

## Legal-compliance Activities and Management and Reduction Activities of Environment-Impacting Substances

## Local Environmental Conservation Activities

In order to achieve thoroughness in environmental conservation, we have established a self-imposed "Aisin Environmental Standard," which specifies air and water quality standards that are more stringent than those prescribed by law, and we are implementing thoroughgoing management based on this.

## Air and water quality

## [Prevention of Air Pollution]

- We are promoting the changeover from crude oil to cleaner gas fuels for our boilers and other equipment (proportion of fuel for which crude oil is used has been reduced from 31% (FY1997) to 17% (FY2002))
- We are pressing ahead with plans for the introduction of a state of the art incineration facility with dioxin eliminating equipment. With the introduction of this facility, two of our older incinerators will be withdrawn from use.
- The AISIN com-center (new pavilion) utilizes a rooftop garden to dissipate solar radiation and to reduce the air conditioning load, especially in the summer. Rainwater is used to water the grass. We are monitoring this project to evaluate its environmental benefits.

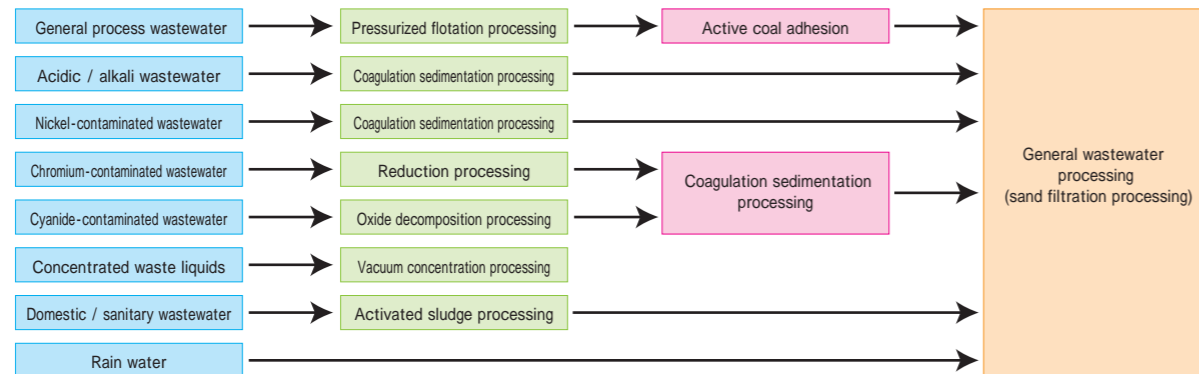


"AISIN com-center" with Rooftop garden

## [Prevention of Water Pollution]

Wastewater produced at our plants is collected separately according to the type of process it has been used in, and each different type is processed in the most appropriate way. We constantly monitor our wastewater using continual measuring apparatus (testing for cyanide, chromium, COD, nitrogen and phosphorus) in order to abide by the strict "Aisin Environmental Standards" which we have set ourselves.

## Wastewater Processing Flow



## [Groundwater Purification]

The soil-scrubbing program that Aisin had implemented in FY1997 ended in FY2001. We have also completed work on the groundwater downstream-barrier wells, which were installed between FY1997 and FY1998 within our plants and prevent water escaping downstream, as well as water-pump aeration-cleaning equipment, and are continuing cleanup operations using this equipment.

Levels of contamination are falling, albeit slowly, at each plant.

We report groundwater levels to the government at regular intervals, and also to the local community at Regional Discussion Meetings.

Aeration-cleaning: Air is blown up through a mist of groundwater, and trichloroethylene is vaporized and removed.

## Trichloroethylene Investigation Results During Fiscal 2002

Plant	History of use	Groundwater level
Kariya	Yes	0.33mg/L
Shintoyo	Yes	0.31mg/L
Nishio	Yes	0.07mg/L
Ogawa	Yes	Not detected
Handa	No	—
Shinkawa	Yes	Not detected
Anjo	Yes	Not detected

Environmental standard : 0.03mg/L  
Continuous monitoring is carried out at all plants. The levels indicate collected-water concentrations from within plant grounds.

## Analysis and measurement

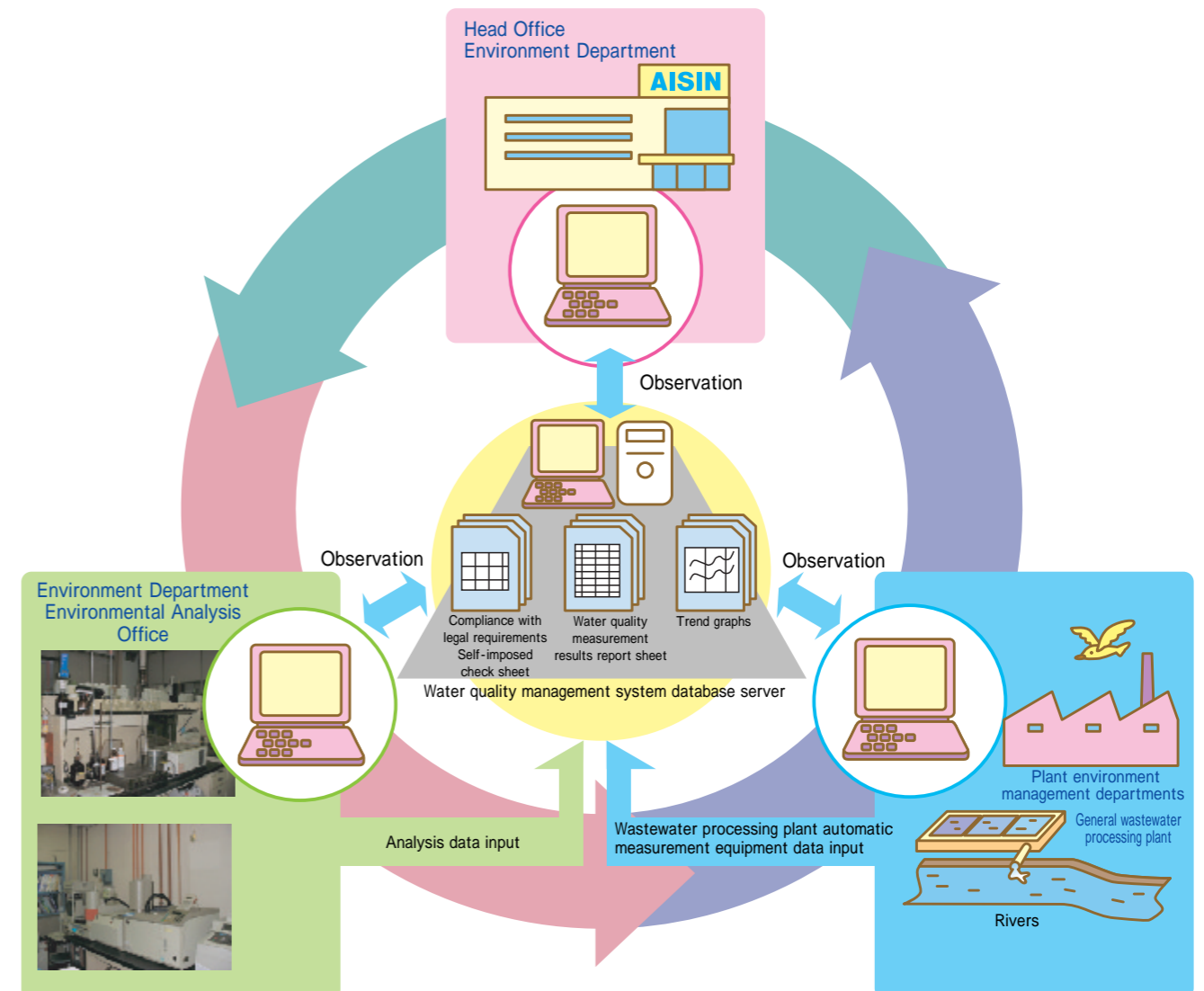
All wastewater, smoke and soot, and waste materials, as well as noise and vibrations covered by the regulations of the Environment Act, are regularly measured by the Environment Department's Environmental Analysis Office, and evaluated and managed according to the Aisin environmental standards, which is stricter than legal provisions.

During FY2002, we developed a unique water quality measurement-result management network system to enable us to manage data in regard to wastewater in an efficient and more detailed way. This system has enabled us to supply timely information to each plant's environmental management department, as well as wastewater processing plants for use in their water quality conservation activities.

## Main Analysis Equipment in Use (For analysis of water quality and waste materials)

Names	Analysis item
Atomic absorption photometer	Metals in wastewater and waste materials
Absorption photometer	Nitrogen, phosphorus, cyanide, etc. in wastewater
Gas chromatograph	Noxious organic solvents etc.
Gas chromatograph mass spectrometer	Chlorine substances in wastewater and waste materials
Ion chromatograph	Various types of ions in wastewater
Fluorescent X-ray analyzer	Metals in waste materials

## Water Quality Measurement-Results Management Network System



## Management of Chemical Substances

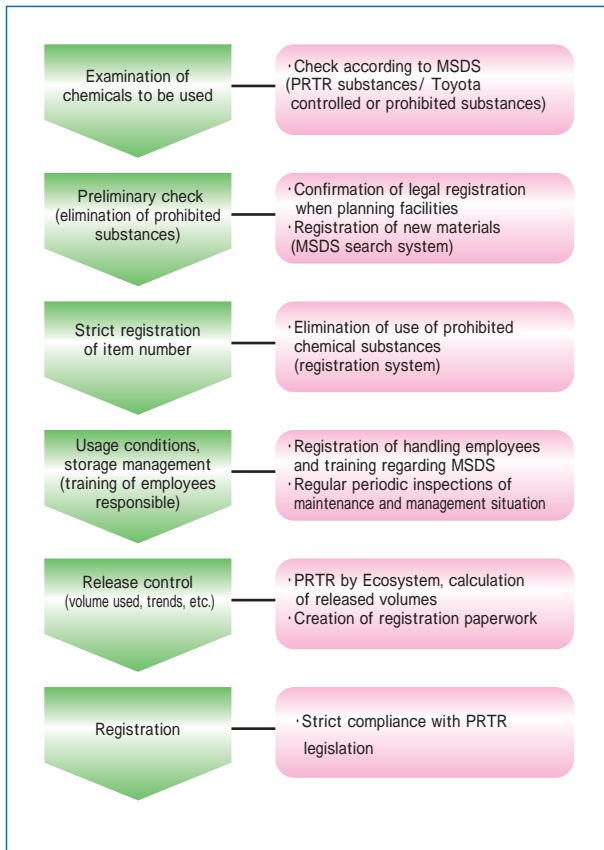
Chemicals are a necessary part of our everyday life, but the damage being done to the environment and the ozone layer, as well as accidents and leakage incidents resulting from insufficient management of such substances, are growing problems. At Aisin, we manage every aspect of its use of chemicals, from their introduction through to their use in everyday processes and registration, with a detailed set of in-house regulations. When chemicals are introduced to a process at Aisin, we put them through an impact assessment, and register them, along with the people who are going to be handling them. Staff undergo MSDS training and are taught to store and manage chemicals with strict adherence to regulations, to prevent accidents. We are also implementing activities to reduce the use of environment-impacting substances, which predate PRTR legislation.

MSDS: Material Safety Data Sheet

PRTR: Pollutant Release and Transfer Register

### Chemical substance control system

At Aisin, we effect strict control on chemical substances, from their introduction through everyday control, in accordance with the system described below.



### PRTR substances

During FY2002, Aisin handled 734 tons of 24 PRTR chemicals (a 9% reduction compared with the previous year). Our releases of PRTR substances were 115 tons (of which 107 tons were of toluene and xylene), which represents a 38% reduction over the previous year. (See the figures at right.)

In terms of dioxins, we closed down our Nishio Plant sludge incinerator, and are in the process of developing and introducing a new facility that is capable of eliminating dioxins, based on the strict standard of 1/50 of the legally regulated amount (Expected to go into operation in April 2003).

### Reduction in use of environment-impacting substances

Aisin eliminated the use of trichloroethylene in FY1993, and of specified CFCs in FY1994, and is continuing to work towards reducing the amount and number of environment-impacting chemicals it uses. During FY2001, we created the Third Environmental Action Plan, which details reductions in use of particularly damaging chemical substances from the development through to the utilization stages.

#### Organization of Environment-Impacting Substances Reduction Activities, Main Results, and Details of Considerations During FY2002

