

## We offer products that are kind to the environment and people by reducing and strictly managing environmentally-sensitive substances.

### ● Concept

Aiming to reduce the impact on the global environment and enhance end-user comfort and safety levels, the Ricoh Group is tackling important issues by establishing a strict management system for environmentally-sensitive substances contained in its products, reducing ozone, dust, and volatile organic compounds (VOCs)<sup>1</sup> emitted when products are used, and ensuring that its supplies are safe. Environmentally-sensitive substances contained in products will affect the environment when the products come to the end of their lifecycle and are improperly disposed of. An ecobalance<sup>2</sup> assessment shows that reducing the use of these substances will ultimately lessen the environmental impact a product has during its lifecycle and reduce recycling costs to a great extent. The Ricoh Group is making efforts to reduce environmentally-sensitive substances and create a reliable management system that covers the entire manufacturing flow, including suppliers.

1. VOC stands for volatile organic compound.  
TVOC stands for total VOC.

2. See page 55.

### ● Targets for Fiscal 2007

- ◎ Create and enforce a system of managing chemical substances contained in Ricoh Group products (in fiscal 2005).
- ◎ Observe Ricoh standards that cover environmentally-sensitive substances emitted by products. (Observe Ricoh standards that cover such substances as ozone, dust, and VOC.)

### <Global>

#### ① Achievement of Standards for Environmentally-sensitive Chemical Substances

	Models that Achieved the Standards <sup>1</sup>	Ricoh Standards (mg/h) <sup>2</sup>	
		Color	Monochrome
Ozone	10	3.0	1.5
Dust	10	4.0	4.0
TVOC	10	18	10

1. Figures indicate the number of product series, including copiers, multifunctional copiers, and printers, launched in fiscal 2006 that achieve these standards.

2. Ricoh standards also meet the Blue Angel requirements, and were revised in 2007 in response to revisions to the Blue Angel requirements.

### ● Review of Fiscal 2006

In July 2006, Ricoh completed the establishment of a management system for environmentally-sensitive substances contained in its products at our sites outside of Japan. Ricoh also conducted an internal audit and selected important issues to raise the level of the management system, and has been making efforts to improve it. Concerning emissions of environmentally-sensitive substances generated by products, Ricoh was quick to satisfy the Blue Angel requirements that came into force in January 2007, and a range of products, including copiers, multifunctional copiers, printers, and 10 model series, launched in fiscal 2006 have attained Ricoh standards for ozone, dust, and VOC (see table ①).

### ● Future Activities

In anticipation of tighter laws and regulations in the future, we will upgrade our chemical substance management system that encompasses the entire supply chain of the Ricoh Group. We will also continue our efforts to further reduce environmentally-sensitive substances in products and will maintain Ricoh standards for all future products.

### Controlling the Use of Environmentally-sensitive Substances

#### <Ricoh Group (Global)>

Ricoh set original standards for environmentally-sensitive substances that could be used in its products in 1993 as part of efforts to reduce these substances. Since then, it has regularly reviewed the standards to incorporate the latest regulations and scientific knowledge and has controlled chemical substances accordingly. In addition, all the divisions engaged in production (the design, procurement, and manufacturing divisions) have jointly worked to improve the chemical substance control system. At the end of March 2006, a system of preventing chemical contamination at suppliers was created on a global basis. At the same time, the chemical substance control system within the Ricoh Group was strengthened, completing the management system for chemical substances contained in products within Japan. As for the system outside of Japan, the building of the system was completed in July 2006. To manufacture products that do not contain environmentally-sensitive substances and promptly disclose information to customers, we will continue our efforts to enhance the chemical substance control system that covers the entire production flow, including suppliers.

### Marketing Products Pursuant to the RoHS Directive

Ricoh has been engaged in reducing environmentally-sensitive substances and enhancing its management system for a long time, and has been sequentially launching products complying with the RoHS Directive since fiscal 2004. In principle, the products launched in fiscal 2006 comply with the RoHS Directive.

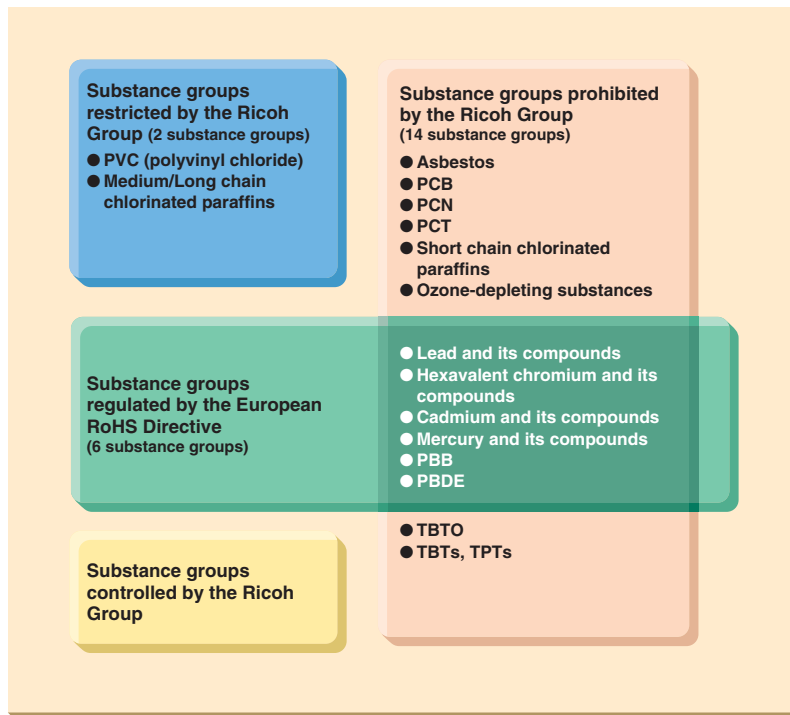
## REACH

This is a new EU regulatory framework for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). It requires the registration and management of all chemical substances used in business in accordance with their conditions of use to ensure safe assessment of chemical substances. It came into force on June 1, 2007, and regulations will be gradually enforced from June 1, 2008.

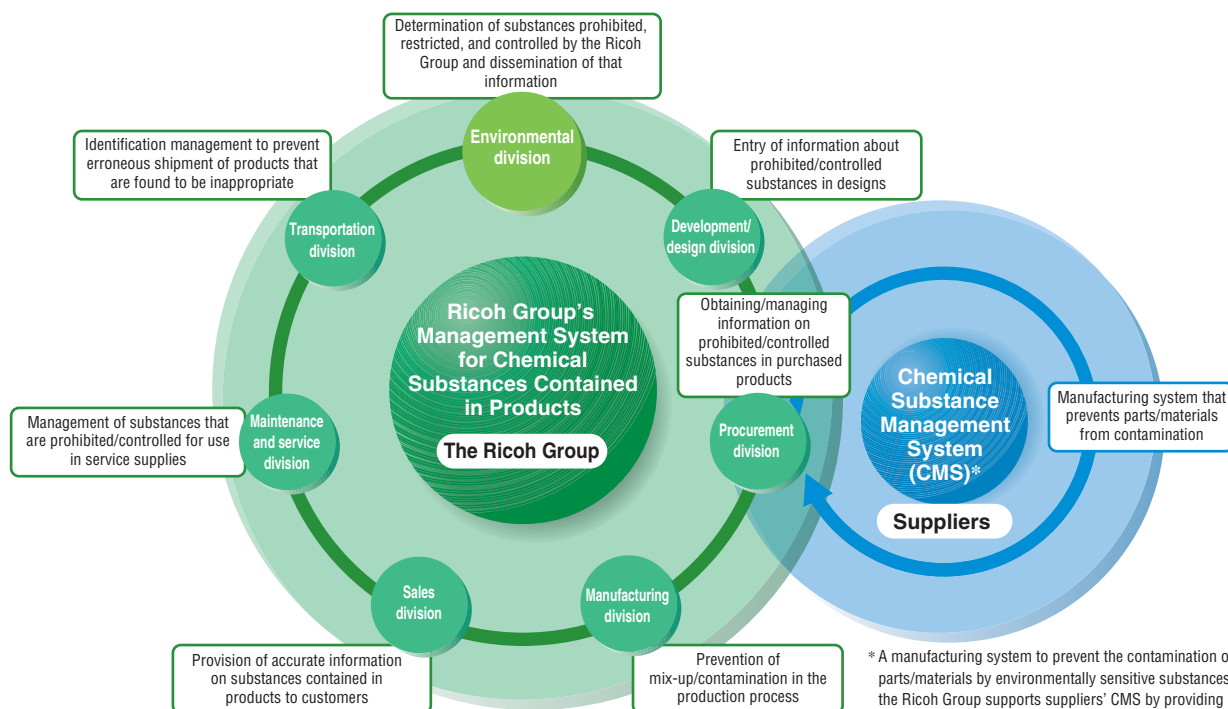
## RoHS Directive

The RoHS Directive, which stands for the Restriction of Hazardous Substances Directive, is an EU Directive that restricts the use of certain hazardous substances in electrical and electronic equipment. The directive has been in effect since July 1, 2006.

### Relationship among substance groups prohibited, restricted, and controlled by the Ricoh Group and substances restricted by the European RoHS Directive



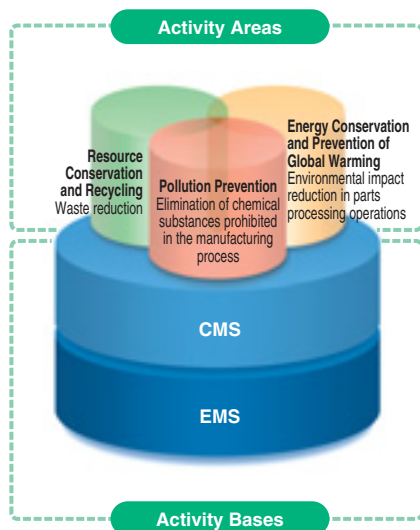
### CMS and Management System for Chemical Substances Contained in Products



### Green Procurement Activities in Partnership with Suppliers

The Ricoh Group promotes green procurement activities that place emphasis on partnership with suppliers. Green procurement refers to the procurement of raw materials, parts, and products with less environmental impact that are manufactured in plants that are advanced in environmental conservation. The purpose of green procurement is to reduce the environmental impact over the whole lifecycle of Ricoh products and to reduce the costs to the Ricoh Group and its suppliers by using resources and energy effectively. Moreover, by building these activities, we aim to contribute to global environmental protection and reinforce management practices of the Ricoh Group and its suppliers. Environmental conservation activities at suppliers are implemented in three areas: resource conservation and recycling, pollution prevention, and energy conservation and prevention of global warming. To support these activities, suppliers are requested to establish environmental management systems (EMS) and chemical management systems (CMS). In fiscal 2008, we will request our suppliers to set numerical targets for CO<sub>2</sub> reduction and support those activities.

Suppliers' Activity Areas and Bases



### History of Green Procurement

	Activities
1998	Started supporting the establishment of environmental management systems (EMS) at suppliers
2001	Started a survey on environmental impact information (survey on chemical substances contained in products)
2002	Commenced Ricoh Group's efforts toward the total elimination of environmentally-sensitive substances/Established Ricoh Group's green procurement policy
2003	Completed environmental management systems (EMS) at 1,089 suppliers throughout the world
2004	Issued Chemical management system guidelines for suppliers
2005	Commenced educational activities for CO <sub>2</sub> reduction at suppliers
2006	Completed chemical management systems (CMS) at 734 suppliers (1,700 sites) throughout the world
2007	Started supporting the establishment of chemical management systems (CMS) at second-tier suppliers and subsequent tier suppliers
2008	Establish CO <sub>2</sub> reduction targets for parts (scheduled)

### Training CMS Examiners at Suppliers <Rico Group (Global)>

To ensure that products do not contain environmentally-sensitive substances, it is necessary to monitor the upstream manufacturing process at every step. Targeting employees at our first-tier suppliers, the Ricoh Group trains and certifies CMS examiners. Specifically, those who complete the Ricoh Group's ISO14001 internal auditor training (qualified persons are exempt) and

CMS examiner training will be recognized as CMS examiners. In addition to internal audits of their own companies, recognized examiners will conduct audits at second-tier and subsequent tier suppliers that deal with important processes involving environmentally-sensitive substances and work to establish chemical management systems. As of the end of March 2007, the number of CMS examiners at our suppliers was 629.

## INTERVIEW

### Supplier Interview

### MIWA Tech Co., Ltd. Activities to Establish Chemical Management

**We have finished Ricoh's CMS examiner training and are working to establish chemical management systems at our suppliers.**

**We faced a challenge in establishing chemical management systems at our suppliers.**

At present, six employees are recognized as Ricoh's CMS examiners. Since our company is a trading company dealing with a variety of parts, including rubber belts and rollers, the necessary condition for CMS certification is to establish chemical management systems at nine companies (13 sites) that are our first-tier suppliers. In November 2005, I and one other employee finished Ricoh's CMS examiner training, and we then conducted inspections at our suppliers and assisted them in establishing their own chemical management systems. Because we were short-staffed, we held study meetings on CMS in the company and allocated the inspection work to other employees.



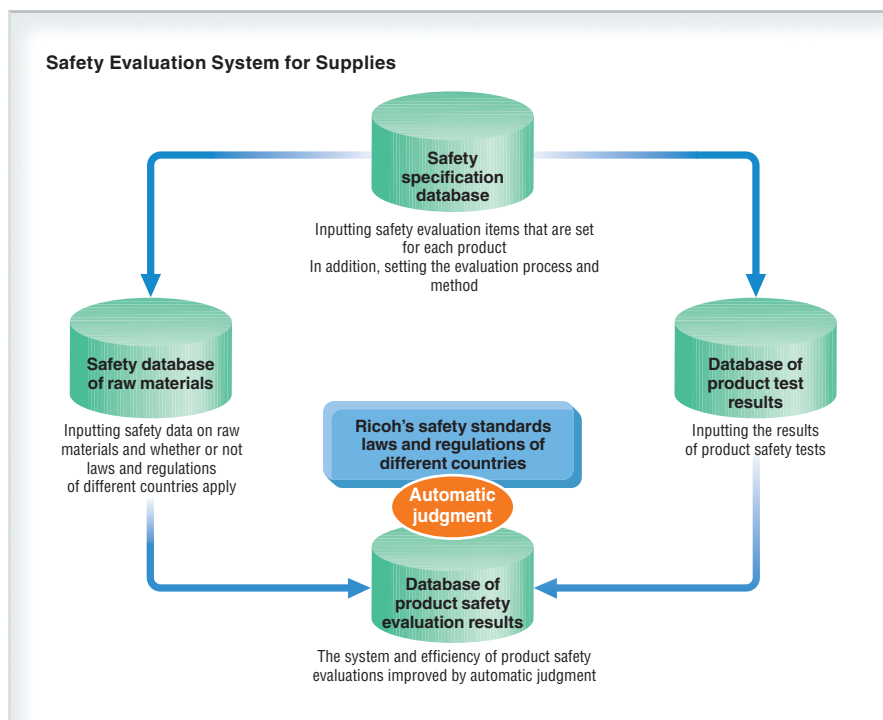
**Mr. Takashi Yatsuka**  
(Left)  
Manager  
O.A. Parts Division

**Mr. Itsuo Ishii**  
(Right)  
Managing Director  
O.A. Parts Division

## Chemical Substance Control of Supplies

### <Ricoh Group (Global)>

Various chemical substances are used in supplies, including toner and developer. Based on the belief that “product safety is a basic condition for customer satisfaction,” the Ricoh Group ensures the safety of its supplies through the appropriate chemical substance control. We use an information system called RECSIS<sup>1</sup> to evaluate safety. Depending on the type of product, we set items for which safety should be confirmed, create MSDS<sup>2</sup>, evaluate new chemical substances, check on the method of disposal, consult the relevant laws and regulations, and prepare safety specification data for products. In fiscal 2006, we upgraded the system. The new system can make automatic safety judgments by referring to the laws and regulations of different countries and Ricoh standards for the chemical substances contained in supplies. From fiscal 2007, we will use this system’s database of raw materials to satisfy the REACH Regulation (registration, Evaluation, Authorization and restriction of Chemicals)<sup>3</sup>.



1. Ricoh Environmental & Chemical Safety Information System

2. Material Safety Data Sheet

3. See page 32.

## Systems by Supplier's Examiners

However, the examination level varied widely between those of us who actually participated in Ricoh's training and other employees, eventually we had to conduct the inspection again, and it took a lot of extra time and effort to finish establishing the chemical management systems. After a review of the situation, four more employees participated in Ricoh's training in August 2006. Then, in September 2006, our company was able to acquire CMS certification from Ricoh.

### We aim to become a trading company with a low environmental impact.

Ricoh's CMS examination attaches importance not only to the written examination but also to the site audit. Ricoh's CMS examiner training provides a comprehensible explanation of points on how to audit sites that we cannot learn just by reading the CMS guidelines, and therefore it was very helpful. Since we are a trading company, all we can do is to ask our suppliers to put into place a specific structure to manage chemical substances, which can be very stressful. If we understand clearly the structure of chemical substance control, we can provide smooth on-site support. We are grateful that Ricoh encouraged us to keep up our efforts to establish environmental management and chemical management systems and consequently we now have specialists on chemical substances within the company. We will continue to make active efforts to deliver only products with low environmental impact.

## Reduction in Environmentally-Sensitive Substances Generated While in Use

### <Ricoh (Japan)>

Ricoh establishes its own standards on chemical emissions\* generated by products while in use and endeavors to reduce them. Chemical substances emitted by products like copiers and printers are measured at the emission-measuring testing laboratory located within the company. Ricoh is certificated as an official testing laboratory by Germany's BAM (Bundesanstalt für Materialforschung und -prüfung; Federal Institute for Materials Research and Testing), and measurement data from Ricoh's testing laboratory will be recognized in registering for the Blue Angel, a German environmental label.

\* Chemical emissions are chemical substances emitted by products and include ozone, dust, and volatile organic compounds (VOCs).