

2008 Environmental and Social Report Published in September 2008 Shin-Etsu Chemical Co., Ltd. 6-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-0004, Japan URL: http://www.shinetsu.co.jp/

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CSR Vision

The Shin-Etsu Group supports to the fundamental policies outlined in the Charter of Corporate Behavior of the Japan Business Federation (Nippon Keidanren.) The Group aims to increase its corporate value in both economic and social terms while upholding respect for human dignity, and giving top safety and environmental protection-first, as basic guiding principles for its CSR activities.

Corporate Mission Statement

To contribute to people's daily lives as well as to the advance of industry and society providing key materials and technologies.

Basic Policies Concerning Corporate Social Responsibility (CSR)

The Shin-Etsu Group's mission is to contribute to people's daily lives as well as to the advance of industry and society providing key materials and technology. To ensure that all companies in the Group achieve this, Shin-Etsu places utmost priority on such core business principles as product quality and safety, fair competition, good relationships with the public and governments, careful management and protection of customer data, and sound business practices. By acting in accordance with these principles, Shin-Etsu ensures steady growth, and greater worth for the whole Group.

The Shin-Etsu Group continues to promote corporate activities while focusing on environments based on our commitment, safety and environmental protection-first, and strive for being trusted by our stakeholders.

Respecting for human dignity and achieving fulfillment in life, Shin-Etsu endeavors to create a work environment in which all employees can perform their jobs easily and effectively and fully realize their potential. We forbid any discrimination the workplace, any use of compulsory labor and any use of child labor.

The Shin-Etsu Group is committed to contributing to society and to disclosing accurate and timely information to the public about the business activities and position of the Group so as to continue to gain the trust and understanding of society.

Editorial Policv

This Environmental and Social Report has been prepared to inform you of the environmental activities and achievements of the Shin-Etsu Group and its approach to CSR. The report also provides an overview of our responsible care activities. Furthermore, the report introduces U.S. subsidiary Shintech Inc. in its feature on the environmental activities of the Group's overseas subsidiaries (p.35–36.) In editing the report, we have referred to the Environmental Accounting Guidelines and the Environmental Reporting Guidelines prepared by the Ministry of the Environment, Japan.

Period Covered by the Report

From April 1, 2007 to March 31, 2008 (Regarding the challenges and approaches mentioned, some information to cover the near future is also included.)

Organizations Covered by the Report

Shin-Etsu Chemical Co., Ltd. and the Shin-Etsu Group companies are all covered. The scope of the data collection carried out is as follows:

1. Environmental Activity Report

11 Companies: Shin-Etsu Chemical Co., Ltd., Shin-Etsu Handotai Co., Ltd., Nagano Electronics Industrial Co., Ltd., Naoetsu Electronics Co., Ltd., Mimasu Semiconductor Industry Co., Ltd., Shin-Etsu Quartz Products Co., Ltd., Yamagata Shin-Etsu Quartz Co., Ltd., Fukui Shin-Etsu Quartz Co., Ltd., Nissin Chemical Industry Co., Ltd., JAPAN VAM & POVAL CO., LTD., and Shinano Electric Refining Co., Ltd.

2. Environmental Accounting

Shin-Etsu Chemical Co., Ltd.

3. Sociality

Shin-Etsu Chemical Co., Ltd. and consolidated accounting companies, including those overseas but excluding the Shin-Etsu Polymer Group, are all covered.

Notes: For the report of the Shin-Etsu Polymer Group, please refer to the Shin-Etsu Polymer Group Environmental and Social Report 2008. For the publishing date, the division in charge of publishing, contact point and URL, etc., please see the reverse cover.

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Fulfilling corporate social responsibilities and aiming to be a company that is trusted by society



Chihiro Kanagawa President and CEO

On the occasion of the publication of the "Shin-Etsu Chemical Environmental and Social Report of 2008," I would like to report to you on the Shin-Etsu Group's basic management principles and on their concrete manifestations with regard to our environmental activities and our efforts to contribute to society.

Towards the realization of Shin-Etsu's basic management principles

The Shin-Etsu Group's mission is "to contribute to people's daily lives as well as to the advance of industry and society through the provision of *key materials* and technologies." The Shin-Etsu Group's business operations are based on fair and equitable practices, and are carried out in strict compliance with each host nation's laws and regulations. We believe that a corporation fulfills its social responsibility to contribute to society by making a profit from its fair business operations, paying taxes, and striving to grow and develop while endeavoring to satisfy all of its shareholders, customers, clients and local residents in the communities in which we operate, and our employees. Accordingly, through each and every one of our daily activities, we are working to fulfill our corporate social responsibilities.

Safety is our utmost priority

It is above all important to place the utmost priority on safety-first in all of our business operations and the fact that we are totally focused on assuring safety and accident-free plant operations. The Shin-Etsu Group has consistently placed its highest priority on safety-first as its foremost management principle in all of its business operations. I have taken every opportunity to urge all of the employees of the Shin-Etsu Group to make sure that our commitment to safety is being thoroughly implemented at all times at each worksite. Despite our consistently strong safety efforts, an accident involving an explosion and subsequent fire occurred at our Naoetsu Plant in 2007. As a result, we undertook a serious, comprehensive review of all of our safety measures. We proceeded to immediately implement systematic safety inspections, and adopted a range of new safety measures aimed at preventing the recurrence of such an accident at any facility of the Shin-Etsu Group. Furthermore, not forgetting the lessons learned from this accident, we will make all-out efforts in the future in our daily business activities to ensure that safety continues to be our utmost priority. Among our Management Objectives for the fiscal year ending in March 2009, we re-emphasized a policy of "avoiding any accidents or disasters by means of thorough safety management in everyday activities." Towards achieving this objective, we urged that the following five policy steps be concretely put into practice:

- 1. We must learn from the Naoetsu Plant accident and never again cause such an accident or disaster.
- 2. Managers must always review safety operational manuals and make sure that all of the recommended procedures are followed through.
- 3. Each and every employee must consider safety as his or her own responsibility, and perform their work activities accordingly.
- 4. Even when a problem occurs in the production process, employees must never overly speed things up in an attempt to unreasonably make up for a production delay.
- 5. Managers must make the rounds of the production site every day, engage in an exchange of opinions with workers and dedicate their all-out efforts to the promotion of safety.

These five policy steps represent guidelines that each and every one of our Shin-Etsu Group employees must faithfully keep foremost in their minds to help the company assure the achievement of safety as its maximum priority.

At the same time, employees must never forget that safety-first is also a promise that we make to society. With the Shin-Etsu Group working together to implement these five policy steps in order to put in place a system that eliminates any possibility of accidents, we will meet the expectations of society and thereby be enabled to recover its trust.

Responsibility towards the global environment

The Shin-Etsu Group considers that it is the responsibility of a manufacturer of key materials to steadily supply highquality products that are essential in everyone's daily life as well as for industry. We believe that it is an important part of our mission to efficiently use limited resources to help achieve a sustainable society that places a strong emphasis on environmental protection. In particular, with the start of the enforcement of the Kyoto Protocol, the reduction of greenhouse gases is becoming a crucial global issue, and the Shin-Etsu Group, determined to attain its mid-term environmental goals, is working all-out to achieve a major reduction in greenhouse gas emissions.

Furthermore, in our product development and manufacturing processes, we are focusing on taking appropriate measures to comply with all the applicable environmental regulations and standards. For example, we are continually making strenuous efforts to live up to the trust of not only our global customers, but also of all of our consumer endusers. Toward this end, we have acted decisively at an early stage in carefully following international regulatory trends. We have performed this way in recent years, as more stringent environmental regulations for chemical substances have come into force, such as the European Union RoHS (Restriction of Hazardous Substances) Directive, which restricts the use of certain hazardous substances in electrical and electronics equipment, as well as the REACH Regulation (Registration, Evaluation, Authorization and Restriction of Chemicals) on chemicals, which requires the registration of the properties of chemical substances.

Strengthening internal controls

As another key managerial issue, we are proactively working on strengthening corporate governance. In particular, the strengthening of internal controls is an important issue in fulfilling corporate social responsibility, together with improving management efficiencies and promoting fair corporate activities. In this regard, we are taking such concrete measures as appointing people with broad, high-level experience in company management to a number of positions as external directors and statutory auditors. To carry out internal audits, we have established an Auditing Department, which operates independently from other operational or management departments. In anticipation of the enactment of the Japanese version of the U.S. Sarbanes-Oxley Law, which was passed in April 2008, we put into effect in May 2006 a "Basic Policy Concerning Internal Compliance" and introduced a strict, reinforced internal-control system.

The Shin-Etsu Group is carrying out a wide range of business activities around the world.

We believe that these global corporate activities themselves are the means through which we fulfill our corporate social responsibilities. We always endeavor to appropriately disclose information about the business operations of our company and continue to strive to promote a high level of transparency about our corporate activities. In the future as well, by continuing to nurture the development of various new technologies and *key materials* that contribute to the development of people's daily lives, industry and society, we will endeavor to maximize the worth of the Shin-Etsu Group. Through carrying out highly transparent corporate activities, we will strive to fulfill our corporate social responsibilities and aim to become a company that is trusted by society.

C. Kanagawa

Chihiro Kanagawa President and CEO Shin-Etsu Chemical Co., Ltd

By achieving a globally unrivalled level of technology, quality and cost competitiveness, and through our proactive efforts in CSR activities, we aim to be a Group of companies that society can trust.

As of March 31, 2008, the Shin-Etsu Group comprised Shin-Etsu Chemical Co., Ltd., 96 subsidiaries and 16 affiliates. Shin-Etsu Chemical Co., Ltd., and its subsidiaries and affiliates share responsibility for sales, manufacturing and other operations, and cooperate to develop their respective business activities.

Our business fields are divided into three business sectors: Organic and Inorganic Chemicals, Electronics Materials, and Functional Materials and Others. Each

business sector offers products that either have the largest global market share, such as PVC, semiconductor silicon, photomask substrates for LCDs, and rare earth magnets for hard disk drives (HDDs,) or have the largest market share in Japan, such as silicones.

The Group's products are used in countless everyday applications and are integral to the advancement of society.



Principal Shin-Etsu Group Companies

Japanese Domestic Group

Shin-Etsu Chemical Co., Ltd., Shin-Etsu Handotai Co., Ltd., Shin-Etsu Polymer Co., Ltd., Shin-Etsu Engineering Co., Ltd., Nagano Electronics Industrial Co., Ltd., Naoetsu Electronics Co., Ltd., Shin-Etsu Astech Co., Ltd., Mimasu Semiconductor Industry Co., Ltd., Shin-Etsu Quartz Products Co., Ltd., Kashima Vinyl Chloride Monomer Co., Ltd., others

Overseas Group

Shintech Inc., Shin-Etsu Handotai America, Inc., S.E.H. Malaysia Sdn. Bhd., Shin-Etsu PVC B.V., SE Tylose GmbH & Co. KG, Shin-Etsu Handotai Europe, Ltd., Shin-Etsu Handotai Taiwan Co., Ltd., others

Note: The profile of the Shin-Etsu Group includes the Shin-Etsu Polymer Group.

Product Information

Guide to Materials

Semiconductor materials	As the world's leading supplier of semiconductor-related materials, we provide a diverse range of items that are in- dispensable to the manufacture of silicon wafers and semiconductors. We also deal in synthetic quartz photo- mask substrates, gases, chemicals and jigs used in their manufacture.
Electronic materials	Through a wide range of products including silicones, rare earth magnets and liquid fluoroelastomers, we con- tribute to the improved performance, function and reli- ability of such devices as electrical home appliances, com- munication equipment and computers.
Optical materials	Using both natural and synthetic quartz as a base, we de- velop a diversified range of optical materials, including synthetic quartz preform for optical fibers and assorted optical parts. We supply a wide range of items, from raw materials to processed products.
 Techn 	ology and Key Materials Provided by Shin-Etsu



Financial Highlights



Architectural/ civil engineering materials	We respond to a wide range of needs in the architecture and civil engineering fields by providing such building/civil engineering items as sealing materials, coating materials and admixtures.
Environmentally friendly materials	Such products as our PVC, silicones and synthetic phero- mones help save resources, conserve energy and reduce environmental impact.
Automobile- related materials	Because of their diversity and varied characteristics, our products are expected to be crucial for the development of new automobile technologies in the areas of improved reliability size and weight reduction, as well as environ- mental responsiveness.





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Note: Final accounts include the Shin-Etsu Polymer Group.

Restoring Confidence

On March 20, 2007, an accident occurred at the methyl-cellulose manufacturing facility of Shin-Etsu Chemical's Naoetsu Plant in Niigata Prefecture, Japan, involving an explosion and subsequent fire. In line with its management policy of putting *safety and environmental protection-first*, the Shin-Etsu Group is resolved to prevent a recurrence and is making every effort to restore confidence.

Panel Discussion

To ensure that 2008 is our base year for restoring confidence, we are going about our safety management activities with a certain sense of urgency.

President Kanawaga, personnel in charge of environmental control and safety assurance, and managers in charge of manufacturing at various plants met to reflect upon the Naoetsu Plant accident and reconfigure the Company's systems to prevent a recurrence. Panel members discussed a variety of topics, ranging from routine safety management to specific safety measures. In keeping with its resolve to make 2008 the base year for restoring confidence, the Shin-Etsu Group outlined specific actions for putting safety first.

Ongoing reviews of safety procedures, absent the overconfidence stemming from a previous lack of accidents

Takahashi: On March 20, 2007, an accident occurred at the methyl-cellulose manufacturing facility of Shin-Etsu Chemical's Naoetsu Plant in Niigata Prefecture, Japan, involving an explosion and subsequent fire. We are in the process of facing head-on the problems that were the background for this accident, and we are pulling together as a Group to formulate safety measures and systems to preclude such an accident from recurring. During today's panel discussion, I would like for us to reflect back on our everyday safety activities as we work to enhance our safety system.

Endo: The accident that took place at the Naoetsu Plant disturbed the local community, our business partners, shareholders and other stakeholders. Again, I offer my apologies. Typically, the plant's cellulose production process takes place in an atmosphere where workers wear antistatic shoes and clothing that prevents electrostatic buildup; a variety of electrostatic prevention and other safety measures are in place. This accident resulted from a source that we had not recognized as a safety issue.

Now I recognize that the sense of security that arises from an absence of accidents can be quite dangerous. It is important to determine, without having preconceived notions, methods of handling dangerous substances and powders, as well as understanding such factors as explosion characteristics and the ignition energy of static electricity. We must constantly pursue technical measures to counter such characteristics. Reflecting on this accident, I recognize the need to review the way we handle combustible substances that are suspended in air.

Based on the president's instructions immediately following the accident, we conducted checks of all facilities and processes.

We also distributed questionnaires to all workers who are involved in the plant's daily operations, receiving 3,069 comments from 1,440 people in the Naoetsu



rom left: Ken Nakamura, Chihiro Kanagawa, Kiichi Habata, Masaharu Takahashi, Mikio Endo, Fumiaki Kaneko, Hideaki Oseki, Shohei Kojima, Ryoichi Ishizaki



area. These comments covered a host of topics, including equipment improvements, training and education. As of November 2007, we had addressed 90% of the topics that were raised.

Sharing safety information involving close-call incidents and plant patrols

Kaneko: At the Takefu Plant, as well, we formed a committee to conduct a comprehensive check and review factory safety. To elicit a wide range of views, we drew participants from a broad pool of people, including the plant manager, the Safety Audit Committee Chairman, the Environmental Control and Safety Department Manager, plant workers and researchers. We followed up by introducing specific safety measures as needed.

In October 2007, we began disclosing on the Company Intranet and website information involving close-call incidents at each plant. Benefiting from this horizontal development, at the Takefu Plant we respond to situations similar to those that other plants have experienced. Supervisors also patrol the plant continuously, keeping a constant lookout for unsafe activity. They keep records of points that require caution and share this information throughout the plant.

Using HAZOP* to keep an eye out for danger

Oseki: Whenever we construct new facilities or add equipment, engineers and other personnel maintain a constant safety awareness at all stages from conceptualization to design and processing. Despite this vigilance, some factor that nobody recognized can cause a loss of safety. We have introduced the HAZOP methodology to prevent such oversights. At the Gunma Complex, we involve a range of members in HAZOP, including engineers, production line personnel, operators and the Environmental Control and Safety Department. We conduct detailed evaluations throughout the plant, involving every piece of equipment and each system. We look for what could go wrong in certain environments and decide how we would respond if a problem did arise. If we cannot answer those guestions, we create additional response measures. The accumulation of these processes over time raises the overall safety level.

The diverse makeup of the teams that participate in HAZOP means that we are paying attention to safety from a wide range of perspectives.

* HAZOP (Hazard and Operability Study):

HAZOP is designed to facilitate improvement in work procedures and facilities by anticipating potential malfunctions in manufacturing facilities and the resultant environmental pollution brought about by changes in operating conditions. HAZOP is conducted whenever a new facility is at the design stage, and is implemented by the designers and managers to ensure that a high degree of safety is designed into the facility right from the start. Existing facilities are also subject to HAZOP, in which their operators participate, and this is reflected in the improvements made to operating procedures and facilities.

Important is preventing accidents, not earning certifications

Kojima: Kashima Vinyl Chloride Polymer is now in its fifth year as a licensed supplier or high-pressure gases. Operating in a society that is making an overall shift from regulation to voluntary safety assurance, we are beginning to solidify the way we think about voluntary safety assurance. Specifically, our system involves have three administrative divisions—safety assurance, facilities and operations. We have created a management system for certify the systems and operations of each. In principle, all procedures are documented and subject to rules of operate for a two-year period without regular maintenance, assuming that equipment has a certain expected life remaining and that safety tests are conducted during operations. Under the certification

system, on the other hand, equipment must be renewed every five years. Maintaining certification involves personnel time and expenditures. We benefit at least as much from ensuring two years of continuous operation.

Of course, we must exercise caution when putting equipment back into operation following regular maintenance. Detailed plans and well-established measures are needed to ensure that appropriate confirmation measures are in place. We also have to remain alert for signs of irregularity.

Raising operating levels through OJT

Endo: At the Naoetsu Plant, our efforts to prevent danger focus on operator training. The manufacturing division that I manage has a single integrated instrument room for four plants. We conduct training on a rotating basis, lasting approximately six months for each plant. This on-the-job training (OJT) helps operators learn technical skills. In addition, all employees participate in dialog aimed at evaluating safety measures and eliminating waste at facilities, as well as enhancing operating efficiency through such efforts as improving logistics. We implement proposed improvements that have been introduced in this way.

I believe that OJT is the key to operator training. The sort of training we conduct in this example maintains a sense of urgency for both the trainer and the trainee. It gives both the opportunity to go about their jobs with a fresh outlook, and I believe this approach is effective from the standpoint of assuring safety. We will continue operating on this rotating basis within our production division. In the future, I would like to create a system whereby all personnel become capable of operating all plants.

Work safety is enhanced by each person maintaining a sense of urgency

Takahashi: From my point of view, plant safety assurance relies on two important underlying aspects of production: safety technologies and routine safety management. By safety technologies, I mean the wide range of production technologies spanning all process-





es from design and operation to facility maintenance. Improvements and enhancements stem from the ability to project fundamental design concepts into the future and to incorporate technical successes and processes.

Routine safety management involves working together with people on the factory floor to ensure that day-to-day production activities deliver products safely and dependably. Success in this area requires supervisors to have a safety mind-set. I consider the experience gained through risk prediction activities and close-call incidents important, as it allows supervisors to review operations and direct improvements.

Applying safety technologies in the workplace requires supervisors to communicate closely with each person who works there. I believe that a cheerful environment is essential to their success.

Habata: I hope to make 2008 the base year for recovering trust in our manufacturing departments. Just after the accident, in line with the president's instructions we conducted thorough checks. This situation created a sense of urgency for all of us and brought about some major breakthroughs. I believe that this sense of urgency is important. Rather than this being a one-off situation, I would like us to maintain an ongoing sense of urgency that becomes a part of our daily activities. I believe that this sense encourages us to pay closer attention, reviewing and studying our work, which ultimately becomes more fulfilling. A sense of urgency fosters better awareness of everyday issues and a greater sense of mission. If we can all approach our work with a sustained sense of urgency, I am confident that we will succeed in making this our base year for restoring confidence.

Kanagawa: The phrase "putting safety first" is more than just words. It means placing an importance on making sure that accidents do not actually occur, and ensuring that everybody works toward that end every day. I use this phrase on any number of occasions and always list it at the top of my management objectives. What is important is not the sense of satisfaction that things have remained safe in the past. Rather, we must implement safety measures on a daily basis to keep accidents from actually occurring.

The people on the factory floor are the ones who have the best-developed precognition of danger, so it is essential for managers to create an organizational and workplace atmosphere that encourages them to communicate such information. We need to foster this atmosphere with phrases such as, "Thank you for sharing that useful information." Managers must actually feel this to be the case, rather than being annoved, in the sense of "What is that person going on about this time?" Fostering that sort of atmosphere prevents a manager from knowing what is happening on the factory floor.

I would like to ask everyone first to review thoroughly all manuals, with the eyes of a specialist, to make sure that nothing is missing or defective. We must make sure that manufacturing facilities are protected by their manuals and take the responsibility of creating solid systems. We need specific systems that define who is responsible for confirming what items. Next, I would ask that you do not skimp on environment-related costs. Make the necessary investments. Even in difficult economic times, we cannot cut back on expenditures related to safety and the environment. Finally, if things are running behind schedule—for whatever reason-do not try to do the impossible to accelerate work back onto schedule. You should not treat delays as "running behind." By this, of course I do not mean to encourage slipshod scheduling. Rather, create work plans that have leeway built into them.

In addition, we must carefully study cases of accidents that have occurred at other companies. We should apply lessons from these examples toward our own everyday safety management activities. We need not limit ourselves to examples in within the chemical industry. Also look at accidents that have occurred in other industries. It is important for us to learn why such accidents happened and take them as points of caution. Even while reading the newspaper, be thinking whether there are lessons that you could apply in your own plant. If you come across case studies that could apply on a Companywide basis, I want you to share these throughout the Group.

The problem with everyday safety management lies in getting all personnel to maintain open minds and shed their preconceived notions. Rather than as just a set phrase, thing of "putting safety first" as words that will protect your life. Please, continue to maintain a sense of urgency.

Safety Measures

The Shin-Etsu Group is formulating safety systems and remains unswerving in its ongoing efforts to restore confidence.

All the people who were injured in the Naoetsu Plant accident have now been released from the hospital, and the cellulose production facility is back in operation. We are putting in place a variety of safety measures to restore confidence in our operations. At the Naoetsu Plant, such measures include enhancing its system for communicating with local residents and reinforcing its environmental protective barriers.

The Shin-Etsu Group's principal safety measures

1) The Group has introduced the following measures to prevent powder dust explosions.

- Substitution of nitrogen gas
- Antistatic measures
- Dust prevention

2) Revising manuals

We are undertaking a thorough review of our manuals and safety training, confirming as we go that manuals are in no way inadequate and striving to raise safety levels.

3) Identifying sources of danger

We are reviewing work processes to identify those with explosion or conflagration potential. As we identify such sources of danger, we strive to understand the type of danger and introduce appropriate countermeasures.

4) Disclosing close-call incidents

We have begun disclosing on our website the occurrence of close-call accidents, in which danger is mitigated at the scene, in the interest of the propagating safety measures horizontally.

Future accident preparedness

The Company conducted a study to determine the factors leading to the 2007 accident at the Naoetsu Plant involving an explosion and subsequent fire. I participated in this study, as well as the follow-up safety audit in 2008, involving an all-point safety check. During this process, I was given the opportunity to express my own opinions freely. I have witnessed numerous accidents in the past, which typically occur when appropriate measures have not been enacted. In this instance, a host of fundamental improvements were indeed in place, including core safety policies. A comprehensive, Companywide check revealed that although extensive safety measures were in place at various plants and the Company was taking an aggressive stance on safety measures, certain inconsistencies were evident at different locations. In addition, we uncovered areas involving processes with poor workability or that were inexpertly implemented. Such discoveries indicated room for

Efforts at the Naoetsu Plant

1) Establishing a communication system

We have put in place a hotline system for communicating with representatives of the local community in the event of emergency. The system is designed to minimize the time needed to relay information when the unexpected occurs.

2) Reinforcing protective barriers We have reinforced protective barriers and planted trees in green belts between the barriers and houses in the immediate vicinity of the plant to enhance the

Aftermath of the Naoetsu Plant accident

1) People who were injured

area's attractiveness

All 17 people who were injured in the accident have been released from the hospital.

2) Cellulose production facilities

We are progressing toward the reopening of the cellulose production facilities that were shut down following the accident. Facility repairs had all been completed as of October 2008, and production capacity returned to nearly the pre-accident level.

safety improvement. Compared to 2007, during the 2008 safety audit the various personnel responsible for safety assurance were clearly more confident. Companywide efforts to enhance risk management were evident, and it was clear that the Company had raised the effectiveness of its policies. I consider risk levels to have been substantially reduced.

As medium- to long-term goals, I look forward to the seeing the Company adopt even more sophisticated safety procedures, cultivate its sensitivity toward safety and foster an independent safety-oriented culture.

> Kazutoshi Hasegawa Professor, Faculty of Risk and Crisis Managemen Chiba Institute of Science Graduate Scho



HIGHLIGHT 1 Topics

Here we introduce some of the latest Shin-Etsu Chemical environmental and social contribution activities.

Production of PVC Ecologically Friendly Bags

Strong, durable and economical on resources

The Shin-Etsu Group has begun manufacturing the Shin-Etsu ECO SEA BAG, an ecologically friendly novelty bag made from PVC, to highlight this core product's contribution to the environment.

PVC is made 60% from inexhaustible salts, with the proportion of oil in its raw materials at just 40%. Accordingly, it is cited as a resource-conserving resin because of its low dependence on oil. In addition, CO2 emissions during production are low relative to other resins, it is easy to recycle, and it is rated highly in lifecycle assessments as a material having a low environmental

impact. PVC finds a broad range of applications in processed products, such as water pipes, and can be utilized in sheet form to produce top-class brand bags. Its texture, durability and ease of cleaning have gained PVC widespread acclaim for its practical properties.

The Shin-Etsu ECO SEA BAG features effective utilization of limited global resources in a strong, durable and long-lasting product that can be used with peace of mind. The naming of this truly eco-friendly bag alludes to fact that the salts from which PVC is made are derived from the sea.



SEH-Kanagawa Way—a New Street Name for Vancouver, Washington, the United States

Making an impression on a region through social contributions

The street leading to the gates of our Shin-Etsu Handotai America, Inc. plant in Vancouver, Washington, the United States, has changed its name from Northeast 39th Street to SEH-Kanagawa Way, According to Rovce Pollard, Mayor of Vancouver, this initiative was taken through a desire to make a lasting mark on the region to honor SEH America's many years of social contributions and the achievements of Shin-Etsu Chemical's President and CEO. Chihiro Kanagawa. In addition, Mr. Pollard has proposed that the main road leading into the plant from SEH-Kanagawa Way be named Kanagawa Avenue.

SEH America is one of the Shin-Etsu Group's 300mm wafer production bases, delivering high-quality products to markets worldwide. As its business performance has steadily picked up momentum, the company has developed its contributions to the regional economy and society. In recognition, President Kanagawa was made an Honorary Citizen of Vancouver In November 2007.

Introduction of a PVC Window Frame Grant System

Friendly to both the global environment and household budgets



Comments from the system's beneficiaries

"I installed PVC interior window sashes in the living room of our house. From that point on, I've had no condensation. I am very satisfied for that result alone."

"I had PVC interior window sashes installed in the kids' rooms to give them a guiet space to study. The sashes serve as a excellent noise barrier; It's unbelievable how little of the disturbances outside can be heard."

Royce Pollard, Mayor of Vancouver

I have always said that in our local community the role of an engine for greater economic development is necessary, and SEH America is certainly performing that role. SEH America is not only an economic asset of the local community, but it is also a wonderful friend of Vancouver because of Vice President Tatsuo Ito. It is our pleasure to name the street to commemorate our gratitude over our long-time relationship and to honor Shin-Etsu Chemical's President Kanagawa.



The Shin-Etsu Group has introduced a system whereby it contributes to employees a portion of the costs of installing PVC window sashes in residences where they live or that they own. The system provides grants toward purchase and installation of PVC window sashes when constructing, renovating or repairing a property. The Japanese government and the New Energy and Industrial Technology Development Organization (NEDO) provide subsidies for PVC window sashes through the High-Efficiency Housing/Building Energy System Introduction Promotion Program, for which employees are eligible under the newly introduced system.

Compared to conventional aluminum sashes, PVC lowers thermal conductivity by one third and provides excellent insulating benefits, which contribute to CO₂ reductions through energy conservation. PVC also prevents condensation and noise pollution. For these reasons, PVC is attracting significant attention as a lifestyle-enhancing building material.

We deliver a variety of environmentally friendly materials out into the world. Our subsidy system is an approach that is particularly viable because of our status as a material manufacturer providing products in a wide range of fields. The system is designed to raise employees' environmental awareness of and foster their participation in energy conservation activities.

HIGHLIGHT 2 Shin-Etsu Eco-Friendly Products

The Shin-Etsu Group is striving to reduce environmental impacts and conserve energy and resources through its ongoing development of environmentally considerate products.

Pledging energy savings and lifestyle amenity

PVC window sashes

PVC is derived from 60% salts and 40% oil, which renders it a general-purpose plastic with low oil-resource dependency. Furthermore, high durability and easy recycling find it broad range of uses as a construction material.

PVC window sashes are being promoted to consumers for their thermal conductivity, anti-condensation and soundproofing benefits. Compared with aluminum window sashes, PVC facilitates energy savings and enhances lifestyles, in addition to making a major contribution to global warming prevention.



PVC window sashes—the choice of the Ministry of the Environment

In October 2006, the Ministry of the Environment took the initiative over other Japanese government ministries and agencies through the model construction of PVC interior window sashes at the Kasumigaseki Central Government Building No. 5 in central Tokyo. The work spans 20 office windows on the 23rd and 26th floors, covering an area of approximately 200 square meters. The adoption of PVC win-

dow sashes had immediate benefits in terms of reducing thermal conductivity and noise. Moreover the installation work was praised for its simplicity. In April 2007, PVC window sashes were also added to ministerial and other executive offices.



PVC window sashes installed at the Office of the Minister of the Environment





Help prevent global warming

Conversion to PVC from conventional aluminum window sashes

can result in annual CO₂ emissions cuts of more than 1 ton per house, or 300kg per condominium. If all detached houses

and collective housing throughout Japan adopted PVC window sash systems, the annual reduction in CO₂ emissions could be as high as 35 million tons Source: PVC Siding Promotion Committee



∎.

1.042kg

Detached houses Annual CO₂ reduction

Save on expenditures 2

PVC window sashes feature low thermal conductivity with high insulation benefits. PVC sash/multilayered glass systems can cut heating and air-conditioning costs by 25% to 40%. In a model case, this is reckoned as an economy of 35,000 yen per year

Heating and air conditioning cost reduction effects



1. Using national average heat-insulated housing as a model (1980 energy conser specifications)
2. Maintaining temperatures of 26°C in summer and 20°C in winter during occupation

only using a heat pump air condition

Bectricity charges calculated at 23 yen/kWh.
 Electricity charges calculated at 23 yen/kWh.
 Source: Sakamoto Laboratory; Department of Architecture, Faculty of Engineering, University of Tokyo

3 Eliminate noise pollution

PVC window sashes offer **PVC window sash sound insula**excellent soundproofing qualities. In addition to vastly reducing outdoor traffic noise, leakage of interior sounds, such as voices and music, can be constrained. Source: PVC Siding Promotion Committee



Helping reduce product size and weight

Rare earth magnets

Rare earth magnets contribute to the miniaturization, weight saving and power performance of motors and other electrical equipment through their strong magnetic intensity. Such factors find them a broad range of applications, spanning energy-saving air conditioners and a variety of automobile motors.

Employing rare earth magnets in air conditioner compressor motors improves the coefficient of performance (COP) by 5% to 10%, bringing energy savings and CO₂ emission reductions, thus contributing to global warming prevention. Automotive applications include the drive components and generators of motors for hybrid and fuel cell vehicles and sensors, helping realize reductions in size and weight of components and promote energy conservation and utilization of clean energy.

Aiding atmospheric pollution prevention

Cellulose derivatives

Cellulose derivatives are manufactured from environmentally friendly natural high-polymer materials. These derivatives are used for appropriate binders for moduling automobile components as ceramic catalyst carrier and diesel particulate filter (DPF.)

Ceramic catalyst carriers function as a purification system for noxious compounds, using chemical reactions that convert hydrocarbons, carbon monoxide and NOx to such harmless substances as water and nitrogen. DPFs perform almost complete removal of harmful particulate matter from diesel vehicle exhaust emissions.

Catalytic device





Novel eco-friendly agrochemicals

Synthetic pheromones

Synthetic pheromones are artificial formulations of the pheromones secreted by insects that can be applied as a new weapon in pest control. By disrupting communications between pests that are harmful to agriculture, pheromones have the effect of reducing next-generation pests density.

Synthetic pheromones are being increasingly adopted as innovative alternatives to pesticide for apple and peach crops in Europe and the United States, and in Japan during the cultivation of fruit, tea, and cabbages and other vegetables. They are gaining widespread attention on account of their reduced environmental impact, which is significantly lighter than conventional agrochemicals.



Corporate Governance

The enhancement of corporate governance is the most important task in CSR management.

Board of Directors/Managing Directors' Meeting

The Board of Directors consists of 20 members, four of whom are external directors with broad management experience. By minimizing the number of members, Shin-Etsu is working to establish a system capable of faster decision-making and more flexible management.

The Board of Directors determines the Company's fundamental policies, and deliberates and decides upon important business operations in light of the Companies Act and the Company's articles of incorporation. The Managing Directors' Meeting engages in deliberation and determination concerning a variety of other business operations.

Statutory Auditors

We have adopted a statutory auditor system. In order to improve and strengthen the audit function, three of the five auditors are external. Statutory auditors attend not only meetings of the Board of Directors and Managing Directors, but also other important in-company meetings, and carry out all audits concerning our business operations. In addition, the auditors hold reqular monthly meetings with the Auditing Department, where they receive progress reports on all activities and internal auditing results, give advice on activity details and audit themes, and request further investigation when necessary.

Officers' Remuneration Committee

The Officers' Remuneration Committee, chaired by an external director and consisting of a further three directors, carries out all deliberation and evaluation of board members' remuneration and submits its recommendations to the Board of Directors, based on the Regulations of the Officers' Remuneration Committee.

Auditing on Operation

The Auditing Department is a specific department, dedicated to taking charge of all matters concerning internal operation audits and internal control systems. This Department also strives to further strengthen corporate governance.

Risk Management Committee

Chaired by a managing director, this committee's role is to identify and take preventive measures regarding the various kinds of risk that could possibly occur as a result of the Shin-Etsu Group's business operations.

Internal Control Reporting System

Shin-Etsu will comply with J-SOX from the fiscal year ending March 31, 2009. In preparation, the Company has established the Internal Control Promotion Team, which formulated the Basic Policy Statement on Internal Controls Related to Financial Reporting in December 2007 and is creating other fundamental plans.



* For further details of our corporate governance, please refer to the "Report on Corporate Governance." URL : http://www.shinetsu.co.jp/j/profile/cg.shtml (Japanese only)

Compliance

Through the concerted efforts of the Company and all directors and employees, we are trying to ensure the establishment of a thorough and comprehensive system for compliance.

The Shin-Etsu Group believes that its obligation to comply with laws and regulations in its business activities. and always includes compliance in its periodical managerial objectives.

Thoroughgoing Awareness of Compliance

In cases where legal statutes concerning corporate activities are newly established or revised, the Legal Department leads efforts to notify all employees throughout the Shin-Etsu Group and conducts explanatory meetings. In the event that illegal activities are discovered at other companies, reminder notices are transmitted throughout the Group, with the intention of continually raising awareness of compliance issues.

Compliance Pledge

A Compliance Pledge has been introduced, to be taken by Company directors and employees, all of whom pledge to conduct their daily business activities in the spirit of compliance. Anyone who violates the Pledge is severely punished.

Compliance Consultation Office

We have set up a Compliance Consultation Office, whose role is to support every staff member of the Shin-Etsu Group in conducting their business activities in strict compliance with all laws, government regulations and in-company rules.

This office strictly protects the privacy of all those who use it, ensures that they are not subjected to any disadvantages, investigates all information obtained from consultations and formulates appropriate countermeasures. Under the Compliance Consultation and Notification Regulations, no one using the Office may be disadvantaged in any way or lose their job because of any consultation or notification



Information Management System

The Company has developed a fundamental policy concerning information security to ensure the confidentiality, safety and stability of its information assets and prevent the leakage of important information concerning our customers and business partners. We are constructing an information asset management system, have appointed an officer responsible for information control, and are striving to manage its information in accordance with established information management regulations and standards.

Protection of Personal Information

In response to the Act on the Protection of Personal Information, which came into force on April 1, 2005, we formulated a personal information protection policy that is now posted on the Company's website*. Moreover, we hold explanatory meetings within the Group related to compliance with all relevant laws, and are making exhaustive efforts related to the appropriate handling and protection of personal information.

* Personal Information Protection Policy: URL: http://www.shinetsu.co.jp/j/about/hogo.shtml (Japanese only)

CSR Promotion System/Environmental Management Promotion System

By revisiting the very basis of Corporate Social Responsibility, we are now approaching CSR activities with a new outlook.

CSR Promotion System

Since fiscal 2005, we have promoted various CSR activities by establishing the position of Officer Responsible for CSR and setting up the CSR Promotion Committee.

Based on the acknowledgment that "CSR is itself a corporate activity," the CSR Promotion Committee reviews the actions undertaken by Shin-Etsu at a corporate level and ensures that any positive aspects are retained while any points needing to be improved are rectified, and continues to support those activities that can further enhance the corporate value of the Shin-Etsu Group.

To further promote and develop CSR Activities at a Group level, the Committee has made special efforts to assess the status of the promotion of CSR activities in the Group companies, both in Japan and abroad, and has focused on improving the promotion system for Shin-Etsu, which is seen as the core of promotion activities.

The Group will keep working on CSR promotion activities while revisiting the original question of just what is the social responsibility of a corporate body.

Environmental Management Promotion System

To promote environmental management, we are addressing specific problems related to environmental protection via the Shin-Etsu Group Environment Control and Safety Meeting, chaired by the officer responsible for environmental control and safety. With the participation of those persons in charge of environment and safety, the Shin-Etsu Group Environment Control and Safety Meeting addresses environmental protection and safety issues affecting the Group as a whole. As for Environmental Control and Safety Guidelines and Safety and Health Guidelines, the Environmental Control and Safety Department of the head office has compiled all the required guidelines and is in charge of their promotion and further development.

The Environmental Control and Safety Departments at each plant and business establishment are providing support for the manufacturing departments and performing public relation activities in association with local governments, related governmental offices and industrial organizations, etc.

Environment Control and Safety Audits

Regular environment and safety audits and special

audits with specific themes are performed and verified in accordance with the activities of all environmental and safety assurance operations.



Special environment control and safety audit (conducted at JAPAN VAM & POVAL CO., LTD., in June 2007)

Shin-Etsu Group Environmental Management Promotion System

Board of Directors President & CEO Shin-Etsu Group Environment Control and Safety Meeting (Chairman: Kiichi Habata, Managing Director) All Shin-Etsu Chemical Co., Ltd. Departments

Environmental Charter

We will keep pursuing *safety and environmental protection-first* as the basis of our management, and continue to contribute to the establishment of a sustainable society.

The Shin-Etsu Group conducts its business activities with *safety and environmental protection-first* as its basic corporate philosophy. We place a high priority on technological developments capable of contributing to the reduction of environmental impact, and conduct thorough environmental management at all stages, from the design of products and manufacturing facilities through to the creation of an efficient manufacturing system.

We strive to achieve the above goals by establishing objectives in each business and unit based on the Environmental Charter. We will continue to pursue *safety and environmental protection-first* and implement environmental initiatives contributing to the construction of a sustainable society.

Environmental Charter

I. Fundamental Principle

The Shin-Etsu Group recognizes that global environmental protection is one of the most important issues facing humankind. We believe in the fundamental principle of pursuing environmental protection in every aspect of our business activities as we aim to help create a society in which the issue of global warming can be effectively addressed and sustainable development is possible.

II. Action Guidelines

1	We strive to accurately anticipate any effects tha and we comprehensively implement policies focu vation of resources and energy, recycling of mat- continually improve the local, regional and global
2	We fully comply with national and international I ment. Moreover, we also strive to prevent environ to achieve this goal.
3	In developing new products and technologies, v from the fundamental research and design phase disposal phases.
4	By means of Group company training programs protection, we strive to raise the consciousness more, with deep regard for the local, regional and onmental protection activities.
5	To promote environmental protection activities, v agement activities.

All Shin-Etsu

Chemical Co., Ltd.

Departments

Shin-Etsu Group CSR Promotion System

Board of Directors

President & CEO

CSR Promotion Committee

(Chairman: Kiichi Habata, Managing Director)

Companies of

the Shin-Etsu Group



at our business activities might have on the environment, used on the strict control of chemical substances, conserterials and reduction of waste products. We endeavor to l environment.

laws, regulations, and agreements related to the environnmental pollution and work together with local societies

we aim at minimizing any adverse environmental effects as through to the manufacturing, distribution, usage, and

.....

s and internal communications regarding environmental of all employees about environmental matters. Furtherd global environment, we promote a wide range of envir-

we organize to effectively carry out environmental man-

Shin-Etsu's Core Environmental and Safety Principles Shin-Etsu's core principles of 'Safety and Environmental Protection-First'

The Shin-Etsu Group is making strenuous efforts to effectively put in place safety measures that take all possible accidents or disasters into account The Shin-Etsu Group has been carrying out security and safety management at its plants guided by Shin-Etsu's basic management policy of putting Safety and Environmental Protection-First as its most crucial management objective. However, as a result of the accident that occurred in 2007 at the Naoetsu Plant, we have deeply reflected upon the fact that latent safety dangers may still exist and that there are some safety matters that need to be improved.

During the past year, for all Shin-Etsu's production processes and ways of working, including those of overseas Group companies, we have carried out countermeasures by tracking down all the possible risks of an accident involving an explosion occurring related to the raw materials and products that we handle. With these countermeasures, we believe that safety has been greatly improved.

Moreover, we are seriously undertaking the activities of gathering and analyzing information about close-call incidents and safety measures, and we have received many safety improvement suggestions from employees at our plants. To make sure that the suggestions that we are continuously receiving are immediately and effectively utilized for the improvement of worksite safety by means of implementing them for the actual production processes and work within the entire Shin-Etsu Group, we have established a registration and access system for these suggestions on Shin-Etsu's Intranet, which speeds up the sharing of information and disclosures.

We are implementing measures aimed at creating safer worksites in parallel with carrying out risk evaluations of plant and work processes.

For many years, we have strengthened our systems for dealing with large-scale earthquakes by such means as establishing a system to speed up information transmission through having multiple communication channels, carrying out reconfirmation and reinforcement work for each plant's earthquake-resistance strength, and connecting each plant's safety shutdown system with an earthquake recorder, a seismic instrument that continually monitors the Earth's crust vibration levels.

We are going ahead with new earthquake countermeasures and safety and disaster prevention measures based on the BCM (business continuity management) planning concept, which involves a back-up system to protect all essential company information.

Measures in response to the REACH European Community Regulation on safe use of chemicals From risk to business opportunity

On June 1, 2007, the REACH Regulation, which deals with the Registration, Evaluation, Authorization and restriction of chemical substances, came into effect.

REACH is a new regulation to require the better and earlier identification of the intrinsic properties of chemicals that are distributed in European Community. Under REACH, chemical manufacturers are required to make safety evaluations, including the gathering of information on the properties of all the chemicals they use and manufacture and their safe handling, and to register this information in a central database. As a chemical manufacturer Shin-Etsu is making strong efforts throughout the Shin-Etsu Group to sincerely comply with the REACH Regulation.

In line with the REACH regulation, if we make a mistake of omission with regard to taking the necessary steps stipulated by that new law, it could become a grave management risk. Shin-Etsu has established a Risk Management Committee that is taking charge of all matters related to risk management. By strengthening our relationships with supply chains and promoting the sharing of information, we would like to make use of our response to the REACH Regulation to create new business opportunities.

By achieving our mid-term environmental goals, we will fulfill our responsibility and role as a member of society As medium-term environmental objectives, the Shin-

Etsu Group has laid out two objectives: 1) A reduction in greenhouse gas emissions to 66% of

- the 1990 level in terms of the energy consumption rate in 2010.
- 2) Achievement of zero emissions (buried waste under 1%) in 2010.

We are proactively installing co-generation facilities to reduce greenhouse gas emissions and promoting the efficiency of existing processes to improve our energy consumption unit of output so as to work toward the achievement of our medium-term environmental objective of realizing in 2010 a reduction of 66% of the emission level of 1990.

With regard to the latter goal — reducing, reusing and recycling of waste generated in the production process our efforts to achieve zero waste emissions are going smoothly. We are totally focused on making sure to achieve our medium-term environmental objectives.

The Shin-Etsu Group will do its part by fulfilling our responsibility and role as a member of society.



Kiichi Habata Managing Director in charge of Environment Control and Safety Shin-Etsu Chemical Co., Ltd.

Challenges and Results of Shin-Etsu Chemical in Fiscal 2007

Achieving zero environmental accidents and medium-term environmental objectives were the challenges of Shin-Etsu Chemical in fiscal 2007. At the same time, we conducted Responsible Care (RC) Initiative Verifications and tried to correct items cited by the inspectors.



In fiscal 2007, we experienced no explosions, accidental fires or other environmental accidents. The energy consumption rate in the medium-term objectives exceeded the target value, 69% of the 1990 level, and the amount of buried waste in zero emission objectives was reduced to 0.7%, and we achieved zero emissions in fiscal 2007. The results of inspections of our RC activities are shown below.

Verification of RC Activities

Shin-Etsu Chemical strives to maintain safety and preserve the environment according to our management policy safety and environmental protection-first. As part of our efforts, we have been promoting Responsible Care (RC) activities since 1995, which are participated in by chemical companies worldwide. RC activities are voluntary management activities by the chemical industry to protect the environment, safety and health.

> In January 2008, inspections covering occupational health and safety and process safety and disaster prevention were conducted at the Naoetsu Plant and the Takefu Plant. Results were as follows.

- The distribution of post-accident questionnaires to all employees and public disclosure of questionnaire responses was recognized.
- Comprehensive disaster drills, including late-night and holiday drills, were recommended.
- It was recognized that a system was in place to follow up on cited inspection items through to improvement.
- The initiation of process hazard prediction training and safety education and training was recognized.

These results will surely be fed back to our RC activities. We will continue holding such inspections in the future, and outside inspections will be extended to other plants and inspection items.

Shin-Etsu Chemical's Tasks for Fiscal 2008

- 1. Through accident instruction at the Naoetsu Plant, prevent recurrence of accidents and fire damage.
- 2. Strive to achieve medium-term objectives in 2010.
- (1) Introduction of co-generation facilities to reduce greenhouse gas emissions and further improve the energy consumption rate. (2) Assurance of 3R (reduce, reuse and recycle) in our efforts to sustain zero emissions (buried waste under 1%.)

• A reduction in greenhouse gas emissions to 66% of the 1990 level in terms of the energy

Environmental preservation, process safety and disaster prevention, occupational health and safety, chemical and product safety, distribution safety and communication with the community are included in RC activities.

Because of the voluntary nature, we felt the necessity for third-party assessment of our RC activities, and underwent inspections by outside inspectors in addition to in-house audits on the PDCA of RC activities, continuing such activities from fiscal 2006.

- It was anticipated that that STOP activities would be introduced and be effective in preventing unsafe actions.
- The introduction of effective training and education, combining desktop education and hazard experience training, was recognized.
- The encouragement of activities to promote health and raise individual health levels was recognized.

Emergency Response and Safety Measures

To ensure the safety and security of local residents and employees by taking every possible measure to keep the workplace safe and prevent accidents.

Ensuring the safety and security of local people and improving the environment where our employees can work in safety every day is our duty as a corporate entity. We have therefore established ensuring safety and environmental protection as mutually inseparable, toppriority components of the basic guidelines used for all our business practices.

The Shin-Etsu Group handles and manufactures a variety of chemical substances as raw materials. Although the chemicals we handle are useful to society, some of them are, by their very nature, also harmful to human health. For that reason, the Group abides by all laws and regulations regarding chemicals, making all necessary efforts to prevent outside pollution and enforcing appropriate controls.

Emergency Response System As the Shin-Etsu Group handles many kinds of chemi-

cals, there is the possibility of a large-scale disaster occurring and involving both employees and local people in the event of an accident. In preparation for the possibility of such an accident, disaster or large-scale earthquake, we have arranged a Companywide emergency response system and established relevant procedures. We also verify the efficiency of our response procedures by performing regular drills.

As well as the accident and disaster drills carried out in each plant and business establishment, divisional drills are practiced for fires caused by explosions and for leaks of dangerous materials. All necessary equipment and materials are also prepared in the event of an accident taking place outside the Company's premises, such as during transportation. Above all, in consideration of recent accidents in Japan and abroad, we have strengthened our response capabilities for emergency situations as follows:

- Establishment of emergency communication systems (inside the Company, in conjunction with public agencies such as fire departments and in collaboration with the local community)
- Quantitative assessment of disasters using simulations
- Improvement and reinforcement of equipment and materials for emergency measures (including providing support for people outside the company)
- Execution of plantwide and divisional drills based on specific accident scenarios
- Provision of and education on the use of Yellow Cards (in response to accidents occurring during transportation)
- Implementation of Container Yellow Cards



Water discharge drill (Gunma Complex, July 2007)



First-aid training for a person facing cardiac or respiratory arrest (Shin-Etsu Handotai Shirakawa Plant October 2007)

Safety Measures for Chemical Substances

The Shin-Etsu Group handles, manufactures and sells a variety of chemical substances, including many hazardous substances, which are flammable, explosive, toxic, poisonous or corrosive. Such dangerous substances should be handled according to their properties, and strict observation of the handling rules represents the basics of safety measures. These hazardous substances are regulated by laws and regulations. Compliance with such legislation is a means of implementing safety measures.

We issue MSDS^{*1} for each of the hazardous chemical substances. When these hazardous materials are handled in the plant, observing the MSDS is to keep employees' safety, and prevent mechanical failure and accidents in facilities. An MSDS is created for each product provided to customers. Accordingly, the MSDS is also used to ensure the safety by the customer.

Ensuring safety during transportation is also required. The Shin-Etsu Group issues a Yellow Card*² for bulk transportation, or a Container Yellow Card*³ for the transportation of small quantities of chemicals. Further, the GHS*4 labeling system was introduced to ensure the Group complies with protocols arising from revisions to the Labor Safety and Sanitation Law in December 2006.

The Shin-Etsu Group reports the amount of atmospheric emissions of chemical substances we handle in accordance with the PRTR Law*⁵. At the same time, we strive to reduce emissions, and make our utmost efforts to develop less hazardous materials. In developing and manufacturing Small Amount of New Specific Chemical Substances^{*6} or New Specific Chemical Substances^{*7}, we make sure of safety and submit notifications in accordance with the Law concerning the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.*8.

*1 MSDS

MSDS stands for Material Safety Data Sheet, on which all relevant data concerning the chemical in question is described in order to handle chemicals safely and prevent any accident from occurring. When a business operator delivers chemicals or products containing chemicals to another business operator, the MSDS must be attached.

	Million and angle, Maranan Million and Angle	n ti n ti furti uti ti ti
and the second second		MSDS

*2 Yellow Cards:

The cards on which all relevant information on treatment required in case of an accident during transportation is described. These are prepared in the interests of safety and handed over to the carrier whenever chemicals are transported and retained by the carrier throughout delivery



*3 Container Yellow Cards:

A label indicating safety information is attached to every container when transporting small guantities of chemicals individually or with other items. Information requirements are internationally accorded.

*4 GHS (The Globally Harmonized System of Classification and Labeling of Chemicals)

This internationally accorded system addresses the classification of chemicals by type of hazard, in accordance with labels and safety data sheets.

*5 PRTR Law (Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management):

Promulgated on July 13, 1999, the law is intended to promote improvements in the voluntary management of chemical substances by businesses and prevent impediments to environmental protection, based on different ideas from existing environmental laws.

*6 Small Amount of New Specific Chemical Substances:

The notification of new chemical substances is obligatory under the two below-mentioned laws, regardless of the amount manufactured or handled.

*7 New Specific Chemical Substances:

The Law Concerning the Examination and Regulation of Manufacture, etc., of Chemical Substances and the Labor Safety and Sanitation Law establish reporting duties with respect to new specific chemical substances.

*8 Law Concerning the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.: A law concerning examination and regulation of manufacture and other

aspects of chemical substances.

Safety Measures for Facilities

The Shin-Etsu Group's factories use various types of machines and facilities for a host of purposes, including production, environmental conservation, utilities and distribution. Operating this equipment requires a substantial amount of energy. We also employ facilities that process hazardous and toxic materials, operate at high pressures, and certain equipment sustains extremely hot or cold temperatures during operation.

The machines and facilities in factories ease the labor of workers, but are potentially dangerous, as suggested above. A significant number of people were injured in the March 2007 Naoetsu Plant accident, with extensive impact on residents of the local community. Our safety measures for machines and facilities are therefore focused on identifying the risk factors in advance to minimize the risks of an accident.

A number of techniques are available to identify risk factors, but HAZOP* is typically used in chemical plants. The most effective plans are proposed for the risk factors identified with various techniques, and the safety review board, including factory managers in its members, investigates and approves the proposed safety plans. The plans are then presented to all Group companies for their approval and put into practice.

Because of the seriousness of the potential damage caused by accidents in factory machines or facilities, adequate preparedness for accidents is very important. Emergency drills are conducted at individual sections and across plants, in addition to damage simulation to predict the scope of damage, preparation of equipment for dealing with accidents, and implementation of an emergency communication system.

* HAZOP (Hazard and Operability Study):

HAZOP is designed to facilitate improvement in work procedures and facilities by anticipating potential malfunctions in manufacturing facilities and the resultant environmental pollution brought about by changes in operating conditions. HAZOP is conducted whenever a new facility is at the design stage, and is implemented by the designers and managers to ensure that a high degree of safety is designed into the facility right from the start. Existing facilities are also subject to HAZOP, in which their operators participate, and this is reflected in the improvements made to operating procedures and facilities.

Response to REACH

REACH* is a new European Union Regulation on chemical substances, which was enacted in June 2007. Preliminary registration opened from June 1, 2008. Under the REACH directive, parties that manufacture in or import into the EU substances to a volume of one ton or more are obliged to complete registration procedures, in a process comprising registration, notification, approval and restriction.

Specifically, substances, preparations, molded parts and other components relating to the chemicals contained in products are subject to registration and notification procedures. Further, for the protection of health and the environment, the use and handling (including production, processing, assembly, transfer, and handling by general consumers) within the EU of chemical substances and the products in which they are used are subject to approval and restriction regulations.

Information on dangers and hazards posed by chemical substances must be provided to customers in the form of a safety data sheet. Further, data must be collected on customers' uses and volumes handled. As a result, Shin-Etsu Chemical requires the cooperation of all Group members and related parties throughout the supply chain in the processing and sharing of information.

Based on the cooperation of all operating and related divisions, the Shin-Etsu Group is deliberately and actively striving to realize its response to REACH as it progresses with the clarification of target substances and processing of information.

* REACH:

The Registration, Evaluation, Authorization and Restriction of Chemical substances

Promoting CSR Procurement

Shin-Etsu Chemical's CSR Procurement Basic Policy is posted on the Company website. It covers materials required for manufacturing processes, including main raw materials and secondary materials such as packaging materials, and machinery and equipment.

Specifically, the policy promotes green procurement and publicizes legal compliance and the need to manage chemical substances subject to environmental regulations to our business partners. In the future, we will prioritize procurement from business partners that are aggressively pursuing CSR activities, including environmental protection measures.

Responding to CSR Procurement Requirements

The RoHS directive was enacted in the EU in July 2006. Further, REACH has also been in force since June 1, 2007. Similar laws on the management of chemical substances have been formulated in other countries, too, calling for information management throughout the supply chain to ensure supply of appropriately controlled products. In response to these advances, we are providing many customers with chemical substance management certification, verifying the contents of our products.

The Shin-Etsu Group, as a materials manufacturer, supplies an array of products to customers that in turn require us to issue certification documents. As part of our CSR procurement activities, we are increasing the number of Green Procurement Certificates we issue year on year, reaching 9,181 for Fiscal Year 2007.

Control of Food Additives and Pharmaceutical Products

Cellulose and silicone are key materials used in certain food additives and pharmaceuticals. As these products are directly related to human health, the Group pays close attention to their quality control and compliance with all relevant laws and regulations.

Safety Measures for Employees

The Shin-Etsu Group implements a range of measures for the safety of its staff. The basis of our measures for the safety of employees in the course of their activities is recognition that people do make mistakes. From this standpoint, our safety measures span enhancing intrinsic safety of facilities and processes as error prevention measures, boosting safety through interlocks and alarm systems to limit the consequences in the eventuality of an error occurring, and implementing revisions and improvements.

We use various machines and facilities in our manufacturing factories to process a variety of chemical substances. Tangible safety measures are taken for these machines and facilities. We also focus on the intangible aspects, such as education on the correct operation of the machines and facilities. Workers are educated on the purpose and effect of protective gear and repeatedly told to wear it. We have launched a scheme for the promotion of zero accidents, and introduced risk prediction training, potentially serious error proposals, prevention, risk assessment, and hazard experience training have been carried out on all Group company sites.

The work environment is continuously improved in our effort to maintain the health of workers, and the density of substances handled at workplaces is measured to ensure it is within the control level. The installation of local exhaust systems and changes to substances less harmful to workers are also promoted.

Throughout the Shin-Etsu Group there were 16 injuries in total, 4 LTIs and 12 Non-LTIs during 2007*. Most injuries arose from being pinched or caught in machinery or other wounds sustained in the course of activity. We promote the "intangible" safety measures given above.



Change in the Number of LTIs and Frequency Rate in the Shin-Etsu Group

^{*} These figures include two victims of the March 2007 Naoetsu Plant Accident. However, they do not include contractors or construction workers.

Reducing the Environmental Impact of Business Activities Input/Output

As a key material manufacturer, we aim to reduce environmental impact, not only for our own benefit but also for that of the whole society, by developing advanced technologies.

The Shin-Etsu Group intends to implement a management environment to reduce environmental impact and risks and increase energy efficiency via its own business activities. At the same time, our mission is to offer new materials that can contribute to reducing environmental loads and increasing energy efficiency across society, through the development of advanced technologies as a leading material manufacturer.



Notes: The numbers are a total of 11 companies: Shin-Etsu Chemical Co., Ltd., Shin-Etsu Handotai Co., Ltd., Nagano Electronics Industrial Co., Ltd., Naoetsu Electronics Co., Ltd., Mimasu Semiconductor Industry Co., Ltd., Shin-Etsu Quartz Products Co., Ltd., Yamagata Shin-Etsu Quartz Co., Ltd., Fukui Shin-Etsu Quartz Co., Ltd., Nissin Chemical Industry, JAPAN VAM & POVAL CO., LTD. and Shinano Electric Refining Co., Ltd in fiscal 2007. Please refer to Shin-Etsu Chemical's website, at http://www.shinetsu.co.jp/e/profile/kankyo.shtml for environmental data on Shin-Etsu Group companies

Environmental Activity Report

The Group is addressing all issues that are relevant to realizing energy saving and preventing global warming, including reducing the environmental impact, protecting the environment and recycling resources.

Energy Saving and the Prevention of Global Warming

Reduction of energy usage

The Shin-Etsu Group manufactures a variety of products handling a range of energy sources, including electricity, fuel oil, kerosene, diesel oil, liquefied petroleum gas, liquefied natural gas and steam. We select the most suitable energies for manufacturing facilities and utilities used in such processes as reaction, purified, synthetics, processing.

Although overall energy usage is growing, owing to increased Group-wide production, each company and plant also strives to save energy.

Examples of our approach

- Extensive use of co-generation systems
- Improvements in energy saving by facility: Improved efficiency, productivity, insulation, etc.
- Recovering heat from waste

The amount of energy consumed by the Shin-Etsu Group in fiscal 2007 was 679,000 kiloliters (crude oil equivalent,) an increase of 37,000 kiloliters from fiscal 2006. This figure, approximately the same amount per unit of sales, represents a 24% decrease in the five years from fiscal 2003.



Prevention of global warming and pollution abatement measures

The Shin-Etsu Group is trying to reduce greenhouse gases to stop global warming. We are also working to minimize discharged air pollutants through pollution abatement measures.

 CO_2 emissions have risen as our energy use increases, but every company and plant is making an effort to reduce CO_2 emissions. Some of our affiliates use a specific CFC as a refrigerant, but this substance is strictly

managed so as not to be released in the air. The efforts of individual companies and plants have maintained or reduced levels of air pollutants such as soot, nitrogen oxides (NOx) and sulfur oxides (SOx.) Emission gases from boilers and incinerators are regulated by laws, regulations and ordinances, but we go beyond simply complying with these regulations; we reduce emissions even further. We regularly measure levels of soot, NOx and SOx and monitor their impact on the atmosphere.

Examples of our approach

- Promotion of energy saving by introducing cogeneration systems, etc.
- Switch to fuels, such as liquefied natural gas, with less CO₂ and air pollutant emissions
- Addition of a pollutant treatment facility and installation of a recovery facility
- Improvement of the combustion method

Energy-caused CO₂ emissions by the Shin-Etsu Group in fiscal 2007 totaled 1,240k CO₂-ton, a slight increase of 30k CO₂-ton from fiscal 2006. Amounting to a 2% improvement per sales unit, we achieved a 29% improvement compared with the fiscal 2003 level.

Soot emissions amounted to 16 tons. Although this emission quantify varies by year, the trend is steadily downward. NOx and SOx emissions were 660 tons and 800 tons, respectively, and the combined emissions of these chemicals are decreasing.





Boiler Emission Gas Monitoring Result Table: Naoetsu Plant

	Regulation value	2003	2004	2005	2006	2007
Soot (g/Nm ³)	<0.25	<0.02	<0.02	< 0.03	<0.01	<0.01
NOx (ppm)	<150	<110	<83	<110	<99	<88
SOx (Nm ³ /h)	<74	<1.1	<1.2	<2.6	<0.1	<0.1

Incinerator Emission Gas Monitoring Result Table: Gunma Complex

	Regulation value	2003	2004	2005	2006	2007
Soot (g/Nm ³)	<0.15	< 0.03	<0.01	< 0.02	< 0.004	<0.003
NOx (ppm)	<250	<90	<100	<110	<62	<55
SOx (k value)	<17.5	<1	<0.55	<0.51	<0.47	<1.03
Hydrogen chloride (mg/Nm ³)	<700	<54	<28	<62	<24	<51
Dioxin (ng/Nm ³)	<5	<0.01	<0.01	<0.01	<0.01	<0.01

Prevention of water pollution

The Shin-Etsu Group uses large quantities of industrial water, groundwater and tap water for manufacturing and cleaning products, and maintaining and managing facilities. Wastewater is discharged into rivers after being checked for compliance with laws and regulations specifying the limits. pH*1, BOD*2, SS*3 and COD*4 are measured on a regular basis to monitor their effects on water quality. We are also trying to reduce our use of water.

Examples of our approach

- Improvement and expansion of wastewater treatment equipment
- Leveling of effluent water quality and volume
- Recycling and reuse of cooling water

The total amount of discharge wastewater produced by the Shin-Etsu Group in fiscal 2007 was 42,000 kilotons, down 600 kilotons from fiscal 2006 and a 5% improvement in emissions per unit of sales. COD emissions totaled 700 tons, down 250 tons from fiscal 2006, and emissions per unit of sales improved 19%.

*1 pH:

Hydrogen ion concentration (-log[H+]) indicating acidity (<pH7,) neutrality (=pH7) and alkalinity (>pH7) of water solution. *2 BOD

Biochemical Oxygen Demand (BOD): This indicates the amount of oxygen required for water-borne micro-organisms to break down contaminants in water. This value is a measure of the degree of water pollution. *3 SS:

Suspended Solids (SS): These are organic and mineral particles suspended in water. They are a major cause of turbidity, and have a significant impact on aquatic life. *4 COD:

Chemical Oxygen Demand (COD): This is the amount of oxygen required to degrade the organic compounds of wastewater. A higher COD value means more polluted wastewater.

Effluent Water Quality Monitoring: Gunma Complex

	Regulation value	2003	2004	2005	2006	2007
рН	5.8~8.6	6.8~7.3	6.7~7.4	6.3~7.5	6.4~7.8	6.3~7.4
BOD (mg/L)	<25.0	<22.0	<17.0	<14.0	<25.0	<21.0
SS (mg/L)	<50.0	<41.0	<43.0	<38.0	<31.0	<32.0

Total Discharge Wastewater Amount



COD Emissions



Waste management

Various types of waste, including unreacted raw materials, byproducts, defective products and broken or unnecessary goods, are produced in various manufacturing processes. The Shin-Etsu Group applies the 3Rs (reduce, reuse, and recycle) to ensure effective use of the Earth's limited resources. We also periodically inspect contractors to ensure the proper handling of waste consigned to them.

Examples of our approach

- Utilization of inorganic sludge as a raw material for cement/steel
- Utilization of organic sludge as a fertilizer
- Reuse of acids and alkalis through separate recovery
- Thermal recycling of waste oil and waste solvent
- In-house incineration, in-house disposal
- Separate recycling of valuable metals

The amount of waste recycled by the Shin-Etsu Group in fiscal 2007 totaled 61,000 tons, up 3,000 tons from fiscal 2006, and recycling proceeds satisfactorily. The amount of waste added to landfills was 5,300 tons. Emissions per unit of sales improved 70% from fiscal 2003.



Other Environmental Protection Activities

In fiscal 2007, the Shin-Etsu Group experienced two environmental accidents, as well as one physical distribution accident and one facility accident.

Environmental accidents

One environmental accident involved a hydrochloric acid leak that resulted from damaged piping to a tank within a plant. A rise in the tank's internal pressure was the cause of the rupture. Countermeasures to prevent recurrence included resetting the gas extraction pipe and introducing a system to monitor internal tank pressure during normal hours. The other accident arose from a leak in the a cooling pipe that occurred as refrigeration equipment was being removed. Neither accident was major, thanks to swift responses by factory managers and personnel, and in neither case was the atmosphere in the plant's vicinity affected.

Physical distribution accident

While transporting products, a container suspended from a five-ton truck while clearing away an accident dropped, spilling product out onto the roadway. The truck driver's swift reporting and rapid support from the factory prevented this from becoming a major environmental accident involving the surrounding area. Furthermore, the driver was uninjured.

Facility accident

In this incident, factory operation was suspended owing to the development of a hole in a part attached to an incinerator within the plant. As no leakage occurred from the facility and the suspension of operation prevented the discharge of pollutants outside the plant, the surrounding environment was not affected.

Soil pollution

At each of our plants, ground water and soil quality are monitored and the pollution status is checked. However, no soil pollution has yet been identified at any of our plants.

Education on the environment and safety

Environmental conservation and accident prevention require both correct responses at the facility level and effective actions by all personnel involved. Therefore, we organize many training sessions regarding environmental and safety operations. We also conduct safety education, environmental education and education on chemical handling to prevent accidents.

Furthermore, we regularly carry out education and training sessions for employees at various levels and job descriptions.

Examples of safety and environmental education

- Education of new employees, transferred personnel and newly appointed managers
- RST education (Article 60 of the Labor Safety and Sanitation Law, "Safety and health education for foremen and others")
- Hazard prediction training, risk assessment training
- Experiments and training on combustion and explosions, low voltage electricity handling training and chemical substance handling training
- Experience training, maintenance training
- Environmental Management System (ISO 14001) education, etc.

Safety and environment qualifications

Many different machines and facilities are used for our manufacturing activities. Education and training sessions are therefore organized to cover the operation and management of all equipment and machinery.

When legal qualifications are required, personnel acquire the relevant gualifications and attend appropriate technical training.

Examples of legal qualifications regarding safety and the environment

- High pressure gas production safety controller (High Pressure Gas Safety Law)
- Pollution control manager (Law Concerning the Improvement of Pollution Prevention Systems in Specific Factories)
- Hazardous materials engineer (Fire Service Law)
- Health supervisor (Labor Safety and Sanitation Law)
- Operations chief for various operations (as set down in the rules of the Labor Safety and Sanitation Law)
- Specially controlled industrial waste control manager (Waste Disposal and Public Cleansing Law,) etc.

Training

Although we are fully prepared for accident and disaster prevention, accidents cannot be completely ruled out. We therefore conduct emergency response training to prevent the spread of any damage and promptly diffuse the situation in the eventuality of an accident. Apart from the training carried out at each workplace,

Environmental Accounting

In fiscal 2007, Shin-Etsu Chemical calculated its investments and expenditures on reducing the environmental impact from such factors as air pollution, water pollution, the emission of chemical substances into the air, saving energy to conserve the global environment, reducing waste by improving resource recycling and recycling used goods. The company computed this amount in accordance with the Environmental Accounting Guidelines prepared by the Ministry of the Environment, Japan.

The Company's cumulative capital investment related to environmental protection over the past decade came to approximately ¥18.5 billion.

Env

1

Environmental Costs in Fiscal 200)/		(Millions of yen)
Category	Details	Investment	Expenditure
Business area costs:			
1. Pollution prevention costs	Air, water, noise and other types of pollution prevention measures	1,048	3,827
2. Global environment conservation costs	Energy conservation and global warming prevention measures	200	982
3. Resource circulation costs	Waste prevention, recycling and other measures	162	1,517
Upstream and downstream costs	Green purchasing and container and packaging measures	0	6
Administration costs	Environmental management, monitoring environmental impacts and education measures	0	480
Research and development costs	Environmentally conscious product and process research and development	0	1,237
Social activity costs	Donations and contributions to environment protection	8	163
Environmental remediation costs	Assessment, handling and other costs related to environmental degradation	15	310
Total		1,433	8,522

we organize general drills assuming that a large-scale accident or disaster has occurred. We hold such drills in cooperation with local fire departments, if necessary, and open them to the public.

Environmental activities at the industry level

Shin-Etsu Chemical participates in such associations as the Japan Chemical Industry Association, the Vinyl Environmental Council and the Plastic Waste Management Institute. Moreover, we strive to improve the safety management and environmental control levels of each of our companies and cooperate with other industry member companies. We also undertake public relations activities to research and enhance the understanding of chemical substances and provide technical support.

Examples of environmental activities undertaken in cooperation with the industry

- •Activities to reduce air pollutants and volatile organic compounds
- Support of the Long-range Research Initiative (LRI)
- Introduction to the benefits of PVC and promotion of PVC recycling
- Support for waste plastics recycling

Main investments

- Introduction of a cogeneration facility
- Expansion of wastewater treatment equipment
- Installation of waste disposal and recovery facilities
- Improvement of dust collecting facilities
- Improvement of the industrial waste disposal yard
- Promotion of energy saving and installation of an energy recovering facility
- Environmental improvement, etc., of areas around other plants

Relations with Employees

People create and support technology. We aim to provide ideal working conditions so they can.

The Shin-Etsu Group respects fundamental human rights and implements a variety of approaches to establish a workplace environment that is easy to work in, help each employee realize an affluent and healthy life to make the most of his/her potential and career.

Occupational Health and Safety

Health considerations

To further decrease the number of sick, we focus on activities that promote fitness and developing physical strength, and by improving the regular health consultation service, health guidance for lifestyle-related diseases and mental health treatment. Industrial physicians conduct interviews and provide guidance for people working long hours.

Fitness and Physical Strength Development Promotion Committees are also being established in each plant and business establishment. These committees organize physical strength monitoring and hold seminars and events for physical strength improvement in cooperation with local Medical Treatment Rooms. A Family Health Consultation Desk has also been established in the corporate health insurance society to help ensure the health of employees' families.



A health lecture on smoking held to coincide with World No Tobacco Day (July 2007 at Shin-Etsu Handotai's Shirakawa Plant)

Respect for Human Rights

The human rights enlightenment promotion committee

We respect the human dignity of all individuals. To help accomplish this, the Human Rights Enlightenment Promotion Committee implements initiatives to ensure that work environments are free of all racial, gender and other forms of discrimination and are places where all employees can work together in a spirit of mutual trust.

In addition, Shin-Etsu belongs to both the Industrial Federation for Human Rights, Tokyo, and the Industrial Federation for Anti-Discrimination, Osaka. Our employees participate in training sessions held by both federations to raise staff awareness of human rights.

Performance-based personnel evaluation systems and equal opportunities

We have introduced a performance-based personnel evaluation system for wages, promotions, transfers, etc. that is applied equally to both genders. The system has proven useful for increasing employees' motivation, as their treatment reflects the way in which they meet their challenges to achieve higher goals.

To operate the personnel evaluation system in a fair and appropriate manner, the evaluation standards are made available to all employees and evaluation training is provided for all managers. All possible steps are taken to ensure that all evaluation is carried out according to the uniform standards. Communication between the evaluator and the person being evaluated is ensured by holding two interviews per year.

A Communication Sheet is also prepared between each staff member and his/her immediate superior. This sheet is utilized for further capacity building by ensuring mutual confirmation of the superior's expectations, the subordinate's desires, target setting for the next six months, and feedback on achievements discussed during the interview.

Education/Training and Self-Enlightenment

Auditing student system

We established an auditing student system in 1962. In this system, designed to help mid-level employees upgrade their skills, about 10 employees chosen from plant manufacturing sites are sent to study at university for one year. In the 47 years since this system was introduced, 477 employees have completed the program and now function as leaders at their job sites.

Participation in CEO 40s training

Mid-level employees are sent on the CEO 40s Program, conducted by President Iwao Nakatani of Tama University, as part of our efforts to foster executive candidates. Those who have attended the courses apply the knowledge gained by establishing project teams throughout the Company.

Career development support system

To support individual career development, we offer bonuses to employees who have obtained official certification. We also offer correspondence courses, online learning courses for those who have completed two years of study abroad or attended other educational programs.

Benefits

BAKER-KANAGAWA Japan—U.S. scholarship program

This new scholarship program was set up for the children of Japanese employees of the Shin-Etsu Group to attend universities in the United States. The program is the brainchild of Mr. Robert Baker, founder and the first president of Dow Chemical Japan Ltd. and a former chairman of the American Chamber of Commerce in Japan, and Mr. Chihiro Kanagawa, president of Shin-Etsu Chemical. Their shared idea for this program was to foster internationally active human resources and deepen the exchange between Japan and the United States.

Bullet train commuting benefits

Since 1989, Shin-Etsu has allowed commuting by shinkansen bullet train at company expense. This option has allowed more employees to own houses and enables personnel who are reassigned to headquarters from business locations in Gunma and Fukushima prefectures to transfer jobs without changing their lifestyles. As of July 2008, 78 employees were taking advantage of this Company offer.

Taking advantage of the bullet train commuting benefits

I decided to live in Shin-Shirakawa and put my lifestyle and child-raising first.



It has been 10 years since I started commuting by bullet train from my home near Shin-Shirakawa Station (Fukushima Prefecture) on the Tohoku Shinkansen Line. I used to live in Omiya (Saitama Prefecture,) but the commuting time to where I work near Tokyo Station is almost the same. I

Chiaki Suzuki Accounting Department Shin-Etsu Handotai Co.,

su Handotai Co., Station is almost the same. I don't like crowding or traffic

much, so it's very convenient for me to be able to sit on the train and read the newspaper or a book at my leisure. The only bothersome thing I can point to is that the last train is earlier than before.

There are multiple shopping malls, hot springs, golf courses and ski resorts scattered around Shin-Shirakawa, making it a relatively comfortable environment. I am particularly fond of the walking path along the Abukumagawa River. I had also been hoping to raise my children in a carefree setting in the countryside, so I am very happy with this choice. Additionally, I recommend this area to anyone who likes ramen noodles, because the local *ramen* restaurants are outstanding.

Childcare and nursing-care systems

Our childcare leave system permits employees to take leave till their children have reached the age of three in cases where parents are unable to secure places for their children in nursery schools, and many employees take advantage of the system. Employees raising children who have yet to reach age of three are also allowed to shorten their work time to as little as two hours a day.

As for nursing-care leave, under certain conditions, employees can take up to one year of leave per eligible family member. No employees used the system in fiscal 2007.

Number of employees who have taken child-care leave (Fiscal 2007)

Shin-Etsu Chemical (non-consolidated)	10 (male: 0; female: 10)
Consolidated companies in Japan	39 (male: 0; female: 39)
Consolidated companies total*	77 (male: 9; female: 68)

Note: The length of childcare leave differs from country to country, as the program is based on the local laws.

Accumulated holidays

Employees are granted a certain number of annual paid holidays in accordance with labor regulations. If those holidays are not taken, they are treated as accumulated holidays, which are then carried over to the next year and may be utilized as family-care leave days or as days off for injury or illness. From July 2007, this system has been applied to people who work as volunteers in disaster regions, as well as to donors for organ or bone marrow transplants.

Other systems

In the event of the death of an employee, we offer a scholarship system to support surviving children and family members. Because the Company has group long-term accident and indemnity insurance, workers may still receive a portion of their salaries, should they be unable to work due to long-term illness or injury. In addition, we have established asset-building schemes, a shareholding system, and a mutual aid society to provide support for weddings, births or sudden hospitalizations of family members.

Communication with Local Communities

We maintain communications with local communities through our plants and business sites.

The Shin-Etsu Group continues its efforts to deepen mutual understanding by promoting an array of communications aimed at building trust-based relationships with a variety of stakeholders in society and successfully realizing the Group's mission to ensure that its global customers are satisfied with its business activities.

Educational Support Activities 191 children participate in annual summer school



mmer School has become an essential event for local elementary school students

The Naoetsu Plant held its annual Summer School this year, as usual, marking its 33rd year. The event is put on mainly by new employees assigned to the plant. The school helps local elementary school students in grades four through six with their summer vacation homework, encouraging community interaction and contribution

The school is run in daily two-hour sessions, with learning in the first hour and recreation in the second. A total of 191 children attended in the seven-day period.

Providing a venue for elementary school children to get to know local industries



In the product display area of the Silicone-Electronic Materials Research Cente

62 third-year students of Nishiyokono Elementary School in Matsuida-machi, Annaka, toured the Gunma Complex, Matsuida Plant. This tour was part of a program to familiarize local residents with local industries. On the day of the tour, the children were lit up with excitement at learning things they had never seen or heard before.

Participating in Local Events Participating in the Naoetsu Gion Festival in matching yukata



Participating in the Naoetsu Gion Festival *minyo-nagashi* in matching *yukata*

From the Naoetsu Plant Group, 134 employees wearing matching yukata (light summer kimono) with the Shin-Etsu logo participated in the minyo-nagashi (folk dance procession) during the Gion Festival, which is a famous summer event in Naoetsu. In 2007, despite the event being held on a Saturday, more employees than usual attended-primarily new employees. Despite hasty preparations, the participants danced through the town of Naoetsu for two hours, greatly enlivening the town and shouting encouragement to each other along the way.

Communication with Local Communities Demonstrating plant safety to the public through display of rhododendrons









Beautifully blossoming rhododendrons

The display of rhododendrons to the public doubled as a show of plant safety and security

When Shin-Etsu Handotai opened its Shirakawa Plant to the public to show off its rhododendrons to area residents, 534 peoplefrom children to the elderly-came to see them. Under sunny skies, visitors viewed the rhododendrons at their leisure and were surprised at their size and variety. The visitors were accommodated by 128 employee volunteers at the plant. This event proved to be a good opportunity to inform area residents of the safety and security of the plant.

Other Activities

Donating to Victims of the Niigata Chuetsu **Offshore Earthquake**

Shin-Etsu Group Naoetsu Plant



Senior Managing Director Shunzo Mori (left) handing the donation register to Chuetsu Deputy Mayor Hideyuki Murayama

In its desire to be of use to the residents of Niigata Prefecture and fulfill its roles as a corporation with a production center there, the Shin-Etsu Group donated relief funds to the victims of the Niigata Chuetsu Offshore Earthquake of July 16, 2007, through the city of Chuetsu, where the Naoetsu Plant is located. Volunteers at the Naoetsu Plant also contributed relief funds at this time.

Earning a certificate of appreciation at the National Convention for promoting blood donations

Takefu Plant



With Honorary Vice-President of the Japan Red Cross Society His Imperial Highness the Crown Prince of Japan in attendance, Asahi Sub-Plant of the Takefu Plant was awarded a certificate of appreciation by the Governor of Fukui at the 43rd National Convention for Promoting Blood Donations (sponsors: Ministry of Health, Labour and Welfare; Fukui Prefecture; The Japan Red Cross Society.) The certificate was based on the branch plant's active contributions to promoting blood donation activities in Fukui Prefecture, which serve as a model for others to follow.

Activities Overseas Donating \$50,000 to the Brazosport Memorial Hospital

Shintech (United States) donated \$50,000 to Brazosport Memorial Hospital's cancer treatment center in Texas. The donation will be used toward replacing radiation therapy equipment, adding chemotherapy facilities and other expenses. Brazosport Memorial Hospital established its cancer treatment center after receiving generous contributions from a number of donors in 1995. The cancer treatment center is now the main treatment facility of its type in Brazoria County, where it treats more than 1,100 patients a year.

Participating in Corporate Breakfast Activities to provide breakfast to those in need



Associates at the corporate breakfast club

Employees of Shin-Etsu MicroSi (United States) have become members of the Corporate Breakfast Club at the Society of St. Vincent de Paul, where they volunteer to provide breakfasts. The St. Vincent de Paul Society is an international volunteer group that helps meet the needs of homeless people and low-income workers. The group serves breakfast to homeless and otherwise disadvantaged people at one of five kitchens in the Phoenix area.

On the first day, two Shin-Etsu MicroSi employees who had served breakfast to 448 people commented, "We realized not only how much we take for granted, but also how thankful we are for what we have been given in our own lives."

"Safety and environmental protection-first" is a key phrase throughout the Shin-Etsu Group.

Each of the Group companies is conscious of the key characteristics of their businesses and actively implements environmental protection activities.

Shintech Inc.

The World's Largest PVC Maker, and Growing

Established in 1973 in Houston, Texas, USA as a joint venture (although Shin-Etsu Chemical's wholly owned subsidiary since 1976) between Shin-Etsu Chemical and Robintech, Inc., Shintech commenced production of polyvinyl chloride (PVC) resin the following year at its newly constructed Freeport facility. At its start of operations, the facility's annual production capacity was 100,000 tons. Capacity is now 1,450,000 tons, as a result of effective eight expansions. The construction in 2000 of the Addis facility in Louisiana, with annual capacity of 590,000 tons, brought Shintech's PVC capacity to more than 2,000,000 tons, making it currently the world's largest PVC manufacturer. In 2008, the company constructed and began operating the Plaguemine Plant in Louisiana, which handles integrated production from PVC monomers.



Freeport facility



Freeport Plant—the World's Largest PVC Plant

Located roughly 100 kilometers south of Houston, the Freeport Plant is the world's largest PVC plant. Even through repeated facility expansions, the plant has operated for the past seven years with no lost time injuries (LTIs.) We believe this record is a result of our corporate culture of putting safety first and our employees' tireless efforts. The plant has proactively implemented a plantwide AIMS program. The system aims to forestall accidents by having individual employees seek out and focus on potential safety issues at the plant and handle them before they can manifest. The suggestions from employees are then validated, implemented and evaluated by the company's Safety and Environmental Committee.

Having obtained ISO 9001 certification in 1995 and ISO 14001 certification in 2005, the Freeport Plant maintains a high awareness of product quality and environmental issues. The plant continues to engage in a broad range of environmental activities. Examples include a 30% reduction in wastewater discharge over the past seven years through effluent recycling and a 60% reduction in NOx emissions over the past seven years through upgrades to boiler equipment.

Moreover, as a member of the local community the Freeport Plant supports a wide variety of local businesses and organizations, and proactively discloses information. For instance, the plant periodically invites community representatives and explains to them its safety efforts, information disclosure on emissions, overview of plant operations and other matters.



Jim Hodges Site Manager, Freeport Plant

Addis Plant Works to Prevent Environmental Pollution

The Addis Plant is located approximately 20 kilometers south of Baton Rouge, Louisiana's capital.

The Addis Plant is channeling resources into its safety and environmental plans. Reporting based on the Environmental Protection Agency (EPA)'s Toxic Release Inventory is compulsory in Louisiana, and the plant's emissions of methanol, chlorine, PVC and monomers are all under the approved limit. Furthermore, the plant complies with risk management and federal and state environmental plans. These results evidence the plant's Based on the Environmental Charter adopted in 1998, each Group company prepares its own environmental policy and carries out environmental protection activities. This report describes the environmental protection efforts of overseas Group company Shintech.

efforts to prevent environmental pollution and minimize emissions, which are checked at 52 monitoring points including site area. The Addis Plant obtained ISO 9000 certification in 2005 and is working to acquire ISO 14001 certification.

The plant also actively participates in the local community under the Shintech motto of "Live locally, Hire locally and Buy locally." Out of desire to be good neighbors to the community, plant employees participate in local events and an array of charity activities. They also provide direct financial assistance to a road construction project important to the area, carried out by the State of Louisiana.



David Wise Plant Manager, Addis Plant and Plaguemine Plant

Conducting Environment Control and Safety Audits

As the world's largest PVC manufacturer, Shintech is obligated to maintain constant safe operations and live up to the trust of its customers and the general public. To fulfill that trust, in February 2008 Shintech performed environment control and safety audits jointly with Shin-Etsu Chemical. The three items of the audit were (1) to meet the directive issued by President Kanagawa on March 26, 2007; "to carry out a systematic review of all plant safety measures" (2) confirmation of the renovation plan and (3) verification of environmental control and safety management status.

The results of the audit proved that Shintech's environmental control and safety management efforts have resulted in the stringent observation of the fundamentals of production technology and that rational safety management procedures fully accounting for on-site practice have been established and are being carefully and repeatedly implemented. In his assessment of Shintech, Kiichi Habata—the Managing Director in charge of Environment Control and Safety at Shin-Etsu Chemical, who performed the audit—stated, "The fun-



Environment control and safety audits conducted at the Freeport Plant

damentals of environmental control and safety, which are to steadfastly do what should be done, are being faithfully implemented. In the United States, guidance is provided under a clear division between the Occupational Safety and Health Administration (OSHA) for inside business site premises and the EPA for outside the premises. The standards for devices and facilities are also systematically maintained under a rational and practical system. Japan could learn a lot from this system."

The audit was a valuable opportunity for the Shin-Etsu Group to enhance its environmental and safety activities. We remain committed to uniting the power of the Group to thoroughly implement environmental and safety measures.



Company Outline

Shintech Inc. Representative: Chihiro Kanagawa, President Location of Main Office: Houston, Texas, U.S.A. Businesses: Manufacture and sale of polyvinyl chloride resin (PVC)

History of Environmental Activities

Measures taken by the Shin-Etsu Group

		1	95 3	
Apr. 1953	Work manuals and standards formulated	-	000	
Sep. 1955	Education and training committees established		900	
Mar. 1961	R&D Committee and Chemical Industry Council established			
Jun. 1961	Safety Council established			
Oct. 1961	First safety audit carried out	-1	070	
Nov. 1966	Safety Health and Hygiene Committee established		9/0	
Nov. 1970	Environmental Control & Safety Department established			
Oct. 1971	Wastewater treatment facility completed at Isobe Plant			
Mar. 1972	Large-scale hydrochloric acid recovery facility (byproduct incinerator) completed at			
	Kashima Vinyl Monomer plant			
Nov. 1973	Company wide emergency council established			
Feb. 1974	Environmental Control & Safety Departments in each plant placed under the			
	direct jurisdiction of plant general managers			
Aug. 1975	Environmental Control & Safety Management Regulations and Emergency	-1	non	
	Response Regulations formulated		900	
Oct. 1989	CFC Control Countermeasures Committee established	-1	000	Nov. 1988
			aa 0	
May 1990	Global Environment Issues Countermeasures Committee established (by reorga-			Sep. 1992
	nizing the CFC Control Countermeasures Committee)			
Mar. 1995	Participation in Responsible Care (RC) promotion			Oct. 1993
Jul. 1996	ISO 14001 certification obtained for the Gunma Complex			
Dec. 1997	ISO 14001 certification obtained for all production plants of Shin-Etsu Handotai			Nov. 1994
Aug. 1998	Environmental Charter adopted			
Nov. 1998	First Environmental Report published			Jun. 1996
Jan. 1999	ISO 14001 certification obtained for JAPAN VAM & POVAL CO., LTD.			
Nov. 1999	Company-wide hearing on environmental issues			Oct. 1996
				Jun. 1997
				lup 1007
			-	Juli. 1997
				Nov 1998
				1404. 1550
		0	000	Jul. 1999
		-2	UUU	
Mar. 2000	ISO 14001 certification obtained for all domestic production plants of Shin-Etsu			Jun. 2000
	Chemical			
Apr. 2000	ISO 14001 certification obtained for Nissin Chemical Industry			Jul. 2000
May. 2000	Final disposal facility completed at the Gunma Complex			Jul. 2000
Oct. 2001	Waste disposal facility completed at the Naoetsu Plant			Nov. 2000
Mar. 2003	Attended First International Conference on Green and Sustainable Chemistry			
	(GSC TOKYO 2003)			Oct. 2001
Apr. 2005	Corporate Social Responsibility (CSR) Promotion Committee established			
Jul. 2005	Waste-recycling system at Naoetsu Plant began full-scale operation			Oct. 2001
Oct. 2005	Environmental Charter revised			
				Oct. 2002
				Nov. 2002
			-	1 2002
			-	Jul. 2003
			-	Aug 2002
				Aug. 2003
				Qua 2003
				Jul 2005
				Jul. 2003
				Dec. 2005
				2005
				1.1 2007

Safety/Environment/Industrial Health-related Commendation Results

Fukui Prefectural Governor's Award for Excellent Manufacturer of High- Pressure
Gases (Shin-Etsu Handotai/Takefu)
International Trade and Industry Minister's Award for Excellent Green Factory
(Shin-Etcu Handotai/Shirakawa)
Osaka Profectural Governor's Award for Excellent Manufacturer Polated to High-
Processing Gases (IAPAN VAM & POVAL)
Achieved 12 200 000 disector free hours a 2rd class disector free record (Shin
Auneveu 15,500,000 uisaster-nee nouis, a siu ciass uisaster free fecord (Shift-
Etsu Handotai/Shirakawa) Drine Minister's Common defines for October ding Contribution to the National
Prime Minister's Commendations for Outstanding Contribution to the National
Greening Campaign (Shin-Etsu Handotai/Shirakawa)
Minister of International Trade and Industry Award for Excellent Manufacturing
Facility of High-Pressure Gases (Shin-Etsu Chemical/Gunma)
Fire Defense Agency Director General's Prize for superior handling of hazardous
materials (Shin-Etsu Chemical/Gunma)
Fire Defense Agency Director General's Prize for superior handling of hazardous
materials (JAPAN VAM & POVAL)
Superior High-Pressure Gas Production Facility Award from the Head of the Kinki
Bureau of Economy, Trade and Industry (Shin-Etsu Handotai/Takefu)
Superior High-Pressure Gas Production Facility Award from the Head of the Kanto
Bureau of Economy, Trade and Industry (Shin-Etsu Chemical/Kashima)
Fire Defense Agency Director General's Prize for superior handling of hazardous
materials (JAPAN VAM & POVAL)
Minister of Labor Superior Prize (Nissin Chemical Industry)
Minister of Labor Superior Prize (Naoetsu Electronics Industrial)
Superior High-Pressure Gas Production Facility Award from the Head of the Kinki
Bureau of Economy, Trade and Industry (Shin-Etsu Quartz Products/Takefu)
Minister of Health Labor and Welfare's commendation for industrial braiene
activities (Shin-Etsu Quartz Products/Takefu)
Minister of Economy Trade and Industry Award for Superior High- Pressure Gas
Production Eacility (Shin-Etcu Chamical/Kachima)
Thirty-Voar disaster-free Special Achievement Award from the Japan Soda
Industry Association (Chin Etsu Chamical/Magateu)
Industry Association (Shin-Elsu Chemical/Nadetsu)
Superior High-Pressure Gas Production Facility Award from the Head of the Kinki
Bureau of Economy, Trade and Industry (Fukui Shin-Etsu Quartz)
Superior High-Pressure Gas Production Facility Award from the Head of the Kanto
Bureau of Economy, Trade and Industry (Shin-Etsu Chemical/Kashima)
Achieved 7,000,000 disaster-free hours, a 1st class disaster-free record (Shin-Etsu
Handotai/Isobe)
Achieved 5th class disaster-free record (Naoetsu Electronics Industrial)
Excellent Safety and Hygiene Workplace Award from the Minister of Health, Labo
and Welfare (Shin-Etsu Chemical/Kashima)
Commendation of the Malaysian Ministry of Human Resources (a counterpart of
the Japanese Health, Labour and Welfare Ministry) for One of Five Domestic
are supurese recurar, Eabour and Wenare Winistry) for one of the bonnesic
Companies in Malaysia for Excellence in Safety and Occupational Health

Jul. 2007 Nagano Labor Bureau Director's Superior Prize (Nagano Electronics Industrial)

External Assessments

FTSE4 Good

Rating

Moody's Investors Service, Inc. has classified Shin-Etsu Chemical Co., Ltd.'s long-term debts as Aa3

Memberships

Nippon Keidanren (Japan Business Federation) Japan Chemical Industry Association Vinyl Environmental Council Plastic Waste Management Institute The International Friendship Exchange Council The Japan Committee for UNICEF, etc.

As of March 31, 2008

RC Verification

Responsible Care (RC) Verification

Aiming to further improve its RC activities, Shin-Etsu Chemical carries out RC verification. They involve the verification of all Group activities and reports by the Japan Responsible Care Council (JRCC.)

RC verification is conducted in accordance with the Fundamental Policy of the Japan Chemical Industry Association for Environment and Safety (Revised edition, 2005) and the Responsible Care Codes*. The verification process aims to improve the quality of RC activities by providing objective evaluations of the content and results of RC activities carried out by JRCC members, and serves to enhance the credibility of RC activities by publishing the results and ensuring accountability.



「建筑-社会報告 第三者検証

■検証の目的

レスポンジブル・ケア場合書は証は、信頼化学工業時に会 と掲すうた対象として、下記の事項について、レスポンシブル・ ることを目的としています。

1) パフォーマンス発展 聖徳(の第三) 集計方法の合理性 2) 教徒に外の記録情報の正確性 2) レスポンシブル・ケア活動内容

0 10 20 10

■検証の手織

・非社において、各サイト(事業用、工業)から特徴される数値 地について調査を行いました。 調査は、特合者の内容に こと、並びに準らより資料通告・効用を受けることにより行び ・彼江津工業において、本社に総合する数値の算出力があの 行いました。意以に主張の調査は、各単規責任者及び報告 こと、並びに主服物料との開査することにより行びいれ」た。 物理点び記述機構成の課意についてはシングレング手法を通

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0パワイーマンス指導 取扱いの第二・集計方法の合理性点U ・数価の第二・集計方法は、本社良び直江津工場において、 ・読者した利用に加いて、パワイーマンスの包括は正治に第 ・内住業計方法について、システム化が留まれます。

2) 記載法報の正確当について ・報告書に記載された情報は、正確であることを確認しまし 思さに説い、若干問題があることを保健しましたが、情報 知らられません。

- ・1年間の注動の全体像が相関できるような一致長を記載さ 3 レスポンシブル・ケア活動内部について ・2008年を信頼グループの「信頼回復元年」とする互いのも
- ○結んでいることを評価します。 ・レスポンシブルーケア活動の量点項目について中規目標 とを評価します。今後はそれ以外のレスポンシブルーケア 報告書に記載されることを取得します。
- ・直江津工場では801401を活用して毎年工場構造目標を 約年の環境大変事物におびした安全対策を定め、情報が 4 報告書の特徴について
- -2007年の東江東工業協会大災事業後の、全社和けての) いることを評判します。

* Responsible Care Codes

Six principle areas are addressed when implementing Responsible Care: environmental preservation, process safety and disaster prevention, occupational health and safety, distribution safety, chemical and product safety, and social dialogue with the public. The codes cover initiatives in these areas, together with the Management System Codes required for operating all the above.

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AND ADDRESS OF
CONTRACT OF
BALARCITA-STERA METERAMA
レスポンシブルータア構築センター島
华旧三郎
社が作品した「環境・社会報告書 2008」(写像、報告書 ケア検証センターが化学業界の専門室の重要を書明す
いな場合正確性
の集計方法の合理性、及び影響はHAの記載情報の正確 2、17各集務責任者及び副告書作編員任者に賞問する
NELT.
書作成責任者に異型すること、資料通奈-加厚を受ける
R.ELS.
御後の正確性について 会場的な力法を採用しています。 出・集計されています。
た、原業的間では素簡の適切性あるいは文章の分かり 音響では様正されており、福在様正すべき重要な事実は
れるとなお分かり高い被告書になると思われます。
と、安全対象、日本の安全管理等にグループをおけて取
バ設定され、環境目標等の環境が要素に見上しているこ 活動についても、年間目標を除す、その成果と進成度を
設定し、時間かに環境部種を取り組んでいること言ひに に取り組んでいることを許認します。
現代由に関する取り組みについって、情報を分開して
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