TOYO INK GROUP

Environmental and Social Report 2004

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What This Environmental and Social Report Covers

Period Covered

This environmental and social report mainly covers the fiscal 2003 period (April 1, 2003, to March 31, 2004). However, data from January 1, 2003, to December 31, 2003, were used to calculate the environmental impact of overseas affiliates. In addition, as the Japanese-language version of this report was published in August 2004, information regarding significant accomplishments made through June 2004 has been included.

Areas Covered

Environment: In this environmental and social report, "environment" refers to the environment surrounding operations at TOYO INK MFG. CO., LTD., as well as at its domestic and overseas affiliates.

Social: In this environmental and social report, "social" refers to the social aspects of operations at Toyo Ink as well as at its domestic affiliates.

Operations Covered

This environmental and social report covers Toyo Ink and all its domestic and overseas affiliates. However, data from Toyo Ink's four manufacturing facilities and four plants as well as from its five domestic production-related affiliates and the five plants of the four overseas production-related affiliates, which have all obtained ISO 14001 certification, were used to calculate environmental impact.

- This report was prepared with reference to the Japanese Ministry of the Environment's *Environmental Reporting Guidelines* (*Fiscal Year 2003 Version*).
- Environmental accounting information in this report was prepared in conformity with the Japanese Ministry of the Environment's *Environmental Accounting Guidelines 2002* and the Japan Responsible Care Council's *Environmental Accounting Guidelines for Chemical Companies.*

Toyo Ink has been publishing an annual environmental report in the Japanese language since 1999. In 2002, the Company also began publishing an English-language edition of the report.

This environmental and social report as well as previous reports can also be viewed on the Company's home page.

URL: http://www.toyoink.co.jp/

Date of Publication: August 2004

Next Publication Slated for: August 2005

Introduction

Thank you for taking the time to read TOYO INK MFG. CO., LTD.'s *Environmental and Social Report 2004.*

The 21st century has been described as an era in which corporate emphasis will be on the environment and corporate social responsibility (CSR) as well as on the creation of a sustainable global society.

With less than three years left before January 15, 2007—the 100th anniversary of Toyo Ink's establishment—we have entered the final stage of our long-term business plan, Take Off 2007, and are making solid progress toward becoming "a company creating new values for human culture throughout the world," a concept that we believe is rooted in CSR.

In fiscal 2003, the Toyo Ink Group endeavored to meet the challenge of attaining substantial management. We redoubled our commitment to environmental issues and compliance, worked to devise a framework for reducing environmental impact, endeavored to offer numerous environmentally conscious products (ECPs), established a Compliance Committee, and completely revised the Toyo Ink Group Business Conduct Guidelines. In fiscal 2004, we will take our initiatives a step further by making social contribution activities a part of our management policy, under which the Toyo Ink Group's employees will work to promote true social satisfaction through CSR. In addition, we changed the title of our environmental report to *Environmental and Social Report* to reflect its broader coverage and worked to enhance its accuracy and content.

In fiscal 2002, Toyo Ink activated a natural gas cogeneration system at the Fuji Plant as part of efforts to reduce CO_2 emissions. However, this has not yet brought about emission reductions. We will continue to critically assess current conditions and make concerted Groupwide efforts to achieve our goal of reducing CO_2 emissions to fiscal 1990 levels by fiscal 2006—the 100th anniversary of our establishment.

In fiscal 2003, Toyo Ink achieved a 52% reduction from the previous fiscal year in the volume of landfill waste by promoting resource recycling. In the current fiscal year, we will strive to make further progress toward our goal of achieving zero waste throughout the Toyo Ink Group by fiscal 2005.

Toyo Ink also boosted sales of ECPs 6.8% from the previous fiscal year by promoting their development and sale.

As a result, our score as measured by the Eco-Conscious Efficiency Index—our independently developed environmental management index introduced in fiscal 2002—rose on increased sales of ECPs, and the fiscal 2003 Integrated Environmental Impact Index figure was 4.0 times greater than our reference year (fiscal 2000), reflecting a decline in our operations' environmental impact and stronger environmental management.

As a chemical company, Toyo Ink aims to be an industry leader in chemical substance management. In fiscal 2003, the Company reinforced its chemical substance management by establishing "Toyo Ink prohibited chemicals" and "Toyo Ink restricted chemicals" based on the toxicity of chemical substances.

Furthermore, the Toyo Ink Group is endeavoring to achieve a CSR-based management. At the organizational level, the Corporate Management Team is heading efforts to bolster the scope of the Risk Management Committee and the Compliance Committee, and, going forward, we will continue to endeavor to fulfil our social responsibilities through appropriate information disclosure and communication with society.

In fiscal 2004, we will enter the final stretch of Take Off 2007. As stated in our corporate policy, we aim to become "a company creating new values for human culture," and in the current fiscal year we will focus on fulfilling our social and environmental responsibilities and bringing CSR management to an even higher level. The goal of this environmental and social report is to introduce the Toyo Ink Group's environmental preservation and social activities to a large number of people. We welcome candid feedback on this report.

August 2004

Kunio Sakuma
President
TOYO INK MFG. CO., LTD.

Toyo Ink Operations and Corporate Philosophy

OPERATIONS AND THE ENVIRONMENT

Corporate Data

Company Name: TOYO INK MFG. CO., LTD.
Headquarters: 3-13, Kyobashi 2-chome, Chuo-ku, Tokyo 104-8377, Japan
Foundation: September 1896
Establishment: January 1907
Capital: ¥24.61 billion
Net Sales: ¥167,201 million (non-consolidated)
¥216,406 million (consolidated)
Employees: 2,146 (non-consolidated)
6,064 (consolidated)
Affiliates: 29 domestic companies and 47 overseas companies as of March 31, 2004

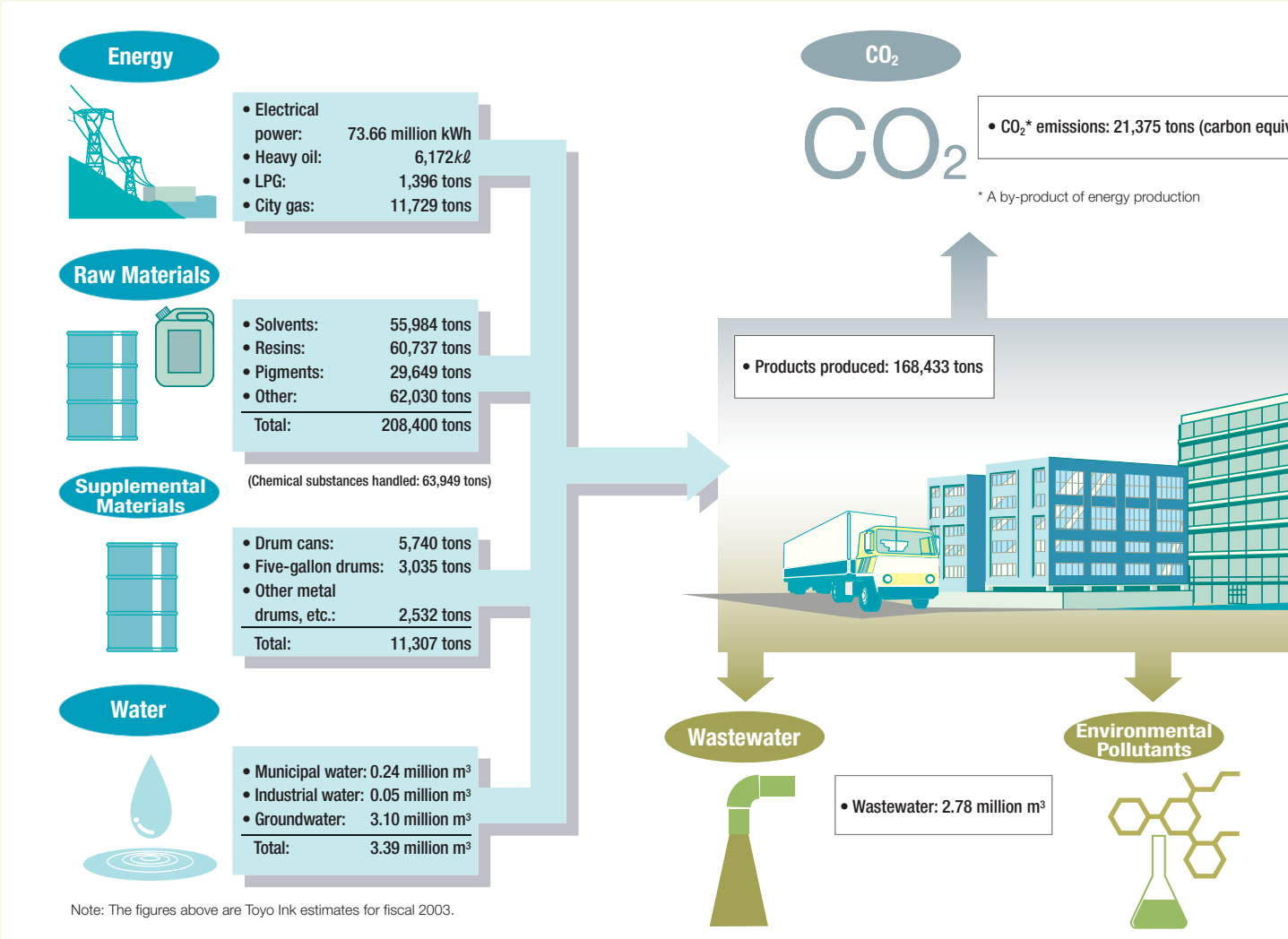
Business Operations

Toyo Ink's core businesses are color and color technology, polymer technology, and optical device material technology. The Company's operations focus on development in two major areas—graphic arts and chemicals.

In graphic arts, Toyo Ink offers a variety of environment-friendly products centered around its printing inks and total solutions based on digital technologies. The Company also leverages these products and technologies to create printing work-flow solutions.

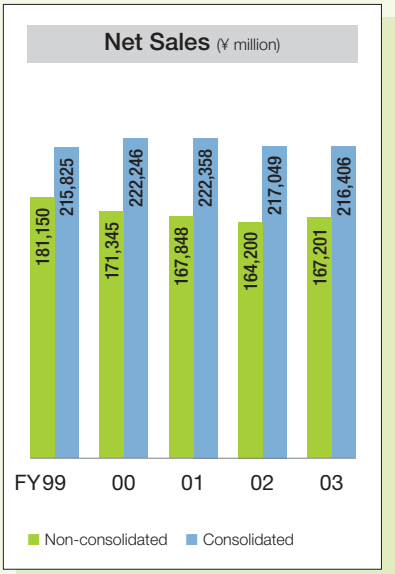
In chemicals, Toyo Ink offers a wide range of products, including pigments, coatings and resins, adhesives, and high-performance materials.

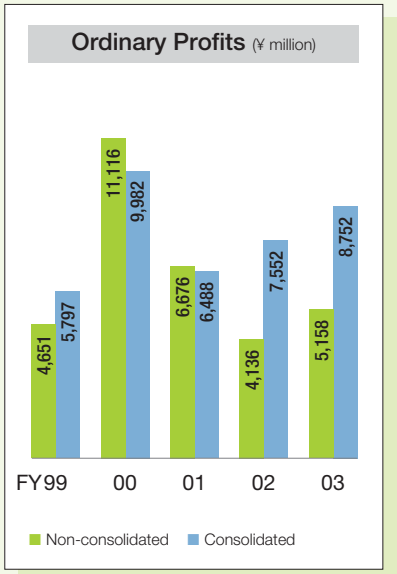
Environmental Impact Flowchart

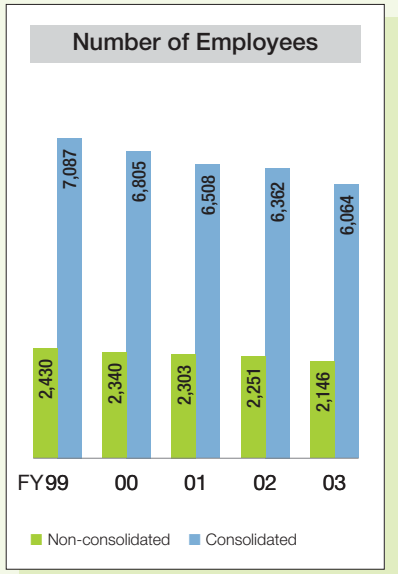


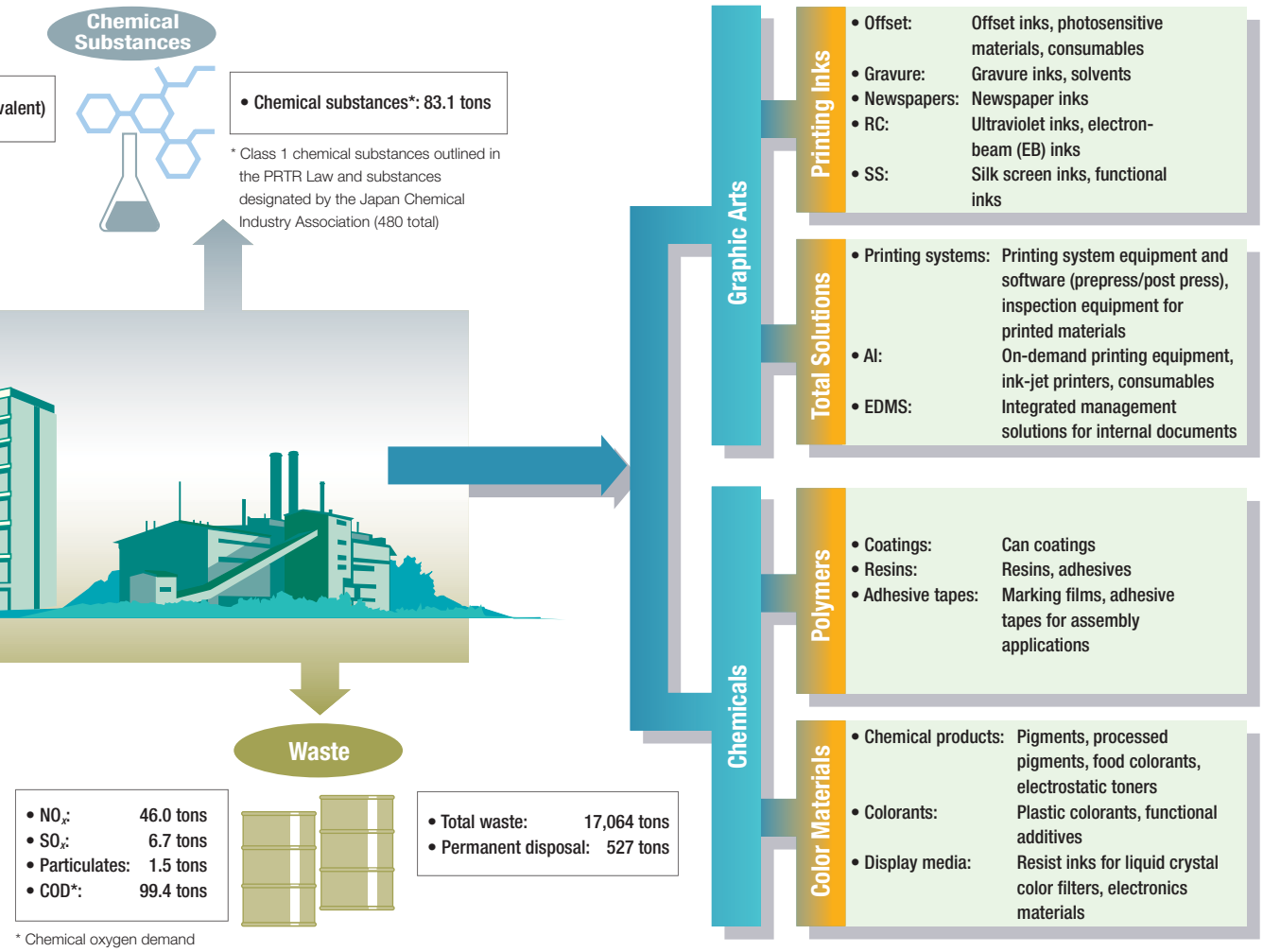
Note: The figures above are Toyo Ink estimates for fiscal 2003.

Trends in Net Sales, Ordinary Profits, and Number of Employees









CORPORATE VISION AND ENVIRONMENTAL VISION

In 2007, Toyo Ink will celebrate the 100th anniversary of its establishment.

Seeing this anniversary as a turning point, in April 1993, Toyo Ink established its Take Off 2007 business plan—the Group's vision for the 21st century. The Toyo Ink Group is engaging in unified business activities focused on corporate strategies based on this vision.

The fundamental objective of these activities is epitomized by the Toyo Ink Group's corporate policy, "to be a company creating new values for human culture throughout the world."

The Toyo Ink Group realizes that carrying out business operations with an eye to satisfying all its stakeholders—from employees and their families to shareholders—as well as society in general is critical to its continued future success.

Therefore, the Toyo Ink Group takes stock of its operations not only from a corporate perspective, but also from an individual and social perspective by considering its businesses in terms of corporate, individual, and social values. This stance is reflected in the Group's Guiding Principles, under which each member of the Group is working to realize the corporate vision.

In 1995, Toyo Ink launched its Responsible Care activities—becoming a member of the Japan Responsible Care Council at the time of the council's establishment.

In addition, in line with its Take Off 2007 business plan, the Toyo Ink Group's Environmental Charter and Action Policies, compiled in June 1996, outline the Company's fundamental environmental management policy based on a philosophy of sustainable development.

The Toyo Ink Group endeavors to put its Environmental Charter and Action Policies into practice by promoting Responsible Care activities.

TAKE OFF 2007

Corporate Philosophy: People-oriented management

Corporate Policy:

We, the Toyo Ink Group, would like to be a company creating new values for human culture throughout the world. We aim to:

- Contribute to people's wealth and culture worldwide
- Create new values for life in the next generation
- Provide superior technologies and quality

Guiding Principles:

1. Provide our knowledge to enhance customer satisfaction
2. Respect the realization of all employees' dreams
3. Act as a responsible citizen coexisting with society and the Earth

ENVIRONMENTAL CHARTER

Since its establishment, the Toyo Ink Group has strived to the enrichment of people's daily lives through the development of color. In carrying out its business activities, the Toyo Ink Group has continually aimed to maintain harmony with local communities, conduct safe operations, eliminate pollution, and offer safe products while helping to preserve people's health.

In the future, based on the international principle of "sustainable development," the Toyo Ink Group will adhere strictly to various environment-related laws in Japan and overseas and endeavor to enhance energy and resource conservation by improving its operations and stepping up efforts to fulfill its responsibilities to society. In pursuing these endeavors, the Toyo Ink Group will be guided by the policies set out in its Environmental Charter.

ACTION POLICIES

1. **As members of society, individual employees of the Toyo Ink Group will conduct their activities with an awareness of various environmental issues.**
2. **The Toyo Ink Group will develop and provide products, taking into consideration these products' effects on people's health and the environment during their entire life cycles.**
3. **The Toyo Ink Group will make strenuous efforts to ensure environmentally sound operations, conserve resources and energy, and reduce the environmental burden during production.**
4. **The Toyo Ink Group will provide information about its products, the environment, and safety and will cooperate with customers, local communities, and citizens, assisting them in improving their operations in all areas related to the environment, safety, and people's health.**
5. **The Toyo Ink Group will adhere strictly to laws and regulations and cooperate in accordance with various administrative policies while promoting harmonious international efforts in response to global environmental issues.**

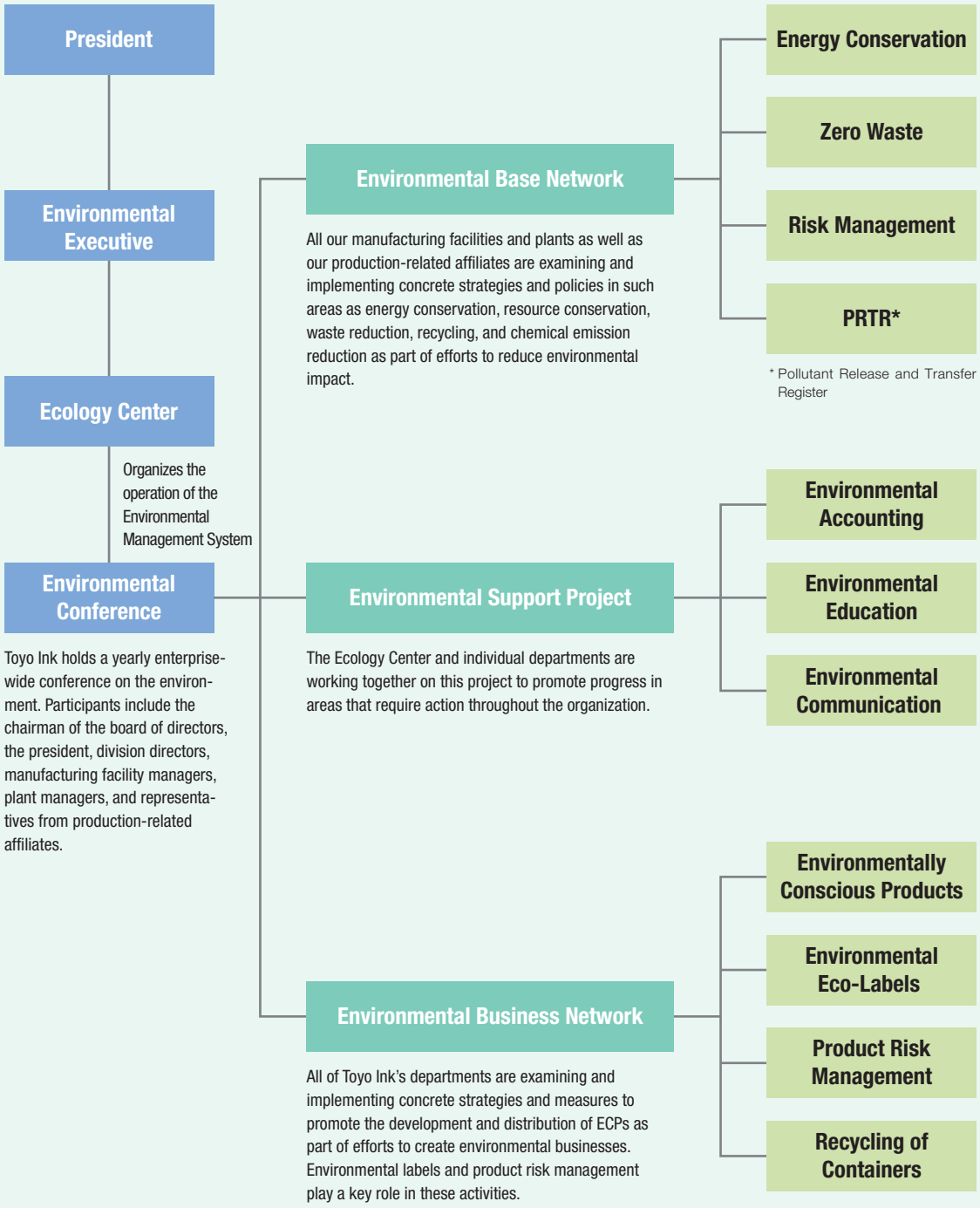
Environmental Management System

ENVIRONMENTAL MANAGEMENT SYSTEM ORGANIZATION

Toyo Ink has taken action at the organizational level in response to environmental impact, starting with the establishment of its Environmental Improvement Center in 1973. The Company's efforts to create a robust environmental management system include establishing environmental safety regulations in 1990, attaining membership in the Japan Responsible Care Council as of 1995, and establishing the Environmental Charter and Action Policies in 1996.

In April 1999, the Ecology Center was established at Toyo Ink's headquarters. With the Ecology Center as its focal point, Toyo Ink revised its previous environmental management system to bolster environmental activities throughout the entire Toyo Ink Group via the establishment of a Companywide organization, and the new environmental management system was launched in April 2000.

ORGANIZATIONAL DIAGRAM



ENVIRONMENTAL OBJECTIVES AND ACHIEVEMENTS

When Toyo Ink launched its new environmental management system in April 2000, the Company positioned the goals of its Environmental Charter and Action Policies as its environmental policy, which is required for ISO 14001 certification. The Company is working to enhance employee awareness as well as to set objectives and targets for the Environmental Charter and Action Policies and realize these goals.

In February 2004, at Toyo Ink's Fourth Environmental Conference, the Company decided to continue to pursue its current environmental objectives.

Environmental Objectives (Targets for Achievement: Fiscal 2006)	Environmental Targets for Fiscal 2003
Management System • Obtain ISO 14001 certification at all of Toyo Ink's business establishments by fiscal 2006 and promote continual improvement • Obtain ISO 14001 certification at Toyo Ink's domestic and overseas production-related affiliates by fiscal 2006 and promote continual improvement • Implement ISO 14001-based environment management systems at Toyo Ink's domestic and overseas non-production-related affiliates and promote continual improvement	• Promote ISO 14001 certification • Create a Responsible Care management system • Follow the Ministry of the Environment's *Environmental Accounting Guidelines 2002* to gain an understanding of environmental costs and effects
Education and Social Contributions • Establish an education system based on Responsible Care to heighten employees' environmental awareness and promote unified Companywide environmental protection activities • Actively communicate with local communities to promote harmonious coexistence	• Bolster Responsible Care based education for all staff • Have all of Toyo Ink's domestic production-related affiliates publish site reports
Environmental Business Activities • Increase sales of ECPs to account for more than 40% of net product sales by fiscal 2006. This will contribute to improving the profit structure and making Toyo Ink a top brand. • Reduce product risks	• Raise net sales of ECPs 10% from the previous fiscal year • Increase the number of Toyo Ink products with environmental labels • Reinforce the management of chemicals, establish a product risk management system, and rapidly respond to customers' needs
Manufacturing Facility and Plant Activities • Reduce CO_2 emissions at Toyo Ink manufacturing facilities and plants to fiscal 1990 levels by fiscal 2006 • Reduce the amount of waste created and promote recycling. Achieve zero waste at Toyo Ink's manufacturing facilities and plants as well as domestic production-related affiliates by fiscal 2005 • Dispose of all incinerators, including the large incinerator at the Kawagoe Plant, at Toyo Ink's manufacturing facilities and plants as well as at its domestic production-related affiliates • Establish a system to prevent environmental pollution and strive to eradicate accidental spills • Establish a system to ensure occupational safety and prevent accidents as a part of efforts to eradicate major fires and workplace accidents	• Reduce CO_2 emissions at all of Toyo Ink's manufacturing facilities and plants 2% from fiscal 2002 levels • Expand the number of zero waste facilities among Toyo Ink's manufacturing facilities and plants as well as production-related affiliates • Complete the introduction of wastewater treatment technologies at the Kawagoe Plant • Reduce accidents at the Company's outsourcers as well as at non-production-related departments • Conduct risk assessments and bolster efforts to reduce risks related to environmental pollution and accidents
Communicating Risks and Preventing Chemical-Associated Health Damage • Ensure adequate communication of environment-, health-, and safety-related risks • Promote the proper management of chemicals	• Continue to publish the *Environmental Report* • Establish a risk communication framework and promptly address any risks • Conduct chemical risk assessments
Observing Laws and International Cooperation • Ensure that laws are observed • Introduce environmental management systems at overseas affiliates	• Enhance the system for addressing overseas laws and regulations • Expand the collection of performance data from overseas affiliates

	Fiscal 2003 Achievements	Level of Achievement	See Page	Fiscal 2004 Environmental Objectives
	Management System			
	• Three production-related affiliates (domestic and overseas) and one domestic non-production-related affiliate achieved ISO 14001 certification.	○	21	• Work to obtain ISO 14001 certification at Toyo Ink's non-production-related business units
	• The Responsible Care management system was completely revised.	◎	19	• Revise the framework for environmental and Responsible Care activities, focusing on policies and objectives for social activities
	• The Company released the results of its environmental accounting conducted in line with the Ministry of the Environment's *Environmental Accounting Guidelines 2002*. Information on the effects of environmental preservation was released for the first time.	◎	8	• Implement environmental accounting following Ministry of the Environment and JRCC guidelines and release the results on environmental costs, environmental effects, effects of environmental preservation, and economic effects
	• Toyo Ink introduced its independently developed Eco-Conscious Efficiency Index as an environmental management index.	◎	9	• Strive to raise the Eco-Conscious Efficiency Index and continue to announce index results
	Education and Social Contributions			
	• Periodically conducted disaster prevention education at all manufacturing facilities	○		• Promote Responsible Care based education and conduct Responsible Care audits to assess results
	• All of Toyo Ink's domestic manufacturing facilities and production-related affiliates published site reports.	○		• Have all of Toyo Ink's manufacturing facilities and plants as well as its domestic production-related affiliates publish site reports on the environment, health, and safety, as part of efforts to educate employees and communicate with local communities
	Environmental Business Activities			
	• Sales of ECPs rose 6.8% from the previous fiscal year.	△	8	• Boost net sales of ECPs 10% from fiscal 2003 levels
	• Made progress in obtaining Eco Mark certification under the revised criteria, mainly for printing inks	○		• Reinforce the management of prohibited and restricted chemicals and link this management to that for product risk to accommodate regulations that must be met by electronics and automobile-related manufacturers
	• Bolstered the management of chemicals, established a product risk management system, and proactively addressed customers' needs	◎		
	Manufacturing Facility and Plant Activities			
	• CO_2 emissions increased 2.3% from fiscal 2002 levels. We did not achieve our target.	×	10	• Reduce CO_2 emissions by 500 tons from fiscal 2003 levels
	• Toyo Petrolite Co., Ltd., achieved zero waste.	○	12	• Strengthen the inspection and monitoring of energy use and CO_2 emissions with the aim of implementing appropriate corrective measures
	• A new design for the wastewater treatment facilities at the Kawagoe Plant was completed.	○		• Reduce the volume of waste sent to landfills 25% from fiscal 2003 levels. Enhance the recycling plans of the Fuji Plant and the Kawagoe Plant to promote the reduction of waste sent to landfills
	• Accidents at the Company's outsourcers as well as at non-production-related departments increased from the previous fiscal year.	△	20	• Promote water recycling and work to conserve water resources
	• Layout surveys were conducted and preventive maintenance frameworks were established at all four manufacturing facilities as part of efforts to reduce risks related to environmental pollution and accidents.	◎	20	• Follow up on the layout surveys conducted at four manufacturing facilities by implementing improvement plans based on the surveys and then carrying out additional surveys with a broader scope to promote occupational safety with the goal of bringing the number of workplace accidents to a level lower than that of fiscal 2002
	Communicating Risks and Preventing Chemical-Associated Health Damage			
	• The *Environmental Report* was published in August 2003.	◎		• Enhance the *Environmental Report* by including information on the Company's CSR activities and publish this report under the revised name *Environmental and Social Report*
	• The Company withdrew from certain operations involving products containing prohibited or restricted chemicals and established deadlines for reducing the use of such chemicals in products.	◎		• Reduce chemical emissions 50% from fiscal 2001 levels by fiscal 2006
	Observing Laws and International Cooperation			
	• Compliance education for Toyo Ink Group employees was implemented.	◎	18	• Raise awareness of compliance by establishing a "Compliance Reinforcement Month"
	• An understanding of overseas manufacturing facilities' activities was attained.	○	10	• Enhance performance data by urging overseas affiliates to obtain ISO 14001 certification

Level of Achievement: ◎: 100%　○: Almost 100%　△: More than 50%　×: Less than 50%

ENVIRONMENTAL ACCOUNTING

Toyo Ink introduced environmental accounting into its operations in fiscal 1999 and has included environmental accounting information in its environmental reports since fiscal 2000.

Methods Used to Compute and Classify Fiscal 2003 Environmental Accounting Data

- Environmental costs, direct quantitative effects of environmental preservation, and environmental effects: Data have been classified and computed with reference to the Ministry of the Environment's *Environmental Accounting Guidelines 2002* and the Japan Responsible Care Council's *Environmental Accounting Guidelines for Chemical Companies.*
- Environmental effects: In fiscal 2002, the calculation of environmental effects was limited to energy conservation and environmental businesses. However, in fiscal 2003, the sale of valuable resources, resource conservation, recycling of containers and other items, and waste disposal cost reductions were also included.

Fiscal 2003 Environmental Accounting Highlights

- Environment-related capital investment: In fiscal 2003, environment-related capital investment was near fiscal 2001 levels, owing to the absence of major investments.
- Upstream/downstream costs: Environmental management costs and social activity costs remained at approximately the same level as in the previous fiscal year. Environmental damage costs increased from the previous fiscal year due to soil remediation costs entailed in the sale of land in the Aoto area of Tokyo.
- R&D costs: The entire Company continued with its proactive R&D activities, and R&D costs remained at approximately the same level as in the previous fiscal year.
- Direct quantitative effects of environmental preservation: An index was used to gauge effects related to resources used in operations and effects related to the environmental impact of emissions from and waste generated by operations.

The effects of environmental preservation are computed by comparing current fiscal period data with those of the previous fiscal period, taking into account production quantity. In fiscal 2003, production quantity was 1.0123 times that of the previous fiscal year.

- Although CO_2 and other emissions increased, waste for final disposal declined from the previous fiscal year.
- Environmental effects: Net sales of ECPs rose 6.8% compared with the previous fiscal year and environmental business effects of ¥1.0 billion led to a 1.95% climb in Toyo Ink's operating profit ratio. The effects of the newly computed sale of valuable resources, resource conservation, recycling of containers and other items, and waste disposal cost reductions came to ¥412 million, and total environmental effects, including energy conservation effects, amounted to ¥1.59 billion.

● **ENVIRONMENTAL ACCOUNTING RESULTS (NON-CONSOLIDATED)**

1. Environmental Costs

(¥ million)

Category	General Description	Fiscal 2003		Fiscal 2002	
		Investments	Expenses	Investments	Expenses
Direct costs (environmental measures)		417	1,499	1,587	1,388
Pollution prevention	Expenses to maintain and improve air, water, and soil pollution prevention activities	223	594	665	576
Global environmental protection	Expenses to maintain and manage facilities related to global warming prevention and energy conservation	155	193	810	86
Resource-related measures	Expenses incurred through resource conservation, waste disposal, volume reduction, and recycling	39	712	112	726
Upstream/downstream costs	Expenses incurred through product and product container recycling	1	144	0	129
Environmental management	Expenses associated with environmental management, environmental advertising, and employee education	0	463	0	513
R&D (Note)		86	1,631	63	1,627
Product development	Total costs incurred through work to develop ECPs	59	1,340	44	1,262
Technology development	Total costs incurred through work to develop ECP technologies	27	291	19	365
Social activities	Charitable contributions to support global environmental preservation activities as well as environmental organizations	0	1	0	0
Environmental damage	Soil remediation costs	0	32	0	4
Total		504	3,770	1,650	3,661

Note: Total R&D costs for the period under review amounted to ¥7,467 million.

2. Direct Quantitative Effects of Environmental Preservation

Description	Index Representing the Effects of Environmental Preservation			
	Category	Fiscal 2003	Fiscal 2002	Index Value
1. Effects related to resources used in operations	Total energy input (crude oil equivalent: 1,000kℓ)	44.4	43.9	0.04
	Water resource input (10,000m^3)	339	315	–20
	Volume of PRTR/Japan Chemical Industry Association targeted chemical substances handled (1,000 tons)	63.9	61.9	–1.2
2. Effects related to the environmental impact of emissions and waste generated from operations	CO_2 emissions (1,000 tons carbon equivalent)	21.4	20.9	–0.2
	PRTR/Japan Chemical Industry Association targeted chemical substance emissions (tons)	83.1	65.8	–16.5
	Wastewater (10,000m^3)	278	234	–41
	Waste generated (1,000 tons)	17.1	17.7	0.82
	Waste for final disposal (tons)	527	1,017	507
	SO_x emissions (tons)	6.7	6.7	0.1
	NO_x emissions (tons)	46.0	32.7	–12.9
	Particulates (tons)	1.5	1.4	–0.1
	COD level (tons)	99.4	98.3	0.1

Note: Direct quantitative effects of environmental preservation activities reflect comparisons with the previous fiscal year after making adjustments for production quantity. Index value = previous fiscal period environmental impact x (current fiscal period production quantity / previous fiscal period production quantity) - current fiscal period environmental impact

3. Environmental Effects

(¥ million)

Category	Definition of Data Included in Calculations and General Description	Fiscal 2003	Fiscal 2002
1. Sale of valuable resources	Profits from the sale of used containers and other items	5	—
2. Energy conservation	The total effect of energy conservation activities at Toyo Ink's business establishments was calculated as a monetary amount.	97	69
3. Resource conservation	Effects of resource saving (yield improvement, etc.)	167	—
4. Recycling of containers and other items	Effects of reusing product containers and promoting the use of tanks	201	—
5. Waste disposal cost reductions	Effects of cost savings gained from waste reduction	39	—
6. Environmental business	Total profits from registered ECPs (Note)	1,000	577
Total environmental effects		1,509	646

Note: The operating profit ratio was based on the net sales of ECPs.

Eco-Conscious Efficiency Index

One of Toyo Ink's key management objectives is to promote environmental management by reducing the Company's impact on the environment and offering environment-friendly products and services. In line with this objective, in fiscal 2002, the Company introduced its Integrated Environmental Impact Index to assess overall reductions in environmental impact, advances in environmental management, and other areas of environmental performance.

In fiscal 2002, we independently developed this index as a tool for calculating environmental impact, and it shows how much the Company's impact on the environment has decreased as compared with fiscal 2000 figures. The smaller the calculated figure, the smaller the integrated environmental impact of CO_2 emissions, hazardous chemical substance emissions, etc.

We also devised the Eco-Conscious Efficiency Index as an environmental management index. Formula A shown below is used to calculate this index. The higher the index figure, the greater the progress in environmental management. The fiscal 2003 Eco-Conscious Efficiency Index figure was 4.0 times greater than the reference year—fiscal 2000. However, this increase is small compared with the growth seen through fiscal 2002.

In fiscal 2003, the Company scored 65.5 on the Integrated Environmental Impact Index. The lower score was mainly attributable to a substantial reduction in the volume of waste for final disposal.

Toyo Ink will leverage its Eco-Conscious Efficiency Index to assess the Company's progress in environment-friendly management. We will strive to raise this index figure by reducing our environmental impact through the development of ECPs and the expansion of ECP sales.

● **RELATIVE WEIGHT ASSIGNED BY TOYO INK TO FACTORS CONTRIBUTING TO ENVIRONMENTAL IMPACT**

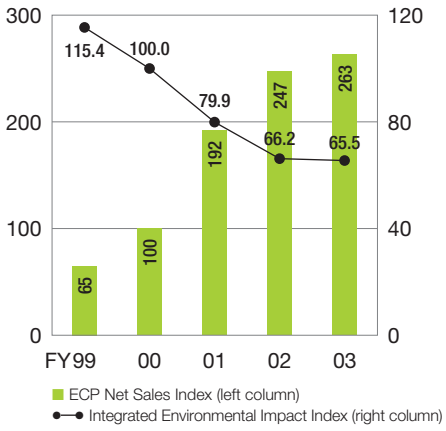
Primary Environmental Impact	Data Used to Assess Environmental Impact	Relative Weight Assigned by Toyo Ink
Global warming	CO_2 emissions	30%
Increased levels of waste	Volume of waste for final disposal	20%
Water pollution	COD levels	10%
Air pollution	NO_x and SO_x emissions	10%
Increased levels of hazardous chemical substances	Emissions of PRTR targeted substances	30%

Formula A

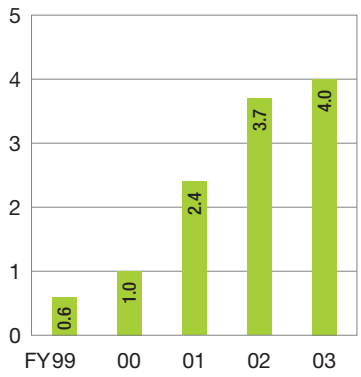
$$\text{Eco-Conscious Efficiency Index} = \frac{\text{ECP Net Sales Index*}}{\text{Integrated Environmental Impact Index}}$$

* This index is based on the net sales of ECPs in fiscal 2000.

ECP Net Sales Index and Integrated Environmental Impact Index Trends



Eco-Conscious Efficiency Index



Reducing Environmental Impact

Toyo Ink is a chemical manufacturer, and, as such, its business operations influence the environment in various ways. Thus, the Company regards a clear understanding of its impact on the environment and a commitment to reducing that impact to the lowest possible level as among its most important management issues.

This awareness has led Toyo Ink to do more than just promote energy conservation and reduce waste and environmental pollutants associated with manufacturing. Toyo Ink is undertaking a variety of additional activities, including those directed at reducing emissions of chemicals that are believed to impact the environment, as part of efforts toward realizing environment-friendly business operations.

REDUCING ENERGY USE AND CO_2 EMISSIONS

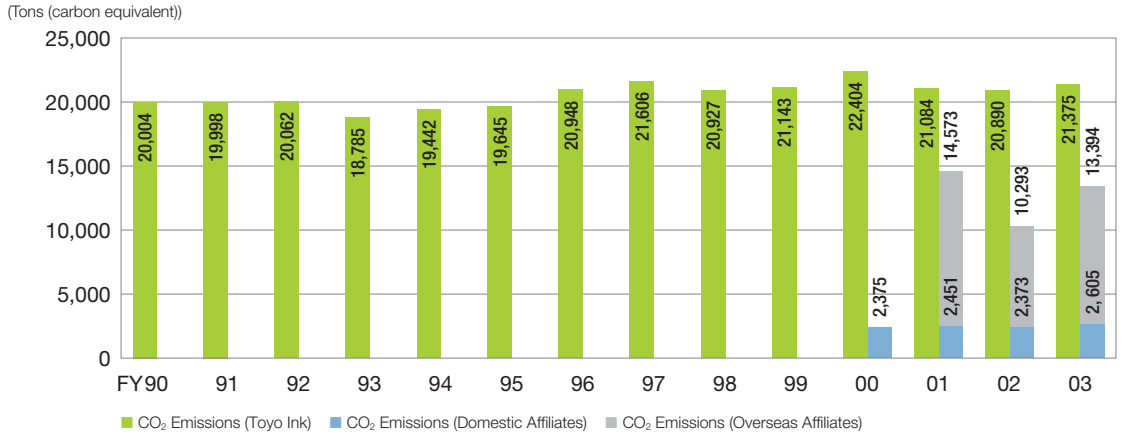
Reducing the Amount of Energy Used

In fiscal 2003, Toyo Ink strove to restructure its business offices, develop manufacturing processes that use relatively small amounts of energy, introduce energy conservation equipment, and conserve energy in day-to-day operations as part of efforts to reduce CO_2 emissions, the amount of energy used, and the energy source unit. Although the amount of energy used (crude oil equivalent) increased 1.1% from the previous fiscal year, the energy source unit (quantity of products manufactured) remained unchanged.

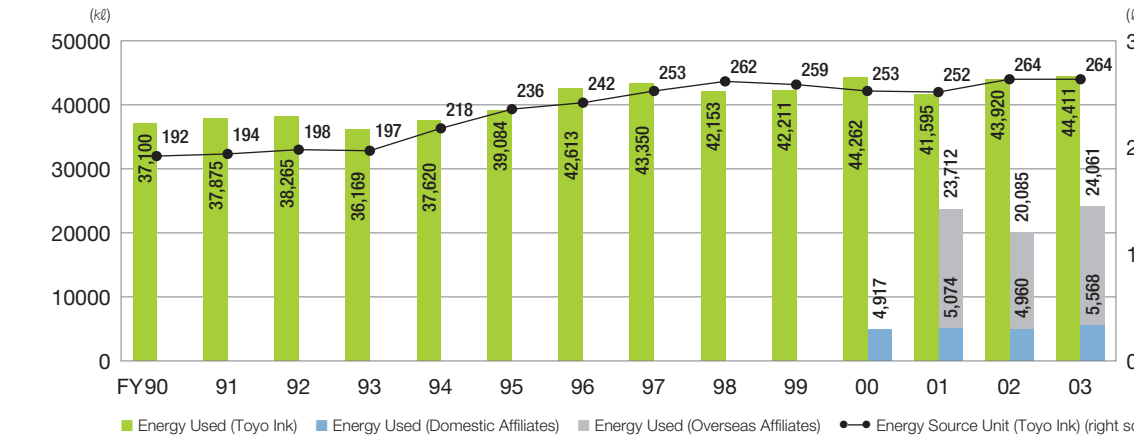
The rise in the amount of energy used was attributable to changes in the operating environment, including a decrease in the low-energy manufacture of conventional products coupled with an increase in the high-energy manufacture of conventional products, a switch to internal production for products that were previously manufactured externally, improvements in the air-conditioning facilities of workplaces, and the higher percentage of small-lot production as compared with conventional production that consumes large amounts of energy due to a shift to more sophisticated and compact products.

We expect these highly processed products to comprise an ever greater

CO_2 Emission (Carbon Equivalent) Trends



Energy Use (Crude Oil Equivalent) and Energy Source Unit Trends



proportion of our product lineup. Therefore, we will work to reduce the amount of energy used by developing energy-efficient manufacturing methods and introducing energy-conserving equipment.

In fiscal 2003, Toyo Ink's domestic production-related affiliates used 5,568 kiloliters of energy (crude oil equivalent), a 608 kiloliter, or 12.3%, increase from the previous fiscal year. Overseas production-related affiliates used 24,061 kiloliters of energy (crude oil equivalent).

Reducing CO_2 Emissions

As mentioned in Toyo Ink's *Environmental Report 2002,* in fiscal 2002, Toyo Ink changed its environmental goal concerning energy to "reducing CO_2 emissions at Toyo Ink manufacturing facilities and plants to the fiscal 1990 level by fiscal 2006."

To achieve this goal, the Company drafted an action plan based on its reduction plan, which set the objective of a 2% annual reduction in emissions at manufacturing facilities and plants. In fiscal 2003, we proactively worked to reduce CO_2 emissions by converting from heavy oil fuel to LNG fuel at the Fuji Plant for use in drying and other equipment; at the Saitama Plant for use in boilers, drying equipment, and other equipment; and at the Kawagoe Plant for use in combustion and other equipment.

In fiscal 2003, total CO_2 emissions from Toyo Ink's manufacturing facilities and plants amounted to 21,375 tons (carbon equivalent), reflecting a 485 ton, or 2.3%, increase from the previous fiscal year. This rise is the result of increased CO_2 emissions stemming from the greater use of electricity and heavy oil due to changes in operations that outweighed reductions achieved through fuel conversion.

We will continue to endeavor to reduce the amount of energy used through the development of manufacturing processes and the introduction of energy conservation equipment and to reduce CO_2 emissions through the expansion of fuel conversion.

Domestic production-related affiliates' fiscal 2003 CO_2 emissions were 2,605 tons, a 232 ton, or 9.8%, increase from the previous year. Overseas production-related affiliates' CO_2 emissions were 13,394 tons.

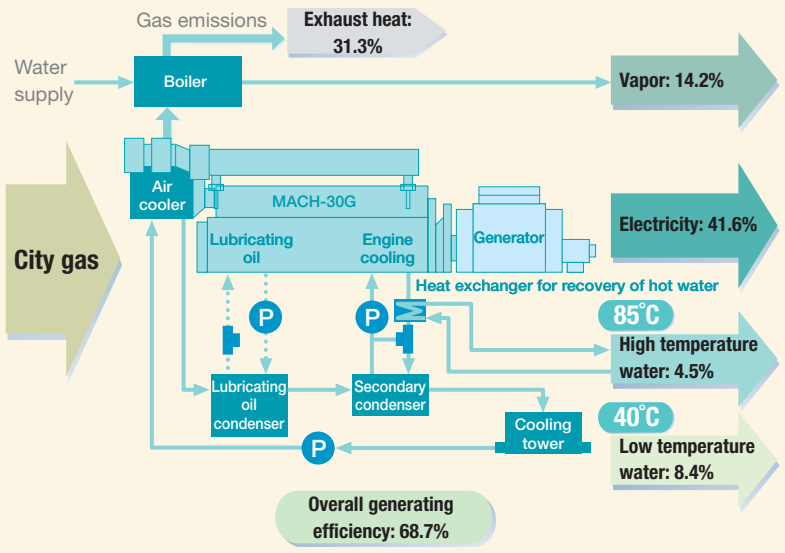
Energy use and CO_2 emissions data are based on the *Responsible Care Performance Data Reporting Guidelines* created by the Japan Chemical Industry Association and the Japan Responsible Care Council. Figures represent the total amount of electricity, petroleum, LPG, and city gas used at manufacturing facilities and plants—the amounts are converted to crude oil and CO_2 equivalents. The same conversions were used in calculating figures for overseas production-related affiliates.

Cogeneration System Goes On Stream

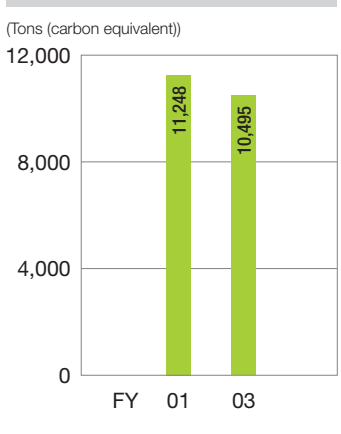
In February 2003, a gas engine cogeneration system that boasts power-generating efficiency of 42% and overall generating efficiency of approximately 69% went onstream at the Fuji Plant. In conjunction with the introduction of this system, a boiler at this plant that burns crude oil was replaced with one that only uses natural gas—greatly lowering environmental impact by substantially reducing the plant's CO_2 emissions and bringing its SO_x emissions to near zero. CO_2 emissions at the Fuji Plant have been reduced by 753 tons (carbon equivalent)—roughly 3.6% of the Company's total CO_2 emissions—thanks to the new cogeneration system.

Toyo Ink is currently working to achieve further CO_2 emission reductions by promoting conversion from LPG and kerosene to natural gas fuels. This is expected to generate an annual 430 ton (carbon equivalent) reduction in CO_2 emissions.

Gas Engine Cogeneration System Configuration and Heat Balance



Reductions in the Fuji Plant's CO_2 Emissions Achieved via Cogeneration System Operation



REDUCING WASTE

Toyo Ink regards waste as a major source of environmental impact and is actively committed to waste reduction. In fiscal 2003, the parent company reduced waste volumes 3.6% compared with the previous fiscal year, to 17,064 tons, while its domestic affiliates' waste volumes remained relatively unchanged at 4,172 tons. Waste volumes for four of the five overseas affiliates of Toyo Ink amounted to 11,476 tons.

Note: At Toyo Ink and its domestic affiliates, waste that is later directly recycled and reused in-house (reuse of drum cans as containers, etc.) or reduced through intermediate and other processing (reuse of solvents in redistillation, etc.) is included in the total volume of waste generated. (The total volume of waste generated was calculated in accordance with the "Guidelines for Calculating Volume of Industrial Waste Generated" contained in the Japanese Ministry of the Environment's *Manual for the Establishment of Industrial Waste Disposal Plans by Businesses with High Volumes of Emissions (June 2001).*

In fiscal 2003, Toyo Ink recycled 9,353 tons of waste, a 13.3% increase from the previous fiscal year, and its domestic affiliates recycled 2,869 tons, a 3.1% increase. Overall, Toyo Ink and its domestic affiliates recycled 12,222 tons of waste, or 57.6% of all waste generated.

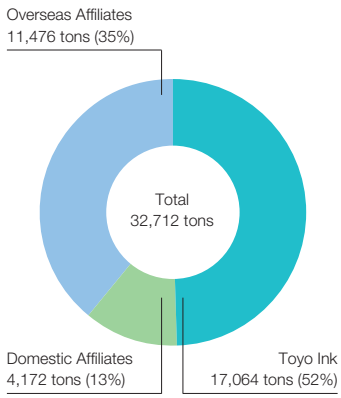
Toyo Ink sent 527 tons of waste for landfill disposal, a 48.2% reduction from the previous fiscal year, and its affiliates in Japan sent 101 tons, an 8.6% increase. The overall volume of landfill-disposed waste generated by Toyo Ink and its domestic affiliates was 628 tons, or 3.0% of all waste generated.

Starting in fiscal 1999, numerical targets have been set for the resource recycling of waste and the reduction of use of landfills. At each business location, garbage is thoroughly sorted, and efforts are made to recycle on the premises. At the same time, some waste processing is outsourced to specialist recycling and processing companies. As a result of these initiatives, in fiscal 2003, the volume of waste recycled increased and the volume of waste sent for landfill disposal continued to decline.

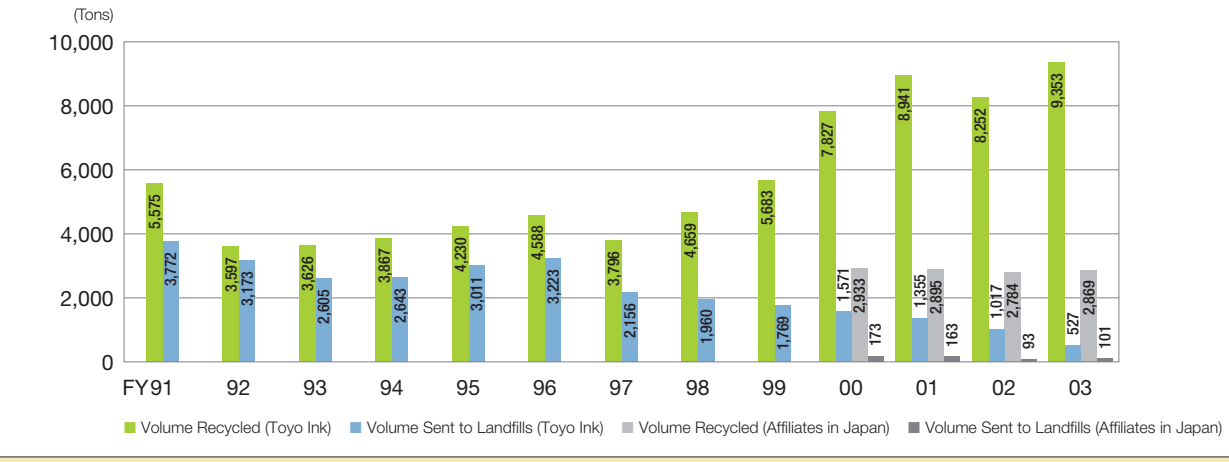
In fiscal 2003, Toyo Ink and its domestic affiliates' recycling rates for metal scrap and sludge exceeded 60%. Toyo Ink plans to raise the recycling rates for wastepaper, waste solvents, waste inks, and waste plastics.

Toyo Ink defines zero emissions as "producing a volume of waste for landfill disposal that is equal to less than 1% of the total volume of waste generated," and one of the Company's environmental goals is to achieve zero waste at its manufacturing facilities and plants as well as at its domestic production-related affiliates by fiscal 2005. In fiscal 2003, five of the parent company's manufacturing facilities and plants and one domestic affiliate achieved zero emissions.

Breakdown of Volume of Waste Generated at the Toyo Ink Group



Waste Materials: Volume Recycled and Sent to Landfills

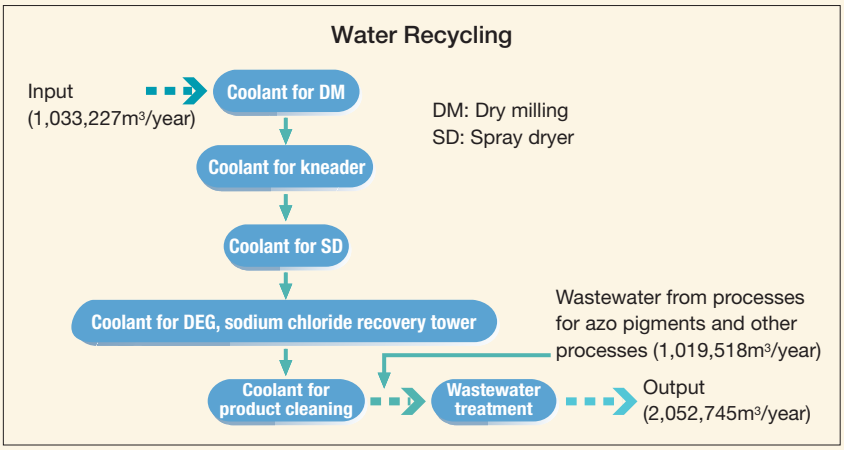


RECYCLING WATER

Pigment production entails the use of large volumes of water due to the heavy reliance on water-based processes, which, in turn, require the application of cleaning processes. Toyo Ink has made concerted efforts over the years to keep water use from rising even when production volumes increase. For example, the Fuji Plant has curbed water use by recycling instead of using new coolant for each process.

At this plant, groundwater used in the manufacturing process for blue and green pigments that use copper phthalocyanine as a raw material (approximately half of the water used at the Fuji Plant is used in similar processes) is recycled after going through the stages shown below.

In addition, the Company is making efficient use of water through ongoing technical improvements.



- We are working to reduce the volume of water used in manufacturing processes that use diethylene glycol (DEG) or sodium chloride by repeatedly recycling dispersion water until it reaches the saturation solubility of sodium chloride.
- We are working to reduce the volume of azo rinse water by altering water use according to application—using hot water (around 40°C due to use as a coolant in several processes) for cleaning phthalos and relatively cool water for azo pigment manufacturing processes.
- We are also considering changing manufacturing processes and are working to develop a manufacturing process for blue pigments that does not use water.

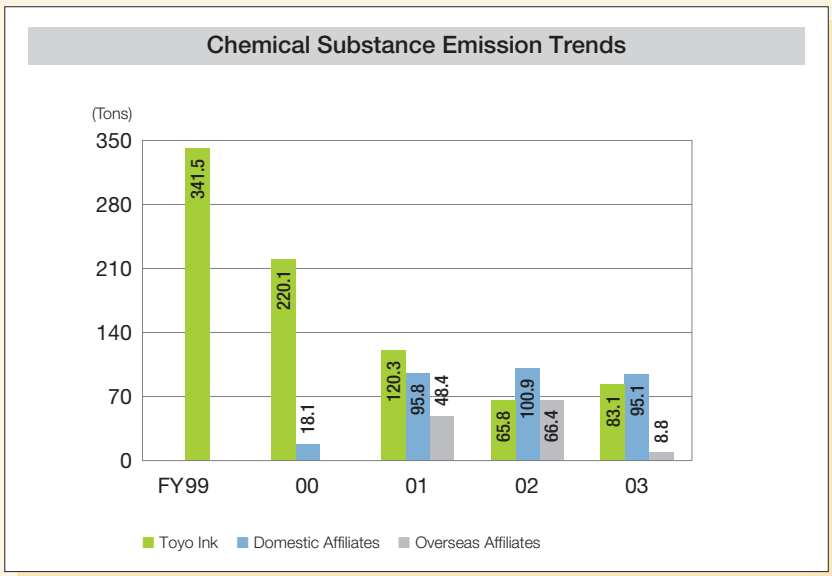
We will continue to work toward the more effective use of water resources.

REDUCING CHEMICAL EMISSIONS

Toyo Ink began complying voluntarily with PRTR requirements even before the passage of the PRTR Law (legislation to promote the comprehension and control of chemical emissions). Inspections are made regarding the use and emission volumes of substances of environmental concern at every manufacturing facility of the parent company, and an annual report is sent to the Japan Chemical Industry Association. Currently subject to inspection requirements are 354 substances designated as Class 1 substances under PRTR regulations and 284 substances specified by the Japan Chemical Industry Association. Since some substances appear in both lists, a total of 480 are covered.

In tandem with official reporting under the PRTR Law, similar inspections have been carried out at all the business locations of domestic production-related affiliates. At overseas affiliates, the measurement of emission volumes of chemical substances is undertaken at every facility.

Emissions of chemical substances at Toyo Ink in fiscal 2003 amounted

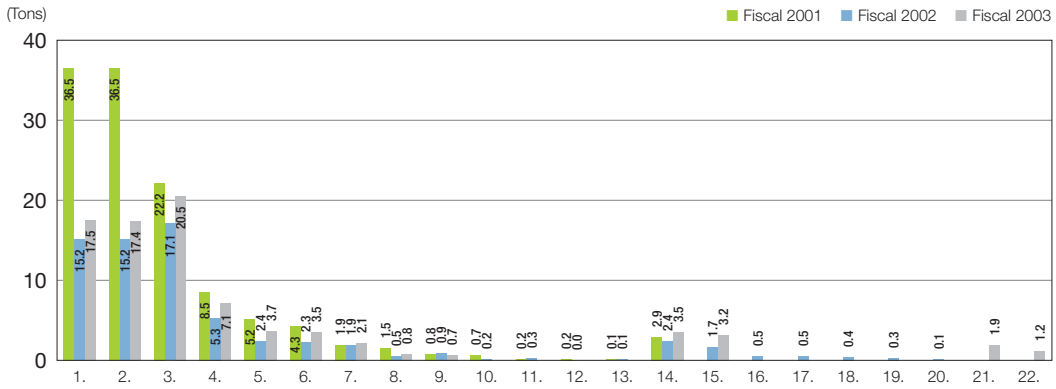


to 83.1 tons, a substantial increase of 17.3 tons, or 26.3%, from fiscal 2002. This was mainly attributable to the increased production of products associated with the emission of PRTR-targeted substances as well as an increase in the number of substances the Company reports on in line with changes in the PRTR Law. Specifically, the reporting requirements for PRTR-targeted substances changed from reporting on chemicals (Class 1 substances) that are produced or used in amounts exceeding five tons per year to reporting on those produced or used in amounts exceeding one ton per year. Emissions at domestic affiliates totaled 95.1 tons, a slight decrease compared with fiscal 2002. Emissions at overseas affiliates were 8.8 tons.

Solvents—volatile organic compounds—are the principal substances emitted during the production processes at Toyo Ink. We are working to reduce the emission volumes of chemical substances through the development of water-based components, the recovery of organic compounds, and other measures.

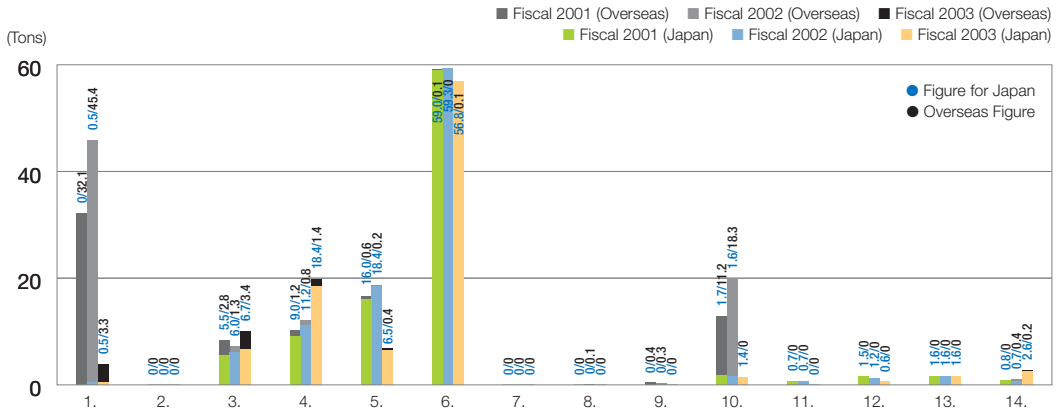
The combined emissions of chemical substances by domestic affiliates exceeded those of Toyo Ink. In the future, greater efforts will be made to reduce emissions by affiliates.

Chemical Emission Trends at Toyo Ink



1. Xylene 2. Ethyl benzene 3.Toluene 4. Acetic acid 5. Methyl ethyl ketone 6. Propyl alcohol
7. Aluminum compounds (water-soluble salt) 8. Methyl butyl ketone 9. Butyl alcohol 10. Methyl alcohol 11. Styrene
12. 1,3,5 Trimethyl benzene 13. Methyl methacrylate 14. Others 15. Cyclohexane 16. Butyl acetate 17. Ammonia 18. N-hexane
19. Acetone 20. Butyl acrylate 21. Ortho-chlorotoluene 22. Copper salts (water-soluble, except complex salts)

Chemical Emission Trends at Affiliates



1. Xylene 2. Ethyl benzene 3.Toluene 4. Acetic acid 5. Methyl ethyl ketone 6. Propyl alcohol
7. Aluminum compounds (water-soluble salt) 8. Methyl butyl ketone 9. Butyl alcohol 10. Methyl alcohol 11. Styrene
12. 1,3,5 Trimethyl benzene 13. Methyl methacrylate 14. Others

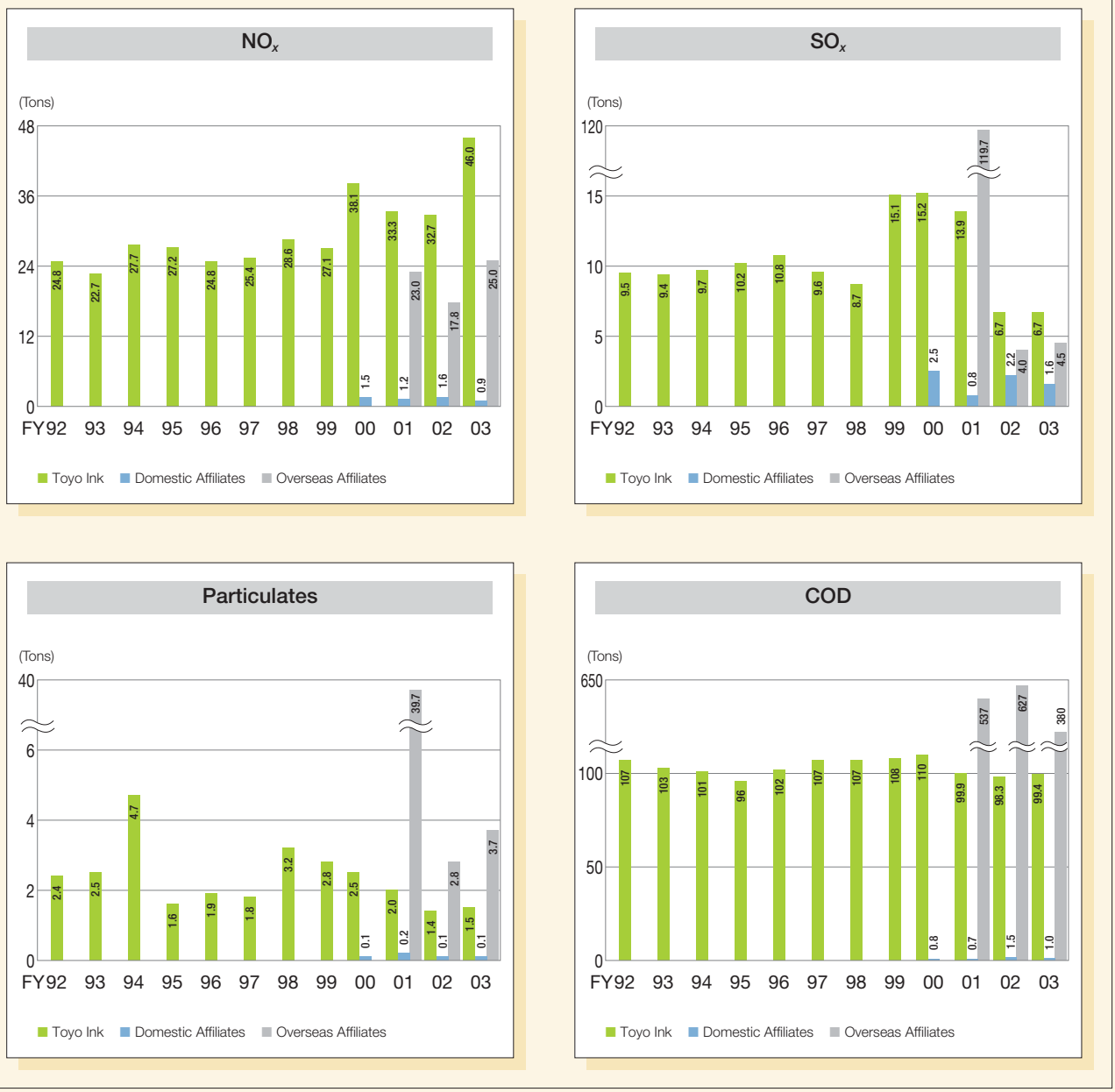
REDUCING ENVIRONMENTAL POLLUTANT EMISSIONS

Toyo Ink has established targets for reducing CO_2 emissions, volumes of waste generated, and volumes of chemical substances used, and it is working to achieve these targets. Although clear-cut goals for the reduction of COD and such environmental pollutants as NO_x, SO_x, and particulates have not yet been established, Toyo Ink is working to attain a clear understanding of COD levels and environmental pollutant emissions at its operations and is taking appropriate actions to reduce such emissions and COD levels. For example, the Company is switching over to heavy oil with a low sulfur content to reduce SO_x emissions.

In fiscal 2003, emissions of all the aforementioned environmental pollutants, with the exception of SO_x, increased slightly at Toyo Ink, and emissions of all the aforementioned environmental pollutants, with the exception of particulates, decreased at domestic production-related companies compared with fiscal 2002.

Total emissions of NO_x, SO_x, and particulates from the five plants at the four overseas production-related affiliates increased slightly. COD levels decreased substantially compared with fiscal 2002, mainly owing to efforts put forth by Francolor Pigments S.A. and Tianjin Toyo Ink Co., Ltd. The Company regards reducing environmental pollutant emissions at the overseas affiliates as crucial and is bolstering its efforts in this area.

Major Environmental Pollutant Emission Trends



Environmentally Conscious Product R&D

TK HY ECOO NV100 OFFSET INK DEVELOPMENT

What is Offset Ink?

Offset printing is a type of lithographic printing wherein ink applied to a smooth printing plate is first transferred to a rubber drum (offset blanket) that meshes well with oil-based inks, after which the ink on the blanket surface is transferred to paper or another printing material. There are two major kinds of offset printing—sheet-fed offset printing, which employs sheets of paper, and web offset printing, which employs rolls of paper. The inks used in offset printing are called offset inks, and they contain pigments to impart color; vehicles composed of resins, vegetable oils, and petroleum solvents; and such additives as driers, ink film strengthening agents, and anti-setoff compounds.

Offset Inks and the Environment

The Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Law on Promoting Green Purchasing) came into effect in April 2001, establishing environment-conscious criteria for printing materials delivered to government agencies and government-affiliated organizations. Against this backdrop, the Tokyo Metropolitan Government devised its Tokyo Metropolitan Government Plan for Protecting the Earth, and local governments throughout Japan established environment-conscious criteria for printing materials. In response to these developments, various environment-conscious guidelines have been established in relation to offset printing, including the Japan Federation of Printing Industries' Green Standard for Offset Printing Services, the Eco Mark Committee's ECO Mark for printed papers, and the Green Purchasing Network's guidelines for printing service purchasing.

Toyo Ink is strengthening its efforts to develop and sell offset ink ECPs. At present, our main offset ink products are all aroma-free inks that use petroleum solvents and contain less than 1% aromatic compounds. Approximately 70% of these products are soy inks.

Toyo Ink's Development of TK Hy Ecoo NV100 Inks

Toyo Ink has long sold its Leostep series of VOC-free products for sheet-fed offset printing processes (see *Toyo Ink Environmental Report 2000*). TK Hy Ecoo NV 100 brings the performance of Leostep's TK Hy Ecoo NV to the level of conventional inks containing petroleum solvents.

TK Hy Ecoo NV 100 is 100% vegetable oil based and VOC-free, and it offers superior performance compared with regular inks in certain areas. As the petroleum solvents used in regular inks either seep into the paper or vaporize, the ink components on the paper gradually wear off after printing, causing the ink film (film of ink on the printed surface) to become thin and less rub-resistant. However, 100% vegetable oil-based TK Hy Ecoo NV 100 ink does not vaporize, enabling the ink film to harden and thus yielding better printing quality and post-processing endurance (during bookbinding, cutting, etc.). TK Hy Ecoo NV 100 is gaining favor for its superior rub-resistance and drying properties.

In addition to its stellar performance, TK Hy Ecoo NV 100 ink does not require users to change their printing machinery. Toyo Ink aims to make TK Hy Ecoo NV 100 inks the standard for sheet-fed ink.

CLOSE UP

TK Hy Ecoo NV 100 Development

The problem with the previous TK Hy Ecoo NV inks was that they took an extremely long time to set (form an ink film) and retained a sticky quality due to the absence of a setting solvent. With TK Hy Ecoo NV 100, we lowered the affinity (solubility) between the vegetable oil used and resins so that they would readily separate when the ink is applied to the paper, thereby reducing stickiness. However, doing so caused the printing materials to lose their gloss. We addressed this issue by adding another vegetable oil that readily dissolves resins to improve the printing quality. Thus, TK Hy Ecoo NV 100 ink contains a mixture of vegetable oils—one that does not mix well with resins and one that does—and capitalizes on the strengths of each type.

TK Hy Ecoo NV 100 inks achieve a level of performance comparable to regular inks containing petroleum solvents. To make TK Hy Ecoo NV 100 inks the standard in sheet-fed inks, we need to reduce their prices to match regular inks and are currently pressing forward with R&D to achieve this objective.

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Tetuo Onishi
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Technical Dept.
Printing & Information Business

AQUA BRIGHT SERIES GRAVURE INK ECP DEVELOPMENT

What is Gravure Ink?

In gravure printing, after ink is applied to a concave gravure plate, a thin steel "doctor blade" is used to wipe off excess ink, and the ink remaining in the depressions is transferred to the printing material. Gravure printing is used for a wide variety of media, including paper, film, and aluminum cans, and is suitable for high-volume printing due to its high speed. The inks used in gravure printing are called gravure inks. These inks are unique in that they are largely composed of solvents, which must dry rapidly because of the high speed of the printing process.

Toyo Ink's Development of Gravure Ink ECPs

In gravure printing, a large volume of volatile solvents is used and VOCs are released into the atmosphere during the evaporation and drying processes. Demand for packaging materials with greater levels of safety and sanitation is increasing as regulations on occupational and environmental health, air pollution, etc., become more stringent. In the area of inks, initiatives to improve the work environment and reduce solvent emissions have been focused on the development of non-toluene and water-based inks. Toyo Ink has been working to develop gravure ink ECPs. We have solved the problems regarding the working properties and printing quality of conventional non-toluene and water-based inks through the use of assessment technologies and an independently developed resin.

Development of the Aqua Bright Series

Aqua Bright is a series of water-soluble gravure inks that can be applied to a wide range of substrates—from high-quality, coated, and other types of packaging paper to carton paper and treated aluminum. Water-soluble gravure inks offer advantages in terms of air pollution prevention, work environment improvement, and fire hazard reduction, and their use with such permeable substrates as paper and paper containers is growing at a fast pace due to their lower environmental impact during drying compared with film substrates. However, previous water-soluble inks needed improvements in usability as their printing effects and printability were not as good as solvent-based inks.

In 1994, Toyo Ink launched the Aqua Plus series of water-soluble inks. The Company then improved the printing effects and printability of these inks, introducing the Aqua Bright series in 2003. These inks are currently being used to print labels for six-packs of beer, snack packaging, toothpaste and cleaning product packaging, cigarette cartons, health drinks, and numerous other products.

CLOSE UP

Aqua Bright Series Development

When we developed the Aqua Bright series, we set out to address two problems encountered with conventional water-soluble gravure inks—fogging (the doctor blade does not remove the ink properly and the ink is then transferred to nonprinting areas) and cell clogging (shallow depressions in the printing plate retain ink and the ink is then transferred to nonprinting areas)—by controlling ink's drying properties and fluidity. We made improvements in these areas by creating a product that dries faster than conventional products and is thixotropic (reduces the stress of upward force against the doctor blade that occurs during the blade's high-speed rotation across the plate during printing). We accomplished this by developing a new water-soluble resin with superior pigment dispersibility. We also attained outstanding printability by combining suitable pigments, dispersing agents, and leveling agents.

Aqua Bright is garnering excellent reviews from major users, which has helped it to gain a larger share of the market. In the future, we will work to develop even higher-quality water-soluble gravure inks and promote a switch to water-soluble gravure inks to lower environmental impact by reducing VOCs. We will also strive to bring down the price of these products.

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Toyo Ink's CSR Activities

CSR ACTIVITIES AND COMPLIANCE

The Toyo Ink Group engages in a wide range of activities in Japan and overseas and the people and regions that are involved in and affected by our business operations are increasing in number and scope. Thus, if we are to continue to exist as a corporate group, we must earn recognition from society for our value as a company through our corporate activities.

Corporate social responsibility (CSR) has become an important issue in Japan. The Toyo Ink Group is working to demonstrate CSR by conducting its business operations in a manner that will win the approval of society, which it considers the first essential step to ensuring sustainability as a corporate group. We are endeavoring to fulfill our social responsibilities by promoting market- and environment-friendly operations; making social contributions; strictly observing ethics, laws, and regulations; and respecting individual differences.

One of the ways that the Toyo Ink Group has been promoting CSR is through compliance, and our activities in this area extend beyond the obvious observance of laws, social norms, and other rules. We are working to establish a corporate atmosphere wherein the entire Group is committed to compliance with laws and ethics, with the aim of putting into practice the values that we are pursuing through the Toyo Ink Group Management Policy, which is formed from three sets of ethical guidelines—the corporate philosophy, corporate policy, and guiding principles. Through these initiatives, the Toyo Ink Group aims to set in place internal frameworks to secure profits and establish social trust, which, in turn, will enable the Group to gain a competitive edge and enhance its corporate value. Each member of the Toyo Ink Group is keenly aware of and plays a key role in promoting CSR.

In April 2003, the Compliance Committee was established and has since led the Group's compliance activities. The committee's objective for its first year was to raise compliance awareness among Group employees—including affiliate, temporary, and part-time employees—and build a foundation for the Group's compliance framework. The committee has made concerted efforts to achieve this objective. It held a series of briefings on compliance for employees in Japan at which the reasons behind the Toyo Ink Group's compliance promotion and the content of the Toyo Ink Group Business Conduct Guidelines, which were revised on April 1, 2003, were explained—deepening employees' understanding of compliance—and started up similar informational meetings for overseas affiliates. In addition, the committee headed the establishment of the Corporate Ethics Helpline, designation of a compliance leader for each business establishment, appointment of a compliance director for each affiliate, provision of compliance education, and implementation of compliance audits.

Now in its second year, the committee is steadily working to increase awareness of the role of compliance in CSR.

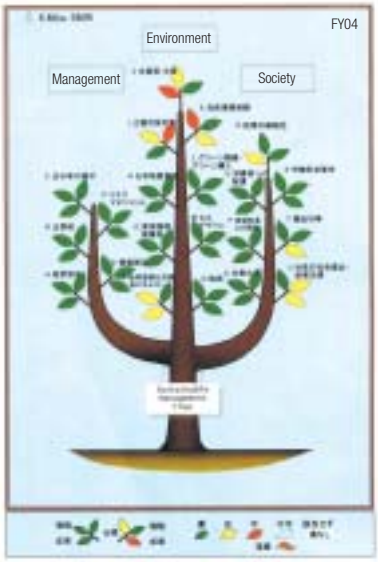
SUSTAINABLE MANAGEMENT RATING

Since fiscal 2002, the Sustainable Management Rating Institute (SMRI) has held hearings for Sustainable Management Ratings. In fiscal 2003, Toyo Ink submitted itself for evaluation for the second year in a row, earning recognition as a Green Top Runner. The SMRI selected approximately 346 companies assumed to excel in environmental management and evaluated those companies that applied at hearings, granting Green Top Runner status to 68 companies that agreed to have their names made public.

The evaluations concerned five aspects of management, nine aspects of environmental activities, and seven aspects of social activities. In addition, evaluations in all areas were made from three perspectives—strategies, frameworks, and performance. The evaluation results are shown on a "sustainability tree," with green leaves indicating the highest ranking, yellow the second highest, and red the third highest.

Toyo Ink scored high in environmental management, did better on social activities as compared with fiscal 2002, and currently ranks in the middle among the 68 companies selected Green Top Runner. In the future, we will strive to promote environmental management and reinforce our CSR initiatives to enhance environmental performance.

TOYO INK MFG. CO., LTD.



LEGAL OBSERVANCE

Clearly, abiding by the law is one of Toyo Ink's top management policies and is stipulated in its Environmental Charter, Action Policies, and Group Business Conduct Guidelines. Compliance Committee activities focus on establishing a framework to ensure compliance with ethics, laws, and regulations. The Compliance Office protects the privacy of individuals seeking consultation and works to remedy issues brought to its attention.

Toyo Ink gathers the latest information on environmental laws and regulations and the Ecology Center compiles this information in periodic reports that are distributed through the Company LAN to facilitate immediate response to new laws. Knowledge of laws governing overseas operations is managed in a similar manner, and we are enhancing mechanisms for complying with such laws, especially in Europe.

The Company is also creating an electronic list of legal requisites, including ordinances. All business establishments have compiled a list of legal requisites, including ordinances, clarifying specific requirements. In fiscal 2003, Toyo Ink strictly complied with all relevant laws, including those pertaining to the environment, and encountered no legal problems.

Toyo Ink pledges to comply with not only legal requisites but also standards set by industry organizations and to meet customer demands regarding chemical substance management. For instance, we have added the "Voluntary Regulations for Printing Inks Used in Food Packaging Materials" (NL Regulations) established by the Japan Federation of Printing Industries to our scope of compliance in the interest of maintaining the safety and cleanliness of food products. In addition, the Company ensures that coloring agents used in plastic products for food containers comply with the Japan Hygienic Olefin and Styrene Plastics Association's voluntary regulatory standards.

RESPONSIBLE CARE AUDITS

In April 1995, the Japan Responsible Care Council (JRCC) was established and Toyo Ink became a member after the president took an oath on behalf of the Company. Since then, we have made Responsible Care a part of our basic philosophy by working to conduct our business operations in a responsible manner.

We are currently following the principles, standards, and policies established by the JRCC, devising long-term plans and annual action plans on environmental preservation and occupational safety, and informing the council of our performance through a Responsible Care Practices Report/Action Plan.

The Toyo Ink Ecology Center conducts annual internal audits of domestic production-related facilities, including those of affiliates. In fiscal 2003, the audits were carried out with reference to the JRCC's *Responsible Care Internal Audit Guidelines,* which were revised in December 2002, and the newly established Responsible Care Standard Checklist. In addition, the content of the audits was revised and expanded and a Toyo Ink Responsible Care Internal Audit Checklist was created.

Communicating with Society and Individuals

COMMUNICATING WITH EMPLOYEES

Occupational Health and Safety

Each year, Toyo Ink holds an Environmental Conference and an Environmental Base Network Conference, at which managers from all business establishments participate, to keep employees informed about the Company's targets and plans pertaining to health, safety, and disaster prevention as well as to review case studies of accidents and other related matters.

As part of Responsible Care activities, all of Toyo Ink's environmental bases are conducting risk assessments to identify and evaluate latent risks and unsafe operations so that improvements can be made to create a safe, low-risk working environment.

If an accident should occur, Company regulations require that the Ecology Center be informed of the incident, after which an Accident Report and a Report on Measures to Prevent Recurrence of Similar Accidents must be submitted to the center. In addition, a thorough on-site investigation is conducted in the wake of any serious accident, focusing on its cause and site facilities to establish measures to prevent the recurrence of similar accidents. Information from these reports and investigations is shared with the entire Group—from environmental base managers to manufacturing site leaders—via the Company LAN in the interest of preventing similar accidents.

As shown in the graphs below, although the severity rate of lost-workday injuries has remained low due to extremely few accidents resulting in serious functional impairment or fatality, the frequency rate of lost-workday injuries has increased in tandem with a rising number of accidents. We believe that this increase in the number of minor injuries is due to the greater use of machinery at non-production-related facilities as well as the inadequacy of risk assessments addressing the rise in atypical operations and conditions at production-related facilities. Going forward, we will work to bolster our activities in this area by expanding the scope of layout surveys and making greater use of risk assessments.

Layout Survey Implementation

The frequency of serious accidents at corporate manufacturing sites in recent years calls for the revision and reinforcement of workplace safety management.

In light of these conditions, in fiscal 2003, Toyo Ink conducted layout surveys to assess risks at production sites and Responsible Care audits to assess performance with regard to process safety and disaster prevention management, health and safety, and environmental preservation at all of its manufacturing facilities.

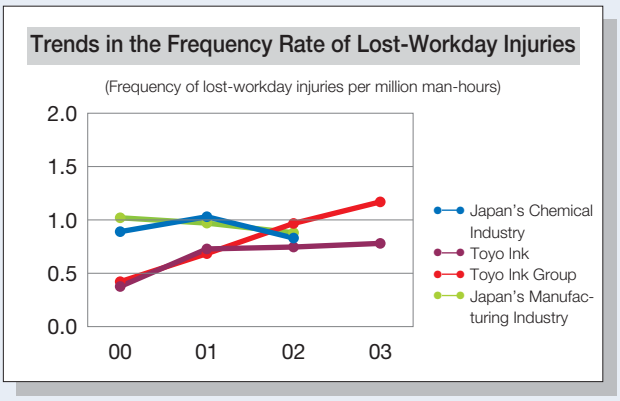
The layout surveys focused in particular on uncovering unacceptable risks stemming from the utilization of people, facilities, and buildings. We are using the results of these surveys to address high-level risks through systematic improvements in infrastructure as well as education and training to create safe workplaces and, in turn, promote the safety and environmental preservation of the surrounding communities.

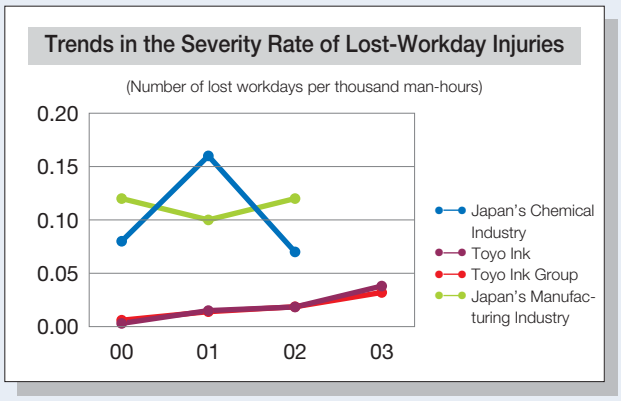
Mental Health Care

Lately, accidents caused by physical fatigue have been declining along with a reduction in the physical demands on workers of the jobs performed due to the enhancement of workplace facilities, increased automation, and other factors. On the other hand, accidents attributable to mental stress have been increasing along with the rise in performance demands. The Ministry of Health, Labour and Welfare has presented corporations with guidelines designed to prevent such incidents and urges that they be implemented. In 1983, Toyo Ink established an internal consultation program to assist individual employees in dealing with mental health issues. In fiscal 2003, Toyo Ink commenced mental health oriented initiatives at the organizational level with the establishment of an annual activity program for a model business office.

Program for Rehiring Retired Employees

In 1993, Toyo Ink introduced a program for rehiring retired employees to meet their employment needs and to leverage their knowledge, skills, and experience. Under this program, any regular employee who wishes to work after retirement may continue to do so until the age of 62. At the present time (September 2004), approximately 100 individuals are taking advantage of this program.





Plants and Affiliates Covered in this Report/ISO 14001 Certification

● PLANTS

Plants	Address	Certification Date	Registered Examining Organization
Fuji Plant	400 Tenma, Fuji-shi, Shizuoka 419-0205, Japan	April 21, 1997	Japan Quality Assurance Organization
Aoto Plant	32-1, Aoto 7-chome, Katsushika-ku, Tokyo 125-0062, Japan		
Saitama Plant	1, Oaza-Sakae, Kawagoe-shi, Saitama 350-0803, Japan	May 24, 2001	JIC Quality Assurance
Neyagawa Plant	6-6, Sanranishimachi, Neyagawa-shi, Osaka 572-0818, Japan		
Kawagoe Plant	286, Matsumine, Nakafuku, Kawagoe-shi, Saitama 350-1156, Japan	February 21, 1997	Japan Electrical Safety & Environment Technology Laboratories
Seishin Plant	5-7, Takatsukadai 1-chome, Nishi-ku, Kobe-shi, Hyogo 651-2271, Japan		
Moriyama Plant	436-1, Miyake-cho, Moriyama-shi, Shiga 524-0051, Japan	April 25, 2002	JIC Quality Assurance
Okayama Plant	3701-1, Kinoko-cho, Ibara-shi, Okayama 715-0004, Japan	April 17, 2003	Expanded certification at the Moriyama Plant to include the Okayama Plant

● DOMESTIC AFFILIATES

Domestic Affiliates	Address	Certification Date	Registered Examining Organization
Matsui Chemical Co., Ltd.	18, Jibu-cho, Fushimi-ku, Kyoto-shi, Kyoto 612-8374, Japan	December 1, 2003	Japan Chemical Quality Assurance Ltd.
Oriental Chemical Co., Ltd.	1430, Togo, Mobara-shi, Chiba 297-0017, Japan		
Toyo Morton Ltd., Saitama Plant	25-26, Oaza-Miyako, Namekawa-cho, Hiki-gun, Saitama 355-0812, Japan	April 26, 2001	JIC Quality Assurance
Toyo Petrolite Co., Ltd., Chiba Plant	1432, Togo Fujimi, Mobara-shi, Chiba 297-0017, Japan	January 30, 2001	JIC Quality Assurance
Nihon Polymer Industries Co., Ltd.	2114, Kohama, Himeiji-shi, Hyogo 671-1241, Japan	June 30, 2003	Japan Chemical Quality Assurance Ltd.

● OVERSEAS AFFILIATES

Overseas Affiliates	Address	Certification Date	Registered Examining Organization
Francolor Pigments S.A. HQ and VSP Factory	Platforme de Villers-St. Paul, B.P. 25, 60870 Rieux, France	July 8, 1997	AFAQ
Francolor Pigments S.A. Oissel Factory	Platforme de Oissel, B.P. 4, 76350 Oissel, France	April 28, 1998	AFAQ
Liochem Incorporated	2145 East Park Drive, Conyers, GA 30013, U.S.A.	March 23, 2000	Deloitte & Touche
Tianjin Toyo Ink Co., Ltd.	12 Xinghua 2# Road, Xiqing Economic Development Area, Tianjin, China 300381	December 7, 1999	China's National Environmental Protection Agency (Huaxia EMS Auditing Center)
Toyochem Ink Pte. Ltd.	31, Tuas Avenue 2, Jurong Town, Singapore 659462	December 1, 1999	SGS

● OFFICES THAT EARNED ISO 14001 CERTIFICATION IN FISCAL 2003

Offices	Certification Date	Registered Examining Organization
Nihon Polymer Industries Co., Ltd. (domestic production-related affiliate)	June 30, 2003	Japan Chemical Quality Assurance Ltd.
Toyo Ink Tohoku Co., Ltd. (domestic non-production-related affiliate)	August 4, 2003	Japan Chemical Quality Assurance Ltd.
Matsui Chemical Co., Ltd. (domestic production-related affiliate)	December 1, 2003	Japan Chemical Quality Assurance Ltd.
Toyo Ink Compounds Corp. (overseas production-related affiliate located in the Philippines)	January 23, 2004	BVQI

TOYO INK

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This environmental and social report can also be viewed in its entirety on the Company's home page.
URL: http://www.toyoink.co.jp/

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