From the viewpoints of corporate social responsibility and environmental risk management, surveys have been completed at all business sites throughout the world.

● Concept

Soil and underground water contamination, if left alone, could damage the health of people in neighboring areas. In light of this, the Ricoh Group has been surveying and purifying major production sites since the 1990s. The purification of contaminated soil entails huge costs and significantly affects the business, which makes it necessary to take action from the two viewpoints of corporate social responsibility and environmental risk management. The Ricoh Group established Basic Policies Concerning Soil and Underground Water Contamination and Standards for the Management of Risks Related to Soil and Underground Water Contamination.
In addition, the Group started surveying the history of all Group business sites, including both the production and non-production sites of subsidiaries of Ricoh's subsidiaries, in fiscal 2004. The survey was completed in fiscal 2006.

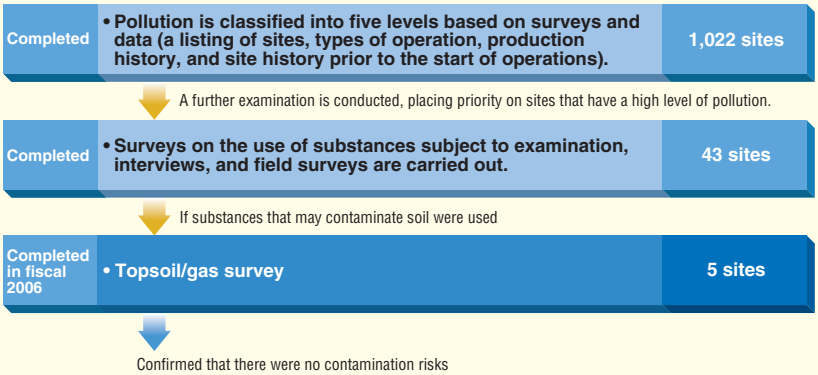
● Targets for Fiscal 2007

◎ Complete the examination of soil and underground water at Ricoh's non-production sites and leased land (Ricoh and affiliates in and outside of Japan).
◎ Make and implement plans to improve sites where pollution is detected.

Ricoh Group's Basic Policies Concerning Soil and Underground Water Contamination

(1) Top priority is given to controlling impact on the living environment in the neighborhood.
(2) Efforts will be made to carry out surveys and measures to cope with contamination caused by the Ricoh Group's business activities.
(3) Laws, regulations, and ordinances set by the national and local governments shall be observed.
(4) Efforts will be made to establish risk communication with local governments and residents.
(5) Soil is checked for contamination when land is purchased/transferred or rented/returned.

Steps for Soil Examination at Non-Production Sites



● Review of Fiscal 2006

History surveys of non-production sites showed that soil at five sites might be contaminated, so topsoil from the five sites was tested. The survey revealed no contamination that required action. As all the surveys have been completed, we now understand all the contamination risks at all Ricoh Group sites. Systematic cleanup measures are being taken at production sites where some contamination was detected, including measures to prevent outflow when pumping up underground water. Thus the contamination is under control. Tohoku Ricoh Co., Ltd., has completed its cleanup work.

● Future Activities

It has become apparent that contamination risks at non-production sites are smaller than originally expected. In response to this, the occasions currently requiring surveys, including the buying, selling, and leasing of land, will be reviewed and the environmental risk management model will be revised. For our production sites, information on the activities at respective sites will be shared at committee meetings so that contamination risks can be systematically reduced. The Ricoh Group had spent about ¥1.95 billion on surveys and countermeasures by the end of fiscal 2006 and will need to spend about ¥1.02 billion more in the future.

Surveys of 1,022 Non-production Sites Completed

<Ricoh Group (Global)>

The Ricoh Group started soil contamination surveys of owned and leased land at 1,022 non-production sites worldwide in fiscal 2004 and completed them in September 2006. The history of business activities and the use of chemical substances were surveyed at non-production sites for sales, distribution, services, and technological development, as well as production sites of subsidiaries of Ricoh's subsidiaries. The topsoil was surveyed at the five sites which had used chemical substances that could lead to contamination to confirm that there were no contamination risks. This made it clear that no costs for removing contamination from the ground would accrue at non-production sites in the future. As a result of completing the surveys, the Ricoh Group now understands and controls soil contamination risks at all its sites including production sites.

Cleaning up Sites Where Contamination Was Detected.

<Ricoh Ikeda Plant (Japan)>

Ricoh Ikeda Plant carried out a soil survey in July 2006 when it rebuilt the facilities. The survey showed that the soil at the site was partially contaminated by arsenic, boron, and fluorine at amounts slightly exceeding the standards. Because of this, we requested the Department of Environment, Agriculture, Forestry and Fisheries of the Osaka Prefectural Government to stand by during a detailed survey we conducted. As a result of the survey, we confirmed that contamination was limited to parts of the ground and underground water had not been contaminated. The survey also showed that there were no wells for drinking water downstream of the underground water. In light of these results, we plan to continue to conduct soil surveys and take countermeasures systematically and as needed on the site, although no effects are expected in the neighboring areas. Based upon the fact that soil contamination was detected at a site where the conventional survey had detected no contamination, we will conduct topsoil surveys at some of the sites, where necessary, after examining the results of history surveys conducted in the past.

Scene from the survey

❶ **Survey Results of Underground Water Pollution and Purification Efforts at the Ricoh Group's Production Sites (as of March 2007)**

	Business site	Pollutant	Survey result (mg/ℓ)	Standard value in Japan (mg/ℓ)	Measures in implementation
Japan	Ricoh Ohmori Office	Cis-1.2 dichloroethylene	0.047	0.04	• Pumping up underground water • Bioremediation • Regular monitoring
		Trichloroethylene	0.11	0.03	
		Tetrachloroethylene	0.051	0.01	
	Ricoh Optical Industries	Cis-1.2 dichloroethylene	0.21	0.04	• Pumping up underground water • Bioremediation • Regular monitoring
		Trichloroethylene	0.19	0.03	
		Tetrachloroethylene	0.23	0.01	
	Ricoh Elemex, Okazaki Plant	Cis-1.2 dichloroethylene	0.092	0.04	• Pumping up underground water • Neutralization of soil gas • Regular monitoring
		Trichloroethylene	2.1	0.03	
		1.1-dichloroethylene	0.35	0.02	
		Hexavalent chromium	2.5	0.05	
		Cadmium	0.088	0.01	
	Ricoh Elemex, Ena Plant	Cis-1.2 dichloroethylene	0.31	0.04	
		Trichloroethylene	5.0	0.03	
		Hexavalent chromium	0.25	0.5	
		Fluorine	2.6	0.8	
	Ricoh Keiki	1.1-dichloroethylene	0.05	0.02	• Pumping up underground water • Bioremediation • Regular monitoring
Outside of Japan	Ricoh Electronics Inc., Irvine Plant (U.S.A.)	Cis-1.2 dichloroethylene	0.0056		• Pumping up underground water • Regular monitoring • Neutralization of soil gas • Chemical oxidization trial test
		Trichloroethylene	0.16		
		Tetrachloroethylene	3.0		
	Ricoh Industrie France S.A.S. (France)	Tetrachloroethylene	0.29		• Pumping up underground water • Regular monitoring
	Ricoh UK Products Ltd.* (U.K.)	Cis-1.2 dichloroethylene	2.4		• Pumping up underground water • Regular monitoring • Chemical oxidization trial test
		Trichloroethylene	1.1		
		Tetrachloroethylene	8.9		
		Vinyl chloride	0.6		
		Total petroleum hydrocarbon (TPH)	220		

• Contamination cases that seem to be attributable to natural causes are excluded.
• The highest densities recorded at the monitored wells are shown in the above survey results.
• The areas surrounding all business sites are not affected by pollutants.
• As for a list of business sites, including those that do not have any contamination records, please visit our Web site at http://www.ricoh.com/environment/data/index.html
* Measured in April 2007