
Ongoing seminars for all employees • E-learning Course (4 times total)	an average of 13,500
Seminars on individual laws, regulations and incidents • Antitrust Law Seminar • Seminar for People Involved in Overseas Operations	648 59

# Implementing an E-learning Course

Sekisui Chemical Group posts on our intranet, compliance-related questions for Group employees to answer as part of their compliance training.

These questions are based on the items identified in the Compliance Manual. All employees of Sekisui Chemical Group are instructed to complete the questions although some questions may not relate directly to every employee's scope of responsibility.

This course was conducted over four sessions starting in March 2006. In fiscal 2007, the course is planned to include real examples from actual business operations.

## Monitoring of Activity Status at Each Business Site

Since the start of the circulation of the Compliance Manual, we conducted monitoring surveys across Sekisui Chemical Group. The purpose of these surveys is to biannually assess the status of implementation and achievements of the critical agenda (priority measures to prevent legal violations) prescribed for each department and affiliated companies.

In fiscal 2006, Sekisui Chemical Group employees conducted self-assessments on compliance using e-learning methods. It was conducted with the purpose of prompting each Sekisui Chemical Group employee to think of compliance as his or her own responsibility, and to confirm that no incidents or problems violating compliance were occurring. In the future, problems will be extracted based on the self-assessment results, and countermeasures will be considered (see p. 54).

# Development of S.C.A.N. – Whistle-blowing Program

In March 2002, Sekisui Chemical Group developed S.C.A.N. (Sekisui Compliance Assist Network), an inner-company whistle-blowing system, to prevent employees from violating laws, internal rules and corporate ethics.

In the internal rules, "protection for whistleblowers," and, "the confidentiality obligations of employees who become privy to information provided by such persons," were clearly prescribed, and a total of three whistle-blowing consultation offices for employees have been designated, one location within the company (S.C.A.N. Office) and the two other outside the company (one law office in Tokyo and one in Osaka). Anonymous whistle-blowing and consultation is possible through external whistle-blowing consultation offices.

Whistle-blowing and consultation are also possible via e-mail. Guidelines are displayed on screen to promote use in keeping with goals.

In fiscal 2006, we included guidance regarding this system on our in-house magazine to promote dissemination of the system. In fiscal 2007, we promoted thorough dissemination by including this guidance on the back of the Compliance Guide circulated to all Group employees and temporary workers in June.

# Reported Irregularities by Category (cumulative total of 2002-2006)



### Fiscal 2006 Legal Violations, etc. On-spot Inspection by the Japan Fair Trade Commission

In November 2006, in regards to the sales of polyethylene gas pipe and fittings, due to suspicion that Sekisui Chemical was determining sales prices targeted at gas related businesses together with other manufacturers, Sekisui Chemical underwent an on-spot investigation from the Japan Fair Trade Commission. Sekisui Chemical was sincerely concerned regarding the existence of suspicions pertaining to antitrust legislation, and gave full cooperation to the investigation by the Japan Fair Trade Commission.

In order to make sure that a similar incident does not occur again, Sekisui Chemical established a survey committee including independent lawyers and outside auditors as members. The corporate culture and organizational system problems that contributed to the incident were thoroughly investigated, causes were clarified and measures have been taken to prevent recurrence.

As part of the efforts to prevent recurrence, development of a system which thoroughly controls the product pricing process as well as implementation of an antitrust legislation seminar (December 2006 – February 2007 and May 2007) headed by an outside instructor, are just some of the activities being conducted.

#### **Risk Management**

# **Strengthening risk management in order to foresee and counteract management risks**

### Consolidation of a Risk Management System

#### Basic Policy for Risk Management

Sekisui Chemical Group prepared a report, Current State of Risk Management and Associated Problems, assigned responsible departments for each item related to the three risk categories of management risk, accident/disaster risk and social risk, and has established a risk management system.

Subsequently, a series of major disasters, terrorist incidents, corporate scandals, etc., encouraged us to reinforce our risk management system resulting in the creation in March 2004 of a booklet, Sekisui Chemical Group Risk Management Guidelines 2004. This publication consists of Basic Rules for Dealing with Emergencies and an Emergency Response Manual, covering such potential emergencies as natural disasters, fire and explosions, environmental pollution, product-related issues, intimidation and crime, information-related incidents and overseas incidents. Copies of the booklet were distributed to managers of the Group to ensure everyone knew and understood the content.

# Strengthening of Information Security and Response to the Asbestos Problem

In order to further tighten security, we engaged in network environment formation in fiscal 2006, with activities such as enlarging the internal auditing of Sekisui Chemical Group information security and substantiation of security level for access from overseas.

In addition, along with revising our organization, we worked to ensure fast and accurate communication to the management in the event of emergencies by revising our emergency contact network.

Also, we continued to implement measures in fiscal 2005 to address concerns about the asbestos contained in our products and construction materials at major business sites of Sekisui Chemical Group.

# Towards a Management System Which Foresees New Risks

We are now turning our attention to the creation of a wide range of risk management system incorporating response to risks that can be foreseen, such as handling of personal information and ensuring the safety of foreign local employees, staff stationed abroad, and staff on overseas business trips, which is of concern in the further development of our overseas business. Specifically, we will extract major risks upon comprehending the degree of impact risks have on business activities and the possibility for risks to become actual crises, and establish risk management rules. Furthermore, we also plan to revise Sekisui Chemical Group Risk Management Guidelines 2004 to better tailor them to actual situations.

In order to implement thorough notification and awareness of



Sekisui Chemical Group Risk Management Guidelines 2004

these new risk management rules and risk management guidelines to the entire Sekisui Chemical Group, in addition to circulating them to all Group employees, we plan to hold explanation meetings at major business sites.

## Daily Business Risk Management by Self-audits

Sekisui Chemical Group is implementing a Self-audit System for risk management in the course of daily business. This has developed into a system which is effective and easy to use at each workplace, resulting from a process which began in 1986 as activities for self-evaluating management situations by theme, and was revised to correspond with management environment changes while experiencing an expansion in target departments and evaluation contents.

The risk themes are some ten plus themes (in the form of questions) arranged corresponding to Sekisui Chemical Group business based on The Institute of Internal Auditors – Japan checklist, and consist of themes such as accounting, contracts, labor standards, and safety and health. They are applied in line with the specifics of the business affairs of each business site and department.

This system is easy to execute repeatedly and employs a checklist of questions to answer that is helpful for daily

business management. The reliability of answers are ensured through actions such as placing managers, etc. from other administrative departments as execution witnesses at the audit site in addition to inner-department staff and by checking verification data that corroborates activity achievements.

It is conducted every two years at each department. Proper auditing is ensured, such as subsequent fiscal year checking, when areas to be improved are found. Furthermore, it is helpful as a supplement to internal audits for environment, safety and quality and audits by our auditing firm. Moreover, it facilitates the recent social stance of favoring the strengthening of internal control and is expected to be effective in the endeavor of ensuring thorough business management at each workplace.

This system was introduced in all Japanese Group companies as well as the subsidiaries in China in fiscal 2006. Implementation is planned for all Sekisui Chemical Group companies, including overseas companies, by fiscal 2008.

# Implementation of Information Security Measures

Since fiscal 2004, Sekisui Chemical Group has been systematically advancing information security measures as part of risk management endeavors. In fiscal 2004, IT asset management software, electronic employee ID cards, network access verification, etc., were introduced and implemented as measures for the strengthening of security infrastructure.

In fiscal 2005, we promoted the application of a monitoring system for the thorough implementation of visual and easy-to-understand information security measures. Moreover, in fiscal 2006, we expanded the application range to facilitate the thorough operation of these measures and implementation in management throughout the Group.

The internal audit for information security, which began in the second term of 2005, was executed at 13 business sites within Japan and 8 business sites abroad (China) in fiscal 2005. To this we added 26 business sites within Japan and 6 business sites abroad (Europe) in fiscal 2006, making the total number of business sites that underwent auditing 53. In the future, we plan to continue systematically advancing this audit.



Information security internal audit at a overseas subsidiary

# Dealing with Globalization

In a climate of progressing corporate globalization, there are many employees at Sekisui Chemical Group as well who are posted overseas or go on overseas business trips. Thus, the instances of these employees accessing information systems located in Japan from their overseas posts have also increased.

In order to maintain the information security environment in such instances equal to that of within Japan, we created a mobile network environment that utilizes as keys electronic employee ID cards, which have already been introduced. This is a framework which combines electronic employee ID cards along with IDs and passwords to allow access to the information system based in Japan from the Internet. Since this is a framework that only allows employees who have been issued electronic employee ID cards to use the system after passing an identification procedure, we can expect this to be effective from a security standpoint.

In the future, we plan to introduce the same framework for mobile users within Japan as well. Furthermore, in order to keep up with the increasingly complex network environment and corporate globalization, by newly promoting the construction of an internet environment, we are implementing measures so that we do not lag behind with regards to handling security.

## **Response to Asbestos Concerns**

#### Summary of Activities to Date

Sekisui Chemical Group is actively advancing activities to address asbestos concerns. Continuing upon the activities of fiscal 2005, we focused mainly on the following in fiscal 2006.

- Preventing the impact of house demolitions on employees and the surrounding areas
- Ocontinuing health surveys and medical examinations for employees including former ones who have handled asbestos-containing products.

#### Activities at House Demolition Sites

At house demolition sites, the Asbestos Removal Work Guide created by Sekisui Chemical, using work procedure instruction sheets and asbestos handling guides prepared by related organizations as reference, is circulated to construction supervisors and individuals involved in work at the site.

Furthermore, we are conducting special education about asbestos targeting our employees and contractors. A total of over 300 people have participated at 8 locations to date. We are working towards making our working environment thoroughly safe.

Furthermore, we follow all laws, administrative guidelines as well as engineering guidelines of the housing industry in wetting

and hand-removing components which definitely contain asbestos and components which may contain asbestos. In addition to this, we are extending consideration to neighboring residents through actions such as installing dust-proof



Asbestos material packed to prevent dispersal

sheets to prevent dispersal of asbestos. Regarding workers involved in asbestos removal, in addition to wearing protective clothing, protective goggles and dust masks during work, they take periodic health examinations.

# Addressing Current Employees and Former Employees

The schedule regarding health examinations for current employees and former employees is posted on the web site or sent by mail (current employees are notified via e-mail). Individuals who want to undergo health examinations are then given examinations.

Moreover, we provide a compensation system for current and former employees as measures for cases when health problems are discovered.

### **Disclosure and Communication**

# Sekisui Chemical Group delivers CSR Management by advancing the processes of disclosure and communication with stakeholders

#### **Establishment of Disclosure System**

Sekisui Chemical Group recognizes the importance of adequate and proactive disclosure and two-way communication based on this disclosure for promoting mutual understanding and developing trusting relationships with all stakeholders.

In December 2005, we clearly stipulated its Disclosure Principles as its basic policy for putting these principles into practice.

In fiscal 2006, we began convening meetings, bringing together the persons responsible for liaison about company information in each workplace on a quarterly basis to ensure that the above principles are thoroughly understood and that information is disclosed. Originally, the persons responsible at all division companies had gathered regularly for this purpose. Due to differences in the operating characteristics of each division company and the wide-ranging nature of the information in question, however, in fiscal 2007, it was decided to hold such meetings on an individual division company basis.

Based on the Disclosure Principles, Sekisui Chemical Group is working to communicate closely with all stakeholders, and to reflect the evaluations we receive in our business operations as appropriate.

Disclosure Policy http://www.sekisuichemical.com/ir/disclosure/index.html

## Distribution of Sekisui Chemical Group CSR Pocket Guide

In June 2007, Sekisui Chemical Group prepared a volume called Sekisui Chemical Group CSR Pocket Guide and distributed it to all employees, including temporary workers. This booklet is a valuable tool employees can use to think about CSR and how it is involved in their own work.

CSR Pocket Guide was the result of the opinion voiced by employee representatives who attended the first CSR Committee. The employee representatives stated that "We understand the CSR way of thinking, but many of the employees on-site say that they really don't know how to fit CSR in their work and so why don't you have the company create a tool that will provide us with the opportunity to think about CSR."

CSR Pocket Guide describes the Group's CSR efforts in

accessible terms, illustrated with examples of CSR activities for the workplace. Collated in a handy pocketbook format, CSR Pocket Guide can be carried around for easy reference when concerns arise.

We are dedicated to spreading the CSR message Group-wide. In addition to disseminating Sekisui Chemical Group CSR Pocket Guide and CSR Reports, the Group is initiating dialog at each workplace.



Sekisui Chemical Group CSR Pocket Guide

### **Communicating with Various Stakeholders**

Sekisui Chemical Group maintains an ongoing process of dialog with all stakeholders, to deepen mutual understanding and build relationships of trust.

Stakeholders	Means of dialog and information disclosure, philosophy and examples of dealing with stakeholders	
Customers	Reflection of customer's feedback in product development	
Business connections	Regular meeting with business partners	
Shareholders/ investors	Publication of annual reports and business reports Management briefings and visits to investors	
Employees	Meetings with the management, dissemination of information via Intranet and distribution of in-house magazines and awareness surveys	
Local communities	Participation in regional environmental preservation activities Convening of regional environmental dialogue	
Global environment	Reducing the environmental impact through products and business activities, environmental consideration in business activities	
Government and municipal offices, public administration	Dialog with governmental sectors	
Education/Research institutions	Assistance in research and joint research Educational support at the junior-high, high-school and university levels (including dispatching lecturers to schools and universities and accepting plant tours)	
NPO/NGO	Support for environmental activities through environmental preservation funds Joint conduct of regional environmental preservation activities	

### Expanding Dialog with the Supply Chain

The operations of Sekisui Chemical Group vary for each division company. Our business partners include not only materials and parts suppliers but also production and installation collaborators, sales representatives and others.

In each area of operations, we are strengthening our relationships with business partners and working to provide better products and services. Vehicles for liaison with business partners include the *Heim Kyoei-kai* in the housing business, the *Eslon-kai* in the pipe business and the *Tsutsumi-kai* in the packaging materials business.

These liaison groups provide a vital forum for communication with our business partners. In April 2007, the Group conducted a CSR survey for business partners, promoting CSR activities throughout the supply chain.

# Communication with Stakeholders ①: Liaison with Labor Unions, Exchange of Views between the Management and Employees

At Sekisui Chemical Group, we view our employees as precious assets bestowed on us by society. We take every opportunity to engage in direct dialog with employees.

In fiscal 2005, the Group's director in charge of CSR met with Sekisui Chemical Labor Union executives to discuss CSR themes, engaging in a full and frank exchange of views.

The Group followed up this initiative in fiscal 2006 with briefings for the union executives on the subject of CSR in Sekisui Chemical Group. At the same time, the Group partnered with the union to conduct a survey of awareness on CSR in Sekisui Chemical Group. The results of this survey made clear that, while awareness of the environment, CS & Quality and compliance matters were relatively high in each workplace, room for improvement remained in the area of communication.

The management places a high value on dialog with employees. At meetings with the management in fiscal 2006 (see p 55), corporate headquarters directors explained the management vision and took part in a lively exchange of views regarding CSR activities.

The CSR Committee was reorganized in fiscal 2006 (see p. 13). As part of this reorganization, the chairman of Sekisui Chemical

Labor Union as well as female employees were added as stakeholder representatives.

Sekisui Chemical Group continues to work hard to seek out the opinions of employees and reflect them in the Group's management.



CSR Committee

# Communication with Stakeholders 2: Vision Caravan 2006

Every year since fiscal 2002, the president of Sekisui Chemical has personally visited workplaces, to communicate the management vision directly to employees and to listen to opinions and suggestions from employees.

In fiscal 2006, the first year of the current Midterm Management Vision, GS21-Go! Frontier, Vision Caravan 2006 toured a total of 13 group companies, plants and laboratories across Japan. Some 860 people from 105 group companies took part in this event, engaging in passionate discussions regarding issues and activities involved in opening new growth frontiers, as called for in the Midterm Management Vision GS21-Go! Frontier.

In the future, the Group will provide further opportunities for dialog between the management and employees, touching on a variety of contents and themes.



# Communication with Stakeholders 3: Dialog Through Websites and Events

Sekisui Chemical Group values communication with its stakeholders. In December 2005, the Group created a website called Eco-Dialog and offered a discussion entitled, Let's Talk About Ecology! The program encouraged all interested people to participate in a discussion of environmental issues. At Eco-Dialog, regarding waste, water, energy and other ecological issues, not only were comments made concerning remarks submitted by participants, but also participants were able to engage in a discussion with the site's environmental expert, Professor Tori. The site has received over 200 written comments since its opening.

Fiscal 2006 was also the year of Eco Products 2006. At this event, Sekisui Chemical Group featured the Eco Future Lab in our booth. Visitors were not only provided the opportunity to become more aware of environmental issues, but also to engage in far-reaching dialog and to take active steps to preserve the environment.

The event contrasted two possible futures: One in which nobody does anything about the environment, and another in which each individual does his or her part, however small, to grapple with environmental issues. People who participated in the event were engaged in dialog about ecology and encouraged to think about the issues raised. Finally,

participants were asked to sign My Eco Declaration describing the steps they would take individually for the environment. Eco Future Lab attracted about 3,000 participants in its three days of operation.

On its website dedicated to explaining the Group's CSR activities, Sekisui Chemical Group provides a framework for canvassing the opinions of the site's visitors regarding the environment and the Group's CSR efforts. This website serves a valuable role in providing feedback to corporate management

on stakeholder opinion. By linking our websites with events such as those just described, Sekisui Chemical Group is deepening our ongoing dialog with stakeholders.



Engaging in dialog at Eco Future Lab



http://sekisui.stadiams.jp/ (Japanese Only)

Eco Products 2006

http://www.sekisui.co.jp/communicate/exhibit/ index.html (Japanese Only)



<sup>-</sup>oundation of CSR

### **Conserving the Natural Environment and Contributing to Society**

# Sekisui Chemical Group is promoting nature conservation and social contribution activities with Environment, Successive Generation and Global at the core

#### Sekisui Chemical Group Activities to Conserve the Natural Environment

Sekisui Chemical Group has identified three areas of effort for becoming an Environmentally Creative Organization: Environment-friendly Business Activities, Contributing to the Environment through our Products and Social Contribution in Environmental Areas. We recognize that community-based nature conservation activities are an important part of our CSR activities, and are working hard to promote such efforts.

Sekisui Nature Study Course (p. 28) trains leaders in nature conservation and serves as a forum for activities to contribute to each region. This Study Course has served as a touchstone for ecologically oriented activities in companies throughout the Group.

In addition, through activities in support of NPOs and NGOs, as well as regional activities at every business site, we raise the consciousness of our employees and encourage participation in volunteer programs. All of these efforts contribute to a corporate culture and atmosphere that place importance on the environment.



### The Five Thousand Acorns Project at Kyushu Sekisui Industry

The area around the plants of Kyushu Sekisui Industry Co., Ltd. is blessed with natural beauty, and the company works hard to maintain harmony between its plants and the regional environment. In addition to pushing forward environment-friendly business activities, such as zero-emission and ISO 14001 activities, in fiscal 2001, the company opened a biotope on plant grounds. The flora and river fauna at this site increase with each passing year.

Kyushu Sekisui Industry followed this effort in November 2005 with the Five Thousand Acorns Project. In this project, the company planted 5,000 trees around the plant, enhancing the environment with a verdant green belt. After picking acorns at a nearby park, the company prepared the soil, planted pots, and then nurtured and transplanted the seedlings. In January 2007, after employees and their families conducted the third annual Five Thousand Acorns Project, the number of oak trees planted indeed numbered approximately 5,000. In 10 and 20 years' time, these stately trees will form a magnificent green belt around the plant, fulfilling a beautiful dream.



Planting oak seedlings into pots is fun for kids and grownups alike.



I'm going to keep doing my part to create a place where we can be together with nature and feel its power and beauty.

In this year's Kyushu Sekisui Nature Study Course, the Five Thousand Acorn Project, Part III, we nurtured acorns and transplanted the seedlings. I transplanted many of the seedlings



Shota Otsuka Equipment Section, Manufacturing Department, Kyushu Sekisui Industry Co., Ltd.

myself, carrying a spade in one hand. I got so immersed in the simple task of weeding the area around the seedlings and digging holes for transplanting that eventually I stopped using the spade and dug out the soil with my bare hands. When one phase was complete we held a barbecue for all the kids and adults. When I saw people who hadn't known each other before the project talking avidly about acorns, I realized what a great Nature Study Course this was. After a break we went back to nurturing the seedlings. The kids poured their hearts into it and had a great time with it as well.

This is my second time participating in the Kyushu Sekisui Nature Study Course, and I'm planning to take part in the next one, too. Every time I join in, the beauty of nature and the feeling of success we share simply lifts my heart. If you've never taken part in the Nature Study Course, or if you're thinking you might like to, I encourage you to join us.

### Satoyama (Semi-natural Ecosystem) Nature Observation Tour at Shikoku Sekisui Industry

Many of Sekisui Chemical Group's business sites are situated in regions of mesmerizing natural beauty, offering precious opportunities to get in touch with nature. For example, Shikoku Sekisui Industry Co., Ltd., in Saijo, Ehime Prefecture, enjoys a beautiful location close to both mountains and the sea. In February 2007, the company followed the previous year's bird-watching event with a satoyama nature observation tour based on a theme of thinking about the nearby environment by getting in touch with the nature around us.

On the day of the tour, a total of about 40 employees and local parents and their children took part. There were many participants this time who were repeat participants.

Although the group expected to see few flora and fauna, as it was still winter, a great number of natural phenomena were observed, thanks to the help of an instructor from an NPO that sponsors a local nature school and a member of the Environmental Section of City Hall. The children, smiling and

laughing all the way, collected fallen leaves and berries found on satoyama and used them to create their own unique kaleidoscopes.

We hope that this year's nature observation tour participants will serve as regional leaders in environmental conservation, and we hope to create a framework where both Shikoku Sekisui Industry Co., Ltd. and the local community work together so that they can engage in such activities



Nature observation tour in satovama

### Coastal Cleanup: Sekisui Heim Kanagawa

Sekisui Heim Kanagawa Co., Ltd., whose area of operation is Kanagawa Prefecture, joined hands with the Kanagawa Coastal Environment Foundation in August 2006 to clean up a stretch of Kanagawa's Shonan coast called the Kugenuma Coast. In recent years, this coast has become littered with garbage from summertime swimmers and driftwood from typhoons, and calls from employees to clean up this area of coast have become louder. On the day of the cleanup, a total of 150 employees and family members collected 200kg of trash.

Although currently Sekisui Heim Kanagawa carries out the cleanup once a year, the company hopes to expand the operation in the near future, with collaboration from local

residents and Sekisui Heim homeowners. The company will continue to play a vital role in the beautification and cleanup of the Shonan coast.



Coastal cleanup in full swing



Cleaning the Kugenuma Coast

# Supporting the Nature Conservation Activities of NPOs and NGOs

Since 1997, Sekisui Chemical Group has cooperated with a charitable trust, the Keidanren Nature Conservation Fund, to support activities including aid for foreign and Japanese environmental NGO-administered nature

conservation projects at



Wild Bird survey in Vietnam

home and abroad. Apart from our support for a total 62 projects, one employee of Sekisui Chemical has been assigned to the Nippon Keidanren Committee on Nature Conservation since March 1997 to support nature conservation activities.

The president of Sekisui Chemical Co., Ltd., who has served as chairman of the committee since 2002, actively participates in trips to observe overseas nature conservation projects, international symposiums involving nature conservation organizations and workshops organized by NGOs.

We also hold regular reporting sessions within the company on the status of activities of NGOs we support, while many of our employees are deepening their interest in environmental issues by participating in exchange meetings between businesses and NGOs, international nature conservation conferences and NGO project sites.

	Name of project (Country or region)	Name of NGO (country)
Continuing for 4 years	Development of forest diversity restoration model (China)	Green Earth Network (Japan)
Continuing for 5 years	Asia Wetland Initiative Phase II (Asia)	Ramsar Center (Japan)
Continuing for 2 years	Project to Help Toki (Nipponia Nippon) return to the wild (Japan)	NPO School of Killifish (Japan)
New	Mount Fuji Environmental Leader Development Project (Japan)	Mount Fuji Club (Japan)
New	IBA Preservation Operations in Asia (Asia and beyond)	BirdLife Asia (Japan)

Data

## Sekisui Chemical Group Activities to Contribute to Society

#### Basic Approach

In addition to contributing to society through its business activities, Sekisui Chemical Group is promoting its unique characteristics and assets to launch activities contributing to society in which it does business. The Group's current focus is on three keywords: Environment, Successive Generation and Global. In fiscal 2006, we continued these efforts, with special focus on successive generation issues. The Group supported research and education programs on natural science and the global environment, and presented dialog events to encourage children, the leaders of the future, to think about the environment and take action. (p. 66)



#### Charity Activities

Sekisui Chemical Group is proud to provide financial support to a wide range of activities in support of environmental, academic and cultural causes. Total support in fiscal 2006, combining charitable contributions with the value of regional voluntary activities by employees, equaled approximately ¥250 million; financial contributions were divided as shown in the pie chart below. The kind of support includes activities in support of NPOs and NGOs through the Keidanren Nature Conservation Fund, regional activities (see p. 68) and the Sekisui Chemical Grant Program for Research on Manufacturing Based on Learning from Nature, among others.

#### Breakdown of Charitable Contributions



# Contributing to Society by Fostering the Science and Technology on Which Future Generations Depend

Sekisui Chemical Grant Program for Research on Manufacturing Based on Learning from Nature

Sekisui Chemical Group operates a program known as Sekisui Chemical Grant Program for Research on Manufacturing Based on Learning from Nature. This program, launched in fiscal 2002 as part of the Group's 55th anniversary celebration, provides support for universities and research institutions that are researching practical applications of basic scientific knowledge learned from nature. In fiscal 2006, we approved and awarded grants to six research proposals and encouragement prizes to another six, out of a record 276 applications.

#### Research Proposals Awarded Grants in 2006

Scientist	Affiliation / Title	Research theme
Shin Mukai	Professor, Hokkaido University	Assembling of Nanoparticles into a Microhoneycomb Form Using Unidirectionally Formed Ice Crystals
Kenichi Morigaki	Researcher, National Institute of Advanced Industrial Science and Technology	Development of integrated model bio-membrane on solid substrates
Ryo Yoshida	Associate Professor, The University of Tokyo	Design of novel micro/ nano biomachines using self-oscillating gel that mimics heart muscle
Hideyuki Otsuka	Associate Professor, Kyushu University	Dynamic Polymer Materials based on Reversible Bond Formation
Masashi Hayakawa	Professor, Univ. of Electro-Communications	ELF Schumann resonances and monitoring of global warming
Sei-ichi Tsujimura	Associate Professor, Kagoshima University	A novel multi-primary illumination system for controlling circadian rhythms

\* University and position are those given at the time the grants were awarded.

#### Hosting Forums for Exchange with Researchers

To provide an opportunity for academic interaction, the Group hosts a series of academic forums. These events bring together researchers, including those grappling with their grant themes and those grappling with research topics in related fields.

In October 2006, we hosted a forum at Sekisui Chemical's Kyoto Research & Development Laboratories that was attended

by some 300 guests from universities, research institutes and enterprises.

Keynote speeches were delivered by Professor Ryusuke Kakinoki of the National Institute for

the National Institute for Physiological Sciences, National Institutes for National Sciences; and Professor Shigeyoshi Osaki of Nara Medical University. Poster sessions featured awardees in fiscal 2005 and members of Nagoya University's 21st Century COE Program.



lively exchange at the Forum



Keynote address by Prof. Kakinoki

#### Cooperation with Outside Organizations and Groups

Cooperation with outside organizations is becoming a deeply rooted practice at Sekisui Chemical Group. Among these programs is cooperation with Nagoya University's 21st Century COE Program, which started in fiscal 2004.

The Group remains committed to providing ongoing support for the development of successive generation technologies and human resources, guided by the view that manufacturing starts from nature and people.

# **Contributing to Society Through School Education**

#### Supporting Environmental Education for Children

Sekisui Chemical Group is a leading player in residential housing operations. To educate children about the environment, we offer education support on the theme of the home as a vital part of our daily lives and the relationship between houses and the global environment.

The Group supports initiatives at the junior-high and high-school levels as well. For high school students, Sekisui Chemical Group participates in the Nikkei Education Challenge and Quest Education Program, both sponsored by Nihon Keizai Shimbun. At the junior-high-school level, integrated

study periods and elective courses are used to present the Children's Class for House Development. Using miniature models provided by Sekisui Heim, this continuously offered program teaches basic knowledge about the house as well as the relationship between the houses and the environment.

Children also learn how to make comfortable houses, taking into account factors such as local environmental problems, barrier-free design and family life. In fiscal 2006, this program was offered at Wada Junior High School, a school operated by Tokyo's Suginami Ward.



Children's Class for House Development at Wada Junior High School

### Contributing to the Communities in Which We Do Business

#### Observing Social Studies at the Naruhodo Showroom

The Naruhodo Showroom is a facility that enables Sekisui Heim customers who are considering purchasing a house to learn about the house's performance and safety features interactively before purchasing. All showrooms are located nearby plants of Sekisui Heim.

Sekisui Chemical Group offers observation tours of the Naruhodo Showroom to children at primary and junior-high schools near its plants. The Showroom offers children the opportunity to learn about manufacturing in a fun way, about the structure of houses and about environmental problems around them. In addition to showroom activities, we actively accept tour groups from schools near our production sites, as a way of playing a part in schoolchildren's social studies.

# VOICF

All of us at the plant try to make it an interactive learning experience for the kids.

Despite the limited time available, we are able to give the children a tour of the production line and show them how to drive in pins with a board gun. The students are especially impressed by the passion people have for their work and the sheer power of the



Hisashi Akuto General Affairs Department, Higashinihon Sekisui Industry Co., Ltd.

production line. I am glad that this tour was really useful from a social-studies perspective, as it showed the students the fun in manufacturing, as well as the great responsibilities involved.

# Contributing to Society by Addressing Regional Issues

#### Helping Shut-ins to Integrate with Society

A social phenomenon much talked about recently in Japan is that of the hikikomori. Loosely translatable as "shut-in," a hikikomori is someone who withdraws from the larger society. dealing only minimally with others through family members.

At Chubu Sekisui Industry Co., Ltd., we are providing support for people concerned about this issue and to enable hikikomori to reengage with society. Since 2004, the company made concerted efforts to hire *hikikomori*, providing part-time work as assistants on production lines.

These activities began at Chubu Sekisui Industry, when they were considering such specific topics as reducing the amount of excess parts and performing zero emissions. Some of the employees suggested that the hikikomori could perform assistant work that is usually performed by employees or contracted workers.

Unfortunately, there were some people hired through this program who were unable to continue long-term and soon quit, yet so far a total of 13 individuals have been hired. Some





Attaching double-sided tape to the backs of drainers

of them have now been with Chubu Sekisui for almost three years, and are steadily improving their skills.

The company also applied a number of techniques to modify work methods. Originally used to reduce surplus materials, these techniques are now being used to achieve zero emissions and reduce costs.

Through their work at Chubu Sekisui, a number of these hikikomori gained confidence about their work ability and were able to seek other types of jobs. Going forward, as part of its efforts to train the successive generation of workers and leaders, Chubu Sekisui will continue to support the training of young people, showing them the joys of work in pursuit of individual objectives.

#### Voice: An Educator

As a first step for their children to rejoin society, we hear from hikikomori and their families who contact us in search of a place where hikikomori can put all their energy, so that they may rejoin society, Chubu Sekisui Industry was one of the earliest companies to provide such employment opportunities for the young. and we admire them for their continuing efforts. Problems such as the hikikomori phenomenon are not issues that can be solved just in the classroom. Society as a whole must pull together to build bridges for these troubled people, and we will be more than happy to help.



Masatoshi Kato Superintendent of Education, Toyohashi Board of Education

Prominence

Foundation of CSR Management

Data

# Management Benchmarks (Consolidated)



Composition of Sales by Geographical Segments



#### Free Cash Flows



#### R&D Costs





#### Total Assets



#### Capital Expenditures



#### Annual Dividend Per Share





#### Interest-bearing Debt and Interest-bearing Debt as a Percentage of Equity Capital



#### Depreciation and Amortization



#### Number of Employees


# Coverage of the Environmental Performance Data (in Japan)

Housing Company		Urban Infrastructure & Environmental Product	s Company	High Performance	Plastics Company
R&D institutes	1 company and 1 business site	R&D institutes	1 company and 1 business site	R&D institutes	1 company and 1 business site
Tsukuba R&D Site		Kyoto R&D Laboratory		R & D Institutes	
Production plants	13 companies and 10 business sites	Production plants	21 companies and 11 business sites	Production plants	11 companies and 15 business sites
Tokyo Sekisui Industry Co	., Ltd.	Shiga-Ritto Plant		Amagasaki Plant	
Kansai Sekisui Industry C	o., Ltd.	Gunma Plant		Musashi Plant	
Sekisui Board Co., Ltd., e	tc.	Tokyo Plant		Shiga-Minakuchi Plant	
Sales companies	51 companies and 74 business sites	Sekisui Chemical Hokkaido C Okayama Sekisui Industry Co	o., Ltd. ., Ltd., etc.	Sekisui Techno Molding C Sekisui Film Co., Ltd., etc	o., Ltd.
Sekisui Heim Sales Comp	anies				
Construction and Service	Companies				
85 bi	65 companies and usiness sites in total	2 12 busin	1 companies and ness sites in total	16 bi	11 companies and usiness sites in tota
Corporate headqu	arters				
R&D institutes	1 company and 1 business site	Production Plants and Headquarters	8 companies and 11 business sites		
New Business Office Deve	elopment Center	Tokuyama Sekisui Industry C Hinomaru Corp.	o., Ltd.		
		Tokyo Headquarters and Osa	ka Headquarters		
		12 busi	8 companies and ness sites in total	<b>Total: 1</b> (	02 companies and 125 business sites

\* The total number of companies and business sites do not match, since some companies have two or more business sites, and some business sites are shared by two or more companies. Sekisui Chemical Co., Ltd., is included in the company list.

### Material Balance (in Japan)

Inpu	ut		Output
Main Raw Materials •Metals •Wood, wooden building materials •Cement for exterior walls •Concrete for foundations •PVC •Polyethylene •Polypropylene •Kraft paper •PRTR-designated substances Energy •Purchased electricity •Heavy oil A •City gas Industrial water 13,30	89 thousand tons 47 thousand tons 131 thousand tons 282 thousand tons 282 thousand tons 188 thousand tons 37 thousand tons 16 thousand tons 133 thousand tons 6,752 TJ 399,480 MWh 12,211 KL 42,780 thousand m <sup>3</sup> 00 thousand tons	Sekisui Chemical Group	PRTR-designated substances•To the atmosphere389 tons•To water0.9 tonsCO2 from energy consumption309 thousand tons-CO2NOx398 tonsSOx13 tonsSoot particles18 tonsWater discharged12,038 thousand tonsCOD66 tonsTotal generated waste46 thousand tons

### **Environmental Accounting**

Scope of environmental accounting (1) Summation period: April 1, 2006 to March 31, 2007

(2) Scope of summation: 33 target production sites (as listed on p. 72) + 4 Laboratories + each department of corporate headquarters + back offices of division companies + 26 housing sales companies

(3) Principle of summation

Depreciation amounts are the same as those for financial accounting.
Investment amounts are based on budget approvals during the summation period.

• Expenditures and investments that contain other than environmental conservation activities are distributed pro-rata in 10% increments.

(4) Main Changes from Last Fiscal Year

The scope of summation charged due to business reorganization (decrease in number of production sites by one, increase in number of home sales offices by one).
Sales of environment-contributing products is a management index for the "Environmental Top Runner Plan." The contribution portion (expected effect) from sales of new environment-friendly products has been omitted.

(million ven)

(million ven)

• The non-excavating pipe renewal method has helped to reduce the impact placed on the environment during sewage construction projects. This reduced impact has been included in the calculation as an external economic effect (expected effect).

#### Environmental Conservation Cost (by Each Division Company)

	Housing Company *1		Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		Entire Company *2		
Category	Description of main activities	Costs	Investments	Costs	Investments	Costs	Investments	Costs	Investments
	Prevention of air, water and noise pollution, etc.	1,205	7	136	62	345	620	1,687	691
<ol> <li>Costs within business areas</li> </ol>	Countermeasures against global warming (energy-saving), etc.	22	21	25	125	118	110	174	258
	Waste reduction, recycling, disposal, etc.	4,118	6	421	34	511	204	5,053	257
2) Upstream/ downstream costs	Cost increases due to switch to packaging/packing methods involving reduced environmental impact, greener purchasing, etc.	368	0	60	8	54	0	493	8
3) Administrative costs	Environmental education, EMS maintenance, running costs for green action organization, information disclosure	947	22	278	6	258	13	2,665	88
4) Research & Development costs	Research & Development on environmental conservation	50	14	1,149	17	342	5	1,644	48
5) Social activities costs	Social contributions, etc.	59	0	18	0	11	0	99	0
6) Environmental damage costs	Nature restoration, etc.	0	0	0	0	10	0	10	0
Total	6,768	71	2,087	253	1,648	953	11,826	1,350	

	Housing Company <sup>*1</sup>		Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		Entire Company <sup>*2</sup>	
items	R&D expenditure	Investments	R&D expenditure	Investments	R&D expenditure	Investments	R&D expenditure	Investments
Total amount of R&D costs and investment in the fiscal period (million yen)	4,573 <sup>*3</sup>	4,947	5,612 <sup>*3</sup>	5,780	10,668 <sup>*3</sup>	6,952	24,452 <sup>*3</sup>	18,998
Ratio of amount related to environmental conservation activities to total (%)	1.1	1.4	20.5	4.4	3.2	13.7	6.7	7.1

\*1 39 business sites of housing sales companies included \*2 Total of 3 division companies and departments of corporate headquarters \*3 R&D cost is the total for all consolidated companies.

#### Environmental Conservation Cost (by Environmental Conservation Measures)

									( , , , , , ,
	Items			Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		Entire Company *2	
Category	Description of main activities	Costs	Investments	Costs	Investments	Costs	Investments	Costs	Investments
1.Prevention of global warming	Reduction of CO2 emissions, etc.	37	40	49	124	122	118	271	282
2.0zone layer protection	Reduction of Chlorofluorocarbon emissions, etc.	5	0	2	0	17	0	24	1
3.Conservation of air quality	Prevention of air pollution by reducing pollution substances	314	7	67	7	167	76	549	94
4.Prevention of noise and vibration	Prevention of noise and vibration pollution	5	0	16	0	10	21	31	22
5.Conservation of water environment, soil environment, ground quality	Preservation of water quality, prevention of subsidence	220	0	431	55	134	519	846	575
6.Waste reduction and recycling	Reduction and treatment of waste, recycling	4,580	20	1,166	60	680	204	6,434	305
7.Reduction of chemical substance	Risk management of chemical substances, etc.	400	0	7	0	233	10	640	10
8.Conservation of natural environment	Nature protection, etc.	112	3	50	6	27	3	194	12
9.0thers	Others	1,095	0	299	1	257	0	2,838	49
Total		6,768	71	2,087	253	1,648	953	11,826	1,350

### Environmental Conservation Benefits (by Each Division Company)

Description of Item effects			11-24	Housing Company		Urban Infrastructure & Environmental Products Company		High Performance Plastics Company		nce any	Entire Company			See			
		nem			Fiscal 2005	Fiscal 2006	Effect (06-05)	Fiscal 2005	Fiscal 2006	Effect (06-05)	Fiscal 2005	Fiscal 2006	Effect (06-05)	Fiscal 2005	Fiscal 2006	Effect (06-05)	page
Effects on	(2) Amount of	1. Electricity	TJ	496	486	-10	1,587	1,573	-13	1,429	1,181	-248	4,165	3,927	-238	74	
	resources	usage *4	2. Fuel	TJ	196	190	-6	214	201	-13	2,031	2,179	147	2,693	2,826	132	74
Effects within		(3) CO2 emissi	ons <sup>*5</sup>	Thousand tons	31.5	30.6	-0.9	73.3	71.7	-1.6	161.6	157.4	-4.2	313.5	308.7	-4.8	19
business Effects on environmental	(4) Volume of e pollutants of	environmental lischarged <sup>*6</sup>	Tons	5.8	3.8	-2.0	93.3	79.5	-13.8	371.5	302.6	-68.9	476.5	391.2	-85.3	76	
	wastes	(5) Wastes ger	nerated *7	Thousand tons	13.9	13.6	-0.3	12.1	10.7	-1.4	19.0	19.7	0.7	47.6	46.2	-1.4	21
		(6) Outsourced	l disposal <sup>*8</sup>	Thousand tons	0.00	0.00	0.00	0.10	0.07	-0.03	0.09	0.11	0.02	0.42	0.29	-0.13	77
Upstream/down- stream effects	Effects due to products/services	CO <sub>2</sub> reduction generation, etc	by photovoltaic c. (cumulative)	Thousand tons	95	112	17	_	_	_	_	_	_	95	112	17	
Other henefits		IS014001	New acquisitions	Numbers	0	0	—	0	1	—	2	3	_	3	4	—	
on	Others*9	Certification	Renewals	Numbers	3	4	_	7	3	—	5	6	-	18	13	—	
environmental Uthers <sup>9</sup>	Number of bu achieving zer	usiness sites o emission <sup>*10</sup>	Numbers	0	0	_	0	0	_	2	0	_	5	0	_	21	

<sup>14</sup> Conversion into thermal units uses the coefficient published by the Ministry of Economy, Trade and Industry.
<sup>15</sup> Emissions at the time of manufacturing and conversion to CO<sub>2</sub> amounts use the coefficient published by the Ministry of the Environment (calculated based on the coefficient for 2000),
<sup>16</sup> Applicable to Class I besignated Chemical Substances specified by PRTR Law.
<sup>17</sup> Amount discharged + Amount disposed of a price + Amount incinerated within own premises.
<sup>18</sup> Simple incineration + Landfill.
<sup>19</sup> Including 7 overseas business sites.
<sup>10</sup> A business site affiliated to multiple companies is counted as one.

### Economic Effects Related to Environmental Conservation Measures (by Each Division Company)

Description of effects		Housing Company	Urban Infrastructure & Environmental Products Company	High Performance Plastics Company	Entire Company *3	Remarks
Revenue	(1) Profit on sales of valuable resources	22	42	217	282	Profit on sales of valuable resources from promotion of waste segregation and recycling
	(2) Savings from simplified packaging	1	7	0	9	
Cost- saving	(3) Cost-saving through energy-saving activities	11	87	177	275	
ournig	(4) Cost-saving through waste reduction activities, etc.	13	191	677	881	Including resource-saving activities
Sub-total (a	ictual effects)	48	327	1,071	1,447	
(5) Contribu	tion to environmental conservation activities *11	583	2,448	3,148	6,179	Contribution of environmental conservation activities to added value at business sites $^{\rm *12}$
(6) External Economic Effect		4,277	3,773	_	8,050	Monetary conversion of impact from photovoltaic systems and non-excavating pipe renewal method
Sub-total (e	stimated effects)	4,860	6,221	3,148	14,229	
Total		4,907	6,548	4,219	15,676	

\*11 Excluding housing sales companies \*12 (Added value from business sites) x {(Costs within business areas + Administrative costs) / (Total production costs excluding materials costs)}

### **Global Warming Prevention**

# Energy Usage and Unit Energy Consumption During Manufacturing



### Breakdown of Energy Used

Breakdown of CO<sub>2</sub> Emissions



# Rate of Introduction of Cars Achieving Baseline of Green Taxation Plan of Fiscal 2005



#### CO<sub>2</sub> Emissions Coefficient

The conversion coefficients listed below have been used by all business sites to calculate volumes of and reductions in CO<sub>2</sub> emissions. Our aim is to more accurately evaluate results from this approach by first removing any external factors.

Purchased electricity 0.378 tons of CO2/MWh (purchases from general electric power suppliers)

Jurchased electricity	0.602 tons CO2/MWh
-	(purchases from other suppliers)
Heavy oil A	2.77 tons CO <sub>2</sub> /KL
Heating oil	2.51 tons CO <sub>2</sub> /KL
Diesel oil	2.64 tons CO <sub>2</sub> /KL
Gasoline	2.31 tons CO <sub>2</sub> /KL
_PG	3.02 tons CO <sub>2</sub> /ton
City gas	2.15 tons CO <sub>2</sub> /thousand m <sup>3</sup>
Purchased steam	0.200 tons CO <sub>2</sub> /ton

Source: "Comprehensive report detailing results of the study regarding calculations on volume of greenhouse gas emissions" (August 2002, Japanese Ministry of the Environment Greenhouse Gas Emissions Volume Calculation Method Study Team)

### CO2 Emissions in the Product Distribution Stage



High Performance Plastics Company

Amount transported in fiscal 2006: 390 million ton-kilometers

Calculation method: Either the improved ton-kilometer method, fuel consumption method
 or fuel cost method depending on the product and transportation method

(million yen)

Data

### **Resource Recycling and Saving**





# Zero Emission Achievement Criteria and Accreditation System of Sekisui Chemical Group

- (1) All outside incineration must include thermal utilization, and no landfill outside or inside of facilities (Recycling ratio 100%).
- (2) If the waste quantity is small and is a type of waste that has never been recycled before, recycling methods and relevant contractors must be identified and a service agreement must be executed. We have also established uniform evaluation criteria named the Zero Emission Achievement Evaluation List. We have a system designed to conduct internal checks and issue approvals for observance status of the evaluation criteria, legal compliance, rules and signs for waste reduction planning and management. The list obliges us to conduct inspection of outside contractors and to clarify treatment routes in order to enhance the management system through these activities.

Breakdown of Generated Waste



### **Chemical Substance Management**



# Emission and Transfer of Volatile Organic Compounds (VOC) into the Environment

### Business Site Soil Investigation

Business sites	Survey substance	Targ	et Item	Excess of the standards
	Boron, Lead, Cadmium,		Content	No
Chugoku Sekisui Industry Co., Ltd.	Benzene, Class II chlorine solvent	Soil	Effusion amount	No
	Same as above or harmful chemical substances*	Groundwarter		No
			Content	No
Higashinihon Sekisui Industry Co., Ltd.	Arsenium	Soil	Effusion amount	Yes
	Arsenium	Ground	dwarter	Yes

\* Class 1 designated harmful chemical substances 11 types

### Summation Results Based on the PRTR Law

(Calculations have been made for substances with handling volume of one ton or more at the individual business sites surveyed)

	Government	-		Emissio	n volume		T	ransfer volum	е	
Items	notification	Transaction	Emitted	Public area	In house	In house	Sewage	Transfer	in waste	Detoxification
	number		gases	water-zones	soil	landfill	system	Disposal	Recycling	
Acrylic acid	3	64.4	0	0	0	0	0	0	5.8	0
Acrylonitrile	7	61.9	0.43	0	0	0	0	0	0.47	0
Bis (2-ethylhexyl) adipate	9	4.8	0	0	0	0	0	0	0.0050	0
Acetaldehyde	11	172.2	0.12	0	0	0	0	0	0	52
Antimony and its compounds	25	46.3	0	0	0	0	0	0	5.6	0
Bisphenol A epoxy resin (liquid form)	30	238.9	0	0	0	0	0	0	0.14	0
Ethylbenzene	40	1.1	1.1	0	0	0	0	0	0	0
Xylene	63	113.4	15	0	0	0	0	0	5.7	32
Vinyl chloride	77	123,700.0	4.5	0.46	0	0	0	0	0	0
Cobalt and its compounds	100	1.1	0	0	0	0	0	0	0	0
Dichloromethane	145	777.6	10	0	0	0	0	0	1.2	0
Organic tin compounds	176	125.4	0	0.0001	0	0	0	0.23	0.47	0
Styrene	177	4,646.7	54	0.18	0	0	0	0	1.9	0
Decabromodiphenyl ether	197	99.2	0	0	0	0	0	0	12	0
Terephthalic acid	205	79.8	0	0	0	0	0	0	0	0
Toluene	227	1,840.3	299	0.31	0	0	0	0	33	501
Lead and its compounds	230	705.9	0.0004	0.0020	0	0	0.0010	0	3.2	0
Di-n-butyl phthalate	270	8.0	2.2	0	0	0	0	0	0	0
Bis- (2-ethylhexyl) phthalate	272	221.5	1.2	0	0	0	0	0.62	3.0	0
Formaldehyde	310	4.1	0	0	0	0	0	0	0	1.8
Methacrylic acid	314	41.9	0.020	0	0	0	0	0	0	0
Methyl methacrylate	320	284.7	0.43	0	0	0	0	0	0.076	0
Methylacrylonitrile	321	52.2	0.32	0	0	0	0	0	0.39	0
Total		133,291	389	0.94	0	0	0.0010	0.85	73	586
Dioxins (Unit: mg-TEQ)	179		4.43	13.32	0	0	0	0	1.39	0

# Trend of Emission and Transfer Volume by Substance (PRTR Law)



### SOx Emission Volume



#### Change in New Alternative Freon (HFCs) Usage (tons)



### Soot and Dust Emission Volume



### NOx Emission Volume



# COD Discharge Volume



The Practice of CSR Management

(tone)

Data

### **Environmental Management**

#### No. of ISO14001-compatible Business Sites

### **Housing Company**

Tokyo Sekisui Industry Co., Ltd. Kansai Sekisui Industry Co., Ltd. Sekisui Board Co., Ltd., etc.

76 business sites in total (including 61 business sites at our housing sales companies)

**Corporate headquarters** 

### Sekisui Seikei Ltd. Tokuyama Sekisui Industry Co., Ltd. Hinomaru Corp. 8 business sites in total

# Number of Issues of Concern in Environmental Auditing for Fiscal 2006 (for Production sites and Laboratories, as of End of March 2007)

			Number of cases	Correction completed	Undergoing correction			
		Issues of concern	215	170	45			
Corporate	Headquarters	Issues to work on	297	175	122			
(46 business sites)		Proposals	39	23	16			
	,	Total	551	368	183			
		Nonconformity (major)	0	0	0			
	Renewal (13 business sites)	Nonconformity (minor)	24	23	1			
		Observations	86	55	31			
Auditing by		Total	110	78	32			
body		Nonconformity (major)	0	0	0			
	Surveillance	Nonconformity (minor)	39	32	7			
	(28 business sites)	Observations	134	91	43			
		Total	173	123	50			
Intorn	al auditing of	Nonconformity (major)	4	4	0			
Internal auditing of business sites		Nonconformity (minor)	215	175	40			
(38 bu	siness sites;	Observations	505	396	109			
45 time	is of auditing)	Total	724	575	149			

\* Category of instructions for corporate headquarters environmental auditing Issues of concern: Matters recommended for immediate improvement Issues to work on: Matters recommended for improvement within one year Proposals: Matters to be considered for improvement, advice

### **Environmental Performance in Offices**

Electric Power Consumption in Laboratories (Offices) and Headquarters Buildings



### Urban Infrastructure & Environmental Products Company

Shiga-Ritto Plant Gunma Plant Tokyo Plant etc.

24 business sites in total

### **High Performance Plastics Company**

Amagasaki Plant Musashi Plant Shiga-Minakuchi Plant etc.

22 business sites in total

#### Number of Persons with Qualifications

					I hose who acquired qualifications during fiscal 2006	Aggregate total
Number of	participants in	Number of	internal training	course participants	65	429
Systems (EMS	) internal auditor	Number of	external training	course participants	11	92
development/	training courses	Total			76	521
Number of p	participants in	Number of	internal training	course participants	33	452
Management S	vstems (OHSMS)	Number of	external training	course participants	7	76
interna development/	l auditor training courses	Total		40	528	
	Registered e	xaminer		Lead Auditor	0	3
	of the Cen Environmenta	ter of I Auditor	Qualifications	Auditor	1	3
	Registration	(CEAR)		Provisional Auditor	0	3
				Air Classes 1-4	1	38
Number of				Water Classes 1-4	1	81
with major	Pollution contro	l manager	Qualifications	Noise	0	41
qualifications				Vibration	0	25
				Dioxins	1	4
	Certified Environ	imental Mea	surer		0	2
	Qualified Person Type 1 Designat	i for Heat/Ele ed Plant	ectricity Energy	Management of	1	55
	Olfactory Measu	rement Ope	rator		0	1

#### Green Purchases

Sekisui Chemical Group is committed to green purchasing of office supplies for all its departments and branches.

	(million yen)
	Purchased amount
Photocopying paper	51.82
Other office supplies	135.95
Office automation equipment	221.10
Total	408.86

# Green Procurement and Green Manufacturing

### **Green Procurement**

### Evaluation Criteria in Green Procurement Guidelines

Criteria for business accounts		Criteria for products	
IS014001 certification acquired			
Internal organization	5 criteria including appointment of an environmental management officer	Product assessment	3 criteria including assessment carried out during product development
Compliance with laws and regulations	5 criteria including recognition of environmental laws relevant to business	Conditions at times of use and disposal	9 criteria including introduction of products with longer lives compared to previous lines
Management system	5 criteria including internal auditing	Design and structure for recycling	5 criteria including use of recyclable materials
Voluntary activities	8 criteria including capability to make suggestions regarding environmental impact reduction	Information disclosure	2 criteria including capability to provide environment-related requirements and relevant information
Information disclosure	Disclosure of information regarding own environmental conservation activities	Packaging materials	8 criteria including reduced quantities of packaging materials compared to previous lines

	Criteria for business accounts subject to Green Procurement Guidelines	Green Procurement Guidelines not applicable
Procuring department	Headquarters + departments, plants, group manufacturing affiliated companies	Housing sales companies, construction contractors and offices
Business accounts	Manufacturers of production materials, trading companies, importers, outsourced manufacturers of our products Equipment manufacturers (including manufacturers of equipment for buildings, civil engineering, construction works)	<ul> <li>Service-oriented manufacturers providing office equipment, software, printing services, etc.</li> <li>Outsourced manufacturers using materials exclusively designated or supplied by the procuring department</li> </ul>

### Environment-related Capital Expenditures (More than 10 million yen worth of investment subjects are targeted)

Number of investment subjects: 36 Amount invested: 1.05 billion yen (excerpt)

	Subject of investment	Business sites	Estimated effect
Housing Company	Introduction of an energy management system	Sekisui Board Co., Ltd. Gunma Plant	Energy management in each production process and expansion of energy saving activities
Urban Infrastructure & Environmental Products Company	Hydraulic injection molding machines → motorization	Vantec Co., Ltd.	Reduction of electricity usage compared to hydraulic devices by approximately 330MWh per year
High Performance Plastics Company	Total measures taken towards plant effluents and general effluents	Sekisui Chemical Co., Ltd. Shiga-Minakuchi Plant	Prevention of mixture of resins and odors into plant effluents, prevention of mixture of plasticizers into general effluents

### **Environmental Complaints**

	Details of complaints	Countermeasures
Noise	Complaints about noise generated from tools and equipment.	Sound dampers were attached to tools that make noise and rules were changed to ensure that they are only used indoors.
	Complaints about noise generated from steam safety valve (2 cases).	A silencer was attached to the safety valve.
Odors	Complaints about odors generated from treated waste water sludge (2 cases).	Sludge containers and spin dryers were more securely sealed and an oxygen additive for biological processing was added to waste water processing equipment. There are plans to review the overall waste water treatment as part of comprehensive waste water measures.
	Complaints about odors from plant.	Installed regenerative deodorizing equipment.
Other Complaints	Pine trees cut onsite were blown onto a general roadway and blocked traffic.	Trimmed branches were stored at selected places away from winds.
·	Adhensives leaked from corroded sections of pipes at the plant and became stuck to cars parked nearby.	Replaced pipes.

### **Environment Performance of Overseas Business Sites**

Sekisui Chemical Group is currently moving ahead with globalization of its environmental management. To make continuous improvements in areas associated with overseas production, such as environmental impact, we began monitoring the status of environmental activities and performance data on a regular basis from fiscal 2003. The scope of fiscal 2006 data covers the following 23 business sites (13 business sites in fiscal 2005).



\*1 SEKISUI VOLTEK, LLC. (LAWRENCE PLANT), (COLDWATER PLANT), SEKISUI TA INDUSTRIES, LLC. (CALIFORNIA PLANT), (TENNESSEE PLANT), KLEERDEX, LLC., SEKISUI S-LEC MEXICO S.A. de C.V., SEKISUI S-LEC B.V., SEKISUI-ALVEO B.V., SEKISUI-ALVEO LTD., ESLON B.V., THAI SEKISUI FOAM CO., LTD., SEKISUI S-LEC (THAILAND) CO.,LTD., PILON PLASTICS PTY.LTD., Sekisui (Qingdao) Plastic Co., Ltd., Wuxi SSS-Diamond Plastics Co., Ltd., Xinjiang Yongchang-Sekisui Composites Co., Ltd., Sekisui High Performance Packing (Langfang) Co., Ltd., Sekisui S-LEC (Suzhou) Co., Ltd., Beijing Sekisui Trank Medical Technology Co., Ltd., Shanghai Sekisui-Holy Plastics Co., Ltd., Youngbo Chemical Co., Ltd., Sekisui Industrial Piping Co., Ltd., Sekisui Refresh Co., Ltd.

\*2 Fiscal 2004 data results from the Federation of Electric Power Companies of Japan were used for the CO<sub>2</sub> emissions coefficients for each type of energy. Japan's City Gas 13A data was used for "natural gas."

\*3 Calculation period: January 1, 2006 to December 31, 2006

### **CS&Quality Data**

No. of ISO9001-compatible Business Sites

#### Housing Company

Tokyo Sekisui Industry Co., Ltd. Kansai Sekisui Industry Co., Ltd. Sekisui Board Co., Ltd., etc.

14 business sites in total

### **Corporate headquarters**

Sekisui Seikei Ltd. Tokuyama Sekisui Industry Co., Ltd. Hinomaru Corp.

9 business sites in total

#### Urban Infrastructure & Environmental Products Company

Shiga-Ritto Plant Gunma Plant Tokyo Plant etc.

20 business sites in total (including 5 overseas business sites)

#### High Performance Plastics Company

Amagasaki Plant Musashi Plant Shiga-Minakuchi Plant etc.

30 business sites in total (including 14 overseas business sites)



# Occupational Health, Safety Data

Health, Safe	ety, and Accident-prevention Cos	ts	(Millions of yen)
	Item	Entire	group*1
Classification	Details	Expense amount	Investment amount
1) Costs within business areas	Health and safety measures, rescue and protective-equipment related, determination of work environment, monitoring health, workers' accident compensation insurance, etc.	782	1,185
2) Cost of supervision	Establishment and implementation of OHSMS, safety education, labor costs, etc	1,192	_
3) Other	Awards, etc.	1	_
Total		1,975	1,185
Total investment a	nount for the entire group during the relevant period	_	17,019
Proportion of health within the total inve	n, safety and accident-prevention related investment estment amount	_	7.0%
Amount of loce		21	11

### с,



Trend of Expenses and Investments

\*1 This includes 42 production sites/laboratories + all departments of corporate headquarters + back-offices of division companies.

### Main Education & Training Programs in Fiscal 2006 (Production Sites / Laboratories)

	Program		Content
	Compulsory Program for Each Level		<ul> <li>Safety Course for New Production Section Heads</li> <li>21 people participated in this course intended for production section heads newly-appointed by the production sites (or managers conducting similar duties).</li> </ul>
Basic	Rank Advancement Program	Level I (Basic)	<ul> <li>Hazard-prediction traning (KYT)</li> <li>159 people participated in this course at seven domestic sites targeting onsite leaders.</li> </ul>
		Level II (Practical Level)	Safety Brainstorming Sessions Held (twice) for those responsible for safety and health at the business sites.     Field trip to Enterprises with Advanced Safety Policies 73 people participated in field trips and opinion exchange sessions (twice) to enterprises with excellent safety activities and results.     Training OHSMS internal auditors Outside instructors were invited and 76 people acquired certification (in addition to the 668 internal auditors).     Hands-Oh Learning 53 people participated in this program targeting onsite leaders.
		Level III (Safety Control Course)	_
	Technology & Skill Transfer Program		—
Supplementary	Special Education Program		_

\* Activities conducted safety, personnel at corporate headquarters and in division companies. Business site-level education/development activities were also implemented.

### Main Education & Training Programs in Fiscal 2006 (Housing Construction Sites)

Target	Content
Top management and those in charge of overall health and safety	Top Management Seminar (sponsored by the Japan Industrial Safety & Health Association) Participants learn about their roles in ensuring worker safety, a major premise for management (26 participants with a roughly 80% completion rate).
Safety staff	Safety Manager Course Participants learn how to instruct construction site managers in order to ensure onsite safety (70 participants with a roughly 80% completion rate).
Construction managers and site supervisors at cooperating companies	<ul> <li>Supervisor Course This course provides training for supervisors as stipulated in the Industrial Safety &amp; Health Law (221 participants)</li> <li>Risk Assessment Course Implemented as a new course from fiscal 2006 (974 participants)</li> </ul>
New managers	New Worker Training Basic safety course for new managers from each Fami-S company (165 participants)
Others	Special Training for Asbestos Removal Legally mandated training for those who may be involved with asbestos removal (115 participants)
* The above table shows the activities being conducted by companie	s and corporate headquarters. The housing sales companies and Fami-S companies conduct educational activities on their own.

The Practice of CSR Management

### **Independent Review Report**

(TRANSI	ATION
	Independent Review Report
	here 15, 200
Mr. Nact	ác Olabo,
President	Sekissi Chemical Co., Lat.
	Tohmana Environmental Research Institute La Hiroshi Eucki, Representative Diroctor
1. Scope We have	of the Review e reviewed the "CSR Report 2007" ("Report") presend by Solinai Chemical Co. Ltd. ("Company"). The parameter of our review was to provide limited assessed from an independence of the review was to provide limited assessed from an independence of the parameter of the review was to provide limited assessed from an independence of the parameter of the
pieto finito with co	ner abox whether material environmental information for the period from April 1, 2000 to March 31, 2007 included in the Report was accoracly measured and calculated, reflering to b mental Reporting Guidelines Flucal Yuar 2007 version tissued by the Japanese Manistry of the Euroinmental and GRI Statisticability Reporting Guidelines (Version3.0), in accordance instation methods adopted by the Company.
2. Rep	esibility of the Management
The Ri practic	put a file responsibility of the Company's management. Our responsibility is to provide our firsted assumer with respect to the review performed on the Report from an independent and
3. Sum	ury of Review
To obs Assum	an an adapate and valid standard of basis for providing limited assument with expect to our conclusions, we performed our review with inference to the bitmentional Standard in one Engagements (ISAE) 2000 (inseed by the International Foderation of Accountants in December 2005) and Proposed Environmential Report Review Standard inseed by the Ingene of the University Education (2000).
The second secon	p to an environment of the second and an environmental information for the period from April 1, 2006 to March 31, 2007 included in the Report consisted off, 1) approxing information investigations and apporting documents on a sample basis, 2) interviewing the responsible personnal and the persons in charge; 3) reviewing and agreeing information to the relevant minute report 's regulations, and ISO reliand documents and so on; 4) she visits; and 5) comparing information with other available apporting internal and external materials.
4. Cond	
Oute Apil I Japane	havis of the review procedums described in the preceding paragraph, nothing has come to one attention that caused us to believe the material environmental information for the period the 2006 in Marth 31, 2007 included in the Report was not accurately measured or existance, within the Environmental Reporting Galdelines -Fiscal Year 2005 version (assured by a e-Massing of the Environment) and GRE Sanaeubelity Reporting Galdelines (Version300, in accordance with calculation methods adopted by the Company, in all material respects.
5. Specia	d Interests
There	are no intensis hetween the Company and Toleratus Environmental Research Institute Lad. or its engingement prevenuel, requiring disclosure refined to the provisions of the Cortific

### Comments on Independent Review of Sekisui Chemical Group's CSR Report 2007

#### 1. CSR Management

Last year, CSR Management practice was included in the Mid-term Management Vision, and the strengthening of CSR activities began. In January 2007, a new CSR Division was established by combining the core CSR related Environment, CS & Quality and Personnel departments. Employee Representatives were also added to the CSR Committee to promote a system reflecting the opinions of both male and female employees. In this way, the development of a system that promotes comprehensive CSR activities is progressing. In particular, the inclusion of a personnel development function in the CSR Division can be seen as particular to characteristic of Sekisui Chemical.

In line with President Okubo's strong belief of "placing CSR management at the center of management and developing it in a manner visible to the eye," we look forward to further progress of Sekisui Chemical Group activities incorporating a "customer-oriented CSR Management which energizes our employees."

#### 2. CSR Report 2007

As a special report marking the 60th anniversary of the founding Sekisui Group, the CSR Report 2007 comprehensibly explains what kinds of products have been developed to meet the demands of the times, and how each group company will, in response to society's expectations, contribute socially through its primary businesses. Furthermore, at the beginning of the Environment, CS & Quality and Personnel sections of the report, the progress status of activities is summarized, and new target indices have been set, not only for the Environment field but also for the CS & Quality field, and progress can be seen in comparison to reports in previous years.

In the future, the setting and recording on of indexed targets is expected to facilitate the PDCA cycle for the CSR Management System, including in the area of personnel.

Moreover, in keeping with the most recent CSR trends, we recommend that ways of improving the presentation of CSR Supply Chain Management and Biodiversity, which certain readers expect coverage of, be considered.

#### 3. Management of Environmental Information

Beginning last year, an environmental information gathering system was introduced to strengthen the reliability of Sekisui Group's information, and improvements have been made to it in the course of its operation. However, cases were found at some operation sites where the significance of major and supplemental information used for reports was not fully understood. We expect Sekisui Group will thoroughly confirm the intent for introducing this system as well as which information should be viewed as significant.

Moreover, at business sites and at related companies, cases were found where only some managers took charge of understanding and calculating various kinds of environmental information, including environmental accounting. In order to convey this kind of know-how to the next generation of workers, we expect that documentation and standardization of the detailed processes to understand and calculate environmental information will take place at Sekisui Group's business sites, etc.

- **1947** Establishment of Sekisui Sangyo Co., Ltd. Started first injection molding business in Japan.
- 1948 Change of company name to Sekisui Chemical Co., Ltd.
- **1950** Began selling cellophane tape.
- 1952 Started full-scale production of PVC pipe (Eslon Pipe).
- **1953** Listed on Osaka Stock Exchange.
- **1956** Developed Japan's first plastic rain gutter (Eslon Rain Gutters).
- **1959** Established Sekisui Sponge Industries Co., Ltd. (now Sekisui Plastics Co., Ltd.) with co-financing from Shin-Nippon Chisso Hiryo Co., Ltd., Asahi Kasei Corporation and others, to commercialize plastic foam.
- **1960** Established Sekisui House Sangyo Co., Ltd. (now Sekisui House Co., Ltd.) and started the house business.
- **1962** Launched Movement for Cleaner Towns featuring our plastic garbage bins (Poly-pail), as a campaign to mark the company's 15th Anniversary. Cleaning revolution subsequently spread nationwide.
- **1963** Started producing plastic bathtubs (first in Japan). Modular toilet tank commercialized, paving the way for production of modular-style equipment.
- **1970** Exhibited modular house (Sekisui Heim) at the International Good Living Show in Tokyo.
- **1971** Started producing and selling Japan's first modular house, Heim M1.
- **1972** Launched company-wide commitment to pollution control. Established original Environmental Management Department.
- **1979** Awarded Deming Prize for quality management in recognition of results of aggressive TQC activities.
- 1981 Adopted twin-headquarters system (Osaka and Tokyo), and established Tokyo Headquarters at Toranomon, Tokyo. Began producing and selling timber-framed modular house, Two-U Home.
- 1991 Established Basic Policies on environmental issues.
- **1993** Introduced divisional system. (Pipe & Related Products, Building Materials, Chemicals, Techno-products, Molded Products, Medical Products, and Housing)
- 1994 Began ISO 9000 series certification acquisition activities.
- Excess paid-in capital of 100 billion yen.
   Adopted new headquarters logo.
   Announced Top Management Policy for Environment and Safety. Began ISO 14001 certification acquisition activities.

- **1997** 50th Anniversary of company foundation. Launched nature protection support activities within and outside Japan, such as Sekisui Nature Study Course and nature protection activity in cooperation with Keidanren Nature Conservation Fund. Created Women's Athletic Club.
- **1998** Instituted Corporate Activity Guidelines. Initiated zero emission activities.
- **1999** Launched Management Vision, GS21. Instituted Corporate Philosophy. Concentrated business into three domains: Housing, Urban Infrastructure & Environmental Products, High Performance Plastics. Launched Midterm Environmental Plan, STEP-21. Began publishing Environmental Reports.
- 2001 Launched division company system, i.e. Housing Company, Urban Infrastructure & Environmental Products Company and High Performance Plastics Company. Achieved zero emission in all house production plants and all plants of Sekisui Chemical Co., Ltd.
- 2003 Launched GS21-Premium 600, our Midterm Management Vision.
   Established Environmental Management Promotion Department (now Environmental Management Department).
   Launched new Midterm Environmental Plan, STEP-2005.
   Achieved zero emission at all house construction sites.
- 2004 Ilntroduced CS & Quality Management Department. Developed CS & Quality Management Midterm Plan. Achieved zero emission in all constructions of house renovation companies.
- 2005 Introduced CSR Committee. Published Environmental and Social Report.
- 2006 Launched GS21-Go! Frontier, our Midterm Management Vision. Launched Environmental Top Runner Plan, Part 1, our Midterm Environmental Plan.
- **2007** 60th anniversary of Sekisui Chemical Co., Ltd. founding. Made reviews of the CSR Committee and corporate headquarters organization. Published the CSR Report.

#### Editor's Notes

Sekisui Chemical Group began to earnestly address CSR from fiscal 2005. Our CSR activities are based on the Three Prominences of Environment and CS & Quality, which we need to thoroughly pursue as a leading manufacturer, along with Human Resources, which is so essential for supporting the first two prominences. At the same time we have also adopted Three Attitudes of Sincerity; specifically Compliance, Risk Management and Disclosure & Communication. We feel that Sekisui Chemical Group's approach to CSR can now be embraced by many readers as well as by our employees, key stakeholders in the Group.

In fiscal 2007, we have reorganized the CSR Committee and related organizations and taken other steps to bring about further development for our CSR Management. For example, a major aim of this report is to not only provide disclosure and communication with readers outside of Sekisui Chemical Group, but to also provide some assistance in further developing the activities used by our employees.

In this report, we have tried to provide a wide range of examples from throughout Sekisui Chemical Group, while giving consideration to presenting this information in an easy-to-understand manner. We realize the need to use the publication of this report as a means to examine our approaches and reporting methods, and then make improvements.

From this year, we have discontinued our practice of providing questionnaires inserted in CSR Reports. On the other hand, we have made it easier for people to share their opinions over our website. We would very much appreciate hearing the frank opinions of our readers through our website. Those opinions will serve as valuable references for Sekisui Chemical Group's future reports and CSR activities.

> CSR Planning Group, CSR Department

# SEKISUI CHEMICAL CO., LTD.

4-4 Nishitenma 2-chome, Kita-ku, Osaka 530-8565, Japan URL http://www.sekisui.co.jp

### For further information contact:

CSR Planning Group, CSR Department 2-3-17 Toranomon, Minato-ku, Tokyo 105-8450, Japan (Toranomon 2-chome Tower) FAX: +81-3-5521-0519 E-mail: csr@sekisui.jp

In care.



Environmental consideration is given to printing and bookbinding of this report as follows: (1) This report is made using FSC-certified paper, generated from forests that were handled with care.

(2) CTP (Computer to Plate) method is adopted in the plate making processes in order that no film remains as a waste material.

(3) Soy ink is used in the printing processes because it generates little VOC (volatile organic compound) and has excellent biodegradable and de-inking properties. Furthermore, Waterless Printing, which generates no hazardous waste liquid, is adopted.

(4) Glue not affecting the recyclability of paper is used in binding this book.

Published in English: September 2007 Annual Publication. Next Publication: September 2008