

# **Corporate Social Responsibility Report**





RIKEN TECHNOS CORP.

# Editorial Policy

## **Reporting Coverage**

#### Period Covered

April 1, 2006 to March 31, 2007 In addition, some activities in relation to CSR after April 2007 are included.

Organization Covered (Please refer to pages 6 and 7 about the sites) The organization covered in the environmental reports in this report is RIKEN TECHNOS CORPORATION and the following 12 affiliated companies. Some of the affiliated companies are not included in some cases.

#### Affiliated Companies Cover

SHINKO ELECTRIC WIRE CO., LTD. KYOEI PLASTICS MFG CO., LTD. KANEKON CO., LTD. M-I CHEMICALS CO., LTD. RIKEN (THAILAND) CO., LTD. P.T. RIKEN ASAHI PLASTICS INDONESIA SHANGHAI RIKEN TECHNOS CORPORATION RIKEN TECHNOS (JIANG SU) CORPORATION RIKEN U.S.A. CORPORATION RIMTEC CORPORATION RIMTEC CORPORATION RIKEN ELASTOMERS CORPORATION RIKEN TECHNOS EUROPE B.V.

#### Reporting Fields

We report on the efforts of RIKEN TECHNOS CORPORATION and the affiliated companies in relation to the economic aspects, social aspects and environmental aspects in this report.

#### Referenced Guidelines

Environmental Reporting Guidelines (2003 Edition) and Environmental Accounting Guidelines (2005 Edition) issued by Ministry of the Environment of Japan.

#### Date of Issue

October 2007

(Scheduled date of the next issue: October 2008)

#### History of Issue

Issuing date	Name
October 2002	Environmental Report 2002
September 2003	Environmental Report 2003
October 2004	Environmental Report 2004
October 2005	Environmental Management Report 2005
October 2006	Environmental Management Report 2006

#### About the Cover

This report cover image shows an integration of the corporate mark of RIKEN TECHNOS CORPORATION and the cherry blossoms (*Somei Yoshino*) which is the symbol flower of Tokyo.

The corporate mark was changed simultaneously with the corporate name change in commemoration of the 50th anniversary of our foundation, symbolizing the reliability of our core business namely compound and film and the pulse to the future by using the shape of a flapping elastic wing.

RIKEN TECHNOS GROUP is aiming for the achievement of sustainable society with all our stakeholders and acting on its own initiative. This CSR Report, its successive series of "Environmental Report" (since October 2002) and "Environmental Management Report" (since October 2005), describes RIKEN TECHNOS GROUP's commitments and results for the achievement of RIKEN TECHNOS GROUP's philosophy from the perspective of Corporate Social Responsibility (CSR).

## Comparison with Environmental Reporting Guidelines (2003 Edition)/ Ministry of the Environment (Japanese Government)

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# Message from the President



#### RIKEN TECHNOS CORPORATION

started the business in 1951 as RIKEN VINYL INDUSTRY CO., LTD. (original company's name) in order to popularize PVC (Poly Vinyl Chloride), which was a new material at that time, based on the technology for PVC which had been developed in a university laboratory. As the name "RIKEN" shows, we originated from RIKEN (Rikagaku Kenkyusho) and we were established as a venture business putting its technologies on the existing base.

Ever since we were established, we have been contributing to the progress of society and the enrichment of people's lives by developing and manufacturing our products, compound, film and food wrapping film, making the best use of several resins' characteristics and corresponding to the usage. Meanwhile, our business has expanded favorably, and we have been expanding domestic and foreign production bases and employment. On the other hand, we have accomplished capital enhancement, such as offering of stock to the public.

Since establishment, we have received the understanding and support of all our stakeholders. That is why, we strongly believe, we succeeded, after starting as a small venture business based on only the newly developed technology, in establishing our business foundation globally. Thus, we are confident that the effort of a corporation to develop the business getting support from its stakeholders itself must be the achievement of our CSR (Corporate Social Responsibility).

Recently, a company has been more and more required that as a member of society, it accomplishes sustainable growth under cooperation with society including its global environment through its sound business activities and simultaneously that it contributes to society by means of its active commitment to society. We changed our name to "RIKEN TECHNOS CORPORATION" on the occasion of the 50th anniversary in 2001 to show our following engagements: Never forgetting our venture spirit we will develop ourselves to a company which is continuously growing based on its dominated technologies in accordance with the change of times and social circumstances, and contribute to the sustainable progress of our society.

We have adopted our group philosophy is "Achieve a sustainable enhancement of enterprise value through fair and profitable business activity", and we are practicing various activities to achieve it. Especially the commitment to the environment, we, as a plastic processing manufacturer producing compound and film by using exceeding 200,000 tons of thermoplastic resin, have positioned what we achieve responsible concern for the environment at a higher level as our principal issue.

On the other hand, it is necessary that we disclose appropriate and accurate information to obtain understanding and support from all our stakeholders. We have reported our commitment to tackle environmental issue and the results actively in the reports, namely "Environmental Report" since 2002 and "Environmental Management Report" since 2005, and moreover, we report our commitment to achieve our group philosophy and the results in this report, "CSR Report", from the wide horizon of corporate social responsibility in this year. It would be greatly appreciated if you read this report, the first number of CSR Report, and send us your frank opinion.

Hoichi Kinosta

Representative Director, President RIKEN TECHNOS CORPORATION

## Management Policy

RIKEN TECHNOS' mission is to build a high-value-adding business structure leveraging its strong processing technologies, with a management vision of establishing the RIKEN TECHNOS brand as a Material Solution Supplier creating unique and individualized value and building a stable position both in Japan and internationally. RIKEN TECHNOS will continue to promote a more global strategy and provide our group's high quality products to customers lots more all over the world, based on three core businesses: Compound (Creation of new markets and new business possibilities), Film (Development through high and innovative processing technologies), and Food Wrapping Film (Enlargement and strengthening of business alliances).

# Outline of RIKEN TECHNOS GROUP

Company Name	RIKEN TECHNOS CORPORATION
Date of Establishment	March 30, 1951
Capital Stock	¥8,514 million
President	Koichi Kinoshita
Number of Employees	842
Head Office	3-11-5, NIHONBASHI-HONCHO, CHUO-KU, TOKYO 103-8438, JAPAN

RIKEN TECHNOS was established as "RIKEN VINYL INDUSTRY CO., LTD." (original company name) in 1951 to produce and sell the Poly Vinyl Chloride (PVC) compound.

The company name was changed to "RIKEN TECHNOS CORPORATION" (is a melding of the words "RIKEN" "TECHNOLOGY" and "SUPPLIER") in 2001, the 50th anniversary of the foundation.

RIKEN TECHNOS operates business in Japan and internationally based on comprehensive plastics processing technology which has been cultivated since the foundation, with three core businesses: Compound, Film and Food Wrapping Film. RIKEN TECHNOS, as a "Material Solution Supplier", produces high quality products and technologies to meet increasingly diverse and sophisticated needs of customers and society.

## **Compound Division**

Corporate **Profile** 

**Business Field** 

Compounds are mixtures of base resin with several different additives, thereby giving them novel properties. Compounds are mainly used in extrusion and injection molding.

### **Major Products**

Poly Vinyl Chloride Compounds, Thermoplastic Elastomers, Electro-conductive Compounds, Antistatic Compounds and Biomass Plastics Compounds, etc.

## **Film Division**

The high quality film is produced through optimum formulas for novel properties of blended resin. Moreover, by laminating some films and coating functional paint on the surface of films, we improve design and functionality of the films.

#### **Major Products**

..... Wall-covering Adhesive Sheet with regard for the environment, Thermo-formable Foil, Steel Laminating Film, Polyester Type Film, IR (Infrared) Cut Film, Decorative Film for Glazing, Wallcovering Panel for remodel and Optical Display Film, etc.

### **Food Wrapping Film Division**

As the first company developed the food wrapping film used PVC resin in Japan, we produce wraps ranging from domestic use to commercial use through pursuing quality and efficiency and developing wraps suited for food and automatic packaging machines.

### **Major Products**

**Sales Component Proportion Ratio** 

¥72.9

billion

Europe

1%

📒 Japan 📒 Asia 📒 North America 📒 Europ

by Geographic Segment

North

Asia

18%

America 12%

Poly Vinyl Chloride Types Wrap and Poly Olefin Type Wraps, etc.

## **Financial Results**

Detailed information is available on the page "Financial/IR" of our website.

FY 2006 Financial Results (¥ million)			
		Consolidated	Non-consolidated
	Net Sales	72,979	47,732
	Operating Income	2,006	253
	Ordinary Income	2,227	1,162
	Net Income	1,026	968

#### Capital and R&D Expenditure





## Number of Employees



# Medium-term Business Plan "Plan ff Phase**I**"

RIKEN TECHNOS has prepared the group's new business plan "Plan ff Phase II" from April 2006 to March 2009, and has been practicing it since April 2006.

Setting our direction for the innovation as "Globalization of PVC product business" and "Development of high functional product business", we are practicing to establish the foundation to the future in order to lead our group to excellent one with high enterprise value in three years.

# The gist of "Plan ff PhaseII"

## ① Enhancement of Self-management of 3 Divisions and Creation of the New Business Models

Each division sets the business direction as follows and will actively invest management resources into the business and develop it.

Compound Division ————	<ul> <li>Creation of new markets and new business possibilities</li> </ul>
	Being first to market by leveraging our technical capabilities to develop products quickly, expanding global
	businesses, and achieving customer satisfaction.
Film Division	<ul> <li>Development through high and innovative processing technologies</li> </ul>
	Harnessing technical strengths ranging from film forming to further value-adding processing to create
	differentiating products and increase profits.
Food Wrapping Film Division	<ul> <li>Enlargement and strengthening of business alliances</li> </ul>
	Expanding and strengthening collaboration both in Japan and internationally, to build a solid foundation to the
	No.1 manufacturer in Asia.

## 2 Practice of Corporate Reformation Based on Human Resources Development

We will create system and framework for human resources development which promote our employees so that they can carry out innovation for further growth of our company along with the social and technical progress.

## (3) Reinforcement of Technical Potential

We will invest our management resources in various fields, from the production section to research and development section, due to establish the appropriate "Production System" of the manufacturer and we pursue the drastic reinforcement of technical potential.

# The objectives of "Plan ff PhaseII"













# Networks

RIKEN TECHNOS GROUP is composed of RIKEN TECHNOS CORPORATION and 12 affiliated companies.

We has actively cultivated overseas markets since establishment and aimed to establish the RIKEN TECHNOS brand.

As a "Material Solution Supplier", we offer one-stop solutions for our customers' issues through collaboration between domestic and foreign facilities.





Mie Factory



Gunma Factory



Material R&D Center



Film R&D Center



Shanghai Representative Office

RIKEN TECHNOS CORPORATION's Site	Address	Main Business Field
1 Head Office	3-11-5, NIHONBASHI-HONCHO, CHUO-KU, TOKYO 103-8438, JAPAN	Headquarters, sales & marketing of compound, film and food wrapping film
2 Osaka Branch Office	4-11-23, NISHITENMA, KITA-KU, OSAKA-SHI, OSAKA 530-0047, JAPAN	Sales & marketing of compound, film and food wrapping film
3 Nagoya Sales Office	2-9-3, SAKAE, NAKA-KU, NAGOYA-SHI, AICHI 460-0008, JAPAN	Sales & marketing of compound and food wrapping film
4 Fukuoka Sales Office	2-5-19, HAKATAEKI-HIGASHI, HAKATA-KU, FUKUOKA-SHI, FUKUOKA 812-0013, JAPAN	Sales & marketing of food wrapping film
5 Saitama Factory	2058, OKA, FUKAYA-SHI, SAITAMA 360-0295, JAPAN	Manufacture of compound, film and food wrapping film
6 Mie Factory	522, SUGAUCHI-CHO, KAMEYAMA-SHI, MIE 519-0132, JAPAN	Manufacture of compound, film and food wrapping film
7 Gunma Factory	451-12, KAMITAJIMA-CHO, OTA-SHI, GUNMA 373-0044, JAPAN	Manufacture of high functionally film within a clean environment
8 Material R&D Center	2-37-1, MINAMIROKUGO, OTA-KU, TOKYO 144-0045, JAPAN	Research and development of compound, and technical support to domestic and overseas facilities
9 Film R&D Center	2058, OKA, FUKAYA-SHI, SAITAMA 360-0295, JAPAN	Research and development of film, and technical support to domestic and overseas facilities
10 Shanghai Representative Office	ROOM 10A89 SHANGHAI MART, No.2299, YAN AN ROAD (W), SHANGHAI 20336 CHINA	Liaison Office (market research for film and quality and technical support to customers)

Affiliated Companies in Japan	Address	Capital Stock	Shareholdings	Main Business Field
11 SHINKO ELECTRIC WIRE CO., LTD.	14-6, NIHONBASHI- KODENMACHO, CHUO-KU, TOKYO 103-0001, JAPAN	¥48 million	96.51%	Manufacture and sales of electric wire and cable
12 KYOEI PLASTICS MFG CO., LTD.	7-16, NIHONBASHI- KODENMACHO, CHUO-KU, TOKYO 103-0001, JAPAN	¥24 million	100%	Manufacture and sales of profile extrusion plastic products
13 KANEKON CO., LTD.	4-2-4, SHINBASHI, MINATO-KU, TOKYO 105-0004, JAPAN	¥10 million	60%	Sales of compound and film
MI CHEMICALS CO., LTD.	2-4, OIKE-CHO, KONAN-SHI, SHIGA 520-3213, JAPAN	¥300 million	92%	Manufacture and sales of PVC compound

Affiliated companies in Japan are listed head offices only.

Overseas Affiliated Companies



RIKEN (THAILAND) CO., LTD.





SHANGHAI RIKEN TECHNOS CORPORATION



RIKEN TECHNOS (JIANG SU) CORPORATION





RIKEN U.S.A. CORPOATION



RIMTEC CORPORATION



RIKEN ELASTOMERS CORPORATION



RIKEN TECHNOS EUROPE B.V.

Overseas Affiliated Companies	Address	Capital Stock	Shareholdings	Main Business Field
BIKEN (THAILAND) CO., LTD.	143 moo 5 bangkadi industrial park, tivanond Road, bangkadi, muang-pathumthani, pathumthani 12000 thailand	Bt120 million	40%	Manufacture and sales of PVC compound
16 P.T. RIKEN ASAHI PLASTICS INDONESIA	MM2100 INDUSTRIAL TOWN BLOK H-9, CIKARANG BARAT BEKASI 17520 WEST JAVA, INDONESIA	US\$4.7 million	40%	Manufacture and sales of PVC compound
SHANGHAI RIKEN TECHNOS CORPORATION	No.3700 JINDU ROAD, MINHANG DISTRICT, SHANGHAI 201108 CHINA	US\$5.5 million	70%	Manufacture and sales of PVC compound
18 RIKEN TECHNOS (JIANG SU) CORPORATION	HUANG TANG INDUSTRIAL PARK, XIA KE TOWN, JIANGYIN CITY, JIANGSU PROVINCE, 214407 CHINA	US\$5 million	61%	Manufacture and sales of food wrapping film
19 RIKEN U.S.A. CORPOATION	1702 BEVERLY ROAD, BURLINGTON, NJ 08016, U.S.A.	US\$400 thousand	100%	Sales & marketing of film
2 RIMTEC CORPORATION	1702 BEVERLY ROAD, BURLINGTON, NJ 08016, U.S.A.	US\$10 million	51%	Manufacture and sales of PVC compound
21 RIKEN ELASTOMERS CORPORATION	340 RIKEN COURT, HOPKINSVILLE, KY 42240, U.S.A.	US\$10 million	60%	Manufacture and sales of high functionally compound
RIKEN TECHNOS EUROPE B.V.	Hoeksteen 153, 2132 MX Hoofddorp, The Netherlands	€ 400 thousand	100%	Sales & marketing of film

\*RIKEN ELASTOMERS CORPORATION in June 2006, KANEKONCO., LTD. in August 2006, M-I CHEMICALS CO., LTD. in May 2007 joined RIKEN TECHNOS GROUP.

# RIKEN TECHNOS GROUP Business Field and Major Products





# Social Responsibility

Corporate Governance and Compliance



RIKEN TECHNOS GROUP aims to progress and develop itself by achieving globalization of PVC product business and development of high functional product business, while getting support and reliance of all stakeholders. Then, we deem all our stakeholders as our customers and to obtain customers' satisfaction we will innovate ourselves to fulfill our responsibility in all aspects such as economical achievement, compliance, working circumstance and contribution to society. To win reliance and sympathy of society we declared as a Basic Policy on Internal Control System that we observe RIKEN TECHNOS GROUP Code of Conduct, the Articles of Incorporation and laws related to our business and run our business through fair competition and trade. We pursue active disclosure by means of IR\* and public relations in order to secure the practicability of the corporate governance.

\*IR for investor relations, is a part of public relations, for investors.

#### General Meeting of Shareholders V Appointment Appointment Appointment **Board of Corporate Corporate Auditors Board of Directors** Auditors Auditing Auditing Election Auditing Basic Policy on Representative Directors Audit Office Internal Control System Auditing Rules and Regulations **Business Execution** Operation and Organizational Strategy Meeting Regulations Total Risk Management Committee Regulations for Job Authority Environment, Safety & Quality **Compliance Committee** Assurance Department Technology and Manufacturing Division Cord of Conduct **Product Safety Committee** Administrative and Planning Division **Chemical Substance Compliance Manual Control Committee Business Division** Anonymous Report System

## Corporate Governance Philosophy

The chart shown on the right is RIKEN TECHNOS Corporate Governance System.

Adjustment of the Management System in Accordance with Basic Policy on the Internal Control System RIKEN TECHNOS established "RIKEN TECHNOS GROUP Code of Conduct" as a basic policy in order to secure reliance of society and respond to corporate social responsibility, and declared that we run our business through fair competition and trade. While we have urged establishment of the Code of Conduct all over the group, we set "the Basic Policy on Internal Control System" in May 2006 to fulfill what we declared. We are adjusting our management system in accordance with this basic policy.

Since "The Basic Policy on Internal Control System" covers a wide variety of items to be accomplished, we picked up the following items as the top priority.

<ol> <li>System to ensure the performance of directors' and employees' duty in compliance with laws and the Article of Incorporation</li> </ol>	While all of directors make giving our business activities a top priority known to all of employees, is to observe the Code of Conduct and to ensure the performance of their duty in compliance with laws and the Articles of Incorporation, Compliance Committee manages all over the company, the department in charge of legal affairs gives all directors and employees instruction in necessity of compliance with laws and regulations, and we establish the Anonymous Report System.
2. Rules and systems for risk management	We establish the Total Risk Management Committee, chaired by the President, in order to prevent the occurrence in advance and reduce the influence of specified 7 risks among various potential risks in our business activities which exercise a great influence on the management and we are considering how we act if the risks could occur.
3. Systems to ensure the appropriateness of business operations of RIKEN TECHNOS GROUP	The department in charge of corporate planning has the responsibility to instruct to establish Basic Policy on the Internal Control System in the whole group and to let the group companies have the same information in quality and quantity so that all of our group can ensure the appropriate business operation.
4. System to ensure that audits are executed independently and effectively	The Corporate Auditors confirm that the material decisions are made appropriately through the attendance at important meeting and examination of the minutes of these meetings and the written applications for a approach both of which are automatically submitted to them. In order to establish the system to ensure that the audits of the Corporate Auditors are executed effectively, the Corporate Auditors arrange meeting with the Representative Directors regularly to exchange ideas and information each other, and are entitled to make interview at any time with any directors and employees at discretion. The Audit Office, established in April 2004, takes charge of the internal auditing. Owing to achieve the purpose of Internal Control, such as "Effectiveness and Efficiency of Operations", "Reliability of Financial Reporting", "Compliance with Applicable Laws and Regulations" and "Safeguarding of Assets", mainly from the point of view of 6 elements, namely "Control Environment", "Risks Assessment", "Control Activities", "Information and Communication", "Monitoring" and "Use of IT".
Anonymous Report System	RIKEN TECHNOS set the Anonymous Report System in April 2005. Through the anonymous report hotline direct to the Audit Office, our employees can easily report or consult about any suspicious activities contrary to laws and rules and regulations including "RIKEN TECHNOS GROUP Code of Conduct". To prevent informers from suffering any disadvantage anonymity and privacy of the informers are strictly protected.
Information Security	While Information Technology, such as internet, has been progressing noticeably, the risks, for example, leaking of important information including the personal information and the illegal access form outside, have been increasing. RIKEN TECHNOS tries to minimize such risks by means of following but not limited to; double passwords login system of PC; access permission according to the importance of data; encryption of data, if necessary. In addition, we have installed the latest protection system to against the illegal access from outside. To practice personal information protection, we set "Basic Provision of Personal Information Protection" according to the personal Information on Protection Act in Japan enforced in April 2005.

# Environment, Safety and Quality Assurance



Reinforcing Safety and Environmental Preservation

Assurance of Products' Safety and

#### Commitment

I do maintain safe workplaces where any industrial accident shall not occur and our employees can work free from care, cheerfully and actively. I promote security through activities of risk assessment and fail safe onward based on 5S\*.

Because it is absolutely necessary to preserve the environment not only regions and countries but also in global range for the sustainable existence of a company, all of us will practice to preserve the environment.

Through these activities, I wish, RIKEN TECHNOS GROUP will become one of the model enterprise groups from point of view of safety and environmental preservation.

\*5S: In Japanese, Seiri (order), Seiton (arrangement), Seisou (neatness), Seiketsu (cleanness), Shitsuke (self-discipline).

#### Commitment

I regard the assurance of products' safety and quality as one of the most important issues for us as a manufacturer.

The needs of safety and quality have been increasing more and more and varying greatly. We make certain of the assurance of chemical materials that we are using and pursue the manufacturing to have customers' relief and satisfaction more.

## Product Quality Assurance

Quality

We introduce the mechanism of ISO 9001 all over the group by cross-sectional method. Each production site has its own QA/QC (Quality assurance/ Quality Control) Section which pursues the quality control in a whole process, such as the grasp on customers' request for the products' quality, designing, production and products delivery. Additionally, we are striving to improve products' quality by holding the Quality Improvement Committee per production site or division every month to control defective products and the state of practicing improvement measures.

The Production Liability Law in Japan was put in force in 1995 and we have been taking various actions, mainly under control of "Product Safety Committee", to assure the safety of our products further.

In developing new products we focus on reduction of environmental load using for example, new materials suitable for recycle.

# Relationship to Customers and Business Partners

Shinetsu Kudo Director, General Manager Purchasing Division RIKEN TECHNOS CORPORATION

### **Purchase Policy**

To supply products which fully satisfy customers' requests, it is necessary that our business partners including our suppliers make effort for quality improvement, cost reduction as well as innovation of technology just as we do. Through this cooperation, we and our business partners can create good partnership based on mutual trust, which brings, I believe, both parties development and prosperity.

#### Tair Purchase Trade and Selection

We are dealing with our business partners in an equal playing field, offering them the unprejudiced, fair and open bid occasions. Ordinarily, we purchase from multiple correspondents.

#### ② Creation of Partnership

We respect human dignity and endeavor not to differentiate unfairly based on a good relationship with correspondents.

#### 3 Observance of Relevant Laws and Self-management

In the purchase affairs, we observe the social and relevant laws and regulations by paying enough attention to the treatment of the mutual secret matter. We purchase materials in accordance with the green procurement standards we have set, in terms of environmental preservation.

#### Correspondents' Conditions

We consider following conditions of our correspondents in case of a purchase.

- "Technical Potential"— the state-of-the-art in technologies, manufacturing capacity and sales force
- "Competitiveness" ---- price, stable supply and proposal to cut costs
- "Management" management conditions, affiliation, the position and reputation in the industry segment and cooperation on sales of our products

The Purchasing Department in the headquarters and the Purchasing Section in each factory take charge of the purchasing affairs.

The Purchasing Department purchases various kinds of materials, such as raw materials, fuel and packaging materials.

The Purchasing Section at each site purchases materials each factory consumes, such as consumable goods and stored goods.

Additionally, each Purchasing Section arranges equipment purchase with each factory, however the Purchasing Department negotiates on the price when it exceeds some extent with the high-priced equipment of all purchase.

## Purchase System

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# **Relationship to Shareholders**

## General Shareholders Meeting

Information Disclosure



Annual Report

Shareholders Distribution (as of March 31, 2007)

We hold a general shareholders meeting in June every year. We regard a general shareholders meeting as the occasion of candid dialogue between the shareholders and our Executives.

Accordingly, we strive to answer questions from shareholders precisely and explicitly to facilitate their understanding of RIKEN TECHNOS.

We always appropriately practice prompt, precise and fair information disclosure from the shareholders' and investors' point of view. We try disclosing actively beyond the disclosure standards of the Tokyo Stock Exchange to increase their understanding of our business activities and strategies.

Also, we have the pages for finance and IR on our website, and promptly put the information, such as the financial statements and the material for timely disclosure, on it after disclosure (press release)

We disclosed the outline of our new 3 years business plan "Plan ff PhaseII" and put it on the website in 2006.



For the benefit of our shareholders it has been our basic policy to pay dividends stably and Basic Policy on Distribution of continuously. Regarding distribution of the profits including purchase of our own stocks, it is decided through our board meeting to fulfill the both requirements, namely, benefit of our shareholders and sufficient foundation further investment.

Fiscal Year		Payout Ratio		
(Record Date)	Mid-term	End-of-term	Annual	(Consolidated)
FY 2002 (The end of March 2003)	¥3.00	¥3.00	¥6.00	46.2%
FY 2003 (The end of March 2004)	¥3.00	¥3.00	¥6.00	43.0%
FY 2004 (The end of March 2005)	¥3.00	¥3.00	¥6.00	25.1%
FY 2005 (The end of March 2006)	¥3.00	¥5.00	¥8.00	21.2%
FY 2006 (The end of March 2007)	¥4.00	¥4.00	¥8.00	49.5%

Profits

Local Communication of Our Sites



Kameyama Chamber of Commerce and Industry's Guidebook



## Round-Table Conference with Community around the Factory and Factory Tour

We hold regular round-table conference with the communities around our factories and give them the opportunities of the factory tour. At the conference, we explain our approach of the measures for the environment, gather the requests from the neighboring citizens and exchange various opinions including environmental issues in order to obtain their understanding of our business activities. The regular round-table conference is held once a year in the Saitama Factory, once every 2 years in the Mie Factory.

#### **Factory Tour**

The Saitama Factory, the Mie Factory and the Material R&D Center give students of the elementary and junior high school opportunities to experience actual work as a part of education. We hope that their experience contributes to

broaden their social horizons.

As the Chamber of Commerce and Industry of Kameyama introduces the factory tour at our Mie Factory in its guidebook and website, we have visitors from anywhere in Japan.

The factory tour of our site is also available in Indonesia, P.T. RIKEN ASAHI PLASTICS INDONESIA gives the universities such opportunity.



Pupils' work experience class

#### Communities' Environment Beautification Activities around Factories

We clean the area around the factories regularly and aim at the communities' environment beautification actively.

Each factory cleans; at the Saitama Factory the area around the factory twice a month and



the road from the factory to JR Okabe station twice a year; at the Mie Factory twice a year; and the riverbed open space around the factory twice a year; and at the Gunma Factory along the roads around the factory, such as mowing grass and picking up litter.

Our affiliated companies, SHINKO ELECTRIC WIRE CO., LTD. in Japan and P.T. RIKEN ASAHI PLASTICS INDONESIA in Indonesia participate in the environmental maintenance activities in the industry park.

## Support for Community Events

We willingly communicate with communities through our cooperation and participation in

various events. For the examples, as for our headquarters "Bettara Festival" (a famous traditional festival for fermented pickles of Japanese radish), as for the Saitama Factory "Fukaya City marathon", as for the Mie Factory "Kameyama City Ekiden relay" and "Kameyama



Rokugo Shrine festival in Ota Ward, Tokyo

City summer evening festival", as for the Gunma Factory the fireworks in Ota City and summer festival and as for the Material R&D Center the local autonomous community's festival.



## **Donation of Tubes for the Kidney Dialyzers**

RIKEN (THAILAND) CO., LTD. in Thailand donated 174 sets of tubes for the kidney dialyzers to the Pathumthani hospital in Pathumthani in December 2006 where the headquarters and factory located. The tubes are used for the kidney disease patients who can hardly receive continuous medical treatment for economical reasons. The company donates the tubes every year.



## Internship

We give students of universities and graduate schools the opportunity of internship to let them obtain a sense of intimacy with chemical industry through the experience of the manufacturing process of the plastic products. They can enjoy manufacturing by processing resins. Also, it is a good occasion for them to learn the attitude as a member of society and a research engineer through the communication with our research engineers.

In foreign countries, RIKEN TECHNOS (JIANG SU) CORPORATION in China also accepts internship students. (One probationer was trained from June 2005 to July 2005 and another one probationer has been training from April 2007.)

#### **C** o m m e n t

Yosuke Yamagata Human Resources Development Group General Affairs Department RIKEN TECHNOS CORPORATION

Our internship program consists of a key word "creation" in 2 different meanings. One is the creation using high polymer and another is the creation of the participant through this course from the beginning of the selfintroduction.





## Trade Fair and Exhibition

We regularly participate in the various exhibitions held in Japan and foreign countries in order to introduce our products worldwide. In 2006, for example, we introduced our high-antistatic compound "STATICMASTER®" in the exhibition "SEMICON Japan 2006". In 2007, we introduced our film including the Adhesive Sheet with regard for the environment "fino®" in the exhibition "JAPAN SHOP 2007".



JAPAN SHOP 2007





SEMICON Japan 2006 (above and below)

## Social Contribution by the Employees' Voluntary Activities

Some of the member of the culture and the environmental protection club organized in RIKEN (THAILAND) CO., LTD. by its employees and their families participated in the project of the 60th anniversary of accession to the Thai throne, and afforested along the shoreline in Chanthaburi.

In the USA, The employees of RIMTEC CORPORATION agree the fund-raising campaign "United Way of Burlington County Campaign" and they contribute to it every year. The 40 nonprofit institutions organize the campaign and they distribute the fund-raising to the health for individuals and the social services.





Afforestation project along the shoreline in Chanthaburi

International Contribution

We had dispatched one of our employees of the Production Section to the local company in Thailand to support their production technologies improvement through the dispatching program of JODC (Japan Overseas Development Corporation) for a year in June 2006.

JODC is one of the extra-governmental organizations of Ministry of Economy, Trade and Industry and the purpose of this program is with help of ODA (Official Development Assistance) to support the industrial progress in the developing countries through the technology transfer and the training for local staff carried out by the Japanese experts dispatched to the local companies.

After the dispatching period, we received the report from the Thai local company stating that its engineers have been distinctly cultivated by the guidance of expert from RIKEN TECHNOS CORPORATION. This technical support is quite effective method for it so that it hoped that RIKEN TECHNOS CORPORATION continued the guidance with the JODC dispatching program from now on.

#### Comment

#### Shigehiro Hasegawa

Extruded Film Production Section of Mie Factory RIKEN TECHNOS CORPORATION

I have been dispatched to the local company in Thailand by using ODA type JODC dispatching program for one year.

The Thai company I was dispatched to has manufactured food wrap with its own technologies for a decade. It is quite important to keep total manufacturing equipment in a good condition to produce ultra thin film and to roll up them as the customers designate both in quality and in quantity. I decided it as a point to improve its production technology.

Firstly, I spent a lot of time to condition the equipment. I invested our energy in finding the trouble and preventive maintenance by scheduling repair, maintenance and inspection regularly and thus I could reduce the time of fail by 50 hours and troubles that had occurred chronically. As the multiplier effect, I could reduce the loss while production to half, about



5.0t a month, and raise the yield rate to 99%.

I am convinced that the effect of my direct guidance was the contribution to the improvement of the local workers' level by defining the hidden problems of the equipment and advising the repair and maintenance of the equipment. It is just the technical exchanging beyond the countries and the contribution to Thailand. From this experience I learned that it is quite important to explain in all sincerity without sparing time for real mutual understanding and good communication in spite of difference of mother tongues, which is the biggest harvest I got.



# **Relationship to Employees**



To motivate our employees to develop themselves, we strive as our basic policy to give all of them the appropriate occasion and work circumstance in which they are promoted to show their ability to the full. Then, we support those motivated people to develop themselves and to perform activity which brings us, we believe, a total progress of our group.

The close dialogues and mutual understanding are the most important factors to accomplish the above purpose. "Think with them, worry with them, find the way to conquest" is our basic stance for the human resources development. Now we are reviewing our various systems including the human resource development system. Through these activities, each employee will develop and with the strengthened human resources we will achieve our goal of our medium-term business plan "Plan ff Phase II" to be a high-value-adding corporation.

## New directors training Assessment training III Management training nager posts Technical staff training roduction staff training for managerial posts Sales staff training Assessment training II Promoted employees training Assessment training I Promoted employees training Middle standing

## **RIKEN TECHNOS Training System 2007**

ence traini nproving managemen performance training Life planning training Financial training Overseas language training Correspondence course training employees training Instruction leader / Mentor training Follow-up training Recruits orientation

## Enlargement of Employees' Ability **Development Support System**

We integrate our previous ability development system into "RIKEN TECHNOS training program". This program is composed of 4 education systems; classified the trainings by age and post, "Level"; fulfilling individual career forming by enhancing professionalization, "Job description", "Purpose" and "Preference".

We decided the slogan "We support employees who aim to develop!" and to concentrate on the classified trainings "Level" and "Preference" in 2007.

#### **Reinforcement of Management Ability**

We have started "management training for managerial posts" targeted for managerial posts since April 2007. We support them to enhance "leadership ability" and "subordinates instruction ability" to cultivate their roles, responsibility and knowledge which they should have acquired as the managerial posts in order to keep on winning in the extremely changing management environment.

#### **Occasion for Starting Up Employees**

We have introduced the so-called Mentor System since April 2006 to support our recruiting more efficiently. A Mentor, appointed among our employees whose working career is between 2 and 8 years, takes care of them not only in working but also in the private lives. On the other hand, this program gives a good opportunity for a Mentor to develop herself/himself.

#### **Overseas Language Training Program**

While globalization of business is expanding, we have started since April 2007 the overseas language training program to develop employees who could promote the business globally. As the first year, 2 employees are on the training now. They are striving to acquire the ability of English and crosscultural communication at the language schools and our affiliated company in the US.

#### Comment

#### Shinya Tomitaka

Wire & Cable Application R&D and Overseas Group Material R&D Center RIKEN TECHNOS CORPORATION

My company gave me a great opportunity that allows me to study a foreign language here in Boston, USA. The program provides a total immersion in the language and culture of the country. The reason why I applied for this training is that I would like to learn English because English is a universal business language.

The university where I am studying English has many students from all over the world. This gives me the opportunity to learn about other cultures and compare them to the Japanese culture. This led me to change my way of thinking about how I can become more active in our company's global endeavors. It also has given me a fresh perspective and outlook for my role in plastic material design.

Through this course of my English studies, I began thinking about my future in the company. The important questions such as "What aspects of this language training can I use to further our company in the global



The statue of John Harvard, founder of Harvard University. It is popular for visitors to touch its shoe for good luck.

economy?" or "How can I combine this experience with my strengths to better the company?" have given me much to think about.

In conclusion, I would like to learn English and the skills that can be utilized for overseas business. This language training will allow me to grow as a person who will work effectively by applying newfound knowledge and insights to expand our company's global vision.

#### The Development of the Overseas Local Staff

We have actively cultivated overseas markets since establishment. We have aimed to achieve penetration of the RIKEN TECHNOS brand and have built a solid foundation for overseas businesses. For the further step of "Globalization of PVC Product Business", one of the targets of our middle-term business plan, it is essential that the overseas local staff understand completely our philosophy on the quality and manufacturing.

We hold training for overseas local staff in our factories and R&D centers in Japan every year. Recently, we trained 3 U.S. staff of RIKEN ELASTOMERS CORPORATION in the Mie Factory from May 2007 to June 2007. It is also a good opportunity for the employees of RIKEN TECHNOS, since they are motivated through training the local staff from the overseas affiliated companies in spite of deference of mother tongue and culture.

#### Comment

Yutaka Arai

Team Leader of Overseas Technical Support Senior Research Engineer Wire & Cable Application R&D and Overseas Group Material R&D Center RIKEN TECHNOS CORPORATION

We have 5 overseas compound production sites now. We accept trainees from our overseas affiliated companies to provide their customers with the same quality as ours in all production bases.

Three trainees from RIKEN ELASTOMERS CORPORATION, which just started its operation in July 2007, participated in this



program. With the awareness of the cultural distinction between Japan and the US, we endeavored to discuss until they were satisfied and to increase their understanding of the production process through the practice so that they can produce in the same quality as that of ours.

### Comment

## Mark Butts

Production Supervisor RIKEN ELASTOMERS CORPORATION (USA)

- I recently spent 4 weeks at the RIKEN TECHNOS Mie Factory to learn the production process. This training was necessary for me due to the opening of our new facility, RIKEN ELASTOMERS COPRORATION, USA. This was my first trip to Japan and I was well pleased with all of the staff at the RIKEN TECHNOS Mie Factory. The examples of teamwork and dedication to quality will be a stepping stone
- for our facility in the USA. I gained not only

#### Mark Butts (right)

knowledge of the production process but also a great respect for the culture of Japan. As I build our production team in the USA, I will incorporate many values and standards that I have observed during my training period in Japan. I would like to personally thank RIKEN TECHNOS CORPORATION for allowing me this great opportunity and I look forward to a long and prosperous career with RIKEN ELASTOMERS CORPORATION, USA. We set the first-term action plan as follows according to "the Law for Measures to Support the Development of Next Generation" (the Next Generation Law) which came into force in April 2005.

#### Leave-of-Absence for Child Care System

The employees are entitled to take the leave-of-absence for child care within 2 years (the legal standard is one and a half years) and the male employees also can take it. We extended its term so that their children readily enter nursery schools.

Additionally, we regard the first 3 days as paid leave so that male employees take easily this system.

The Material R&D Center received

#### Child Care Short-Time Work System

The employees taking care of their children can shorten their working hours down to 6 and a half hours a day. They can choose the way of working according to individual circumstances including domestic reasons and the nursery schools. This system is available until children go to the elementary schools from this year on.

## **Re-Employing System**

To hire the skilled employees who are willing to work after our official retirement age of 60 years old, both parties find an apparent merit; for a company, because of technology and knowhow that they have acquired and for the employees, because of stable income. Therefore we have introduced the re-employing system which is applied for those employees. However, the application of this system targets those who are 63 years old now, so we are planning to extend the age to 65 years old finally in accordance with the guideline of the law.

#### **Creating a Safe Workplace**

"Safety has the first priority" under this motto, we have been taking various measures to prevent the occurrence of any industrial accident in each site. For example; the removal and improvement of risk factor distilling by "the risk self-assessment for the equipment" in each site and alerting employees to danger through "a key point to the lesson". As a result of such steady activities we have hardly suffered from such accidents recently. However, the slight accidents like *"hiyari-hatto"* (the accidents with the feeling a shiver and a start) still occur occasionally. Therefore we have been investing especially following activities and practicing since April 2007; the review of the safety and health education and manuals; the reinforcement of activities introducing the

conception of "Fail-safe" which prevents such an occurrence and gives employees absolute safety; and on the hygienic side, introduction of a new approach of "furtherance of health".

In addition, we are planning to introduce the activities through "risk assessment of chemical material". Through these activities, we are promoting the activities to achieve a safe workplace.

#### Awards System

We have introduced the Internal Award Rule and the Award & Compensation System which award and compensate our employees for their innovative proposal and invention.

In 2006, the working amelioration proposals are 622 in the Saitama Factory and 1,513 in the Mie Factory. The working amelioration proposals are connected with the uplift of the employees' eagerness for amelioration.

Additionally, the following awards were presented in 2006; 10 awards were given for contribution to the business performances and 6 awards for contribution to developing new products.

## Topics



# Environmental Management and Action Plans



# Management Basic Policy of Environment

Our basic policy is "the high value added nature of business based on the high processing technology" as a Material Solution Supplier that provides customers for solution of themes with the fusion of our accumulated processing technology and new technology. In addition, through the company activity harmonized with environment, we are thinking of becoming a enterprise that all stakeholders can put confidence in, with our contribution to realization of affluent society.

## Hideaki Aoki General Manager

Environment, Safety & Quality Assurance Department RIKEN TECHNOS CORPORATION

We are the group of manufacturers that process various plastics. We implement the environment management at high level not only with obeying the laws and the regulations relating to chemical substances control, but also with setting our own criteria and objectives. We are aiming at contribution to global environmental maintenance through achieving the objectives, reduction of environmental load at every stage from product design until production and delivery, reduction of CO2 emissions and industrial waste. In addition, we are making efforts to get comprehension of the stakeholders, especially regional residents around our factories with disclosing actively the performance of our activity.



# Environment Statement and Policy

Environment	
Statement	

As a plastics processing company, RIKEN TECHNOS values environmental harmony by proposing materials and processing technologies that will maintain the earth's environment.

#### Environment Policy

RIKEN TECHNOS has designed an environmental management system which allows concrete execution of its principles.

- In business, RIKEN TECHNOS observes all environmental regulations and mutual agreements, thus upholding protection levels and preventing pollution of the environment.
- ② Environmental purposes and targets are established and promoted in order to achieve our goals. All are constantly reviewed and updated to keep in touch with changes that occur in society and within our company.
- ③ RIKEN TECHNOS' supply of plastic and other materials to the market takes into consideration energy conservation, recyclability, and resource-saving products.
- ④ Effective raw material use, minimal energy use, and reduced industrial waste help to lighten the burdens on the environment.
- SRIKEN TECHNOS' environmental statement and policies are published for its employees, and all participate in a continuing environmental awareness education program which ensures constant vigilance.

## Environment Management System

## Organization Chart of Environment Management System

The representative director President takes the top-lead. A Chief Environmental Management Representative (CEMR) is appointed to establish environment management system under his control with setting environmental management representatives at every site.



\*EMR: Environmental Management Representative

Committee / Conference	Member	Function and Purpose
Management Review Meeting of Environment Management System	President, Senior Managing Director (Director in charge of Technical Division), CEMR and EMR at site	Assessment of Policy, Purpose and Environment Management System
Internal Environment Auditing Team	Eligible Internal Auditor	Audit of Compatibility
EMSC	CEMR, Chairperson of EMC, General Manager of Engineering Department and CELRMR	Deliberation and Approval of All Sites' Environmental Purpose and Target and Audit of Environment Management
EMC	EMR, General Manager of Each Division and Committeeman at Each Division	Set up of Environmental Purpose and Target, Discussion of Improvement and Prevention

## **Promotion System**

We stipulate committees and conferences about environment management.

## Role of CEMR and EMR

Certificate of ISO14001

Representative	Position	Role
CEMR	General Manager of Environment, Safety & Quality Assurance Department	Establishment, Operation and Maintenance of Environment Management System of All over the company
EMR	Each Site's Representative (Such as Factory General Manager)	Establishment, Operation and Maintenance of Environment Management System of Each Site

Since establishment in 1951, we have been giving top priority to preventing pollution. The 1992 Rio Summit spurred a heightened importance of corporate environmental management. Amidst these circumstances, the ISO 14001 international standard for environmental management system was created in 1996. Based on the judgment that we also must further enhance its

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environment management, on October 31, 2001, we obtained ISO 14001 certification at Saitama Factory, Mie Factory and Film R&D Center through an inspection by Nippon Kaiji Kentei Quality Assurance Limited (NKKKQA). Currently, all of our company's divisions have obtained this certification and are carrying out environmental activities as part of our company-wide efforts. Environmental Responsibility

The attestation of conformity

Particulars of the organization

Education of Environment for

Employees

## Internal audit

About 90 internal auditors audit once a year according to the instruction of the CEMR. We carried out audit 62 posts last year, and we found out that the programs did not match to the means to achieve the objectives, and knowing well contents and results of the meeting was insufficient. This is a serious defect and ISO secretariat is enforcing management and conduction through 2007.

## 2 External audit

We take audit twice a year by NKKKQA. We took the expanded audit for Gunma factory last year. As the result of the audit we had the indication that linkage between legal requirements and environmental sides was not clear, and we implemented corrective action to ensure our system management. Also we had audit of 15 customers last year. Though the clarification of 4M changes management process was pointed out, we generally gained high evaluation of customers.



## Internal education

Environment, Safety & Quality assurance Department is in charge of education of global and



domestic environment, and management system. We carry out education for new-coming employees and employees of new site that newly joins into the environment management system. Last year we implemented new-coming employees education, explanation of revised points of environmental related laws such as reduction of energy to every factory and Distribution Department, and providing environmental information to the global strategic meeting of Compound Division.

## 2 External education

The Mie Factory generates about 2,000t recyclable plastic waste per year. We inspected NK Nakamurakasei Kougyousho that we request to recycle plastic waste. The photograph is a cutting equipment of plastic waste dump.



## **Emergency Correspondence**

We implement periodical training with identifying the emergency at every site and section, and issuing emergency correspondence manual. We cope with preventing chemical substances with leakage to outside, and cause by dangerous substances specified in Fire Service Law as our



most important theme, because we purchase and use a big quantity of chemical substances and dangerous substances of Fire Service Law as our raw materials.



## Environment Laws and Agreements Related to Our **Business Activities**

On three factories, Saitama, Mie, Gunma, abide by more than 16 kinds of environment laws and agreements related to our business activities, while R&D Centers abide by more than 14 kinds of them.

We had no violation of environment laws and agreements last year.

We identify environment laws and agreements to be observed as follows.

	Sites							
Laws and Regulations	Saitama Factory	Mie Factory	Gunma Factory	Film R&D Center	Material R&D Center	Head Office	Osaka Branch Office	Nagoya Sales Office
1. Noise Regulation Law	$\circ$	$\circ$		$\cap$	$\bigcirc$			
2. Vibration Regulation Law	0	0		0	0			
3. Offensive Odor Control Law	0		0	0	0			
4. Factory Location Law	0	0	0					
5. Law for Combine Household Wastewater Treatment Facility	0	0	0					
Law Concerning the Evaluation of Chemical Substances and Regulation of 6. Their Manufacturing, etc.	0	0	0	0	0			
Law Concerning Reporting, etc. of Releases to the Environment of Specific 7. Chemical Substances and Promoting Improvements in Their Management (Law for PRTR and Promotion of Chemical Management)	0	0	0	0	0			
8. Waste Management and Public Cleaning Law	0	0	0	0	0			
9. Poisonous and Deleterious Substances Control Law	0	0	0	0	0			
10. Fire Service Law	0	0	0	0	0			
11. Law Concerning the Rational Use of Energy	0	0	0	0		0		
12. Law for Promotion of Sorted Collection and Recycling of Containers and Packaging	0	0		0		0		
Law Concerning Prevention from Radiation Hazards Due to Radio-Isotopes, etc.	0	0	0	0				
14. Industrial Safety and Health Law <sup>*1</sup>	0	0	0	0				
15. Air Pollution Control Law	0	0	0	0	0			
16. Water Pollution Control Law	0	0	0	0				
17. Law for Promotion of Correct Waste Disposal of Polycholorinated Biphenyls	0	0			0			
18. Sewerage Law					0			
19. Manual for Prevention of Resin and Pellet Leak" <sup>2</sup>	0	0		0	0			
20. Saitama Prefecture Basic Environmental Ordinance	0			0				
21. Saitama Prefecture Ordinance for Life and Environment Protection	0			0				
22. Agreement of Round-table Conference with the Committee of Neighborhood Inhabitants	0							
23. Mie Prefecture Basic Environmental Ordinance		0						
24. Mie Prefecture Ordinance on Environmental Preservation		0						
25. Kameyama City Pollution Control Ordinance		0						
26. Suzuka River Sewage Disposal Measure Conference Agreement		0						
27. Tokyo Metropolitan Basic Environmental Ordinance					0			
28. Tokyo Metropolitan Ordinance on Environmental Preservation					0			
29. Gunma Prefecture Basic Environmental Ordinance			0					
30. Gunma Prefecture Ordinance on Environmental Preservation			0					
31. Building Control Regulations*3						0	0	0

\*1 Only Ordinance on Prevention of Ionizing Radiation Hazards is picked up for us to be obeyed.
\*2 The Japan Plastics Industry Federation's guideline on prevention of marine and river pollution by resin and pellet.
\*3 Individual rules for tenants set by the owner of each building.

# Environment Objectives and the Performance in 2006

We promote the improvement activities with setting yearly environment objectives matched with business circumstances referring to environment policy.

We promoted reduction of CO<sub>2</sub> emissions and reinforcement of chemical substances management as two main themes for us.

The following are the representative objectives and performance.

Division	Reduce CO <sub>2</sub> Emissions	Results	Reinforcement of Chemical Substances Control	Results
Technical Division	Research for fuel substitution, Saving electricity	Completion of research for fuel substitution at Gunma Factory, Introduction of inverter control system to compressor	Development of environmentally aware products, Reduce use of PRTR-specified substances	Development of recyclable material 1,426t per month, Reduce use of substances subject to reduction including lead
Compound Division	Reduce dead stock	30% reduction (rel. to 2005) at Automotive Group	Promotion of lead-free	Portion of lead-free rigid PVC compound increased to 46%
Film Division	None	-	Response to research of chemical substances	Overseas Sales and Marketing Group 100% responded to it
Wrapping Film Division	Reduce use of indirect materials	3% reduction in domestic use wrap, 6% in commercial use	None	-
Osaka Branch Office	Reduce cost of freight	Completion of reduction of mistake of shipping order	Proposal of lead-free rigid compound	Recommendation of lead- free rigid compound to customers
Nagoya Sales Office	Reduce dead stock	20% reduction (rel. to 2005)	Collecting customers' information	Success in getting the information from customers from time to time
Saitama Factory	Steadily warming of steam pipes, Installation of new type of exhaust gas resolution deodorization furnace, Replacement to fork- lifts running on LPG	125% achievement of the target, Reduced fuel consumption, 3 fork-lifts	Control of PRTR-specified substances, Making databases of chemical substances in raw materials, Keeping strict storage of PCB	Check the monthly consumption, Databased some data of chemical substances which the factory has already gotten, Regular inspection
Gunma Factory	Activities for energy saving, Reduction of waste	Optimized operation of deodorizing equipments, Diversification of valuable use of waste films	Reduction of PRTR- substances	Reduction of occasion for using toluene
Mie Factory	Reduction through total activity	Reduction by 115t	Reduction of PRTR- substances, Total abolition of carbon tetrachloride	Less usage for new products, Total abolition from Jan. 2007 on
Purchasing Department	Reduction of paper lists and slips	Introduce of automatic facsimile sending system with 60 customers	Strict observance of our rules for abolition, reduction and control	Listed up references to get MSDS
Logistics Department	Reduction of pallets purchased	Accomplished (reduced by 28%)	Safe transport of chemical substances	Instruction to drivers for strict obedience of rules at transport of solvents
Environment, Safety & Quality Assurance Department	Promotion and support to reduction of CO2	Introduce and revision of internal rules and relevant guidance	Acquisition and data base of MSDS information, Strict control of substances to be reduced and abolished	Completion of data base, Completion of schedule for reduction and abolition
Administrative Division at Head Office	Reduce consumption of electricity	Introduction of Cool Biz, and setting PC's power saving function	None	-

The above environment objectives and the performance are all RIKEN TECHNOS CORPORATION business establishments' activities (Non-consolidated)

# Status of Environment Load

## Reduction of Industrial Waste

The main environment loads caused by our business activities are such as industrial waste discharge, greenhouse gas (CO<sub>2</sub>) emissions and discharge and transportation of chemical substances. The following data are the status of RIKEN TECHNOS itself.

One of the main themes of our environment management activity is reduction of buried and burnt industrial waste that is generated during our production process. We promote not only restraint of generating waste at our process with improving yield, but also strict classification of generated waste to utilize as material recycle, RPF (Refuse Paper and Plastic Fuel), and cement raw material, etc.

As a result the total quantity of industrial waste was reduced by 69.1% from 2,255t (in 2000) to 697t (in 2006).



\* Sites: 3 factories, Saitama, Mie and Gunma, Film R&D Center and Material R&D Center

# Energy Saving and Reduction of the Greenhouse Gas Emissions

The Saitama and Mie factories are identified as the energy control appointment factory. The main greenhouse gas generated by our business activities is CO<sub>2</sub>. We promote energy saving such as improving efficiency of operating facilities, demand control<sup>11</sup> of air conditioner, leakage prevention of industrial compressed air and steam, and so on. Chlorofluorocarbon is one of the greenhouse gases and used for refrigerant of air conditioner, and we control it not to leak while being used and when it is disposed.

As a result the total emission of  $\mbox{CO}_2$  in 2006 was 43,030t which was reduced by 1.4% from 2000.



- \*1 Demand control system made it possible to reduce electricity of air compressors by automatic stop and go operation to work them within the maximum electric power agreed with the supplier.
- \*2 Total emission of greenhouse gas is an estimated quantity of CO<sub>2</sub> discharged with is calculated by the consumption of electricity and fuel oil used at our 3 factories, Saitama, Mie and Gunma, Film R&D Center, Material R&D Center and Head Office. CO<sub>2</sub> discharged by transportation and at our branch and sales office is omitted and on the other hand that of our Head Office has been included in the above statistics since 2005.
- \* For calculation of discharged CO<sub>2</sub> we adopted the coefficient defined in "the Ministerial Ordinance of Calculating Greenhouse Gas Emissions and Sinks Attendant on Specified Emitters' Business Activities" (in March 2006, by Ministry of Economy, Trade and Industry, Ministry of the Environment) and "Publication of Emission Factor for Electric Industry 2005" (in March 2007, by Ministry of Economy, Trade and Industry, Ministry of the Environment)
- \* Sites: 3 factories, Saitama, Mie and Gunma, Film R&D Center, Material R&D Center and Head Office.

# The Appropriate Management of the Chemical Substances

We conventionally implement chemical substances management based on "Law Concerning the Evaluation of Chemical Substances and Regulation of Their Manufacturing, etc.", "Industrial Safety and Health Law", "Fire Serving Law", etc. "Law PRTR and Promotion of Chemical Management" was enforced on April 2001. We built up a count system in 1999 for thorough management.

We used in this term 26 kinds of chemical substances (4 less than the previous term) categorized to Type I, and among them there were 10 substances of which usage exceeded 1t (unchanged).

We promote the reduction of release quantity and transfer quantity of the PRTR objects with adoption of the substitute materials and introduction of the effluent gas processing equipment and maintenance of that equipment.

Chemical Substances		FY 2	005	FY 2006		
		Atmospheric Emissions (t)	Waste Transfer Amount (t)	Atmospheric Emissions (t)	Waste Transfer Amount (t)	
1	bis-(2-ethylhexyl) adipate	0.0	0.41	0.0	0.46	
2	antimony and its compounds	0.0	0.85	0.0	0.71	
3	chromium and chromium(III) compounds $^{\ast_1}$	-	-	0.0	0.00	
4	1,4-Dioxane *2	1.7	0.00	0.5	0.00	
5	organotin compounds	0.0	0.19	0.0	0.13	
6	decabromodiphenyl ether *1	0.0	0.01	-	-	
7	toluene *2	93.0	0.07	6.5	0.06	
8	lead and its compounds	0.0	0.66	0.0	0.70	
9	di-n-octyl phthalate	0.0	1.70	0.0	0.91	
10	bis(2-ethylexyl) phthalate	1.3	16.00	1.3	13.00	
11	boron and its compounds	0.0	0.01	0.0	0.02	

\*1 Indication by "-" means that total consumption was less than 1t.

\*2 1,4-Dioxane and toluene was reduced remarkably owing to the installation of a new type of gas resolution deodorization furnace at the Saitama Factory.

## Storing the PCB Waste

In July 2001 "Law for Promotion of Correct Waste Disposal of Polychlorinated Biphenyl (PCB)" was enforced. The Saitama Factory, and the Material R&D Center store and control condensers as PCB waste. We plan proper disposal after the preparation of Kanto district processing institution is completed.

The Saitama Factory received 6 pieces of equipment which contain PCB waste from our related companies to promote strict management during 2005. And in 2006 the Mie Factory found new low-condensed PCB waste such as transformers.

Sites	PCB Waste	Storage
Saitama Factory	High voltage condensers: 17 Waste water and oil containing PCB: 1,446 l	Kept in iron containers Kept in the sealed drums in the steel- container
Material R&D Center	High voltage condensers: 12	Kept in iron containers
Mie Factory	High voltage transformers: 4 Waste oil containing PCB: 350   PCB component waste: 300 g	Kept in iron containers Kept in the sealed drums in the steel-container Kept in the sealed drums in the steel-container

Correspondence to the Specified Chemical Substances Restrictions

# Correspondence to ELV Directive and RoHS Directive



The movement to restrict the chemical substances composed products such as ELV Directive<sup>11</sup> and RoHS Directive<sup>12</sup> of EU, and Proposition 65<sup>13</sup> of California USA is activated. The electrical appliances such as TV were obliged to indicate the J-MOSS<sup>14</sup> composition mark in Japan. In China also "Restriction of the use of certain Hazardous Substances in electrical and electronic equipment" enforced in March 2007 imposes the indication of specified chemical substances contained in the products. In Japan, they strengthen the management of the restricted chemical substances against parts and materials to be used between Supply Chain from material makers until assemble makers of automobiles, and electric and electrical appliances.

We reviewed and improved materials, manufacturing process, product inspection process to build up environment quality assurance system. We issued "Green Procurement Criterion<sup>50</sup>" about raw materials based on JGPSSI<sup>16</sup> to request suppliers to investigate whether the material includes the restricted chemical substances or not, and to provide with Non-use certification and Information sheet of specified chemical substances. In manufacturing process we added new automatic scaling equipment and changed the production line without using the restricted chemical substances. In product inspection process we introduced Fluorescence X-ray Analyzers (XRF) at the Saitama and Mie factories to analyze the restricted chemical substances every production lot of object products.

We have Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) at both of Material Characterization & Analysis Center and the Mie Factory to implement detail analysis of products to reply to customers' request in Material R&D Center.



- \*1 The Directive about the recycling of the abolished car which regulates use of cadmium, lead, chromium(\I) and mercury.
- \*2 Restriction of the use of certain hazardous substances in electrical and electronic equipment which regulates the above-mentioned 4 materials and specific fire retardant agents containing bromine.
- \*3 A law of state of California with regard to maintenance of drinking water, which obliges the indication of the hazardous chemical substances.
- \*4 JIS C 0950, "the marking of presence of the specific chemical substances for electronic equipment"
- \*5 Our internal rule about 24 chemical substances to be prohibited or investigated. Thus information is available on our website.
- \*6 The abbreviation of Japan Green Procurement Survey Standardization Initiative, a voluntary organization purposing the standardization of the items of investigation in relation to the green procurement.

Reinforcement of Safety Management of Chemical Substances It is a mission of makers to provide customers with secure and safe products, and it is one of the main themes to secure the safety of our materials. So in 2006 we established the "Chemical Substance Control Committee" as an organization of our whole company. We revised "Chemical substances management criterion" drastically to identify the classification of substances: ban to use<sup>1</sup>, reduction<sup>2</sup>, continual permission to use.

Furthermore we build up a system to provide products of safety priority through whole company by implementing examination of newly adopted chemical substances.

- \*1 We prohibited the use of chemical substances according to not only the laws and regulations, but also our voluntary restraint decided by this committee.
- \*2 We reduce voluntarily the use of suspicious chemical substances such as lead and nonyl phenol of which use is not prohibited by the laws.

We disclose the accounting data of our environmental preservation activity since 2007.

## Collecting Criterion of **Environmental Accounting** in 2006

Summary of Environment Accounting in 2006

<ol> <li>Accounting Coverage</li> </ol>	RIKEN TECHNOS CORPORATION (non-consolidated basis)
Period Covered	April 1, 2006 to March 31, 2007
③ Referenced Guideline	"Environmental Accounting Guidelines (2005 Edition)" (Issued by Ministry of the Environment of Japan in February 2005)

Environmental preservation costs in 2006 amounted to about 1,270 million yen. Investment was about 170 million yen, and expenses amount was 1,100 million yen. The items of investment are costs for prevention of pollution, global environmental preservation, and circulation of resources. Expenses were including analysis cost for RoHS Directive correspondence, maintenance cost for ISO activity, and R&D cost for environmental consideration products, etc. One of the largest portion of environmental preservation was R&D cost for environmental consideration products was about 1,000 million yen.

Environmental preservation effects caused from our activities were the following. Reduction quantity of final disposed waste was 269t. Discharge quantity of CO<sub>2</sub> increased 1,350t from 2005, because the Gunma Factory started operation and we could not absorb the amount in spite of smooth reduction at the Saitama and Mie factories. Valuable sale of wasted plastic gave us about 20 million yen economic effect.

				(¥1,000)
Environmental Preservation Cost	Category	Contents	Total Amount Invested	Expenses Paid
	1.Business area cost		84,979	0
	*Pollution prevention cost	Construction for anti-noise maintenance of place for waste	13,130	0
	*Global environmental preservation cost	Installation of energy saving equipment on deodorization furnaces	37,823	0
	*Resource circulation cost	Disposal of industrial waste, recycling industrial waste	34,026	0
	2.Upstream/downstream cost	Analysis of products containing chemical substances	0	9,072
		Recycle containers and packaging	0	24
	3.Administration cost	Insurance of Environmental Report, maintenance of ISO (including external audit), analysis of drainage and VOC, maintenance of greenbelt at each site	0	6,297
	4.R&D cost	Development of products that contribute to environmental preservation	0	1,064,887
	5. Social activity cost	Beautification and landscape preservation at our sites, donations	0	1,861
	6. Environmental damage cost	None	0	0
	Total		169,958	1,082,141

## **Environmental Preservation Effect**

Category	Environmental Performance Indicators (Unit)
Environmental preservation effect elated to resources input nto business activities	Total energy input volume (GJ): 916,000GJ Energy input volume by type Electricity: 75,833MWH (all of the company) Fuel oil: 4,278KL (all of the company) Kerosene: 28.5KL Gasoline: 81KL Light oil: 2KL Input volume of specially controlled substances (PRTR): 4,289t Input volume of water by source (Tap water) (m <sup>3</sup> ): 168,702m <sup>3</sup> (all of the company) Input volume of water by source (Underground water) (m <sup>3</sup> ): 171,400m <sup>3</sup> Input volume of water by source (Water for industrial use) (m <sup>3</sup> ): 11,167m <sup>3</sup>
Environmental oreservation effect related o waste or environmental mpact originating from ousiness activities	Emission of greenhouse gas (t-CO <sub>2</sub> ): 43,030t-CO <sub>2</sub> (in the previous year 41,680t-CO <sub>2</sub> ) Volume of specially designated chemicals transferred or emitted (t): Emission amount 7t / Transfer amount 16t Total waste emissions volume (t): 6,165t Final waste disposal volume (t): 697t (in the previous year 966t) Wastewater volume (m <sup>3</sup> ): 317,518m <sup>3</sup>
Environmental preservation effect elated to goods and services produced from business activities	Volume of containers and packaging used (t): 3,340t
Other environmental preservation effect	Transport volume of products (tkm): 32,383,000t/km Volume of emission of CO <sub>2</sub> associated with transport (tCO <sub>2</sub> ): 52,753tCO <sub>2</sub>

## Economical Effect Associated with **Environmental Preservation Activities**

Economic Effect	Amount
Benefit from recycling of plastic and paper waste	12,142
Expense reduced by energy saving activities (Reduced 345 t-CO <sub>2</sub> )	7,991
Total	20,133

(¥1,000)

The Material R&D Center Approach to Protecting the Environment



Michihisa Tasaka General Manager Material R&D Center, RIKEN TECHNOS CORPORATION

At the Material R&D Center, we work to boost our "total production power" starting from the manufacturing field. Here "production" is another way of saying "training". The pace at which new businesses are starting has gathered speed in recent years. Yet products and manufacture that take the environment into account are also in demand. This puts even more pressure than ever before on us improve the speed and quality of employee training.

In response, we strive to train employees who understand the overall essentials of "production" by acquiring an awareness of: what manufacturing processes are gentle on the environment and workplace, selecting materials that minimize the load on the environment, and by ensuring product safety. The employee must also put this awareness to work based on our center's theme of "Do not stop to think, but act!"

## R&D Concept

Along with our business strategy, we must develop original and sophisticated products that can follow up on rapid paced technical breakthroughs via an R&D system including:

- A division to develop new materials that meet future marketplace needs
- (2) A division to develop new material to meet expanding market sales mainly in construction, home appliances, cable, and automobiles.
- (3) A division to develop new materials to lower the load on the environment
- (4) A production engineering division to discuss improvement of productivity.

(5) A division specializing in mold engineering to render customer support. Along with this system, we see the role of our center as developing new products that do not emit pollutants as well as manufacturing processes that lower the environmental load posed by currently made products.

## >> Examples of developing environmentally aware products and developer comments

Developed a styrene elastomer that substitutes for rubber Developed a sophisticated TPV<sup>-1</sup> "ACTYMER® G" with wide applications as a substitute for rubber





## Satoshi Takahashi

This elastomer has durability and physical properties resembling vulcanized rubber and can be made into almost any shape by injection, extrusion, blow molding the same as ordinary plastic. ACTYMER® G is ideal for recycling and its great features make it a perfect fit for high-tech needs of expanding markets such as in the automotive field. This dynamically cross-linked styrene elastomer cuts overall costs by reducing material losses and shortening the production process.

Developed an environmentally compatible compound that prevents electrostatic charges Developed the sophisticated olefin-engineering plastic<sup>\*2</sup> "STATICMASTER ®"

## Hiromune Kondo





This "STATICMASTER®" is ideal for meeting ever-increasing needs for static charge protection in the low voltage device field. Using "STATICMASTER®" with its AS, ABS resin base including PC/ABS-PA/ABS•PBT/ABS'2 types, suppresses static charges without causing blooming or a drop in transparency. We also marketed an olefin–engineering plastic'2 "STATICMASTER®" that is free from static charge, which has been allegedly impossible until now.

See page 32 for a description of \*1 and \*2.

## Developed an environmentally friendly flame retardant compound

Developed a elastomer called "TRINITY®FR" having sophisticated functions and a host of applications as well as being non-halogenic, non-phosphorus<sup>\*3</sup> and flame retardant.

## Shinichi Kishimoto





Halogen (particularly bromine) flame-retardent resin is widely used in home appliances, office products and cell phones because of its excellent heatresistance and low-price. However regulations restricting toxic substances such as the RoHS and ELV directives in Europe show increasing worldwide concern about lowering the environmental load posed by flame retardant compounds and solutions. The non-halogenic, non-phosphorus<sup>33</sup> and flame retardant

"TRINITY®FR" styrene elastomer drastically cuts the environment load when used in the growing market primarily in the electrical wires/cables of automobile yet also offers the same durability and properties as halogen fireretardant resin.

## Developed an environmentally friendly vinyl chloride compound Wide applications and full functions of calcium-zinc based vinyl chloride compounds

## Kazuya Tsukada





A switchover from lead stabilizers to non-toxic calciumzinc stabilizers in vinyl chloride compounds is gradually building steam since lead and lead compounds are being targeted by RoHS regulations. Lead stabilizers long used in past years offer outstanding durability and reliability needed in the power, engineering and construction fields and so are likely to see continued use via recycling and recombination. However. stabilizing the production process and optimizing the resin and stabilizer improves processing and flame-retardant properties and boost product service life to a usable level.

Developed an environmentally friendly styrene elastomer Highly sophisticated biomass plastic polymers such as polylactide, etc.

#### Youhei Kuroda





The shortage of fossil fuels, unbalanced raw material supply, and trash problem has focused attention on biomass plastics as material to supplement fossil fuels. The mix of natural materials in biomass plastics improves the biodegradability and the basic features of natural material (antibacterial, heat resistance, strength, natural material feel, etc.) to yield advantages in terms of function, cost and the environment. The rise of biofuels has created a recent shortage in polylactide but more sophisticated biomass functions are scheduled for 2010 when the supply is expected to stabilize.

- \*1 TPV or thermoplastic vulcanizate is a dynamically cross-linked styrene elastomer
- \*2 These are engineering plastics. Typical examples are polycarbonate resin and nylon resin, etc. PC: Polycarbonate PA: Polyamide PBT: Polybutylene terephthalate
- ABS: Acrylonitrile butadiene
- \*3 Non-halogenic non-phosphorus indicates that a product not only contains no halogen elements such as chlorine or bromine but also has no phosphorus.

## The Film R&D Center Approach to Protecting the Environment



Junichi Mori General Manager Film R&D Center RIKEN TECHNOS CORPORATION

As far as the technology for environmental issues is concerned, we believe that there are two ways to achieve. One is when products are developed in a designing step, safer and harmless chemicals are chosen by considering the duration of usage and the wastes. Regarding the use of chemical materials, the rules of our own making have to be taken into account. Needless to say we strictly observe the regulations such as RoHS and ELV, we always try to lessen the use of the chemical materials which might be banned in the near future. Besides, our commitments to make are to select the recyclable materials, to research the materials non-related with fossil fuel and to turn the manufacturing process

into more economical and efficient one environmentally.

The other is to develop products spontaneously that improve the environmental issues, one of which has recently been said to be the global  $CO_2$  emission. Since the energies to dispose of the  $CO_2$  emission almost come from the fossil fuel, the total amount of  $CO_2$  to deal with gets bigger than the one just to exhaust, which makes it more difficult to solve. Each company and country is now striving for the alternative energy resource to the fossil fuel. We will make every single effort to elaborate the products related with the new energy fields and to help these issues be resolved through our R&D activities.

## >> Examples of Developing Environmentally Aware Products and Developer Comments

Developed an environmentally aware film for interior Polyester Decoration Film, "RIVESTAR®"

Our main products, polyvinyl chloride (PVC) sheets, have ever since been used as upholstery films, namely, indoor decoration films, due to the properties and the versatility of PVC in its design and process. However, the consciousness of health and environment has gotten keener in recent years. Therefore, plastic materials replacing for PVC have been sought because harmful gases could be generated when the products of PVC are incinerated on its waste disposal. Scrutinizing and testing various resins for sheeting process repeatedly, we have found out PETG resin, the feature of which is very close to rigid PVC. Although there have still been some leftover problems like sheeting processability, we have been able to create the PETG's product named "RIVESTAR®". Now that "RIVESTAR®" gets substituted for the PVC products, it is used as upholstery films with wide applications.

Shuji Kitahara





Developed an environmentally aware insulation film Non-Halogen Insulation Films

Yutaka Sekine

As an application of our products, there are adhesive films with electrical insulation properties. When applied to electrical insulation, the films are required to have high performance of flame retardance as specification in order to guarantee the safety in use. In general, such chemicals as bromide (so-called halogen) compounds and antimony trioxide have been used as flame retardant agents for these films. However, the contents of harmful gases, which eventually come from the incomplete combustion of these agents, have drawn attention to the damage of human bodies and the environment. As for the products of the next generation, we have developed the electrical insulation films that not only possess the high performance of flame retardance but also emit far less noxious gases when burned. On that step, though the technology has gotten harder to accomplish owing to our concept that utilizing these chemicals is forbidden, the new products with the high





performance have been created successfully. Besides, we have made contributions to easing the environmental issues through R&D activities that the ventilation systems, which clarify VOC gases rising from organic solvents in factories, have been introduced and new products have been developed without the designated chemicals listed on the PRTR regulation.

# Promotion of Green Procurement and Green Purchasing

Green Procurement Criterion

Green Purchasing Criterion

Procuring raw materials and subsidiary materials that have lower load on environment is necessary to supply environmental consideration products. We established "Green procurement criterion" about environment related substances in 2004, and opened it on our homepage. Also we established "Green purchasing criterion" about the office supplies such as stationery and OA machinery, and promote feasible purchase of the eco products.

## Scope

Raw materials such as resin, plasticizer, stabilizer, filler, film matrix, coating agents, and adhesives that constitute our products. And subsidiary material such as packing materials and release-paper.

#### Requirements

- a. Establishment of supplier's environment management system
- b.Achievement of management performance about environment related substances
- c. Investigation and report about our appointed environment related substances, and providing "Non-use certification" and "Information sheet of specified chemical substances"



#### Implementation

We procure the raw materials and the subsidiary materials, only if (a) they contain no substances banned by the environment related regulations, and (b) when they contain the substances to be controlled, such content is identified. There would be a case that we request to improve the materials to much safer ones, according to the evaluation results.

#### Scope

Stationery, OA machinery such as photocopiers and personal computers, and automobiles that we purchase or lease.

#### **Requirements**

Satisfying a criterion to be low environment load and not to contain harmful substances, according with "Law concerning the promotion of procurement of Eco-Friendly Goods and Services by the States and Other Entities" (Green Purchasing Law).

#### Implementation

We request suppliers to introduce eco products positively.

Argument of liability against damages caused from product defect made many developed nations establish Law concerning Product Liability. Japan also established "Product Liability Law" in July 1995. Product safety is the obligation of the manufacturers in spite of legislation, and we have been considering of this since before 1995. On timing of establishment of "Product Liability Law", we started system to prevent occurrence of problems as for product liability in January 1995. "Product Safety Committee" is the top management to promote to secure product safety.

### Product Safety Policy (according Product Safety Standard)

We secure the product safety from the product development stage until the delivery to customers to prevent occurrence of product liability problems.

#### **Organization of Product Security**

•		
Representative Director in charge of Product Security Safety		Inqui
Product Safety Committee	Establishment of organization and	Rankir
	rules	
Product Safety Judging Committee	Judgment of safety of products	Investigat
	Working group for	
Product Safety Measure Committee	measures at	Discussio
	production sites	

#### Procedure of Judgment about Safety of Products



Product Development Considering Safety – Product Liability Correspondence –

# Safety and Health Activity

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To reduce the industrial accident we started the program of safety and health according to the OHSAS18001 in April 2003 after prepared for one year. We revised this program according to the OSHMS in order to obtain the certification of the OSHMS prepared by Japan Industrial Safety & Health Association in accordance with the guidance of Ministry of Health, Labor and Welfare of Japan.



Implementing risk assessment, education and training are especially effective in decreasing the industrial accident just after introducing the management system.

In 2007 we are promoting our management strongly with revising the policy and the philosophy of the top management into more simple and clear ones, and implementing characteristic activities considering management program, education and training, operation standards, safety patrol and etc. Especially we implement through-going education and training under the slogan that safety is the top priority with making curriculums of the fail-safe education at every site.

#### Industrial Accidents Leave



Action to Environment in the Distribution

Environmental Preservation Activity recognize that the data is large load on environment, and we promote the various activities of environmental preservation and quality safety with the tie-up transporters. The following are our activities.

We operate distribution on outsourcing. The transport volume of our products was 32,383,000 tkm in 2006, and the quantity of CO<sub>2</sub> emissions with transportation was 52,753t. We

- Improvement of the loading efficiency with devising the most suitable allocation of cars by the automatic allocation system.
- Improvement of the car using efficiency with taking over materials on returning cars after delivery.
- Improvement of efficiency with integrating the distribution points.
- Promotion of eco-driving under cooperation of the tie-up transporters. And recommendation to them to gain the certification of ISO14001 or Green management.
- Promotion of modal shift\*. We shifted product transportation of about 100t from trucks to rail trains.
- Setting objective to reduce 1% of energy consumption based on unit. On April 1, 2006 the revised law of energy saving was established and the report of setting on saving energy plan, energy consumption, energy consumption based on unit, and performance of implementing saving energy related to consignment transportation is imposed. We obey this law as a consigner to reduce energy consumption.
- Decreasing the number of the pallet purchase with collecting pallets from customers. Promoting to change pallet materials from wood to plastic for protection of forest resources.
   \*Modal shift: Changing the way of transportation due to lightening of the environmental load
- We recommend the tie-up transporters to gain the certification of ISO9001 or G mark (Safety excellent enterprise).



MOTEGI CO., LTD.

KAMEYAMA EXPRESS CO., LTD.

Quality and Safety Activity

The following are the environmental impact data for each sites' activities of our production sites.

## **RIKEN TECHNOS CORPORATION** SAITAMA FACTORY

#### **Business Field**

Manufacture of thermo plastic compound (including PVC compound), high functional film and food wrapping film

#### **Outline of the Factory**

Start of the Operation	December 1968
Number of Employees	402

#### **Environmental Preservation Activities**

Industrial Waste



#### **Emission of Greenhouse Gas**



FY2003 FY2004 FY2005

> \*The volume of atmospheric emissions of 1,4-Dioxane and toluene in FY 2006 was reduced remarkably owing to the installment of a new type of exhaust gas resolution deodorization furnace.

		FY 2005		FY 2006	
	Chemical Substances	Atmospheric		Atmospheric	
		Emissions (t)	Amount (t)	Emissions (t)	Amount (t)
1	bis-(2-ethylhexyl) adipate	0.0	0.08	0.0	0.05
2	antimony and its compounds	0.0	0.18	0.0	0.11
3	1,4-Dioxane*	1.7	0.00	0.48	0.00
4	organotin compounds	0.0	0.17	0.0	0.10
5	toluene*	93.0	0.07	6.5	0.06
6	lead and its compounds	0.0	0.24	0.0	0.18
7	di-n-octyl phthalate	0.0	1.1	0.0	0.55
8	bis(2-ethylexyl) phthalate	0.58	4.7	0.63	3.1

### Status of Stock Pollution\*

We investigated the existence of three heavy metal substances (hexavalent chromium, cadmium, lead) and chlorinated organic cleaning agents (trichloroethylene, 1,1,1-trichloroethane, dichloromethane) at five points inside the factory in 2001. The result showed no pollution with

these substances. We did not have any accident of leakage, and we promote certain prevention of pollution.

<sup>t</sup> The Stock Pollution means the accumlated pollution of soil and underground water caused by inapproproate treatment of hazardous substances.

#### **Prevention of Environmental Pollution**

We implement the periodic measurement of environmental items according to the laws and regulations, and our self-disposed regulation. The items are exhaust gas, drainage, groundwater, noise, vibration, smell, radioactive rays, dust, etc. Especially we concern ourselves especially about noise and we improved protecting facilities of 5 places

for year 2006. We have improved totally 76 facilities for 7 years through ISO14001 activities.

From now on we prevent environmental pollution by continuing the periodic check of equipment and the periodic measurement.

## Environmental Communication: Round-Table Conference with Committee of Neighborhood Inhabitants

We hold the regular round-table conference with the committee of neighborhood inhabitants once a year. In addition to it, we obtain their understanding successfully through accurate disclosure of the environmental data and on-the-spot inspection of the factory. Thirteen

inhabitants and 12 employees participated in this conference held on February 2007, when the information such as drainage and noise measurement results, exhaust gas analysis results of deodorization equipment, etc. was disclosed.

## RIKEN TECHNOS CORPORATION MIE FACTORY

#### **Business Field**

Manufacture of thermo plastic compound (including PVC compound), film and food wrapping film

#### **Outline of the Factory**

Start of the Operation	December 1973
Number of Employees	260

#### **Environmental Preservation Activities**

#### Industrial Waste

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**Emission of Greenhouse Gas** 



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\* No report about decabromodiphenyl ether is required because of actual consumption less than 1 ton in FY 2006.

	FY 2005		FY 2006	
Chemical Substances	Atmospheric		Atmospheric	
	Emissions (t)	Amount (t)	Emissions (t)	Amount (t)
bis-(2-ethylhexyl) adipate	0.0	0.33	0.0	0.41
antimony and its compounds	0.0	0.67	0.0	0.60
organotin compounds	0.0	0.02	0.0	0.03
decabromodiphenyl ether*	0.0	0.01	-	-
lead and its compounds	0.0	0.42	0.0	0.52
di-n-octyl phthalate	0.0	0.55	0.0	0.36
bis(2-ethylexyl) phthalate	0.76	11.00	0.66	9.80
boron and its compounds	0.0	0.01	0.0	0.02

#### Status of Stock Pollution\*

We investigated the existence of three heavy metal substances (hexavalent chromium, cadmium, lead) and chlorinated organic cleaning agents (trichloroethylene, 1,1,1-trichloroethane, dichloromethane) at five points inside the factory in 2001. The result showed no pollution with these substances. We did not have any accident of leakage, and we promote certain prevention of pollution.

\* Stock pollution means the accumlated pollution of soil and underground water caused by inapproproate treatment of hazardous substances.

### **Prevention of Environmental Pollution**

We implement the periodic measurement of environmental items according to the laws and regulations, and our self-disposed regulation. The items are exhaust gas, drainage, groundwater, noise, vibration, smell, radioactive rays, dust, etc. Every measurement result satisfied the criteria.

### Environmental Communication: Round-Table Conference with Committee of Neighborhood Inhabitants

The round-table conference between 3 neighborhood selfgoverning bodies and this factory is held once for two years. The members of PTA, the mayor and the staff of Kameyama City attend to this conference. At this conference we release the information of our environment management and get the opinions of inhabitants. Exchange of various opinions is useful for our environmental improvement.

## RIKEN TECHNOS CORPORATION GUNMA FACTORY

SHINKO ELECTORIC WIRE CO.,

#### Business Field Manufacture of optical film

Outline of the Factory

Start of the Operation	October 2005
Number of Employees	42

## **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	1,518t-CO2	3,230t-CO2
Unit Requirement (per sales)	-	-
Industrial Waste	0	1.6t
Water Consumption	No Research	29,065t
	Subject of Restricted	Subject of Restricted
	Chemical Substances 1,	Chemical Substances 1,
	Emission 0.03t, Transfer 0	Emission 0.06t, Transfer 0

### **Business Field**

Manufacture and sales of electric wire and cable

### **Outline of the Business**

Capital Stock	¥48 million
Number of Employees	68

### **Environmental Preservation Activities**

	FY 2005	FY 2006
Emission of Greenhouse Gas	568t-CO2	551t-CO2
Unit Requirement (per sales)	0.235	0.214
Industrial Waste	15t	25t
Water Consumption	1,100t	1,146t
I am for DDTD and Dramation of		Subject of Restricted
Law for PKIK and Promotion of	No Research	Chemical Substances 4,
Cnemical Inlanagement		Emission 0, Transfer 0.25t

## KYOEI PLASTICS MFG CO., LTD.

#### **Business Field**

Manufacture and sales of profile extrusion plastics

### **Outline of the Business**

Capital Stock	¥24 million
Number of Employees	52

#### **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	925t-CO2	984t-CO2
Unit Requirement (per sales)	0.971	0.868
Industrial Waste	52t	46t
Water Consumption	330t	250t
I mu fee DDTD and Decemetical of		Subject of Restricted
	No Research	Chemical Substances 1,
Cnemical Management		Emission 0, Transfer 0.1t

LTD.

## **RIMEC CORPORATION**

## **Business Field**

Manufacture and sales of PVC compound

## **Outline of the Business**

Capital Stock	US\$10 million
Number of Employees	95

## **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	4,760t-CO2	4,598t-CO2
Unit Requirement (per sales)	0.071	0.064
Industrial Waste	114t	108t
Water Consumption	427,088t	459,381t
Law for PRTR and Promotion of Chemical Management	No Research	Subject of Restricted Chemical Substances 4

## RIKEN (THAILAND) CO., LTD

### **Business Field**

Manufacture and sales of PVC compound

## **Outline of the Business**

Capital Stock	Bt120 million
Number of Employees	234

## **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	9,023t-CO2	9,421t-CO2
Unit Requirement (per sales)	3.589	3.652
Industrial Waste	375t	422t
Water Consumption	42,000t	47,659t
Law for PRTR and Promotion of	No Research	Subject of Restricted
Chemical Management		Chemical Substances 1

## P.T. RIKEN ASAHI PLASTICS INDONESIA

## **Business Field**

Manufacture and sales of PVC compound

## **Outline of the Business**

Capital Stock	US\$4.7 million
Number of Employees	128

## **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	3,266t-CO2	3,623t-CO2
Unit Requirement (per sales)	1.407	1.449
Industrial Waste	0	0
Water Consumption	14,326t	19,233t
Law for PRTR and Promotion of Chemical Management	No Research	Subject of Restricted Chemical Substances 2

## SHANGHAI RIKEN TECHNOS CORPORATION

#### **Business Field**

Manufacture and sales of PVC compound

#### **Outline of the Business**

Capital Stock	US\$5.5 million
Number of Employees	86

#### **Environmental Preservation Activities**

ltem	FY 2005	FY 2006
Emission of Greenhouse Gas	s 1,243t-CO2	1,796t-CO2
Unit Requirement (per sale	s) 0.190	0.165
Industrial Waste	23t	57t
Water Consumption	5,800t	9,425t
Law for PRTR and Promotion Chemical Management	of No Research	Subject of Restricted Chemical Substances 2

#### **Business Field**

Manufacture and sales of food wrapping film

### **Outline of the Business**

Capital Stock	US\$5 million
Number of Employees	63

## **Environmental Preservation Activities**

Item	FY 2005	FY 2006
Emission of Greenhouse Gas	1,138t-CO2	1,458t-CO2
Unit Requirement (per sales)	0.0436	0.0402
Industrial Waste	0.6t	3.0t
Water Consumption	516t	2,155t
Law for PRTR and Promotion of		Subject of Restricted
Chemical Management	INO Kesearch	Chemical Substances 0

## CSR Workshop

**RIKEN TECHNOS** 

(JIANG SU) CORPORATION

As a kick-off of our CSR activities, we held the CSR workshop in February 2007. At our request Mr. Masao Seki, the General Manager of Corporate Social Responsibility Office of Sompo Japan Insurance Inc. that is one of the leading companies in CSR activity, lectured us about CSR, including philosophy, an international trend and the practice of CSR activities in Sompo Japan. While this lecture





was held at our Head Office, many employees of our every Japanese site participated in it through the television conference system. We could learn the elements of CSR and its specific examples through the workshop. Primarily, as we have obtained the common recognition what we should do for CSR, it was a good occasion for us.

## The Expert's Opinion



Mr. Masatoshi Ikari Manager of Environment Senior Consultant Inter Risk Research Institute & Consulting, Inc.

Succeeding a series of "Environmental Managing Report" in the past, this company issued this "RIKEN TECHNOS GROUP CSR Report" with more wide-ranging contents. I regard highly that the management is clearly aware of importance of "sustainability" not only for the company but also for the global environment and all our society, which is symbolized by the word of "the sustainable development" as stated in the "Message from the President". As the Editorial Policy to make this report easily to understand, there are many comments of its own employees, one of the most important stakeholders, with their photographs. Therefore, I would like to say, this report might be popular and read well to and by employees. Additionally, the part of "RIKEN TECHNOS products and technologies are everywhere in your life" makes a favorable impression on me because of the precise introduction of its products which are not so familiar to the general readers.

In the section of Environmental Responsibility, there are plenty of environmental performance data of its domestic and overseas sites. However, the environmental targets and result of RIKEN TECHNOS GROUP as a whole are obscure. Additionally, it is more desirable for the company to report the material balance of the whole group.

Regarding the section of Social Responsibility, since a lot of pages are prepared for "Relationship to Employees", I can easily understand that the business activities of the company are based on mutual respect between the company and the employees. However with regard to "Reaction to the Law for Measures to Support the Development of the Next Generation", there are only some short comments. Therefore I would like to recommend that more details about the promotion system for women, one of the most important issues for Japanese companies, should be reported, for example, about the actual measures and results togather with supporting system such as leave-of-absence for child care. In addition, as this report does not contain the "Code of Conduct of RIKEN TECHNOS CORPORATION" which has been already in force, it is recommendable that the next report will refer to the CSR activities and results with relation to the Code of Conduct.

I expect that the issue of "RIKEN TECHNOS GROUP CSR Report" will accelerate to improve its CSR management continuously.

## Editor's Postscript

We issued "Environmental Report" or "Environmental Management Report" to report mostly environmental achievement and the results in the last five years. From the perspective of Corporate Social Responsibility (CSR), we formed this "CSR Report" disclosing our whole business activities in this year. It was the first endeavor so that there was a lot of trial-and-error. Finally, we decided the editorial policy of



mentioning our business activities unaffectedly and intelligibly in this report.

In fact, we did not have accurate information how our CSR Philosophy has been established and understood in RIKEN TECHNOS GROUP. But in the stage of hearing their activities from each site domestic and foreign we realized that each site has been making effort steadily and it greatly encouraged us. We would like to promote RIKEN TECHNOS GROUP CSR activities with high targets.

It would be appreciated if you understand RIKEN TECHNOS GROUP CSR activities through this report and send us a frank opinion.

Hidetsugu Yamada Environment, Safety & Quality Assurance Department

Tomomi Matsumaru Corporate Planning Office

> The representative of the departments edited this report Makoto Kumanomido

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# **RIKEN TECHNOS CORPORATION**

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