

Color & Comfort by Chemistry

Responsible Care Report 2007



DAINIPPON INK AND CHEMICALS, INCORPORATED

### Contents

Corporate Data	1
A Message from the President	2
Principle and Policy for the Environment, Safety and Health	3
DIC Products: At Home and in the Community	4
Environment-Friendly DIC Products	6
Environment-Friendly DIC Production Processes	10
DIC's Responsible Care Organization	13
Production Input–Output Flow for Fiscal 2006	14
Reduction of Chemical Substance Emissions	16
Reduction of Energy Consumption	18
Reduction of Industrial Waste	19
Green Procurement and Distribution	20
Material Safety Data Sheets	22
Environment, Safety and Health (ESH)	23
ESH in Overseas Operations	24
ESH Activities	26
Environmental Load Reduction (Emissions into the Atmosphere, Water and Soil)	27
Key Environmental Indicators	28
Environmental Accounting	30
Corporate Governance and Risk Management	33
Communicating with Shareholders and Investors	34
In the Community	35
Employment Opportunities and Employee Development	38
Employee Education and Training	39
Creating an Appealing Workplace	40
History of DIC's Environment and Safety Program	42
Independent Review	43
Centennial Anniversary	44
Scope of Reporting: Offices and Plants	46
Scope of Reporting: Domestic DIC Group Companies	47



#### "River of Color"

From a single source, colors flow to many different destinations.

The river of color symbolizes DIC's color engineering and other product technologies, which have allowed it to expand into a wide range of

In 2008, DIC will celebrate its centennial anniversary. Going forward, DIC aims to create new sources, from which new rivers will flow, enabling it to play an increasingly important role in society. This desire served as the inspiration for this year's cover design.







### **Responsible Care (RC)**



"Responsible Care" refers to activities pledged and carried out by companies that manufacture and/or handle chemical substances with the aim of protecting the environment, safety and health (ESH), and to the implementation and continual revision of measures to accomplish this aim throughout the life cycle of chemical products, from development and production through distribution and use to final consumption and disposal.

#### **About this Report**

#### Period under review:

Fiscal 2006 (the year ended March 31, 2007) (Certain material activities in fiscal 2007 are also included)

DIC's Responsible Care Report 2007 summarizes the activities and achievements of DIC's corporate headquarters and Osaka and Nagoya branches (including the offices of subsidiaries that are located within the same buildings), and the following production and research facilities and domestic DIC Group companies (subsidiaries, affiliated companies and production facilities of affiliated companies that are located within DIC plants or the plants of DIC subsidiaries and work together with DIC in the implementation of environmental management measures):

The Tokyo, Suita and Chiba plants, the Kyushu Branch Office's Ink Production Department (formerly the Fukuoka Plant; renamed effective March 2007), the Hokuriku, Sakai, Kashima, Yokkaichi, Shiga, Komaki, Ishikari (closed in March 2007), Saitama, Gunma and Tatebayashi plants and the Central Research Laboratories

#### ■ Domestic subsidiaries:

Domestic subsidiaries:

KITANIHON DIC CO., LTD. (Tohoku and Hokkaido Plants); Kyushu Polymer
Co., Ltd.; Shin DIC Kako, Inc. (Shiga\*, Sakai\*, Narita and Ichihara plants);
Seiko PMC Corp. (Ryugasaki, Chiba, Shizuoka, Mizushima, Harima¹ and
Iwai¹ plants); Dainichi Building Materials, Inc.; DIC EP, Inc. (Sodegaura and
Kashima plants); DIC Interior Co., Ltd.; DIC Color Coating, Inc.\*; DIC
Precision Corp.; DIC Technology Corp.\*; DIC Filtec Incorporated; DIC
Colorants, Inc.; DIC Global Logistics Co., Ltd.\*; DIC Plastics, Inc.
(Tatebayashi\* and Shiga\* plants); TOPIC Co., Ltd.; Nichiei Plastics, Inc.;
Nippon Decor, Inc.; Nihon Packaging Material Co., Ltd.; Nippon Plastic
Pallet Co. (Ueda and Sano plants); Fuil Label Co., Ltd. Pallet Co. (Ueda and Sano plants); Fuji Label Co., Ltd.

- Subsidiaries and production facilities that are located within DIC plants and work together with DIC in the implementation of environmental management measure.

  Note 1: Formerly belonged to Seiko Polymer Corporation
- Affiliated companies and production facilities of affiliated companies that are located within DIC plants and work together with DIC in the implementation of environmental management measures: SUNDIC, Inc. (Shiga Plant); DIC Bayer Polymer Ltd.; Japan Fine Coatings, Inc. (Suita Plant); Japan Formalin Company, Inc.

The information in this report is also available on DIC's web site: http://www.dic.co.jp/eng/rc/index.html













### Corporate Data (As of March 31, 2007)

Registered name: Dainippon Ink and Chemicals,

Incorporated

Corporate headquarters: DIC Building, 7-20, Nihonbashi 3-chome,

Chuo-ku, Tokyo 103-8233, Japan

Date of foundation: February 15, 1908 Date of incorporation: March 15, 1937

Paid-in capital: ¥82,423 million (non-consolidated)

Number of employees: 4,181 (non-consolidated);

25,413 (consolidated)

Domestic operations: One branch, nine branch offices,

15 sales offices and 12 plants

Number of affiliates: 213 (domestic: 50, overseas: 163)

# **Operations**

The DIC Group is a global market leader with printing inks, organic pigments and synthetic resins as its core businesses. The Group currently classifies its businesses into five core operations.

### **Graphic Arts Materials Business Operation**

Printing inks, printing supplies, organic pigments

#### **Industrial Materials Business Operation**

Synthetic resins, synthetic resin-related products, additives and chemicals

### **High Performance and Applied Products Business Operation**

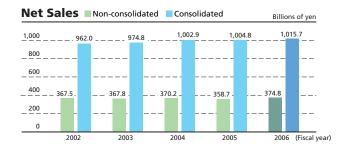
Special compounds and colorants, building materials, petrochemical-related products, chemical coatings, pressuresensitive adhesive materials, plastic molded products

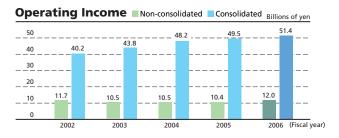
### **Electronics and Information Materials Business Operation**

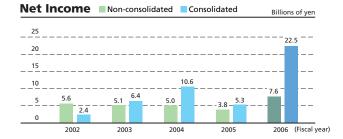
Imaging and reprographic products, liquid crystal (LC) materials, engineering plastics

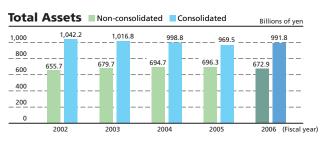
Health care products, decorative materials

# **Financial Highlights**









Note: These graphs have been prepared from the accounts maintained in accordance with the provisions set forth in Japan's Commercial Code and Securities and Exchange Law. The scope of consolidation differs from that used for the purposes of this report. In fiscal 2006, DIC had 179

# A Message from the President



Koji Oe President

I am pleased to present DIC's Responsible Care Report 2007.

On the eve of its centennial anniversary, DIC has formulated "The DIC Way," an articulation of its new management approach, which is based on three elements: a management vision, corporate values and principles of conduct. While building on its 100 years of history, DIC will strive to define its ideal for a 21st-century company and pursue its mission to achieve that ideal. In particular, DIC recognizes that, as a chemicals manufacturer, it has a fundamental responsibility to ensure safety and security, and will continue to implement measures to fulfill our responsibility to society in this regard.

To these ends, on April 1, 2007, DIC reorganized its Risk Management Committee to create the Corporate Social Responsibility Committee and newly established the CSR Division, enabling it to promote socially responsible management that incorporates existing risk management functions.

In 2008, our 100th year in operation, we intend to publish our first-ever CSR report. Accordingly, this report will be our last to bear the title Responsible Care Report. We will continue to position Responsible Care activities as an integral part of our CSR program, however, and will step up efforts to lower the environmental impact of our operations, thereby responding to society's expectations.

Our official Principle and Policy for the Environment, Safety and Health, shown on the facing page, was established in 1992. With the founding in 1995 of the Japan Responsible Care Council (JRCC), of which DIC is a founding member, we unveiled and began implementing a Responsible Care program. Mindful also of DIC's position as a leading global name in fine chemicals, in January 2006 we reaffirmed our support for Responsible Care by signing the CEO's Declaration of Support for the Responsible Care Global Charter, a document drawn up by the International Council with the aim of reinforcing Responsible Care initiatives globally.

As a manufacturer of fine chemicals, we take a comprehensive approach to environmental preservation, placing particular emphasis on the reduction of greenhouse gas emissions as well as industrial waste disposed of as landfill. In the period under review, our emissions of carbon dioxide (CO<sub>2</sub>) declined 6.3% from base year fiscal 1990.

We have set a target for reducing industrial waste disposed of as landfill—to be achieved through "zero emissions" initiatives—of below 370 tons, by fiscal 2007, our centennial anniversary. We achieved this target in fiscal 2006, one year ahead of schedule, as industrial waste disposed of as landfill declined to 312 tons. Going forward, we will continue to promote efforts to further lower industrial waste.

In recent years, industry has come under increasing pressure to strengthen management of chemical substances to preserve the environment and protect the health of consumers and workers. We are taking steps to reinforce our comprehensive management system for chemical substances with the aim of, among others, complying promptly with new European chemical substance regulations.

We hope that you will find this report informative and that it will enhance your understanding of DIC. As always, we welcome and appreciate comments and suggestions from readers.

# Principle and Policy for the Environment, Safety and Health

# **Principle**

As a responsible corporate citizen, Dainippon Ink and Chemicals, Incorporated (DIC), recognizes that care for the environment, safety and health (ESH) is fundamental to the management of the Company. DIC is committed to the concept of sustainable development and contributes to society by creating environmentally sound products and technology.

# **Policy**

- 1. We establish ESH-related objectives and targets and pursue continual progress.
- 2. We comply with laws, regulations and agreements relevant to ESH.
- We consider the ESH implications of each of our products throughout their life cycles in accordance with the ideals of Responsible Care.
- 4. We instill in our employees a thorough understanding of this fundamental Principle and Policy.
- We organize our operations so as to promote the safeguarding of the environment, safety and health and conduct audits to monitor progress throughout the Company.
- 6. We ensure that operations are conducted safely and materials are handled properly. We try to prevent environmental pollution and avoid affecting the environment negatively by recycling waste, conserving energy and other resources and using materials that are environmentally friendly.
- 7. We place the utmost importance on ESH-related considerations at all stages of the new product planning and production process.
- We promote safety by providing customers with detailed instructions on the proper use and handling of all products.
- In our overseas activities, we conduct environmental impact assessments and strictly observe local ESH regulations. In the absence of such regulations, we work with local officials and our business partners to develop environmental safeguards. We also follow this procedure when dealing with toxic materials, applying the same stringent standards for their handling as required in Japan. In addition, we promote the transfer of technology and know-how related to environmental protection.
- 10. We provide the public and appropriate authorities with ample information about our products and business activities so that they may have an accurate understanding of our efforts to promote health, safety and environmental protection.

The above Principle and Policy shall be available to all employees and to the general public. It is our goal that this Principle and Policy be followed at all DIC Group companies.

Established April 1, 1992 Revised February 1, 1996 September 2007

Koji Oe President

# **DIC Products: At Home and in the Community**

Established in 1908 as a manufacturer of printing inks, DIC has established a firm foundation in printing inks, organic pigments, synthetic resins and other fine chemicals, and has applied its proprietary technologies to expand its operations to include high performance and electronics and information products. In the almost 100 years since its establishment, DIC has built a portfolio encompassing approximately 300,000 products.

#### **Residential interior materials**

- Wooden interior materials (kamoi boards for Japanese sliding door frames, door and windowsills)
- Ultraviolet (UV)-curable coatings for wood-finish interior materials
- Adhesives for plywood

# Materials for hand and body soaps

Additives for base aromatics

#### **Products used in kitchen units**

- Counter tops
- Nonflammable decorative boards
- Kitchen cupboard doors

# Products used in the printing of newspapers

- News inks
- Materials for platemaking and printing

### **Health food products**

- Spirulina (tablets)
- Spirulina (coated tablets)



#### **Housing-related materials**

- Adhesives for laminated wood (for pillars and girders)
- Reactive hot-melt adhesives

### System furniture

- System storage units See P.7
- High-performance decorative boards

# Products used in magazines and books

- Printing inks See P.6
- Gravure inks
- Materials for platemaking and printing

# Products and materials used in LCD televisions

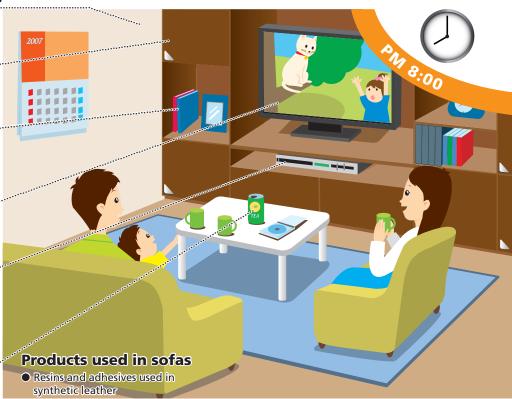
- LC materials for televisions
- Pigments for color filters

# Products and materials used in DVD recorders

- Engineering plastics for optical pick-up components
- Epoxy resins for electronics components
- Resins used in abrasives for polishing LCD glass
- Double-sided adhesive tapes used to affix mesh to speaker frames

# Products used in canned beverages

- Coatings for beverage cans
- Stevia extract (natural sweetener)



# 24 hours with DIC Products



### Materials for floor coverings

- Synthetic latex rubber used in carpets
- Adhesives for flooring materials
- Resins for floor coatings

### Materials for cellular phones

- LC materials for monitors
- Pigments for color filters
- Tapes for LCS
- Epoxy resins for electronics components
- Double-sided adhesive tape used to affix display panels

#### **Materials for PCs**

- LC materials for monitors
- Modifiers for internal wiring cords
- Double-sided adhesive tape used to affix machined components

#### **Materials for CDs and DVDs**

- Coatings and adhesives for CDs and DVDs
- Polystyrene resin used in CD and DVD cases
- Additives for controlling the molecular weight of polycarbonate resin

# Materials used in briefcases and other bags

- Colorants for synthetic resins
- Colorants for synthetic and natural leathers
- Pigments for colorants
- Resins used in synthetic and artificial leathers

## Materials used in electrical wiring

Nonflammable cladding materials

# Materials used in buildings and other structures

- Phenolic resins for use in adhesives for fireproof plywood
- Polyurethane/fiber-reinforced plastic (FRP) waterproofing materials
- Adhesives for heat-proof materials (glass wool, polyurethane foam)

#### Street signs

Pigments for specific sign colors

# Products and materials used in automobiles and buses

- Pigments for paints
- Resins for paints See P.8
- Double-sided adhesive tapes for interior materials
- Materials for electrical components (engineering plastics)
- Automotive products (bumpers, spoilers)
- Additives for radial tires
- Automotive products
- Stickers for automobiles used and transportation advertisements
- Additives for headlamp lenses
- Epoxy resins for electronic components
- Polyurethane support springs
- Harness tapes
- Binding agents for brakes and clutches
- Adhesives for abrasive cloths and papers

# **Materials used in shoes**

- Foamed polyurethane resins used in shoe soles
- Resins and colorants for synthetic and artificial leather
- Phenolic adhesives for shoe soles
- Polyurethane adhesives for shoes

### Roads

- Polyurethane paving materials
- Paving materials for landscaping
- Heat-resistant, water-resistant, non-slip paving materials

### Clothing

- Textile colorants
- Resinsused in crease-resistant processing
- Inks for iron-on prints and decals
- Resins used in moisture-permeable clothing

# **Environment-Friendly DIC Products**

For more information, visit: http://www.dic.co.jp/eng/products/envfprod/index.html



DIC's "environment-friendly product" mark comprises a green leaf representing new life and growth and a stylized blue wave symbolizing nonrenewable resources.

### Environment-Friendly Product Development

DIC products are transformed into a wide range of finished products that play key roles in everyday lives. DIC is actively committed to the development and launch of environment-friendly products, that is, products that respond to expectations regarding reduced impact on ESH. Accordingly, in January 2004 the Company implemented internal guidelines for assessing and designating environment-friendly products.

### Assessment and Designation of Environment-Friendly Products

DIC assesses and designates environment-friendly products using 16 criteria in four categories: energy consumption, raw materials used, risk and industrial waste generation. In principle, all DIC products are evaluated based on these 16 criteria in comparison with corresponding domestic market leaders. (Products for which there are no corresponding domestic market leaders are evaluated in comparison with existing DIC products.) DIC products designated "environment-friendly" are eligible to use DIC's proprietary "environment-friendly product" mark on labels.



### **Environment-Friendly Sheetfed Offset Ink**

**New Champion** 









# The New Standard in Spot Color Inks

Printing uses process inks, that is, the four colors (Cyan-Magenta-Yellow-Black, or CMYK) used to print four-color images, as well as spot colors, used for corporate colors and logos, and standard color inks, used to render clear, bright colors that are difficult to create by mixing spot colors.

DIC's New Champion F-Gloss has been one of the most widely used standard sheetfed offset inks since its introduction in 1962, setting the quality benchmark for sheetfed offset inks in Japan. New Champion F-Gloss' enduring popularity can be attributed to its superb color rendition, that is, its ability to produce rich, bright colors, as well as to the fact that it is the standard ink in the DIC Color Guide®, a color-matching guide used in a wide range of industries, including graphic arts, fashion, interior decorating and product design. Our team developed a new, environment-friendly version of New Champion F-Gloss made with soybean oil.

# A Lower Environmental Impact and Reduced VOC Content

Because the resin component of printing inks must be dissolved, most inks contain solvents made with petroleum, a nonrenewable resource. In contrast, soybean oil is made from an infinitely renewable resource.

New, improved New Champion F-Gloss employs the same basic features as Space Color Fusion G, a sheetfed offset process ink launched in 2005, including soybean oil instead of petroleum-based solvent. A higher oil content—equivalent to almost 50% of the ink's total solvent volume—greatly increases the effectiveness of resource use. Moreover, unlike petroleum-based solvents, soybean oil-based solvents emit almost no volatile organic compounds (VOCs), which are recognized as a cause of atmospheric pollution. The result is a soybean oilbased ink with a lower environmental impact. This new version of New Champion F-Gloss also exceeds environmental guidelines established by Japan's printing industry.

(Printing Inks & Supplies Division)





DIC corporate colors and symbols printed with New Champion F-Gloss



In fiscal 2006, products qualifying as "environment-friendly" accounted for 38% of non-consolidated net sales. On these pages we introduce several examples of environment-friendly DIC products.

> **Environment-Friendly Top Coat for Decorative** Sheets Used as Residential Interior Materials

# UC Clear NT Series

Decorative sheets used as interior materials consist of thin layers of paper or film and are used for furniture and other residential applications. The printed surface of these decorative sheets is coated with a protective top coat.

# **Sick House Syndrome**

In recent years, manufacturers of residential interior materials have stepped up efforts to respond to Sick House Syndrome, a range of ailments caused by certain chemical substances commonly used in such materials. Placing its top priority on ensuring its products are safe for people and environment-friendly, DIC developed the UC Clear NT series of aldehyde-, toluene- and xylene-free top coats. This revolutionary product realizes high productivity and a performance that is superior to conventional top coats containing toluene or xylene.

# High Productivity

Top coats that do not contain toluene or xylene generally have poor solvent release and are slow-drying, making it necessary to proceed slowly or risk a bumpy, uneven surface. By using a special synthetic resin developed in-house as the principal raw material, DIC succeeded in developing a toluene- and xylenefree top coat that facilitates the same coating speed as products containing toluene or xylene, thereby delivering improved productivity.

# Outstanding Performance

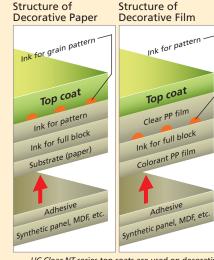
Users of decorative sheets demand a variety of performance features. In recent years, particular emphasis has been placed on enhanced durability

and resistance to scratches and dirt. Bringing its resin development technologies and additive technologies (used in, among others, UV-absorbent additives, scratch-resistant fillers and release agents), DIC developed an additive that can be combined in different amounts immediately prior to use, thereby accommodating a variety of applications, enabling it to narrow down its product lineup and assisting customers' efforts to reduce inventories and to respond to diverse performance requirements.

(Liquid Color Division)



Cabinet unit coated with UC Clear NT series product



UC Clear NT series top coats are used on decorative paper and film sheets.



demands and have earned a



# **Environment-Friendly DIC Products**



Masaki Watanabe, Manager

"Our main goal was to develop

a product that would be easy

Hajime Suganuma, Researcher

(Developer of BURNOCK® WE/DNW series)

"We are delighted that the

met with a positive market

products we developed have

(Developer of BURNOCK®

WE/DNW series)

**Environment-Friendly Synthetic Resins for Coatings** 

# **BURNOCK®**

WE (base)/DNW (hardener) Series



# Two Pack-Type Waterborne Polyurethane Resin for Coatings

From the standpoint of improving the environment-friendliness of their products, one of the key tasks facing coatings manufacturers is to lower the VOC content of coatings. A common variety of two pack-type acrylic polyurethane coating consisting of polyisocyanate and acrylic polyols is used in a variety of applications, including spray coatings for automobiles; highgloss coatings for, among others, wood flooring and tables; and coatings for railroad car exteriors. While the use of polyisocyanate, which is highly reactive with water, in an aqueous dispersion has traditionally been considered difficult, DIC has continued to conduct research aimed at developing a water-dispersible polyisocyanate, thereby enabling it to achieve a reduction in VOC content. As a result of these efforts, DIC succeeded in developing the BURNOCK® DNW series of new, highly stable polyisocyanate hardeners with excellent water dispersibility and low reactivity with water by introducing a specially designed dispersant.

For use with the BURNOCK® DNW series of polyisocyanate hardeners, DIC simultaneously developed the BURNOCK® WE series of waterborne acrylic polyols, facilitating the creation of a two pack-type waterborne resin

for coatings that delivers a level of water resistance comparable to that of solvent-borne coatings.

The dispersion of water and acrylic polyols is achieved simply by mixing the two components together. This greatly improves working efficiency and ensures stable performance even in situations lacking extensive coating facilities.

### Outlook

DIC's two pack-type waterborne polyurethane resins for coatings, comprising the BURNOCK® WEI BURNOCK® DNW series, have earned high marks as environment-friendly products. Going forward, the need for waterborne acrylic polyurethane resins for coatings is expected to increase. DIC will strive to respond to market needs by developing environment-friendly "sets" that combine its water-dispersible polyisocyanate hardeners and waterborne polyols to suit a variety of applications.

(Coating Resins Division)

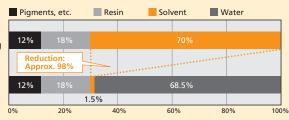


BURNOCK® WEIDNW series used to coat wood flooring

**VOC Content of Standard Types of Coatings During Coating Process (30% Dilution)** 

Standard two pack-type solvent-borne polyurethane coating

Standard two pack-type
waterborne polyurethane coating
Content:
BURNOCK WE-300
BURNOCK DNW-5000



Use of the BURNOCK® WE/DNW series facilitates a reduction in VOCs (orange bar) of approximately 98% compared with standard two pack-type solvent-borne polyurethane coatings.

"Going forward, we will continue striving to develop products that are even more environment-friendly."

WE/DNW series)

Masahiro Miyake, Researcher (Developer of *BURNOCK®* 



DIC's environment-friendly products are developed with the aim of enhancing environmental soundness, as well as achieving new levels of performance excellence.



## Label Stock for Recyclable/Reusable Items

# DAI-HEART

**R** Series

# Label Stock that Facilitates **Recycling and Reuse of** Components

Adhesive labels are seen frequently in numerous applications in everyday life thanks to the fact that they can be printed with a variety of designs and affixed to various surfaces, making them easy to handle. Examples include to copiers, printers, toner cartridges and wide-screen flatpanel televisions.

In recent years, demand has increased for labels for office equipment and household electrical appliances that can be easily removed once the product has reached the end of its useful life, thereby permitting the recycling or reuse of the body and/or constituent components.

# **Label Stock that Has Both Sufficient Adhesive Strength** and Easy Removablity

Traditionally, labels with strong adhesion have generally been favored for office equipment and other such applications to prevent them from becoming detached during use. Over time, however, adhesion strengthens significantly, making it difficult to peel the label off. DAI-HEART® R series label stock employs a newly developed pressure-sensitive adhesive that does not harden with age. As a result, it possesses two seemingly incompatible properties, that is, it does not peel off during use yet peels off smoothly when intentionally removed after use. Moreover, because the pressuresensitive adhesive used is waterborne, DAI-HEART® R series label stock offers added value in the form of significantly reduced VOC emission.

# Making DIC Label Stock the **First Choice of Customers** for Various Applications

DAI-HEART® R series label stock has earned high marks for excellent workability in that it can be easily printed, die cut and otherwise processed. Customers seeking environment-friendly label stock that permits recycling and reuse are also increasingly choosing this product. Going forward, DIC will continue to apply its development technologies for pressure-sensitive adhesives for removable label stock with the aim of facilitating use in a greater variety of applications.

### <Standard DAI-HEART® R Series Label Stock>

White polyolefin base

- R-2000EK Kraft paper release liner (for flat sheets)
- R-2000ED Glassine release liner: Roll-type label stock

(Pressure-Sensitive Adhesive Materials Division)



A roll of labels made with DAI-HEART® R series label stock



# **Environment-Friendly DIC Production Processes**



# Development of Microchemical **Production Systems**

A key focus of DIC's efforts to develop environment-friendly production processes is microchemical production systems. Microchemical production systems combine reactors, heat exchangers, mixers and other microdevices with very narrow (i.e., widths of between several and several hundred μm\*) channels and flows with micromachining process technologies, the development of which progressed significantly in the 1990s. From 2002 through 2006, DIC participated in the Production, Analysis and Measurement System for Microchemical Technology Project, a project of Japan's New **Energy and Industrial Technology** Development Organization (NEDO), with the aim of securing key basic technologies, and at the same time promoted research aimed at commercializing these technologies.

# Potential for Saving Energy and Reducing Environmental Impact

One advantage of using very narrow channels is that chemical equipment with these channels has significantly greater heat transfer capacity than conventional equipment, enabling rapid heating and cooling. Moreover, mixing takes place in the channels and is thus extremely fast and delivers uniform results. This enables accurate, energy-efficient basic chemical reactions and is therefore expected to minimize byproducts and greatly simplify the process of refining the products that generate massive quantities of solvent waste and wastewater.

As part of its efforts to verify the efficacy of this approach, DIC applied it to a microchemical production system for use in the radical coupling reaction of phenols for metallic catalysts used in the production of synthetic sealants

and flame-resistant materials. (See page 11.) Using microreactors designed and built by DIC, the system proves that instantaneous mixing and rapid heating significantly reduces byproducts and thus the environmental impact of production processes.

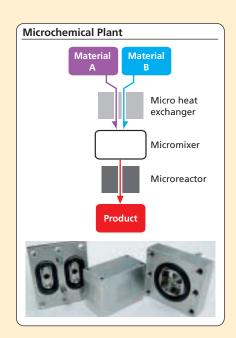
### Future Potential

Since it is easy to control temperature in narrow channels, it is possible to initiate sudden exothermic reactions. Because the system is fully enclosed, it is also possible to initiate high-pressure and other specialized reactions.

DIC produces numerous products using a wide range of specialized reactions. Going forward, DIC will continuously apply and modify this system with the aim of developing environment-friendly production processes.

(Process Engineering Laboratory, Corporate R&D Department)

\* One micrometer (µm) is one-thousandth of 1 mm.



To ensure its environment-friendly products are produced in a manner that does not harm the environment, DIC is working to develop environment-friendly production processes.

### TOPICS

# **Developing Bioprocesses that Employ Microreactors**



The Strategic Technology Roadmap for the Green-Bio Field announced by Japan's Ministry of Economy, Trade and Industry (METI) sets forth a target for switching to bioprocesses of 20%, or ¥5 trillion, of the annual ¥24 trillion currently applied to industrial production processes, by 2025. In line with the grant theme of NEDO's Bioprocess Development Project, which is to develop commercially viable bioprocesses, DIC has since fiscal 2004 pursued the development of bioprocesses for use in the production of high-performance polymer materials, including polyester polyols (PEs), raw materials for polyurethane resins used in its mainstay polyurethane resins, and biphenol (BP), a raw material for epoxy resins for electronics equipment and household electrical appliances.

### Bioprocesses for PEs

Standard PEs are synthesized from 1,4-butanediol and adipic acid through a condensation reaction using a metal catalyst at a temperature in excess of 200°C.

DIC's newly developed bioprocess uses an ester hydrolytic enzyme bound to the carrier instead of a metal as a catalyst to synthesize PEs. Because synthesization can take place at a low temperature of between 50°C and 60°C, energy use is significantly reduced. Additionally, the resulting PEs boast a lower VOC content than

PEs produced using conventional processes.

### Bioprocesses for BP

BP is usually produced through the radical coupling of phenol compounds as monomers employing a metal catalyst. With this process, however, a significant amount of energy is needed to remove unreacted monomers and byproducts.

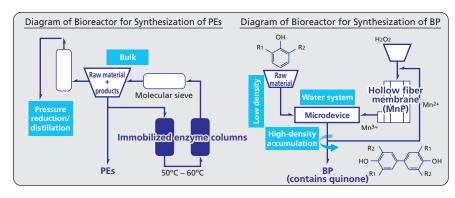
DIC's bioprocess for producing BP, developed as part of a cooperative R&D project with Kyushu University, is an environment-friendly process that employs manganese (3), created using manganese peroxidase (MnP), a lignin-degrading enzyme, in a hollow fiber membrane, as a catalyst to synthesize BP in a microreactor. This facilitates highly efficient synthesization, thereby reducing energy needed for refining.

At the same time, DIC also perfected a highly innovative microorganism culture technology that produces these enzymes.

DIC continues to promote forwardlooking basic research aimed at developing sustainable production processes.

> (Materials Research Laboratory, Corporate R&D Department)

Note: Implemented in line with NEDO's grant theme of developing commercially viable bioprocesses. DIC's efforts focus on the development of production technologies for high-performance polymer materials that use bioprocesses.







# **For the Global Environment**





# **DIC's Responsible Care Organization**

DIC conducts Responsible Care activities as part of its overall CSR program.

# Corporate Social Responsibility Committee

On April 1, 2007, DIC established the Corporate Social Responsibility Committee, which replaces the Risk Management Committee as the body responsible for determining Responsible Care activities. Under the guidance of the Corporate Social Responsibility Committee, Responsible Care activities are overseen through the Responsible Care Implementation Organization and the Responsible Care Audit Organization.

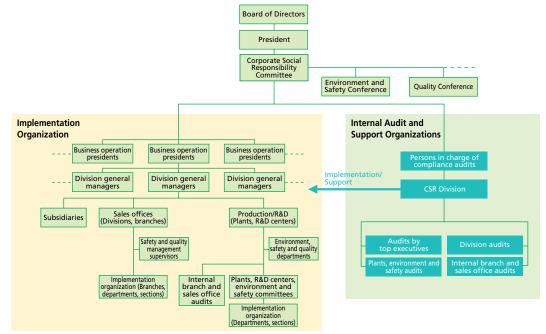
# Responsible Care Organization

# **Responsible Care Implementation Organization**

DIC has established Environment and Safety committees and assigned Environmental, Safety and Quality personnel to all DIC plants, R&D facilities and offices, thereby ensuring its basic Responsible Care policies determined by the Corporate Social Responsibility Committee are implemented in production, technology and sales activities. DIC has also assigned a Safety and Quality Management Supervisor to each sales office. All of DIC's principal plants have obtained ISO 14001 certification, the International Organization for Standardization's (ISO's) global benchmark for environmental management systems, allowing them to measure Responsible Care efforts against internationally accepted criteria. Certified plants are listed on pages 46 and 47.

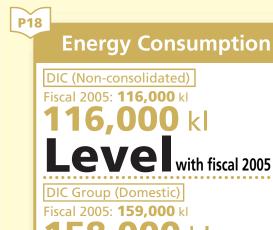
# **Responsible Care Audit Organization**

DIC's CSR Division audits the Responsible Care activities of DIC plants, branches and offices. The general managers of individual plants, branches and branch offices also periodically conduct voluntary audits of the activities at their respective facilities.

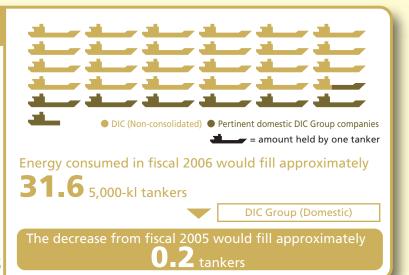


# **Production Input-Output Flow for Fiscal 2006**

- \*Data for DIC (Non-consolidated) comprises data for DIC plants and R&D facilities (including domestic subsidiaries, affiliated companies and production facilities of affiliated companies that are located within DIC plants) listed on the front inside cover.
- \*Data for the DIC Group (domestic) is for DIC (non-consolidated) and above domestic DIC Group companies other than those described.



158,000 kl
DOWN **0.6**% from fiscal 2005



Raw Materials

1,060,000 tons

INPUT ▶





P29

# **Total Water Consumption**

DIC (Non-consolidated)
Fiscal 2005: **13,124,000** m<sup>3</sup>

14,577,000 m<sup>3</sup>

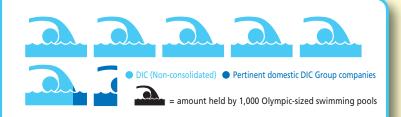
UP **11.1**% from fiscal 2005

DIC Group (Domestic)

Fiscal 2005: **14,593,000** m<sup>3</sup>

**16,013,000** m<sup>3</sup>

UP **9 9 %** from fiscal 2005



Water consumed in fiscal 2006 would fill **6,403** Olympic-sized swimming pools (2,501 m<sup>3</sup>)

DIC Group (Domestic)

The increase from fiscal 2005 would fill approximately 568 Olympic-sized swimming pools

1,647 tons **69** tons **275** tons **SO<sub>X</sub> Emissions** NO<sub>X</sub> Emissions

**P27** 

# **CO<sub>2</sub> Emissions**

DIC (Non-consolidated) Fiscal 2005: **248,000** tons

**244,000** tons

DOWN • 1.3% from fiscal 2005

DIC Group (Domestic) Fiscal 2005: **334,000** tons

**326,000** tons

DOWN • 2.4% from fiscal 2005

In fiscal 2005, CO2 emissions in Japan amounted to 10.12



amount emitted by 3,000 people

CO<sub>2</sub> emissions in fiscal 2006 represented the emissions of

**32,213** people

**DIC Group (Domestic)** 

The decrease from fiscal 2005 represented the emissions of 791



**Products** 

1,028,000 tons

PŽ9 **451** tons COD Emissions into Wateı

PŽ9 **12,876,000** m **Total Emissions** 

of Wastewater

P19

# **Industrial Waste Disposed of as Landfill**

DIC (Non-consolidated) Fiscal 2005: **537** tons

2 tons

**4** % from fiscal 2005

DIC Group (Domestic) Fiscal 2005: **1,282** tons

**20** tons

DOWN • 44% from fiscal 2005





● DIC (Non-consolidated) ● Pertinent domestic DIC Group companies

= amount held by 30 four-ton trucks

Waste disposed of as landfill by DIC in fiscal 2006 would fill

180 four-ton trucks



DIC Group (Domestic)

The decrease from fiscal 2005 would fill approximately four-ton trucks

# **Reduction of Chemical Substance Emissions**



# **Achieving a Gradual, Steady Reduction**

In fiscal 2006, emissions of Pollutant Release and Transfer Register (PRTR) chemicals by the domestic DIC Group amounted to 1,647 tons, a decline of 175 tons, or approximately 10%, from 1,822 tons in fiscal 2005.

# Compliance with Standards Governing the Emission of Dioxins

As of the end of fiscal 2006, DIC had two incinerators and domestic DIC Group companies had five incinerators that qualify as "specified facilities" under Japan's Law Concerning Special Measures Against Dioxins. Emission volumes from these incinerators are monitored on a continuous basis. All seven comply with standards governing dioxin levels in exhaust gas and wastewater.

Dioxin Emission Control Standards Applicable to Domestic DIC Group Incinerators

			aust Gas	Wa	stewater
	Incinerator capacity	Standard (ng-TEQ/Nm³)	Emissions recorded in fiscal 2006 (ng-TEQ/Nm³)	Standard (pg-TEQ/L)	Emissions recorded in fiscal 2006 (pg-TEQ/L)
Chiba Plant	Approx. 3t/h	5	4.4	10	0. 40
Hokuriku Plant	Approx. 0.3t/h	5	0.00079	10	0.00026
DIC Interior Co., Ltd.	Approx. 0.1t/h	10	3.3	_	_
KITANIHON DIC CO., LTD. (Hokkaido Plant)	Approx. 0.2t/h	10	0.17	_	_
KITANIHON DIC CO., LTD. (Tohoku Plant)	Approx. 0.2t/h	10	0.019	_	_
Seiko PMC Corp. (Harima Plant)	Approx. 0.2t/h	10	None recorded	_	_
Dainichi Building Materials, Inc.	Approx. 0.2t/h	10	0.21	_	_



# Reducing Emissions of Chemicals

Chemical companies deal with a considerably greater volume of chemical substances than companies in other industries and must therefore be extremely vigilant in handling chemical substances. Beginning in 1996, DIC focused on reducing its emissions of 284 chemicals targeted voluntarily under the Japan Chemical Industry Association's (JCIA's) voluntary scheme. Since fiscal 2000, DIC has targeted 354 chemicals specified under Japan's PRTR Law and 126 from JCIA list that the law does not specify, or 480 chemicals in total. In line with its risk management policy, in fiscal 2006 DIC monitored and took steps to reduce emissions of these chemicals, including those by domestic DIC Group companies.

#### **Emissions of 354 PRTR Chemicals**

DIC (Non-consolidated)	195 tons	Reduction from fiscal 2005: 5% (11 tons)
DIC Group companies (Domestic)	227 tons	Reduction from fiscal 2005: 23% (69 tons)
DIC Group (Domestic)	422 tons	Reduction from fiscal 2005: 16% (80 tons)

#### **Emissions of Chemicals Targeted by DIC for Emissions Reduction** (Chemicals Specified Under PRTR Law + Chemicals from JCIA Voluntary Scheme (126))

DIC (Non-consolidated) (Total emissions into the atmosphere: 421 tons)	517 tons	Reduction from fiscal 2005: 4% (20 tons)
DIC Group companies (Domestic) (Total emissions into the atmosphere: 1,130 tons)	1,130 tons	Reduction from fiscal 2005: 12% (155 tons)
DIC Group (Domestic) (Total emissions into the atmosphere: 1,551 tons)	1,647 tons	Reduction from fiscal 2005: 10% (175 tons)

In fiscal 2006, DIC recorded emissions of 123 and domestic DIC Group companies recorded emissions of 74 of the aforementioned targeted 480 chemicals. For the domestic DIC Group, the total was 132 chemicals.

#### **Emissions of PRTR Chemical Substances**



Based on PRTR Law and current JCIA standards (non-consolidated) (480 chemicals) Based on PRTR Law and current JCIA standards (domestic DIC Group companies) (480 chemicals)

The graph on the bottom left shows emissions of all targeted chemicals since DIC began monitoring these emissions in fiscal 1996. The table on the bottom right indicates chemicals for which emissions in fiscal 2006 exceeded 10 tons.

# Reducing Emissions of VOCs

Japan's revised Air Pollution Control Law, enforced April 1, 2006, introduced regulations on emissions of VOCs into the atmosphere. In line with this law, DIC has set a target for reducing VOC emissions from static sources by 30% from the fiscal 2000 level by fiscal 2010, which it will achieve by combining compliance with legal regulations and industry-led voluntary efforts.

#### **Emissions of VOCs**

	Fiscal 2000 (Actual)	561 tons
DIC (Non-consolidated)	Fiscal 2006 (Actual)	421 tons (Reduction from fiscal 2000: 25%)
(NOTI-COTISORIdated)	Fiscal 2010 (Target)	393 tons (Reduction from fiscal 2000: 30%)
	Fiscal 2003 (Actual)	1,364 tons (estimate)
DIC Group companies (Domestic)	Fiscal 2006 (Actual)	1,130 tons (Reduction from fiscal 2003: 17%)
(Domestic)	Fiscal 2010 (Target)	965 tons (Reduction from fiscal 2003: 30%)
DIC Crave (Demostis)	Fiscal 2006 (Actual)	1,551 tons
DIC Group (Domestic)	Fiscal 2010 (Target)	1,358 tons

#### Notes:

The PRTR is a scheme for assessing, aggregating and disseminating data on the sources of hazardous chemicals, amounts released to the environment and amounts transferred off-site from industrial establishments via waste products.

#### 2. PRTR Law

The PRTR Law is the popular name for the Law Concerning the Reporting, etc. of the Release to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management. The law, which went into effect in fiscal 1999, required companies meeting certain standards to assess the release and transfer of PRTR chemicals from fiscal 2001 and report results to the government from fiscal 2002. DIC has assessed the release of PRTR chemicals and aggregated and disseminated data in accordance with the law retroactive to 1999

#### PRTR Chemicals with Emissions in Excess of 10 Tons in Fiscal 2006 (Tons)

Chemical	Volume manu	factured/used	Volume emitted			
Chemical	Non-consolidated	DIC Group (domestic)	Non-consolidated	DIC Group (domestic)		
Ethyl acetate	14034.1	15117.1	120.5	702.9		
Methyl ethyl ketone	11132.7	11662.5	50.0	336.3		
Toluene	14079.7	14802.5	73.3	268.2		
Xylene	9342.6	10110.4	58.2	63.7		
N-Methylpyrrolidone	337.7	774.7	56.2	56.2		
Propyl alcohol	4210.3	4315.6	34.5	36.1		
Acetone	1515.8	1583.3	8.8	28.5		
Styrene	142430.5	154436.5	15.4	28.0		
Butyl alcohol	5932.9	5932.9	22.7	22.7		
1,3-butadiene	1936.2	1936.2	14.1	14.1		
Ethyl benzene	2932.6	3090.6	10.0	12.1		

# **Reduction of Energy Consumption**



# Energy Conservation

In fiscal 2006, DIC recorded absolute energy consumption, calculated in volume of crude oil used, of 116,000 kl. The index of energy consumption per unit of production (fiscal 1990=100) was 92, up 1.0 percentage point, falling short of the Company's stated goal of reducing absolute energy consumption, calculated in volume of crude oil used, by at least 1.0% annually. The graph below shows DIC's absolute energy consumption and the consumption index from fiscal 1990 through fiscal 2006. Having harnessed the effectiveness of cogeneration systems and high-efficiency production equipment installed at plants, in fiscal 2007 DIC will continue to take steps to lower energy consumption in line with its annual target of at least a 1.0% reduction.

In fiscal 2006, absolute energy consumption by domestic DIC Group companies engaged in production, calculated in volume of crude oil used, amounted to 42,000 kl. Consequently, absolute energy consumption by the entire DIC Group in Japan, calculated in volume of crude oil used, totaled 158,000 kl, a decline of 0.6% from fiscal 2005.

# Impact of "Cool Biz" Initiative

In line with the Japanese government's "Cool Biz" initiative, DIC encourages employees to dress down during the summer months, thus enabling them to work comfortably under new air conditioning restrictions implemented with the aim of reducing energy consumption. As a consequence, energy consumption at DIC's headquarters in fiscal 2006 declined 9.4 kl, or 4.7%, from fiscal 2005. DIC will continue to promote this initiative in the years ahead.

#### Notes:

- Energy consumption calculated in volume of crude oil used is the total volume of all types of energy used, including electric power, gas and fuel oil
- Energy consumed per unit of production is the volume of energy consumed per ton of products.
- The energy consumption index compares the change in the rate of consumption per unit of production with fiscal 1990 as the base year. JCIA has set a goal for this index of 90 by fiscal 2010.
- 4. Cogeneration systems enable the simultaneous production of several types of energy using one primary fuel. DIC's cogeneration systems use such fuels as natural gas and kerosene to produce electricity and the waste heat from fuel combustion to produce steam.

### Energy Consumption per Unit of Production (Calculated in Volume of Crude Oil Used) and Energy Consumption Index



- Energy consumption per unit of production (non-consolidated) (left axis)
- Energy consumption per unit of production (domestic Group companies) (left axis)
- ◆ Energy consumption index (non-consolidated) (1990=100) (right axis)

# **Reduction of Industrial Waste**



### Industrial Waste

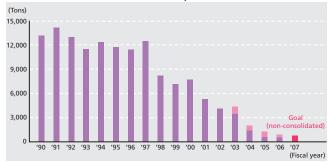
DIC achieved a reduction in industrial waste disposed of as landfill of approximately 42%, or 312 tons, in fiscal 2006. The graph below illustrates the annual volume of industrial waste generated by DIC that has been disposed of in this manner. DIC has set a goal for the disposal of industrial waste as landfill of 5% of the fiscal 1999 level, or 370 tons, by fiscal 2007, and since fiscal 2001 has implemented a variety of related programs. In fiscal 2006, DIC achieved this goal. Going forward, DIC will continue to reinforce initiatives aimed at achieving this goal.

In fiscal 2006, industrial waste disposed of as landfill by domestic DIC Group companies engaged in production amounted to 408 tons. As a result, industrial waste disposed of as landfill by the entire DIC Group in Japan totaled 720 tons, a decline of 44% from fiscal 2005.

# Municipal Waste

DIC strives to lower emissions of municipal waste and promote the separation of municipal waste to facilitate recycling. In fiscal 2006, the volume of municipal waste

#### Volume of Industrial Waste Disposed of as Landfill



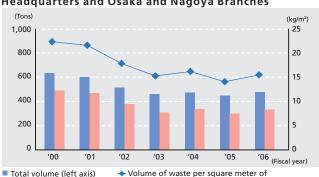
■ Volume of industrial waste disposed of as landfill (non-consolidated) ■ Volume of industrial waste disposed of as landfill (domestic Group companies) generated by DIC's corporate headquarters and Osaka and Nagoya branches was 25.4% lower than in fiscal 2000, while the recycling rate for paper and glass bottles and jars was 74.0%. The graph below shows municipal waste trends since fiscal 2000.

# Recycling of Containers and Packaging

Japan's Containers and Packaging Recycling Law, which went into effect in April 1997, obliges companies to which the law applies to recycle containers and packaging sold to consumers into commercial products. To facilitate a smooth process, the Japan Containers and Packaging Recycling Association was established as a governmentdesignated organization providing services on a contract basis. DIC has contracted the association as part of its strategy to ensure the efficient recycling of containers and packaging. In fiscal 2006, DIC paid a total of ¥716,663 to the association for the recycling of containers and packaging used in its health foods and plastic trays used in its petrochemicals-related products businesses.

Note: Industrial waste disposed of as landfill refers to the volume of industrial waste buried in landfill sites.

#### Volume of Municipal Waste Generated by Corporate Headquarters and Osaka and Nagoya Branches



floor space (right axis)

■ Volume recycled (left axis)

# **Green Procurement and Distribution**



# **Green Procurement**

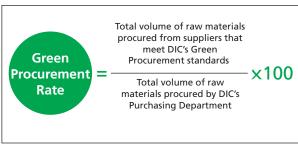
DIC established its own Green Procurement standards in fiscal 2001 and continues to encourage suppliers who do not meet these changes to implement changes.

In fiscal 2006, 96.1% of the raw materials procured by DIC were from suppliers that meet its Green Procurement standards, an increase of 0.3 percentage point from fiscal 2005.

#### **DIC's Green Procurement Standards\***

#### **Materials Procured** Activities A supplier must either A supplier must have earned ISO 14001 supply materials that contain no prohibited certification or have a substances, e.g., substances prohibited under the management system in Industrial Health and Safety Law or Class 1 specified chemical substances prohibited under place and a definite schedule for applying for the Law Concerning the Evaluation of Chemical ISO 14001 certification, or Substances and Regulation of their Manufacture, etc. (the Chemical Substance Control Law), and conduct its operations in accordance with the recycle or take other steps to ensure the principal requirements environmental soundness of containers and for ISO 14001. packaging materials or otherwise contribute to environmental preservation.

### **Definition of Green Procurement Rate**



<sup>\*</sup> Suppliers that meet DIC's Green Procurement standards are those that have satisfied both Activities and Materials Procured standards.



# **Compliance with Customers' Green Procurement Standards**

In addition to implementing strict criteria for regulating heavy metal compounds and other hazardous substances, DIC proactively discloses information on hazardous substances contained in its products to customers.

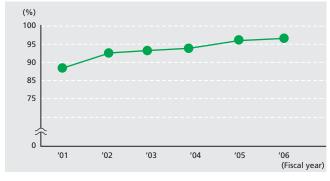
Manufacturers of electrical and electronic equipment are required to comply with such directives as RoHS, which bans the use of specified hazardous substances in such equipment, and WEEE, which applies to the treatment of waste equipment. Automobile manufacturers must comply with the ELV directive, which seeks to reduce hazardous materials removed from endof-life vehicles and ensure proper scrapping procedures. As a consequence, manufacturers must establish stringent Green Procurement Systems and ensure the compliance of raw materials and components suppliers.

As part of its efforts to comply with the demands of customers by disclosing information on hazardous substances contained in its products, DIC has incorporated management of these substances into its quality management system. DIC requests that raw materials suppliers submit Material Assessment Sheets and tests the raw materials it purchases for the presence of heavy metals and impurities to fulfill legal requirements.

# Green Procurement of Office Supplies

Concurrent with its switch to an online purchasing system for office supplies, DIC introduced a Green Procurement designation for office supplies and began promoting the use of products worthy of this designation. In fiscal 2006,

#### **Green Procurement Rate**



Fiscal year 03 04 05 06 Green procurement rate (%) 93.5 95.8 96.1 such products accounted for 18% of all office supplies purchased by the Company.

# Logistics-Related Initiatives

DIC provides yellow cards to drivers of container trucks, tanker trucks and other vehicles designated for transporting hazardous chemicals, as well as to drivers of ordinary delivery vehicles carrying mixed loads, to ensure a prompt response in the event of an emergency.

DIC exclusively uses containers and tanks that comply with Japan's Fire Defense Law standards, United Nations' standards and other legal requirements.

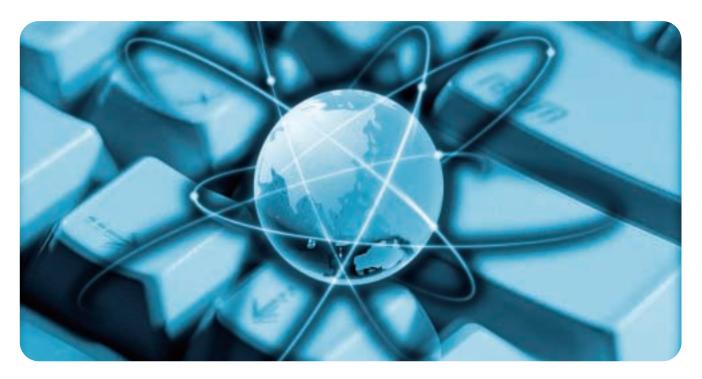
DIC is currently expanding its use of Japan Rail containers, trailers, ocean shipping and large-lot transport modes with the aim of reducing energy consumption. In fiscal 2006, such modal shifts contributed to a 770 ton reduction in CO2 emissions from the estimated level had DIC been using only trucks for transport.



#### Notes:

- 1. RoHS (Reduction of Hazardous Substances) directive A European Union (EU) directive banning the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) in electric and electronic equipment brought to market after July 1, 2006
- 2. WEEE (Waste Electrical and Electronic Equipment) directive An EU directive on the responsibilities of individual manufacturers to collect and recycle waste electrical and electronic equipment.
- 3. ELV (End-of-Life Vehicle) directive An EU directive banning the use of lead, mercury, cadmium and hexavalent chromium in new vehicles after July 2003. (Certain exceptions have been made.)
- 4. Products that comply with Green Procurement standards: DIC defines these as products that (a) qualify as "green" under Japan's Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities; (b) bear Japan's Eco Mark (a designation assigned by the Japan Environmental Association to products that contribute to environmental preservation); and/or (c) are included in the data book published by the Green Procurement Network (GPN), an organization established in February 1996 to promote green purchasing among consumers, companies and governmental organizations in Japan. 5. Yellow cards
- Promoted by JCIA, the yellow card system is a voluntary system of cards containing safety and emergency response information on chemical substances. These cards are provided by manufacturers to transport firms handling chemical substances.
- Modal shift DIC is making a shift to large-lot transport modes, including ocean shipping and rail, which offer higher energy efficiency per load Reduction of CO<sub>2</sub> emissions is calculated using the modal shift standards published by the Japan Federation of Freight Industries.

# **Material Safety Data Sheets**



# DIC Uses Proprietary Systems to Prepare and Distribute High-Quality, Reliable MSDSs.

## DIC's MSDSs

DIC prepares and distributes material safety data sheets (MSDSs) that comply with Japan Industrial Standards (JIS) for all chemical substances it sells in the Japanese market —not only for those it is obligated to by law.

To ensure its products are not a cause of environmental pollution, DIC also includes information on safe handling and appropriate measures for disposal in its MSDSs.

DIC has developed its own automated MSDS preparation system for preparing MSDSs. MSDSs that have been prepared manually are reproduced using this system to ensure all domestic legal requirements have been satisfied and to eliminate human error, thereby ensuring a uniform level of quality. DIC has also incorporated EU MSDS requirements into its own MSDS standards, facilitating exhaustive disclosure.

In response to Japan's revised Industrial Safety and Health Act, enforced on December 1, 2006, DIC amended its MSDS preparation system software, thereby facilitating prompt compliance with the revised law. DIC also introduced a new label-printing system that uses label data generated by the MSDS preparation system, which is transmitted electronically to plants, thereby ensuring labels comply with the revised law.

DIC's MSDS distribution system offers domestic customers the option of downloading sheets by mail on the Internet. Customers requesting online distribution

can view and download DIC's MSDSs at any time from the DIC web site. DIC also produces cumulative, itemized data on shipments to customers of PRTR chemicals.

For products exported from Japan for sale in overseas markets, DIC prepares MSDSs that comply with requirements in receiving countries in local languages or English. DIC has introduced software that incorporates EU Safety Data Sheet (SDS) requirements, thereby enabling the preparation of MSDSs that comply with EU guidelines —considered the global standard—in multiple languages.

DIC also provides hazard data and safety control information in response to requests for assistance from customers.



MSDSs distributed online

Note: An MSDS contains information on the properties and proper handing procedures for a particular chemical substance. Chemical manufacturers in Japan are required to provide MSDSs to customers in advance for products containing substances specified by the Industrial Safety and Health Act, Poisonous and Deleterious Substances Control Law and Law Concerning Reporting, etc. of Release to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management.

# Environment, Safety and Health (ESH)

### **ESH in R&D Activities**

In line with its commitment to sustainable development, the DIC Group places a high priority on the development of environment-friendly technologies and products. In 2008, DIC will celebrate its 100th anniversary. In advance of this milestone, and with a view to its second century in business, DIC is implementing a variety of measures with the aim of strengthening core businesses and cultivating new businesses, thereby positioning itself for dynamic growth as a Company that provides true value to customers in global markets.

To spearhead its efforts to achieve these aims, DIC has established an R&D structure centered on corporate R&D and business-specific R&D organizations and is encouraging collaborative efforts between its two R&D organizations.

Business-specific R&D focuses on individual business areas, namely, graphic arts materials, synthetic resins, and highperformance and applied products, as well as such highgrowth areas as electronics and information materials. Business-specific R&D is the responsibility of divisional technical departments, which endeavor to respond to market needs by developing highly profitable products. Technical administrative departments have been established within each of DIC's four business operations to unify R&D policies as well as maximize synergies among the divisional technical departments. Overseas, Sun Chemical operates research centers in the United States, Germany and the United Kingdom, which, together with DIC, form a cooperative global graphic arts materials R&D network.

Corporate R&D is conducted by the Color Science Laboratory, the Materials Research Laboratory and the Process Engineering Laboratory, all of which are based at the Central Research Laboratories, and by the Analysis Centers, which are located in individual plants and the Central Research Laboratories and provide support for R&D efforts. DIC's corporate R&D structure also encompasses the IJ Ink Development Center, a new Companywide ink jet project that brings together ink jet-related resources, previously distributed among multiple divisions, and the DP Development Center, a similar Companywide project established in April 2007 that combines device printing resources. DIC's corporate R&D network also includes facilities overseas: the DIC Berlin GmbH R&D Laboratory, in Germany, and Qingdao DIC Finechemicals Co., Ltd., in the People's Republic of China (PRC).

While encouraging greater collaboration between its business-specific and corporate R&D organizations, DIC is also promoting the development of innovative products that respond to increasingly sophisticated market needs, as well as composite products that integrate a myriad of proprietary technologies. At the same time, DIC is collaborating with government bodies and academic institutions in investigative and basic research aimed at discovering the seeds of new products.

In addition, DIC is striving to ensure a firm grasp of legal requirements and trends in environmental efforts to facilitate the development of products that meet the requirements of different countries.

# Assessment of and Education on Chemical Substances

In determining product development themes, DIC promotes efforts to reduce the volume of hazardous chemical substances used, realize less hazardous products, facilitate recycling and develop safer production processes that generate less waste, and conducts environmental assessments.

When formulating capital investment plans, DIC strives to ensure the safety and reliability of equipment and reduce the margin for human error, and conducts advance internal assessments of raw materials used. With the aim of ensuring the integrity of existing equipment, DIC has adopted a process safety management (PSM) program that enables it to identify and assess risk.

Safety training for employees engaged in R&D is based on the Environment and Safety Guidelines for the R&D Department, an in-house publication that draws on DIC's extensive experience and uses case studies. For employees in manufacturing positions, education focuses on the use of MSDSs and Principles of Safe Conduct: Procedures and Attitudes for a Safe Workplace, among others, to ensure the proper handling of chemical substances and the correct use of facilities and equipment.

In Japan and overseas, DIC strives to enhance employee understanding of laws and regulations. In fiscal 2006, DIC organized a training program on domestic laws and regulations for employees in R&D responsible for ensuring compliance. DIC also organized graduated, tailored seminars and training on the EU's new REACH legislation, which went into effect on June 1, 2007, for directors, general managers and other individuals in R&D and sales. Texts used in these programs are posted on the DIC intranet for employees to view and/or download with the aim of further reinforcing employee awareness.



Safety Guidelines for the R&D Department

Note: REACH ("Registration, Evaluation Authorisation and Restriction of

REACH puts the onus on businesses to evaluate the safety of chemicals they produce or use—a task that has traditionally been handled by public authorities. Under REACH, businesses bear full responsibility for evaluating the safety of chemicals with no distinction made between "existing" and "new" chemicals. REACH also prohibits the use of specified chemicals that pose unacceptable hazards to human health

# **ESH in Overseas Operations**



# DIC Group Companies Overseas are also Actively Engaged in ESH.

# Complying with Overseas Laws and Regulations

On June 1, 2007, the EU introduced a new regulatory framework, REACH, for controlling chemical substances. Under REACH, manufacturers and importers in the EU will be required beginning June 1, 2008, to register and assess conduct existing chemicals, which were not previously targeted. Companies and products that do not comply with REACH will be forced to withdraw from the EU market.

DIC continues to actively expand its global manufacturing network. Accordingly, DIC must ensure that the DIC Group's operations worldwide are REACH-compliant. Compliance must also be comprehensive,

encompassing not only products that are exported directly by the DIC Group to the EU but also those that are exported indirectly, that is, in finished products manufactured by customers. DIC has taken steps to survey and list all chemical substances requiring registration and assessment under REACH.

DIC has also held discussions on REACH compliance with affiliated companies in the EU and is currently cooperating closely with these companies to establish a system for registration and assessment.

DIC has also addressed concerns and opinions that have arisen in the course of its efforts to comply with REACH to METI and JCIA.

# **ESH at Overseas DIC Group Companies**

As of March 31, 2007, the DIC Group conducted business and engaged in ESH activities at 213 subsidiaries in 62 countries. Core subsidiary Sun Chemical Corp., which has its own extensive group of companies, is actively implementing its own ESH program, while DIC is supporting the efforts of other companies currently without such a framework to establish systems and conduct related activities.

DIC has introduced the same proprietary workplace accident report forms as it uses in Japan—translated into local languages and English—to Group companies in Southeast Asia, Oceania and the PRC, and is pursuing similar ESH initiatives as it does in Japan. DIC has also produced English- and Japanese-language versions of Principles of Safe Conduct: Procedures and Attitudes for a Safe Workplace, which is used by Group companies in Japan, to explain potential dangers inherent in workplace conduct.

In the PRC, DIC companies are conducting employee education and training using a workplace safety handbook prepared by DIC in fiscal 2004. In fiscal 2006, DIC also began distributing Chinese-language copies of two key internal publications: Occupational Accidents: Case Studies and Accidents: Case Studies.



Label for the EU



Label for the ROK



Label for Malaysia

#### **TOPICS**

#### **Enhancing ESH Management Systems in the PRC**

DIC is implementing measures to enhance the ESH management systems of DIC Group companies—primarily manufacturers—in the PRC. In fiscal 2006, DIC conducted compliance-specific environmental management audits of 12 of these companies.

DIC has also commenced internal audits of overall ESH programs at Group companies in the PRC. Such audits were conducted at four companies in fiscal 2006 and will be conducted at remaining companies in fiscal 2007. Based on the results of these audits, DIC will conduct follow-up audits on an ongoing basis, thereby creating an effective ESH audit system.

DIC companies in the PRC continue to exchange information not only on safety procedures, but also on revisions to pertinent laws and local regulations, safety procedures and training methods. Individuals in charge of ESH at DIC also meet regularly with their counterparts at Group companies in the PRC.

### **Enhancing ESH Management Systems in Southeast Asia and Oceania**

In fiscal 2006, DIC conducted safety audits at four affiliated companies in Thailand. Audits were conducted by an auditor, who was assisted by a safety consultant, and used checklists prepared by local subsidiaries, led by DIC Asia Pacific Pte Ltd, DIC's commitment to ensuring the safety of its employees and protecting the environment knows no borders. This commitment will continue to underpin efforts to promote effective initiatives in Southeast Asia and Oceania.

### ESH in International Transactions

In addition to adhering to the rules outlined in its Safety Management for International Trade Regulations and Implementation Manual, DIC has prepared a checklist for employees traveling overseas on business to prevent the illegal export of products, regulated goods and technologies. DIC also keeps abreast of information on trafficking in prohibited substances and has established an internal mechanism to ensure adherence with international regulations.

For products exported from Japan for sale in overseas markets, DIC prepares and distributes MSDSs in local languages or English (see page 22). DIC has also begun using product labels that comply with laws and regulations in receiving countries, replacing labels on products bound for the EU, the Republic of Korea (ROK) and Malaysia with labels that comply with labeling laws in receiving countries.

# **ESH Activities**

# Safety Record

During fiscal 2006, two accidents resulting in lost work days were reported at DIC plants, an increase of one from fiscal 2005, One involved an employee who suffered a lower-back injury while pulling flexible containers full of raw materials up onto a movable tanks. The other involved an employee whose hand was broken when it was caught up in a moving transport conveyor belt. The occupational accident frequency rate for the period and the occupational accident severity rates were 0.26 and 0.001, compared with 0.27 and 0.014, respectively, in fiscal 2005.

The graphs on the right show DIC's occupational accident frequency and severity rates from 1970 through fiscal 2006.

In response to an accident on May 25, 2006, involving the rupture of a reactor and explosion, DIC launched a Companywide project with the aim of identifying the cause and ascertaining the status of countermeasures, and also implemented measures to prevent similar accidents at all plants. Following completion of the project, the project team was reestablished as a permanent committee and continues to focus on ensuring the chemical reactions are managed in a safe manner.

Domestic Group companies engaged in production reported four occupational accidents resulting in lost work days in fiscal 2006, half the fiscal 2005 level. These included an employee whose hand was caught up in a coater roll, resulting in an injury to the knuckles. The occupational accident frequency rate was 0.64, down from 1.52 in fiscal 2005, while the occupational accident severity rate was 0.033, compared with 0.029 in the previous period.

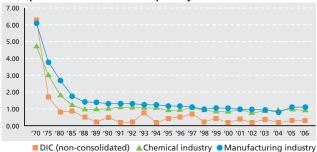
# **Awards Received**

DIC was honored to receive several awards in fiscal 2006 in recognition of its superb safety record.

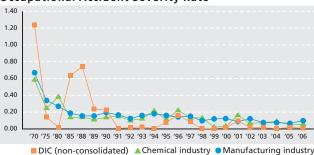
KITANIHON DIC CO., LTD. Tohoku Plant Incentive Prize (Safety and Health) (Minister of Health Labour and Welfare)

KITANIHON DIC CO., LTD. Hokkaido Plant No-accidents Record at Small and Medium-sized Enterprises certificate (Japan Industrial Safety and Health Association

#### **Occupational Accident Frequency Rate**



### **Occupational Accident Severity Rate**



#### Notes:

- "Chemical Industry" and "Manufacturing Industry" include all companies in the chemical industry and manufacturing industry, respectively, as defined by the Ministry of Health, Labour and Welfare for the purposes of its Occupational Safety and Health Statistics.
- 2. Figures for DIC are for the fiscal year (April 1–March 31). Figures for the chemical industry and the manufacturing industry are for the calendar year.

#### Notes

- Occupational Accidents with Lost Work Days
- Occupational accidents are accidents resulting in days away from work.
- 2. Occupational Accident Frequency Rate The occupational accident frequency rate is the number of injuries and deaths due to occupational accidents per one million hours of labor. (Calculation: Number of injuries and deaths + Total work hours X 1,000,000). An occupational accident frequency rate of 1.0, for example, corresponds to one accident per year in a workplace with 500 employees.
- Occupational Accident Severity Rate
   The occupational accident severity rate is the number
   of work hours lost per 1,000 hours of labor. (Calculation: Number of days lost +
   Total work hours X 1,000). An occupational accident severity rate of 0.1, for
   example, corresponds to 100 work hours lost per year in a workplace with 500
   employees.

### "Safety Tree Rings"

DIC has established the "safety tree" as a way to recognize the achievements of its plants and R&D facilities, as well as certain affiliated companies, in eliminating occupational accidents.

Each year, DIC presents plants and R&D facilities that achieve consecutive occupational accident-free years, that is, years free from accidents resulting in days away from work, with a ring for their "safety tree." One tree comprises 20 rings. When a tree is completed,

the process begins again as each silver ring is replaced with a gold one for each consecutive accident-free year. As of the end of fiscal 2006, three DIC plants had achieved more than 20 consecutive occupational accident-free years: the Fukuoka Plant (currently the Kyushu Branch Office's Ink Production Department) (37 years), the Hokuriku Plant (33 years) and the Ishikari Plant (25 years). In February 2007, the Hokuriku Plant also became the first plant to achieve 9,713,761 consecutive work hours free of occupational accident (category 6 occupational accidents, as defined under DIC's internal "zero accident" standard). This internal standard uses an index appropriate for the scale of each plant's workforce based on cumulative hours worked by all employees, thereby ensuring balance in the assessment of different plants. Plants generally fall into category 4. Category 6, which the Hokuriku Plant achieved in fiscal 2006, represents an outstanding performance in terms of consecutive occupational accident-free hours.

These achievements are the result of the consistent, honest application of near-miss incident sampling, hazard prediction and improvement proposal activities by plant employees. Other DIC plants and R&D facilities are modeling their efforts to achieve consecutive occupational accident-free years after the examples set by these three plants.



Safety tree at Hokuriku Plant

# Environmental Load Reduction (Emissions into the Atmosphere, Water and Soil)

# Emissions of CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub> and COD

Graph 1 indicates emissions of CO<sub>2</sub> resulting from DIC's operations from fiscal 1990 through fiscal 2006, calculated in volume of carbon released, and indexes energy consumption per unit of production (fiscal 1990=100). The absolute volume of emissions of CO2 in fiscal 2006 was 244,000 tons, a decrease of 3,232 tons from the previous period. The index declined to 93.7, from 94.4.

CO<sub>2</sub> emitted through the combustion of energy accounts for the bulk of DIC's CO<sub>2</sub> emissions. Accordingly, the Company's targets for reducing CO2 emissions are tied to its targets for lowering energy use. In fiscal 2007, DIC will continue to implement measures aimed at reducing both fuel use and CO2. The first of these will be to bring carbon-neutral biomass-fired boilers on line.

The absolute volume of emissions of CO<sub>2</sub> in fiscal 2006 by domestic Group companies engaged in production, calculated in carbon released, amounted to 82,000 tons. Accordingly, total emissions of CO2 during the period by the DIC Group in Japan, calculated in carbon released, amounted 326,000 tons.

#### Note:

CO<sub>2</sub> emission volume used herein is calculated using purchased electricity in fiscal 2005 as a coefficient. If purchased electricity in fiscal 2006 was used, DIC's emissions of CO2 in fiscal 2006 would be 251,228 tons. Beginning in fiscal 2007, a revised calculation using fiscal 2006 purchased electricity as a coefficient will be used.

Graphs 2, 3 and 4 show sulfur oxide (SOx) emissions, nitrogen oxide (NOx) emissions and chemical oxygen demand (COD) emissions in wastewater by DIC from fiscal 1990 through fiscal 2006. NOx emissions have remained on an uptrend since fiscal 2004, owing primarily to a change in the fuel mix resulting from the installation of cogeneration systems. Nonetheless, emissions of both substances remain well below legislated levels and levels agreed upon with local authorities.

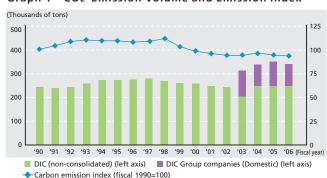
# Soil and Groundwater Analysis at Plant Sites

DIC conducts soil analysis at all former plant sites and, when necessary, implements remedial measures. In fiscal 2006, neither was required at any domestic sites.

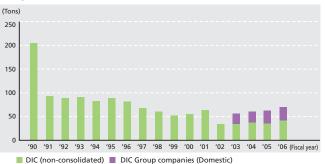
When acquiring plants or sites overseas, DIC compares Japanese laws with those of the country in which the plant or site is located and conducts soil analysis in line with the more stringent of the two. While the types of analysis required vary under different laws, DIC will continue to weigh the standards of other countries against Japanese standards and apply the most rigorous of the two for each type of analysis it conducts.

When investing in overseas plants, DIC conducts advance risk analyses to the best of its ability. In fiscal 2006, DIC conducted soil analysis at a chemicals company in the PRC in which it plans to acquire an equity stake.

Graph 1 CO<sub>2</sub> Emission Volume and Emission Index



Graph 2 SOx Emission Volume



Graph 3 NOx Emission Volume



Graph 4 **COD Emission Volume** 



# **Key Environmental Indicators**

#### Table 1 Emissions of PRTR Chemicals (See page 16)

#### DIC (Non-Consolidated)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
PRTR chemicals (480 chemicals) (tons)	749	652	660	601	573	537	517

#### DIC Group (Domestic)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
PRTR chemicals (480 chemicals) (tons)	_	_	_	(879)	(900)	1,822	1,647

Note: In fiscal 2003 and fiscal 2004, domestic DIC Group companies, excluding DIC, used 354 PRTR chemicals.

### Table 2 Energy Consumption (See page 18)

#### DIC (Non-Consolidated)

Fiscal year	1990 (Base year)	2000	2001	2002	2003	2004	2005	2006
Energy consumption (calculated in volume of crude oil used) (1,000 kl)	114	127	129	120	117	116	116	116
Energy consumption per unit of production (liters/ton)	124	126	133	121	114	114	113	113
Energy consumption index	100	102	108	98	92	92	91	92

#### DIC Group (Domestic)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
Energy consumption (calculated in volume of crude oil used) (1,000 kl)	_	_	_	178	152	159	158
Energy consumption per unit of production (liters/ton)	_	_	_	122	113	113	115

Note: Energy consumption per unit of production is the volume of energy consumed per ton of production, calculated in volume of crude oil used. The energy consumption index compares the change in consumption per unit of production with fiscal 1990 as the base year. JCIA has set a target for the reduction of energy consumption per unit of production for its member companies of 90% of the fiscal 1990 level by fiscal 2010. For DIC, this would be 124 liters/ton.

#### Table 3 Volume of Industrial Waste Disposed of as Landfill (See page 19)

#### DIC (Non-Consolidated)

Fiscal year	1999 (Base year)	2000	2001	2002	2003	2004	2005	2006
Volume generated (tons)	_	127,758	117,682	125,680	118,708	120,084	111,414	119,581
Volume disposed of as landfill (tons)	7,552	7,981	5,582	4,190	3,426	1,560	537	312
Zero emission index	100	106	74	55	45	21	7	4

#### DIC Group (Domestic)

2.2 2.3 45 (2 3333)								
	Fiscal year	2000	2001	2002	2003	2004	2005	2006
Volume generated (tons)		_	_	_	149,781	155,494	162,300	171,086
Volume disposed of as landfill (tons)		_	_	_	4.326	2.229	1.282	720

Note: Industrial waste disposed of as landfill refers to the volume of industrial waste buried in landfill sites after reduction (through dessication or incineration) or directly. DIC has set a goal for industrial waste disposal of 267 tons by fiscal 2007. The zero emission index compares changes in the volume of industrial waste disposed of as landfill with fiscal 1999 as the base year. DIC's zero emission index goal is a maximum of 5%.

### Table 4 CO<sub>2</sub> Emissions (See page 27)

### DIC (Non-Consolidated)

Die (Horr consonauteu)								
Fiscal year	1990 (Base year)	2000	2001	2002	2003	2004	2005	2006
CO <sub>2</sub> emissions (1,000 tons)	243	256	241	240	244	244	248	244
CO <sub>2</sub> emissions calculated in volume of carbon released per unit of production (kg/ton)	254	253	249	241	238	240	240	238
CO <sub>2</sub> emission index	100	100	98	95	94	95	94	94

#### DIC Group (Domestic)

2.0 0.0 0.0 (2 0.11000.0)							
Fiscal year	2000	2001	2002	2003	2004	2005	2006
CO <sub>2</sub> emissions (1,000 tons)	_	_	_	360	311	334	326
CO <sub>2</sub> emissions calculated in volume of carbon released per unit of production (kg/ton)	_	_	_	248	231	237	236

Notes: 1. CO<sub>2</sub> emissions per unit of production is the volume of CO<sub>2</sub> emitted per ton of production, calculated in volume of carbon released. The CO<sub>2</sub> emission index compares the change in emissions per unit of production with fiscal 1990 as the base year.

<sup>2.</sup> CO<sub>2</sub> emissions calculated using purchased electricity in fiscal 2005 is a coefficient.



### Table 5 SO<sub>X</sub> Emissions (See page 27)

#### DIC (Non-Consolidated)

Fiscal year	1990 (Base year)	2000	2001	2002	2003	2004	2005	2006
SO <sub>X</sub> emissions (tons)	204	55	63	32	32	37	35	44
SO <sub>X</sub> emissions per unit of production (g/ton)	221	54	65	32	32	37	34	43
SO <sub>X</sub> emission index	100	24	30	14	14	17	15	19

#### DIC Group (Domestic)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
SO <sub>X</sub> emissions (tons)	_	_	_	49	52	61	69
SO <sub>X</sub> emissions per unit of production (g/ton)	_	_	_	48	51	43	50

Note: SO<sub>X</sub> emissions per unit of production is the volume of SO<sub>X</sub> emitted per ton of production. The SO<sub>X</sub> emission index compares the change in emissions per unit of production with fiscal 1990 as the base year.

#### Table 6 NO<sub>X</sub> Emissions (See page 27)

#### DIC (Non-Consolidated)

Fiscal year	1990 (Base year)	2000	2001	2002	2003	2004	2005	2006
NO <sub>X</sub> emissions (tons)	202	185	174	166	182	244	247	254
NO <sub>X</sub> emissions per unit of production (g/ton)	219	182	180	166	177	240	239	247
NO <sub>X</sub> emission index	100	83	82	76	81	109	109	113

#### DIC Group (Domestic)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
NO <sub>X</sub> emissions (tons)	_	_	_	187	250	265	275
NO <sub>X</sub> emissions per unit of production (g/ton)	_	_	_	182	245	189	200

Note:  $NO_X$  emissions per unit of production is the volume of  $NO_X$  emitted per ton of production. The  $NO_X$  emission index compares the change in emissions per unit of production with fiscal 1990 as the base year.

### **Table 7 Water Consumption and Wastewater Emissions**

### DIC (Non-Consolidated)

Fiscal year	2000	2001	2002	2003	2004	2005	2006
Water consumption (city water) (1,000 m³)	482	386	339	346	362	335	315
Water consumption (industrial water, others) (1,000 m³)	17,178	14,918	13,588	12,270	14,249	12,789	14,262
Waste water emissions (1,000 m³)	13,771	11,813	10,985	10,906	11,810	10,802	12,014

#### DIC Group (Domestic)

	Fiscal year	2000	2001	2002	2003	2004	2005	2006
Water consumption (city water) (1,000 m³)		_	_	_	664	692	851	802
Water consumption (industrial water, others) (1,000 m³)		_	_	_	12,683	14,665	13,778	15,212
Wastewater emissions (1,000 m³)		_	_	_	11,222	12,159	11,736	12,876

### Table 8 COD Emissions in Wastewater (See page 27)

#### DIC (Non-Consolidated)

Fiscal year	1990 (Base yesr)	2000	2001	2002	2003	2004	2005	2006
COD emissions (tons)	745	615	545	471	439	473	417	448
COD emissions per unit of production (g/ton)	809	606	563	473	428	465	404	435
COD emission index	100	75	70	58	53	57	50	54

#### DIC Group (Domestic)

Die droup (Bonnestie)								
Fisc	cal year 2	2000	2001	2002	2003	2004	2005	2006
COD emissions (tons)		_	_	_	442	474	421	451
COD emissions per unit of production (g/ton)		_	_	_	13	10	6	7

Note: COD emissions per unit of production is the volume of COD emitted per ton of production. The COD emission index compares the change in emissions per unit of production with fiscal 1990 as the base year. Calculations for sites having no COD emissions data are based on biological oxygen demand (BOD) emissions.

The data before 2000 : here.



# **Environmental Accounting**

DIC adopted environmental accounting standards in 1998 with the aim of enhancing the efficiency and effectiveness of its environmental investments and expenses.

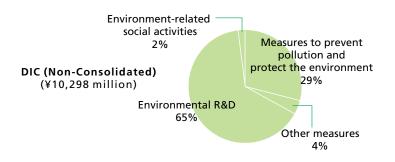
### **ESH Costs**

Prior to fiscal 1998, DIC disclosed environmental and safetyand health-related costs (expenses and investments) based on internal standards. Since then, however, the Company has disclosed environmental costs prepared in line with the *Preparation for Establishment of an Environmental Accounting System* (2000 Report), published by Japan's Ministry of the Environment, while it continues to calculate safety- and health- related costs using internal standards.

## Fiscal 2006 Environmental Costs

DIC's environmental costs in fiscal 2006 comprised investments of ¥865 million and expenses of ¥10,298 million. Environmental expenses are broken down in the graphs to the right and tables 1 through 4.

#### Breakdown of Fiscal 2006 Environmental Expenses



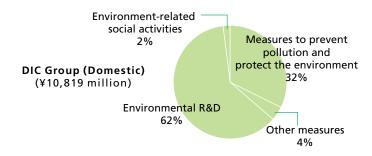


Table 1 Environmental Costs (Investments and Expenses) Figures in brackets [ ] are for the domestic DIC Group.

Millions of yen

Category	Scope	Investments	Expenses	% of Total
<ol> <li>Costs incurred through activities aimed at minimizing environmental load generated within the business area through production and sales activities (costs within the business</li> </ol>	Costs related to the preservation of air and water quality, maintenance or improvement of waste disposal and recycling activities	284 [340]	3,003 [3,471]	
	Costs related to the preservation of air and water quality	108 [123]	1,485 [1,687]	
(a) Pollution prevention and environmental protection costs	<ul> <li>Operating/maintenance expenses related to activities aimed at curbing air polli (241) [246], water pollution (756) [808], soil pollution prevention expenses (0.6</li> <li>Investments in air pollution prevention activities (38) [43]; water pollution other investments</li> </ul>	) [2] and other exp	enses	29% [32%]
	Costs related to energy conservation and internal and external waste disposal	176 [217]	1,518 [1,784]	
(b) Resource recycling costs	Operating/maintenance expenses for activities aimed at reducing energy a [348], water consumption (3) [16] and waste disposal (956) [1,182]; expense recycling of used merchandise (0.7) [0.7]     Investments in activities aimed at reducing energy consumption (175) [215] and other investments	es related to the o	bligatory	
Environmental costs related to management	Costs related to environmental and safety promotion and education; environmental management and auditing related to acquisition of ISO 14001 certification	(Note 1)	400	4%
activities (management activity costs) (Note 1)	Personnel/administrative expenses (235) [250], ISO 14001 maintenance expenses (18) [26], environmental load measurement expenses (40) [56] and other expenses	(11010 1)	[444]	[4%]
3. Environmental costs related to technological activities (technological activity costs) (Note 2)	Expenses and investments related to the development of products that reduce environmental load (including personnel expenses)	574 [574]	6,654 [6,654]	65% [62%]
4. Environmental costs related to social	Costs of plant and office greening programs and shared	. 7	170	
activities (social activity costs)	[7]	[179]	2%	
5. Costs related to damage inflicted on the	Environmental clean-up and other expenses	0	71	[2%]
environment (environmental damage costs)	• Levies on lake development (65) [65] and other expenses	[0]	[71]	
	Total DIC (Non-consolidated)	865	10,298	- 100%
	Total DIC Group (domestic)	[921]	[10,819]	

Notes: 1. The investment portion of management activity costs is included in costs within the business area.

<sup>2.</sup> Technological activity costs are costs related to the development of products that reduce environmental load and include R&D costs of new products as well as improving/customizing existing products.

DIC Responsible Care Report 2007

Table 2 Environment-Related Facility Investments and Technology Costs

Millions of yen

Category	Composition	Expenses
Environment-related facility investments	Investments in facilities to reduce environmental load and lower energy and resource consumption; other investments	865
Percentage of total facility investments	6%	
Environment-related technology costs	Investments related to environmental conservation technologies and the development of products that reduce environmental load	7,229
Percentage of total technology costs	28%	

Table 3 Economic Effects of Environmental Conservation Measures

Millions of yen

Category	Expenses	
Income earned by waste recycling	50 [186]	
Treatment cost reduction through waste recycling	320 [470]	
Cost reduction through energy conservation	167 [Note 1]	
Total	537 [823]	

Note 1: Data was not collected for domestic DIC Group companies.

Table 4 Impact of Measures to Protect the Environment

Category	Environmental Load Indices (Fiscal 1990 = 100)						
	CO <sub>2</sub> emissions (calculated in tons of carbon) per unit of production	Fiscal 1990 (Base year) = 100	94				
	SOx emissions per unit of production	Fiscal 1990 (Base year) = 100	19				
Impact of environmental protection measures within the business area	NOx emissions per unit of production	Fiscal 1990 (Base year) = 100	113				
	COD emissions per unit of production	Fiscal 1990 (Base year) = 100	54				
	Energy used (calculated in volume of crude oil used) per unit of production	Fiscal 1990 (Base year) = 100	92				
	Emissions of solid wastes disposed of as landfill	2% (of the fiscal 1990 level)					
	Target under DIC's reduction plan	4% (of the fiscal 1999 (base year for plan)					
	Fees paid for waste disposed of as landfill (fiscal 2006 actual payment base)	¥25.5 billion less than in fiscal 1990. (Note 2)					
	Emissions of PRTR chemicals (revised list)	60% of the fiscal 1999 level. (Note 3)					
Impact of upstream and downstream environmental protection measures	CO <sub>2</sub> emissions realized as a result of modal shifts were 770 tons more than truck transport. (Note 4)	would have been the case with					

Notes: 2. The comparison of fees paid for the disposal of waste as landfill (fiscal 2006 actual payment basis) was calculated by subtracting the fiscal 2006 total from the fiscal 1990 total. In fiscal 2005, fees paid were ¥11.7 billion less than in fiscal 2004.

- 3. Figures represent emissions of PRTR chemicals based on a revised list of target chemicals that went into effect in fiscal 2001 and is retroactive to fiscal 1999.
- 4. Calculations are based on standards set forth by the Japan Federation of Freight Industries in its Report on Survey of Modal Shifts. A significantly greater reduction in CO2 emissions was realized through the use of large-scale transport modes in fiscal 2006.

# Safety- and Health-Related Costs

Safety- and health-related costs in fiscal 2006 comprised investments of ¥360 million, while safety- and health relate expenses totaled ¥918 million. A breakdown of these costs is shown in the graph to the right and table 5.

Table 5 Safety- and Health-Related Costs

lable 3 Salety- allu llealt	Millions of yen					
Category	Inves	tments	Expenses		% of Total	
Safety and health management costs (a) Safety management costs (b) Health management costs	255	[276]	336 (311) (25)		37%	[36%]
Specific safety- and health-related costs			254	[282]	28%	[28%]
Fees paid to outside firms for safety data-related tests	0	[0]	149	[151]	16%	[15%]
Safety and fire prevention costs	51	[68]	179	[219]	19%	[21%]
Total	306	[344]	918	[1,013]	100%	[100%]

] are for the domestic DIC Group. Note: Figures in brackets [

#### Breakdown of Fiscal 2006 Safety- and **Health-Related Expenses**





# **Corporate Governance and Risk Management**

DIC embraces risk management to be "a process for the appropriate management of the various risks relating to operations arising in the administration by the Company, in order to increase the corporate value of DIC and the DIC Group." Accordingly, DIC promotes the integrated implementation of risk management and its compliance program.

# Corporate Governance

In line with its management vision, "Color & Comfort by Chemistry"—which emphasizes leveraging its core businesses to fulfill our responsibility as corporate citizen, as well as to bolster the trust of stakeholders and achieve continuous growth in shareholder value—DIC approaches enhancing corporate governance as an key management priority.

To ensure transparent, sound management, DIC is striving to reinforce decision making, execution and oversight by refining its internal control systems.

# **Four Objectives and Six Mechanisms of Risk Management**

DIC's risk management focuses four objectives, as well as six mechanisms upon which its risk management is structured.

#### Four objectives

- 1. Ensure the effectiveness and efficiency of operations
- 2. Ensure the reliability of financial records
- 3. Ensure compliance in all aspects of operations
- 4. Secure access to funds

#### Six mechanisms:

- 1. The integration of risk management and DIC's compliance program in order to increase corporate value
- 2. The establishment of a Code of Business Conduct, which applies in common to employees of DIC and the DIC Group
- 3. The clarification of work authority and responsibility
- 4. The establishment of an internal route for communications
- 5. The fulfillment of internal audit functions
- 6. The implementation of crisis management

### Code of Business Conduct

To implement management policies, including "fair and transparent business activities," based on the principle of selfresponsibility, DIC has established a Code of Business Conduct.

#### Code of Business Conduct

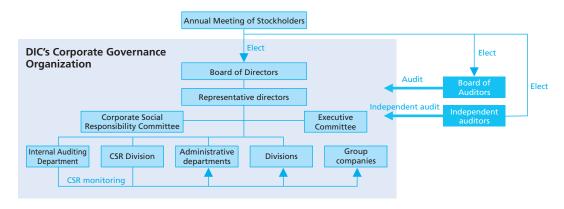
Officers and employees of DIC and the DIC Group must act in accordance with the Code of Business Conduct to respond firmly to the expectations of stakeholders, including customers and society, in all regions where the DIC Group conducts business activities, and gain their trust and confidence.

If an employee discovers any evidence of illegal conduct, they are required to notify the relevant compliance department. The Code of Business Conduct contains specific standards of conduct pertaining to:

- 1. The environment, products and safety
- 2. Employment and the workplace environment
- 3. Competition and business transactions
- 4. The reliability of financial records
- 5. The prohibition of insider trading
- 6. Relations with third parties, public officials and stockholders
- 7. Conflicts of interest

# From Risk Management to CSR

For DIC, corporate social responsibility (CSR) is recognizing that ethical actions by a company (and its employees) are directly linked to the sustainable growth of its businesses and voluntarily incorporating an awareness of social and environmental issues into the business activities and relations with stakeholders of both DIC and the DIC Group. Accordingly, DIC has expanded the focus of its existing risk management efforts and will strive, by leveraging its core businesses, to contribute to social and environmental sustainability.



# Communicating with Shareholders and Investors

To ensure appropriate evaluation by shareholders and investors, DIC strives to enhance transparency, ensure the provision of timely, accurate and impartial information and promote two-way communications.

# IR Policy

DIC views investor relations (IR) as two- way communication, that is the continuous provision to stakeholders— shareholders, investors, customers, financial institutions, employees, suppliers and the communities in which DIC operates—of timely, accurate and impartial information, both positive and negative, pertaining to its management philosophy and policies, operating results and future prospects, and the gathering of external opinions and information and reflection thereof in the Company's management approach. As a listed company, DIC strives to fulfill its responsibility to be accountable for its actions, thereby ensuring its acceptance as a contributing member of society and continued prosperity.

### IR Activities

In 2000, DIC established an IR Committee. Since then, the Company has conducted an active IR program. In 2004, DIC established the Public & Investor Relations Department with the aim of reinforcing communications by, among others, enhancing shareholder and investor understanding of the Company and ensuring feedback is reflected in its management approach.

For analysts and institutional investors, DIC holds twiceannual results presentations (interim and full-term), as well as organizes small group meetings. More than simple performance reports, results presentations encompass an explanation of management strategies by top executives and Q&A sessions.

Results presentation

In response to its increasing number of overseas shareholders, DIC is taking steps to increase and enhance its presentations for investors overseas and in fiscal 2006 began conducting IR activities in overseas markets. DIC is also striving to give individual investors more opportunities to get to know the Company by, among others, participating in a corporate research seminar sponsored by the Nagoya Stock Exchange.

DIC intends to continue holding these presentations, seeing them as a valuable opportunity to gain opinions, advice and other feedback from stakeholders on its IR activities.

# Annual Meeting of Stockholders

DIC regards its annual meeting of stockholders as a valuable opportunity to communicate directly with its stockholders. To facilitate participation by as many people as possible, in 2005 DIC intentionally avoided the day on which most Japanese companies traditionally schedule their annual meetings. In 2007, DIC shifted the venue for its annual meeting, which was held on June 27, from its registered address in Tokyo's Itabashi-ku to its more accessible headquarters in Chuo-ku.

# IR Information Page

With the aim of ensuring the timely disclosure of information on its operating results and financial performance, DIC has established an IR information page on its website. Visitors to the page can access a variety of information, including results announcements and annual reports.



IR page of DIC's English web site http://www.dic.co.jp/eng/ir/index.html



## **In the Community**

As a corporate citizen, DIC places a high priority on promoting dialogue to ensure effective communication with the local and international communities.

## Responsible Care Report

Copies of DIC's Responsible Care Report are placed in the lobbies of the head office, plants and research laboratories for internal use and for handing out to visitors. Englishand Mandarin- language versions of the report are also prepared for DIC Group companies overseas.

The Japanese- and English-language versions of DIC's Responsible Care reports for the past eight years and the Mandarin-language version for the past two years are also available on DIC's web site.

## Site Reports

With the aim of providing accurate information to the public, DIC encourages plants to prepare site reports, which are dedicated Responsible Care reports, and distribute them at presentations organized for their local communities. The Kashima, Hokuriku, Sakai and Yokkaichi plants have been preparing site reports since 2002, while the Saitama Plant began doing so in fiscal 2003. In fiscal 2006, all five of these plants prepared reports.

## Community Conferences

In fiscal 2006, the Suita, Komaki, Chiba and Kashima plants hosted JRCC community meetings. Principal DIC plants regularly host these meetings, which are organized by the JRCC to promote dialogue with local communities.



## **Participation in Industry Activities Aimed at Promoting** the Safe Management of Chemical Substances

### **Participation in the LRI**

The Long-Range Research Initiative (LRI) is a voluntary program launched by the International Council of Chemical Associations (ICCA) in 1999 enabling the chemicals industry to provide longterm support for research into the effects of chemical substances on human health and the environment. JCIA has been a participant in the LRI since 2000. DIC has actively supported this initiative since its inception and currently has a representative on the LRI planning and management panel.

## Japan Challenge Program

The Japan Challenge Program is an initiative promoted by several government ministries that encourages government-industry cooperation in collecting and making public information on the safety of existing chemical substances. The program calls for chemicals companies to sponsor the collection of overseas safety information and testing data on 140 existing chemicals produced in or imported into Japan in volumes exceeding 1,000 tons annually that are not included in existing overseas information collection programs. DIC has registered to sponsor four of the target chemicals and is currently promoting the collection of safety information as well as data necessary for appropriate safety assessments.

### **Support for Various Initiatives**

DIC seeks to contribute to domestic policy-making efforts by exchanging views directly with Japan's government on the safe management of chemical substances and the gathering of information. Through industry associations, DIC also provides indirect support for various other initiatives.

In its capacity as a key member of JCIA, DIC was instrumental in defining the industry's official stance on amendments to the Industrial Safety and Health Act and the Chemical Substance Control Law and has made several recommendations.

As a member of the Japan Dyestuff and Industrial Chemicals Association (JDICA), DIC has participated in the association's member assemblies on amendments to the Chemical Substance Control Law proposed by METI and the Ministry of the Environment, and has submitted concrete recommendations.

A participant in the Japan Article Management Promotionconsortium (JAMP), DIC is playing an active role in the establishment and dissemination of specific mechanisms to facilitate disclosure/conveyance of information on chemical substances, in line with the Japanese government's proposal to establish a system for conveying information on hazardous chemical substances contained in products.

## In the Community

## Working Together

DIC's plants and R&D facilities in Japan endeavor to work with the community and contribute to local environmental efforts through a variety of initiatives, including participating in local cleanup initiatives, inviting local residents and students for plant tours, exchanging opinions through community meetings, taking part in environment education programs and sponsoring local bon odori dance events.

In the Nihonbashi district of Tokyo, where its headquarters is located, DIC participates in local beautification efforts, notably the Chuo Dori Floral Drive initiative, which involves changing the flowers in flower planters placed along the area's main thoroughfare four times a year and keeping the planters watered. A sponsor of the Nihonbashi Metrolink bus services, which links Tokyo Station's Yaesu side with the Kyobashi and Nihonbashi districts, since its inauguration in March 2004, DIC is also active in local community revitalization efforts. This environmentally friendly service uses large electric buses and low-emission small gasoline-powered buses. The services is operated by businesses and organizations based in the area and is available for anyone to use free of charge. Ridership continues to increase every year, reaching 1.3 million in fiscal 2006.



Nihonbashi Metrolink bus service

#### **Notice**

The Kawamura Memorial Museum of Art is closed from July 2, 2007 through March 14, 2008, for reconstruction and extension. During this period, works from museum's collection will be presented as a traveling exhibition at three venues in Japan:

- July 28-October 8, 2007
   Hyogo Prefectural Museum of Art (Chuo-ku, Kobe, Hyogo)
- October 19-December 16, 2007
   Iwami Art Museum (Masuda, Shimane)
- December 29, 2007–January 22, 2008
   Matsuzakaya Museum (Nagoya, Aichi)

# Opening of Facilities to Local Residents

DIC's domestic plants and R&D facilities open on-site athletic facilities to local community residents. The site of Central Research Laboratories in Sakura, Chiba, which covers 30,000 m², has a baseball ground and tennis courts that are open to the residents of Sakura, as well as a huge public garden full with flowers and trees to delight visitors year-round. The site welcomes approximately 20,000 visitors each year.

The Chiba Plant site is also home to the Kawamura Memorial Museum of Art, established in May 1990 to exhibit the more than 1,000 works of art collected by DIC and affiliated companies. In fiscal 2004, the museum's diverse standing collection and period special exhibitions, educational programs, and contribution to efforts to establish Sakura's reputation as a local center of art and culture, were recognized with the Mecenat Grand Prize, awarded by the Kigyo Mecenat Kyogikai. In fiscal 2006, approximately 100,000 people visited the museum.

An example of the Kawamura Memorial Museum of Art's educational programs is the Art Education Support program. Under the program, groups of primary school children have the opportunity not only to tour the museum and view the paintings and sculptures on exhibit, but also to discuss what they have seen with their classmates. More than 130 schools have participated in this highly rated program since its launch in 1998. In fiscal 2006, 56 groups—a total of 1,772 children—took part.



Kawamura Memorial Museum of Art



Participants in the museum's Art Education Support program

## **DIC Color Square**

DIC Color Square is an exhibition space focusing on the theme of "color," on the first floor of DIC's corporate headquarters building in Tokyo.

DIC is engaged in an extensive range of color-related businesses. Designed to further the understanding of color, DIC Color Square stages exhibitions of creative works and provides visitors with access to extensive information about color, thereby contributing to broader understanding and appreciation of color and its role in our lives.

## Participation in Social Contribution **Efforts of Japan's Three Major Economic Organizations**

DIC participates in a variety of social contribution efforts sponsored by Japan's three major economic organizations: Nippon Keidanren, the Japan Chambers of Commerce and Industry and the Japan Association of Corporate Executives (Keizai Doyukai). In fiscal 2006, as part of a Japan Association of Corporate Executives program to promote communication between schools and corporations/ corporate executives,



DIC Color Square

retired DIC executives visited seven junior and senior high school schools in Japan to give presentations to students, including accounts of their experiences.

## Disaster Relief Efforts

DIC provides disaster relief in the form of cash contributions and other activities. In recent years, contributions made through the Japan Red Cross supported relief efforts for victims of the earthquake that struck central Java, in Indonesia, in May 2006. In March 2007, the Sakai and Hokuriku plants supplied blue tarps, plastic buckets and other necessary implements to assist with relief efforts in the wake of the earthquake that hit Japan's Noto Peninsula in March 2007. Other plants and Group companies in Japan periodically make donations to various organizations, including the Japan Red Cross, as well as local charityfunded institutions and facilities. The Chiba Plant, for example, conducts an annual year-end fund-raising campaign to in support of residential homes for senior citizens' and other local facilities. These efforts have been commended by the governor of Chiba and the mayor of Ichihara, the city in which the plant is located.



Presentation given by former DIC executive as part of a Japan Association of Corporate Executives program

### **Contribution to Biodiversity Preservation**

## Cooperation with Efforts to Protect and Cultivate Senri Medaka

A registered supporter of City Aquarium Corporate Support program, a project of the City of Suita's Environment Department, the Suita Plant cultivates Senri Medaka (rice fish), an endangered species of small freshwater teleost fish, in a pond on the plant site.

At one time, the rivers of Suita had plenty of fish, including rice fish, shiners, dark chub and Japanese bitterlings, and playing with river fish was a popular pastime of local children. The name Senri medaka comes from the location, in Suita's Senri district, where this particular strain of rice fish was discovered in 2000 a pond adjacent to the site of Expo '70. The pond was filled in as part of a local redevelopment project and the Senri medaka moved to other locations for protection.

The City of Suita subsequently established a corporate support program aimed at businesses in the area with ponds on-site to look after small fish belonging to endangered species in an effort to maintain populations. In line with DIC's commitment to environmental preservation, the Suita Plant registered for this program, an effort that allows it to make an ongoing contribution to biodiversity protection.

For more information, refer to the City of Suita's web site: http://www.city.suita.osaka.jp/kobo/chikyu/page/00909.shtml (Japanese only)



### Comment from Satoshi Hamaguchi, Vice President, Niigata University

"Thanks to research into genetic makeup, we know that and animal life varies greatly depending upon habitat. To preserve biodiversity, it is thus important to preserve local species as well as diversity therein. If efforts to preserve this local medaka species provide an opportunity to encourage development in a manner that safeguards the integrity of local habitats, so much the better."

## **Employment Opportunities and Employee Development**

The spirit and willingness of its employees to pursue new challenges is the driving force behind DIC's ongoing evolution. DIC strives to provide its employees with such challenges, as well as to ensure support through advanced personnel and compensation systems.

# A Performance-Based Employee Qualification System

With the aim of building a workplace that enables all employees to realize their full potential and ensuring the efforts of employees are fairly reflected in salaries, DIC has long applied an employment system that rejects job category, academic record and other such factors unrelated to performance. As well, in 2002 DIC eliminated distinctions between career and noncareer path employees and integrated its employee qualification system.

#### **DIC's Promotion System**

Promotions within DIC are determined once annually and based on the results of an objective assessment procedure that includes a written test, essay, interview and personnel evaluation. This ensures equal opportunity for advancement for all employees exhibiting initiative and skill.

## A Salary System that Motivates Employees

A salary system that motivates employees to perform is one that emphasizes "pay for performance," that is, evaluates the capabilities and achievements of employees fairly and rewards them accordingly. DIC has created a system that eliminates or scales back the seniority-and qualification-based components of salaries and strengthens the capability- and performance-oriented aspects, introducing this system for management-level employees and higher in fiscal 2001 and nonmanagement employees in fiscal 2005.

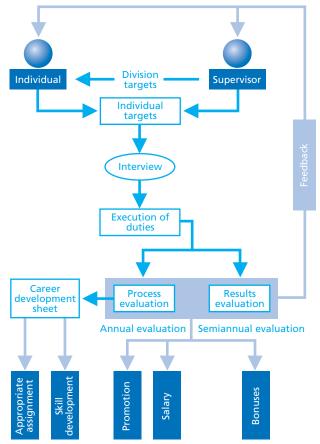
## A Goal-Oriented Evaluation System

For the new salary system to truly motivate employees, it requires an employee evaluation system that ensures the capabilities and performance of each employee are evaluated appropriately. With the aim of enhancing the transparency of and satisfaction with its evaluation system, DIC has introduced a new evaluation system that focuses on goal-oriented management. Under this system, DIC provides feedback to individual employees on their evaluation results. Not limited to evaluation, the system is used to promote personnel development, with evaluation results used in a variety of ways to enhance individual capabilities.

## Reemployment Opportunities for Senior Citizens

With the aim of providing employment opportunities for capable senior citizens who want to continue working, in 1991 DIC became one of the first companies in Japan to introduce a reemployment system that enables employees to continue working beyond mandatory retirement age. This system allows for reemployment up to the age of 65. In addition to broadening the scope of opportunities for retirees, DIC has modified this system in accordance with revisions in 2006 to the Law Concerning Stabilization of Employment of Older Persons.

## **Evaluation Process for Nonmanagement Employees**



### Reemployment at DIC

Fiscal year	Number of employees reemployed	Reemployment rate (%) (Number reemployed/ Number of applicants)
2005	36	97.3
2006	41	87.2
2007 (estimate)	43	95.6

## **Employee Education and Training**

DIC endeavors to cultivate the skills and advance the career prospects of highly motivated employees. To these ends, the Company offers a wide range of educational and training programs.

## **Outline of Employee Training Programs**

Management-level	ams aimed at training and reinforcing the etence of management-level employees	DIC Management School
	increasingly global corporate market	DIC Business College
Programs aimed at strategically cultivating		Training for employees assigned to posts related to overseas business
competent human for DI	gement- and staff-level human resources C Group companies overseas by imparting cial, comprehensive expertise	Support for employees seeking MBAs at overseas educational institutions
		Training overseas
	Employee skill development courses offered by	Correspondence courses
DIC B	usiness School	e-learning courses
Self-development programs	rejetance with course feet offered to employees	
Note: A	ssistance with course fees offered to employees pon completion	In-house seminar courses
Note: A		In-house seminar courses
Note: A		In-house seminar courses  Training for new general managers
Note: A		
Note: A		Training for new general managers
Note: A		Training for new general managers  Training for new section managers  Training for new senior
Note: A u	ams aimed at developing expertise for	Training for new general managers  Training for new section managers  Training for new senior management-level employees
Progr. Level-specific programs  Rote: A	ams aimed at developing expertise for byees at different levels; and among byees whose positions/responsibilities have	Training for new general managers Training for new section managers Training for new senior management-level employees Training in coaching
Progr. Level-specific programs  Rote: A	ams aimed at developing expertise for byees at different levels; and among	Training for new general managers  Training for new section managers  Training for new senior management-level employees  Training in coaching  Training in mentoring  Training for new middle
Progr. Level-specific programs  Rote: A	ams aimed at developing expertise for byees at different levels; and among byees whose positions/responsibilities have	Training for new general managers  Training for new section managers  Training for new senior management-level employees  Training in coaching  Training in mentoring  Training for new middle management-level employees
Progr. Level-specific programs  Rote: A	ams aimed at developing expertise for byees at different levels; and among byees whose positions/responsibilities have	Training for new general managers  Training for new section managers  Training for new senior management-level employees  Training in coaching  Training in mentoring  Training for new middle management-level employees  Training for "S"-level employees  Follow-up training for "J"-level







Employee training (2)

## **Creating an Appealing Workplace**

DIC aims to be a company in which employees can maximize their individual capabilities. To this end, DIC endeavors to accommodate different lifestyles, thereby enabling employees to fully express their abilities in a secure and stimulating environment.

## Promoting Opportunities for Female Employees

DIC is promoting a number of initiatives aimed at ensuring female employees have access to the same opportunities as their male counterparts in the workplace, and that gender is not used as an excuse in personnel decisions.

Designed to enhance employee understanding and contribute to positive changes in DIC's corporate culture, these initiatives also aim to encourage greater ambition among female employees by providing awareness training, expanding the range of jobs open to women, increasing hiring of women and establishing a department to promote their career development.



Start-Up Forum (Seminar aimed at promoting opportunities for female employees) (2007)

## **Helping Employees Balance the Demands of Work and Childcare**

DIC provides support for employees who wish to continue working while they raise their children, enabling them to continue to contribute to their department and the Company. Systems were introduced with the aim of creating a workplace environment conducive to balancing the demands of work and childcare, playing an important role in the Company's efforts to promote opportunities for female employees.

In setting up these systems, DIC held seminars for all employees, including management. These seminars sought to establish basic mechanisms by exploring and examining different viewpoints. Going forward, DIC will continue to monitor the effectiveness of these systems, as well as consider the introduction of additional systems where necessary.

## Childcare Leave

DIC introduced its own childcare leave system in 1985, five years before such systems became mandatory under Japanese law. Since then, the Company has continued to offer conditions that exceed legal requirements. This system has become a regular part of life at DIC and is supporting the efforts of an increasing number of employees to reconcile the demands of work and child care. (See table below.)

With the aim of making it easier for employees to return to full-time work after having children, in January 2007 DIC extended its childcare leave to two years and six months, significantly longer than the legally required term.

As a consequence, the number of female employees able to continue working after starting families has increased. Concurrently, DIC also introduced a rule whereby employees taking childcare leave return to their original job or a job equal in rank, as well as formulated support guidelines, thereby making its childcare leave system easier to use.

Number of Employees Taking Advantage of Childcare Leave System

Fiscal year	Number of Employees		
2003	28		
2004	33		
2005	27		
2006	28		

# Introduction of Flexible Childcare-Work System

With the aim of creating a workplace environment that helps employees balance the demands of work and childcare, DIC has introduced a flexible childcare—work system based on a selection of three formats (see below). Any employee that is raising a child can take advantage of this system, and it is available until the child reaches his or her third year in primary school. (Implemented in April 2007.)

- 1. Short workday system (fixed-term)
  - →Workday reduced by as much as 2.5 hours
- 2. Short workday system (variable)

  →Workday reduced by as much as 3 hours
- 3. Late start system
  - →Start time shifted by as much as 2 hours

## **Economic Support for Employees Taking or Returning to Work after Taking Childcare Leave**

Although employees taking childcare leave do not collect salaries during that time, they are able to borrow from the Company against future earnings, which they then pay back out of their salaries over a fixed period once they have returned to work. Employees may also take out low-interest loans from the Company to help defray babysitting and other expenses during this period of significantly reduced earnings.

## **Other Systems for Supporting Work-Childcare Balance**

DIC also provides support to employees in balancing the demands of work and childcare, as well as helps foster the next generation through a variety of other forwardlooking support systems, as shown in the box below.

- Introduction of Childcare Partner Leave System To help men who want to play a more active role in childcare, DIC allows male employees to take up to five days off from work with pay after the birth of a child.
- Establishment of Support System for Fertility Treatment

To lighten the temporary financial burden for employees undergoing fertility treatment, DIC allows eligible employees to take out low-interest loans from the Company and to store up expired annual vacation days and use them when taking time off for treatment.

 Creation of Work-Childcare Balance Web Site DIC has created a special web site, as well as a pamphlet, that outlines its basic stance on support for employees balancing the demands of work and childcare and provides easy-to-understand information on various systems offered by the Company and public authorities.



"Libra," DIC's work-childcare balance web site (Japanese only)

## Nursing Care Leave

Providing support for employees caring for ailing family members—an increasingly common phenomenon in Japan's aging society—is an important challenge facing companies in Japan. DIC has developed a system that enables employees to take up to a year off for this purpose, which is significantly longer than mandated by law. DIC also allows employees to take this leave in installments, thereby making it easier for employees to take advantage of this system.

## Vacation Day Reserve

DIC allows employees to set accumulated "expired" annual vacation days, up to a maximum of 30 days, in reserve. These days may be used as needed in a variety of ways, including leave for personal illness, care for an elderly or ill family member or participation in volunteer activities.

## Caring for Employee Mental Health

DIC believes ensuring employees are healthy both physically and mentally is the first precondition for creating a positive workplace. In addition to providing all employees with annual physicals, an obligation under Japanese law, DIC offers periodic mental health checks. In 2006, DIC introduced an online check with the aim of helping employees to take an active interest in their own mental health. To emphasize the importance of good mental health, DIC has also established a system whereby employees may follow up on any issues of concern by availing themselves of professional counselling services offered through an affiliated organization.

## Preventing Sexual Harassment

Recognizing sexual harassment as a serious violation of human rights, as well as a serious detriment to maintaining a positive work environment, DIC has publicly pledged to eradicate sexual harassment from the workplace and is taking numerous steps to promote greater awareness, including publishing educational pamphlets for distribution to all employees. To ensure proper measures are taken should an incident of sexual harassment occur, DIC has established specific reporting points at 21 key facilities across the country.

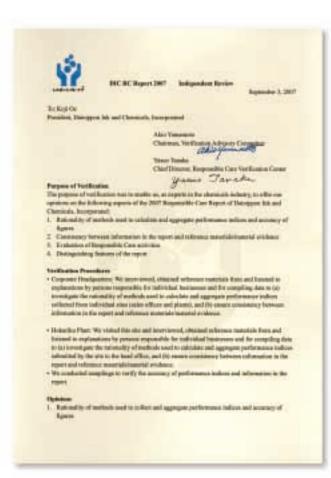
# History of DIC's Environment and Safety Program

## **Principal Highlights**

## Environment and Safety Awards Received

(Fiscal year)	(1	Fiscal year)		
1973	Environment and Safety Response Department established under direct supervision of DIC's president	1973	Amagasaki Plant	Effort Prize (Minister of Labour)
	Internal safety audit conducted	1974 1976	Warabi Plant Warabi Plant	Effort Prize (Minister of Labour) First Prize (Hygiene) (Minister of Labour)
1974	Environment and Safety Management Regulations and Working	1978	Mikawa Plant	Progress Prize (Minister of Labour)
	Regulations for Interim Countermeasures Department established	1979	Sakai Plant	Progress Prize (Minister of Labour)
	Inspection of environment and safety precautions at major plants undertaken	1981	Hokkaido Plant	Effort Prize (Minister of Labour)
1977	Large-scale waste incinerator installed at Chiba Plant	1981	Mikawa Plant Tokyo Plant	Effort Prize (Minister of Labour) Effort Prize (Minister of Labour)
1979	Procedures for Using New Chemicals established		Mikawa Plant	First Prize (Safety) (Minister of Labour)
	Questionnaire on Characteristics of Chemicals established	1984	Sakai Plant	Effort Prize (Minister of Labour)
1982	Guidelines for Training Inexperienced Workers (New Employees) established	1986	Tokyo Plant Hokkaido Plant	First Prize (Hygiene) (Minister of Labour) First Prize (Hygiene) (Minister of Labour)
1983	Professional sanitary guidance qualifications made mandatory for all management-level personnel	1987	Mikawa Plant	First Prize (Hygiene) (Minister of Labour)
1984	Inspection of environment and safety precautions at branch offices, subbranches and sales offices launched	1989	Sakai Plant	First Prize (Hygiene) (Minister of Labour)
1985	5S Procedures and Attitudes for a Safe Workplace and Examples of Emergency Situations published	1991	Amagasaki Plant	First Prize (Hygiene) (Minister of Labour)
	Campaign to reinforce 5S Procedures and Attitudes for a Safe Workplace	1992	Sakai Plant Chiba Plant	Progress Prize (Minister of Labour) Effort Prize (Minister of Labour)
	launched following several accidents		Sakai Plant	Top Hazardous Substance Operation Commendation
	Guidelines for Implementing Management Directives on Key Environment and Safety Issues published	4000	Chille a Diamet	(Commissioner, Fire Defense Agency)
1987	Campaign to identify potential accidents launched	1993	Chiba Plant	Top Plant for High-Pressure Gas Safety Commendation (Minister of International Trade and Industry)
1988	Environment and Safety Guidelines for the R&D Department published		Mikawa Plant	Top Hazardous Substance Operation Commendation
1990	Environment and Safety Management Regulations revised to include		Mikawa Plant	(Commissioner, Fire Defense Agency) Safety Effort Award (JCIA)
	section on global environmental preservation	1994	Suita Plant	Effort Prize (Minister of Labour)
1992	Environment and Safety Philosophy formulated		Chiba Plant	Top Hazardous Substance Operation Commendation
	Accident-free year achieved for entire Company		Sakai Plant	(Commissioner, Fire Defense Agency) First Prize (Safety) (Minister of Labour)
	Guidelines for Preparing MSDSs established		Warabi Plant	Top Hazardous Substance Operation Commendation
1993	Voluntary Long-Term Environment and Safety Plan formulated	1996	Saitama Plant	(Commissioner, Fire Defense Agency) Progress Prize (Minister of Labor)
	Guidelines for Preventing Accidents Caused by Static established	1990	Nagoya Plant	Effort Prize (Minister of Labor)
	Chemical substance safety information officer appointed in each division		Amagasaki Plant	Top Hazardous Substance Operation Commendation
	Various commemorative events held to mark 20th year of DIC's environment and safety program		Nagoya Plant	(Commissioner, Fire Defense Agency) Top Hazardous Substance Operation Commendation
1995	Public pledge to uphold principles of Responsible Care announced by DIC		Nagoya i lant	(Commissioner, Fire Defense Agency)
	in its role as a founding member of Japan's Responsible Care movement	1997	Fukuoka Plant	Special Commendation (JCIA)
	Guidelines for Crisis Management in the Event of an Accident established		Mikawa Plant	Top Plant for High-Pressure Gas Safety Commendation (Minister of International Trade and Industry)
	Procedures and route for reporting and communicating instructions in the		Tokyo Plant	Top Hazardous Substance Operation Commendation
	event of an accident established for domestic and overseas affiliates	1998	Tokyo Plant	(Commissioner, Fire Defense Agency) Safety Award (JCIA)
	The Aftermath of the Great Hanshin-Awaji Earthquake published,		Fukuoka Plant	Top Hazardous Substance Operation Commendation
	chronicling conditions following the disaster		lahikani Dlama	(Commissioner, Fire Defense Agency)
	Responsible Care audit system established		Ishikari Plant	Top Hazardous Substance Operation Commendation (Commissioner, Fire Defense Agency)
1996	Guidelines for Selling Chemical Products established	1999	Suita Plant	Top Hazardous Substance Operation Commendation
	Safety and Quality Control Supervisor appointed at sales office		Kansai Polymer	(Commissioner, Fire Defense Agency) Safety Effort Award (JCIA)
	First Responsible Care annual report (1996) published		Sakai Plant	Progress Prize (Minister of Labor)
	ISO 14001 certification obtained by Kashima Plant from Japan Quality Assurance Association	2000	Nagoya Plant	Safety Award (JCIA)
1997	Sakai, Amagasaki, Mikawa (currently Hokuriku), Chiba, Tokyo, Saitama,		Mikawa Plant Mikawa Plant	First Prize (Safety) (Minister of Health, Labour and Welfare)
	Yokkaichi, Gunma and Komaki plants obtain ISO 14001 certification	2001	DIC	Chairman's Award
1998	PSM Guidelines are published		Saitama Plant	(Japan Industrial Safety and Health Association) Top Hazardous Substance Operation Commendation
	Suita, Warabi and Nagoya plants obtain ISO 14001 certification			(Commissioner, Fire Defense Agency)
1999	PRTR chemical emission levels announced		Saitama Plant	First Prize (Minister of Health, Labour and Welfare)
2000	Registration and monitoring of chemical emissions modified in compliance	2002	Tokyo Plant	Top Hazardous Substance Operation Commendation
	with new PRTR system; environment-related costs and investments published in line with Environment Agency standards for environmental accounting		Suita Plant	(Commissioner, Fire Defense Agency) First Prize (Occupational Health)
2001	Emission volumes for "priority" PRTR chemicals, i.e., those for which emissions exceed 10 tons, published		Julia Halli	(Minister of Health, Labour and Welfare)
2001	Green Procurement activities commenced		Saitama Plant	Chairman's Award (Reduce, Reuse and Recycle Promotion Committee)
2002		2003	Kashima Plant	Top Hazardous Substance Operation Commendation
2002	Energy consumption and CO <sub>2</sub> emission volume published			(Commissioner, Fire Defense Agency)
	Tatebayashi Plant obtains ISO 14001 certification		Kashima Plant	Incentive Prize (Occupational Safety) (Minister of Health, Labour and Welfare)
	Shiga Plant expands ISO 14001 certification to encompass entire plant		Yokkaichi Plant	Chairman's Award
	Automated MSDS preparation system launched	2004	Tokyo Plant	(Reduce, Reuse and Recycle Promotion Committee) Incentive Prize (Safety)
2003	Internal guidelines for assessing and designating environment-friendly products established		Fukuoka Plant	Chairman's Award
	Data on emissions of CO <sub>2</sub> and other chemical substances exerting a burden on the environment published	2005	Komaki Plant	(Reduce, Reuse and Recycle Promotion Committee) Top Hazardous Substance Operation Commendation
2004	Internet-based MSDS distribution launched, enabling customers to download MSDSs from DIC's web site	2005	KUIIIAKI FIAIIL	(Commissioner, Fire Defense Agency)
2005	Data for domestic DIC Group companies published	2006		Incentive Prize (Safety and Health (Ministry of Health, Labour and Welfare))
2006	Target of "Zero-emission" plan (370 tons/year) achieved one year ahead of schedule (312 tons)	'	2. D. (TOTTOKU FIBILI)	and wender,

## **Independent Review**





- Figure very screen within the exposed our investigations.
   Consistency between information in the appert and reference material instance of these in the reference of the resistence with the in the reference.
- materials install evidence.

   At the proposed stage, we recommended second changes in improve the normal and the readfully of the type. These recommendations have been implemented and in our spinion. the published text restauts no further prominent
- 5. Evaluation of Neutral Link Trail Section (1994).

  5. Evaluation of Responsible Core subvisites

  6. Evaluation of the best Responsible Core Section of the Section Office Core, The Hell Core, Plant can be consumed to be affire to advance one amenimum, as not as the few proprietary systems ("Blandbest") is used to improve indicated waste.
  - Avera of the professor as a photol expectation in that manufactures a discovering of produces, IIIC has developed in over monomed systems for property and distributing, VELDs. Datas systems making contenture to view and developed VEDDs to the Internet, DAC has also taken other steps with the much of contraston in mind, including the introduction of system that accordingly indicates considere an early of PRTR elements construct to DE products. IDC can also be pronounced for effecting MSDNs in English and an High other languages for the  $\alpha$ -special and an High other languages for the  $\alpha$ -special and  $\alpha$ -stayled other languages for the  $\alpha$ -special and  $\alpha$ -stayled other languages for the  $\alpha$ -special and  $\alpha$ -stayled other languages for the  $\alpha$ -special and  $\alpha$ -stayled other languages for the  $\alpha$ -special and  $\alpha$ -stayled other languages for the  $\alpha$ -special and  $\alpha$ -special angles are special and  $\alpha$ -special and  $\alpha$ -special angles are special angles and  $\alpha$ -special an
  - · As the Holoselia: Plain, which was used for nic verification (tip way, we confirmed the The second to Frant, which was used for the verification this year, we confirmed the constant, beaut application of local state stapping, improvement perspects addition, beautiful their fives in, who drives not beautiful to the fives on the frant branch of production, as well as my production and production conditions. These activities and efforts are recognized as and exceeding the plant's smooth of 10 companions comparisonal metabolic first production and exceeding the plant's smooth of 10 companions comparisonal metabolic first production.
- Desinguishing between of the report 

  DC is really committed to communicating offered rely with readous and annexing contribution. DC can be communicated particularly the effects to reduce the report, techning the exemptive use of graphs and photographs, maps taken to improve the readability of figures and including suffering applicated communications individuals revolved to its Beginness of including applicated communications individuals revolved to its.

## **Centennial Anniversary**

## New Company Name

Established on February 15, 1908, as a manufacturer of printing inks, DIC will celebrate its centennial anniversary in February 2008. Taking advantage of this milestone, DIC has refocused its attention on accelerating growth by strengthening its Group capabilities and global business development, restructuring its business portfolio and reforming its corporate structure. Accordingly, with the aim of promoting a greater sense of cooperation among

DIC Group companies and reinforcing global recognition, DIC has decided to change its name to "DIC Corporation." The new name allows DIC to continue maximizing its considerable brand assets, while at the same time adding an international flavor. Under its new name, the Company looks forward to building even closer relationships with its customers, suppliers and other business partners. DIC will also take assertive steps to promote "DIC" as its corporate brand.

## New Corporate Logo and Symbol

**New Corporate Logo** 

# **DIC** Corporation

New Corporate Symbol



In accordance with the change in its Company name, DIC will also introduce a new corporate logo and symbol. The design concept behind the new logo is "Collaborative Inspiration," that is, the inspiration (symbolized by the exclamation mark, an inverted "i") that results from collaboration between DIC and its clients, represented by the "d" and "c," respectively.

## The DIC WAY

On July 1, 2007, DIC adopted "The DIC WAY," an articulation of its new management approach. This new approach reflects DIC's mission going forward, which is to maintain the most positive traditions from its first 100 years, and at the same time to refashion itself and fulfill its corporate mission as a company for the 21st century.

The DIC WAY comprises three elements, namely, DIC's "management vision," "corporate values" and "principles of conduct."

DIC's "management vision" delineates business areas the Company will strive to develop. "Corporate values" define the values DIC will cultivate. "Principles of conduct" set standards for employee conduct. Together, these elements will guide DIC's efforts in the years ahead.



**Corporate** values

## The DIC SPIRIT

**Enterprise**, integrity and diligence

> **Principles of** conduct

Management vision

"Color and Comfort by Chemistry."

Corporate values

Through unceasing innovation, the DIC Group strives to create new value contributing to sustainable development for its customers, society and the global environment.

Principles of conduct

- We shall hone our sensitivity to changes in society and be aware of our mission to always be ahead of the times.
- We pledge to incorporate the concepts of social and environmental sustainability into our corporate activities.
- We vow to strive constantly to hone "The DIC SPIRIT."
- We shall respect the autonomy and initiative of each individual employee in applying his or her talents to the pursuit of our values and realization of our vision.

The DIC SPIRIT

The three elements of The DIC WAY are supported by The DIC SPIRIT, comprising DIC's founding precepts of "enterprise, integrity and diligence."

DIC is rallying its collective capabilities to promote CSR activities to achieve the overarching goal of The DIC WAY, which is to contribute to sustainable development that benefits its clients, society and the global environment.

# Scope of Reporting: Offices and Plants



Tokyo Plant (Certified under ISO 14001 in December 1997)



Suita Plant (Certified under ISO 14001 in July 1998)



Chiba Plant (Certified under ISO 14001 in December 1997)



Kyushu Branch Ink Manufacturing Dep't.



Hokuriku Plant (Certified under ISO 14001 in September 1997) (Certified unde



Sakai Plant (ISO 14001 in September 1997)



Kashima Plant (Certified under ISO 14001 in July 1996)



Yokkaichi Plant (Certified under ISO 14001 in February 1998)



Shiga Plant (Certified under ISO 14001 in December 2002)



Komaki Plant (Certified under ISO 14001 in March 1998)





Saitama Plant Gunma Plant (Certified under ISO 14001 in December 1997) (Certified under ISO 14001 in February 1998)



Tatebayashi Plant (Certified under ISO 14001 in July 2002)



Central Research Laboratories



**Corporate Headquarters** 

#### DAINIPPON INK AND CHEMICALS, INCORPORATED

Corporate Headquarters DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel: +81-3-3272-4511 Fax: +81-3-3278-8558

Tokyo Plant 35-38, Sakashita 3-chome, Itabashi-ku, Tokyo 174-8520, Japan Tel: +81-3-3966-2111 Fax: +81-3-3965-4320 Suita Plant 34-1, Kishibe-Minami 3-chome, Suita, Osaka 564-0011, Japan Tel: +81-6-6381-9651 Fax: +81-6-6382-6133

Chiba Plant 12, Yawata-Kaigandori, Ichihara, Chiba 290-8585, Japan Tel: +81-436-41-4112 Fax: +81-436-43-1059

Kyusyu Branch Ink Manufacturing Dep't. 15-48, Higashi-Naka 1-chome, Hakata-ku, Fukuoka 812-9589, Japan Tel: +81-92-472-7811 Fax: +81-92-472-7981

Hokuriku Plant 64-2, Minato-machi-So, Hakusan, Ishikawa 929-0296, Japan Tel: +81-76-278-2332 Fax: +81-76-278-5354

**Sakai Plant** 3, Takasago 1-chome, Takaishi, Osaka 592-0001, Japan Tel: +81-72-268-3111 Fax: +81-72-268-1705

Osaka Branch 5-19, Kyutaro-machi 3-chome, Chuo-ku, Osaka 541-8525, Japan Tel: +81-6-6252-6161 Fax: +81-6-6245-5239

Kashima Plant 18, Higashi-Fukashiba, Kamisu, Ibaraki 314-0193, Japan Tel: +81-299-93-8111 Fax: +81-299-92-6384

Yokkaichi Plant Yokkaichi, Mie 510-0011, Japan Tel: +81-593-64-1151 Fax: +81-593-64-1620

Shiga Plant 373, Koujibukuro, Konan, Shiga 520-3233, Japan Tel: +81-748-72-3711 Fax: +81-748-72-2106

Komaki Plant T51-1, Aza Nagare, Oaza Shimosue, Komaki, Aichi 485-0825, Japan Tel: +81-568-75-2751 Fax: +81-568-73-4120

Saitama Plant 4472-1, Oaza Komuro, Ina-machi, Kita-Adachi-gun, Saitama 362-8577, Japan Tel: +81-48-722-8211 Fax: +81-48-722-6087

Gunma Plant 1, Oaza Showa, Chiyoda-machi, Oura-gun, Gunma 370-0723, Japan Tel: +81-276-86-5811 Fax: +81-276-86-5824

Nagoya Branch 7-15, Nishiki 3-chome, Naka-ku, Nagoya 460-0003, Japan Tel: +81-52-951-9381 Fax: +81-52-962-3591

Tatebayashi Plant 6023, Tobu-Kogyodanchi, Ohshima-cho, Tatebayashi, Gunma 374-0001, Japan Tel: +81-276-77-2461 Fax: +81-276-77-2468

#### **R&D** Facility

**Central Research Laboratories** 631, Sakato, Sakura, Chiba 285-8668, Japan Tel: +81-43-498-2121 Fax: +81-43-498-2229

#### **Art Museum**

Kawamura Memorial Museum of Art 631, Sakato, Sakura, Chiba 285-8505, Japan Tel: +81-120-498-130 Fax: +81-43-498-2139

## Scope of Reporting:

## **Domestic DIC Group Companies**

#### KITANIHON DIC CO., LTD.

Manufacture and sale of synthetic resins

Tohoku Plant

(Certified under ISO 14001 in October 2002) 56, Aza Shin-Oyoke, Miya, Zao-machi, Katta-gun, Miyagi 989-0701, Japan Tel: +81-224-32-2226/Fax: +81-224-32-3515

(Certified under ISO 14001 in January 2001) 134-121, Aza Numanohata, Tomakomai, Hokkaido 059-1364, Japan Tel: +81-144-57-4511/Fax: +81-144-57-4517

#### Kyushu Polymer Co., Ltd.

Manufacture and sale of synthetic resins 2680-1, Oaza Tajiri, Nakatsu, Oita 879-0123, Japan Tel: +81-979-32-5370/Fax: +81-979-32-5634

**Shin DIC Kako, Inc.**Manufacture and sale of fiber-reinforced plastic (FRP) molding compounds and molded products

Shiga Plant (within DIC's Shiga Plant) (Certified under ISO 14001 in July 2002) Tel: +81-748-72-4918/Fax: +81-748-72-4486

Sakai Plant (within DIC's Sakai Plant) (Certified under ISO 14001 in September 1997)

185-342, Tokura, Tomisato, Chiba 286-0212, Japan Tel: +81-476-92-7611/Fax: +81-476-92-7610

575-2, Aza Oguchisekinoue Matsuzaki, Ichihara,Chiba 290-0217, Japan Tel: +81-436-36-2528/Fax: +81-436-36-4705

#### Seiko PMC Corp.

Manufacture and sale of chemicals for paper production Wakamatsu Bldg., 8th floor, 3-6, Nihonbashi Honcho 3-chome, Chuo-ku, Tokyo 103-0023, Japan Tel: +81-3-6202-7331/Fax: +81-3-6202-7341

#### Rvugasaki Plant

Tsukuba-no-sato Industrial Park 3-1, Koyodai 5-chome, Ryugasaki, Ibaraki 301-0852, Japan Tel: +81-297-64-2331/Fax: +81-297-64-2363

Chiba Plant (within DIC's Chiba Plant) (Certified under ISO 14001 in December 1997)

4386-1, Tachiya Utsubusa, Shibakawa-cho, Fuji-gun, Shizuoka 419-0317, Japan Tel: +81-544-65-2310/Fax: +81-544-65-2319

#### Mizushima Plant

(Certified under ISO 14001 in January 2001) 8252-40, Shinminato, Tamashima-otoshima, Kurashiki, Okayama 713-8103, Japan Tel: +81-86-522-7822/Fax: +81-86-522-7820

#### Harima Plant

(Certified under ISO 14001 in October 2005) 47-2, Niijima, Harima-cho, Kako-gun, Hyogo 675-0155, Japan Tel: +81-794-37-7687

#### Iwai Plant

(Certified under ISO 14001 in October 2005) 28, Koushindaira, Bando, Ibaraki 306-0608, Japan Tel: +81-297-35-9910

### Dainichi Building Materials, Inc.

Manufacture and sale of decorative boards (Certified under ISO 14001 in March 2005) 4506-2, Oaza Komuro, Ina-machi, Kita-adachi-gun, Saitama 362-0806, Japan Tel: +81-48-721-4511/Fax: +81-48-721-4524

#### DIC Eco-Engineering Co., Ltd.

Engineering and operations for water treatment plants, site assessment No. 2 DIC Bldg., 16-2 Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan Tel: +81-3-3253-3821/Fax: +81-3-3253-7794

Manufacture and sale of PPS neat polymers and PPS compounds

Sodegaura Plant 11-5, Kitasode, Sodegaura, Chiba 299-0266, Japan

Tel: +81-438-63-0070/Fax: +81-438-63-0072

Kashima Plant (within DIC's Kashima Plant) (Certified under ISO 14001 in July 1996)

#### DIC Interior Co., Ltd.

Manufacture and sale of housing materials (Certified under ISO 14001 in December 2004) 270-8, Aza Kodate, Oaza Komagata, Hirata-mura, Ishikawa-gun, Fukushima 963-8113, Japan Tel: +81-247-54-2990/Fax: +81-247-54-3187

### DIC Color Coating, Inc.

Manufacture and sale of pattern paint (Certified under ISO 14001 in November 2002) (within DIC's Shiga Plant) Tel: +81-748-72-7390/Fax: +81-748-72-7467

#### DIC Information Service Co., Ltd.

Computer-related operations, including consulting, systems operations and communication network services No. 2 DIC Bldg, 16-2 Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan Tel: +81-3-3253-3921/Fax: +81-3-3255-5948

#### DIC Color and Design, Inc.

Product, catalog and web site design, as well as color guides and schools No. 2 DIC Bldg., 16-2 Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan Tel: +81-3-5256-3246/Fax: +81-3-5256-3245

#### DIC Colorants, Inc.

Manufacture and sale of plastic colorants and compounds (Certified under ISO 14001 in July 2005) 103-6, Yoshinodai 1-chome, Kawagoe, Saitama 350-0833, Japan Tel: +81-49-225-2271/Fax: +81-49-225-2659

Manufacture of magnetic and electro-conductive molded products (Certified under ISO 14001 in July 2000) 4602-1, Oaza Komuro, Ina-machi, Kita-Adachi-gun, Saitama 362-0806 Japan Tel: +81-48-722-8891/Fax: +81-48-722-8892

#### DIC Technology Corp.

Engineering, construction and maintenance of chemical plants No. 2 DIC Bldg., 16-2 Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan Tel: +81-3-5256-3230/Fax: +81-3-5256-3253

#### DIC FILTEC INCORPORATED

Manufacture and sale of plastic films (Certified under ISO 14001 in July 2005) 2100-28, Kamiyoshiba, Satte, Tel: +81-480-48-1670/Fax: +81-480-48-1679

#### DIC Global Logistics Co., Ltd.

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel: +81-3-5203-7813/Fax: +81-3-5203-7819

#### DIC Plastics, Inc.

Manufacture and sale of plastic molded products No. 2 DIC Bldg., 16-2, Sotokanda 2-chome, Chiyoda-ku, Tokyo 101-0021, Japan Tel: +81-3-5256-6488/Fax: +81-3-5256-7891

Tatebayashi Plant (within DIC's Tatebayashi Plant) (Certified under ISO 14001 in July 2002)

Shiga Plant (within DIC's Shiga Plant) (Certified under ISO 14001 in July 2002)

#### TOPIC. Co., Ltd.

Manufacture and sale of precise photomask products and PCB pattern design (Certified under ISO 14001 in October 2005) 7-36, Kami-Aoki 1-chome, Kawaguchi, Saitama 333-0844, Japan Tel: +81-48-241-2211/Fax: +81-48-241-2200

#### Nichiei Plastics, Inc.

Manufacture and sale of plastic helmets 4429-14, Oaza Komuro, Ina-machi, Kita-Adachi-gun, Saitama 362-0806 Japan Tel: +81-48-723-0611/Fax: +81-48-723-0403

#### Nippon Decor, Inc.

Printing and sale of decorative sheets and plastic films 2-20, Akabori, Okegawa, Saitama 363-0002, Japan Tel: +81-48-728-8741/Fax: +81-48-728-8742

#### Nihon Packaging Material Co., Ltd.

Gravure printing and processing of flexible packaging materials 2100-30, Kami-Yoshiba, Satte, Saitama 340-0121, Japan Tel: +81-480-48-0680/Fax: +81-480-48-0626

#### Nippon Plastic Pallet Co.

Manufacture and sale of plastic pallets and containers

## Ueda Plant

(Certified under ISO 14001 in June 2003) 2412-9, Oaza Fujiyama, Ueda, Nagano 386-1212, Japan Tel: +81-268-38-8211/Fax: +81-268-38-8272

#### Sano Plant

(Certified under ISO 14001 in June 2003) 947, Akasaka-cho, Sano, Tochigi 327-0004, Japan Tel: +81-283-21-0663/Fax: +81-283-21-2261

## Fuii Label Co., Ltd.

Manufacture and sale of labels and automatic labelers (Certified under ISO 14001 in September 2004) 331-8, Hayashi 1-chome, Tokorozawa, Saitama 359-1167, Japan Tel: +81-4-2938-7670/Fax: +81-4-2938-7676



Responsible Care Department DAINIPPON INK AND CHEMICALS, INCORPORATED

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan Tel: +81-3-5203-7753 Fax: +81-3-3278-0253 URL: http://www.dic.co.jp/eng/rc/index.html





