

1. Significance of PRTR System

1-1 What is PRTR?

PRTR stands for Pollutant Release and Transfer Register, which requires business establishments to submit notifications of chemical substances they release or transfer to the environment.

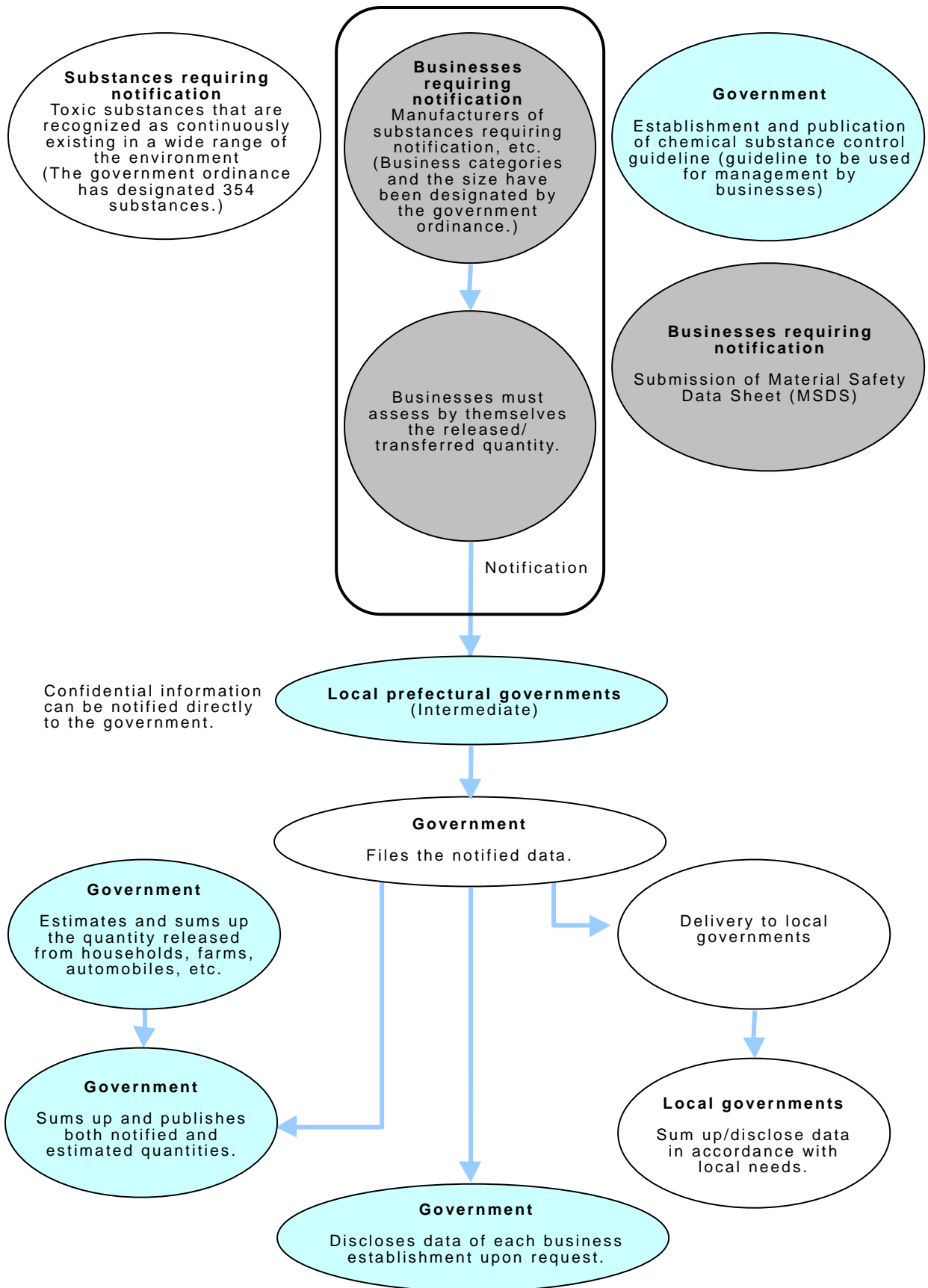
The PRTR system gathers data on the kinds of toxic chemical substances that have been released to the environment from various sources or transferred in waste form to outside business establishments. The data can thus be assessed, summed up, and made public.

The PRTR system has been adopted in various countries. In Japan, it was institutionalized under “The Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management” (hereafter referred to as the Law)

(→ pIII-298) in 1999.

Businesses subject to the PRTR system must assess by themselves the quantity of substances they release to the environment and those they transfer to outside the business establishment as waste for treatment, and report the results to the government once a year.

The government then sums up those data, estimates the quantity of specified substances released to the environment from business establishments (those not subject to notification) running types of business that are subject to notification, businesses running types of business that are not subject to notification, households, farms, automobiles, etc., and simultaneously publishes the two types of data.



1-2 How is each organization involved in PRTR?

Businesses, citizens, NGOs, and the government are involved in the PRTR system as shown below.

(1) Businesses

Businesses must assess and notify by themselves the quantity of various chemical substances they release to the environment under the PRTR system. By doing so, and by using the data they have assessed by themselves, they can improve their management system, suppress unnecessary release, and reduce raw material costs.

→ For details of the advantages to businesses of the PRTR system, refer to 1-3 “Advantages to businesses of the PRTR system”

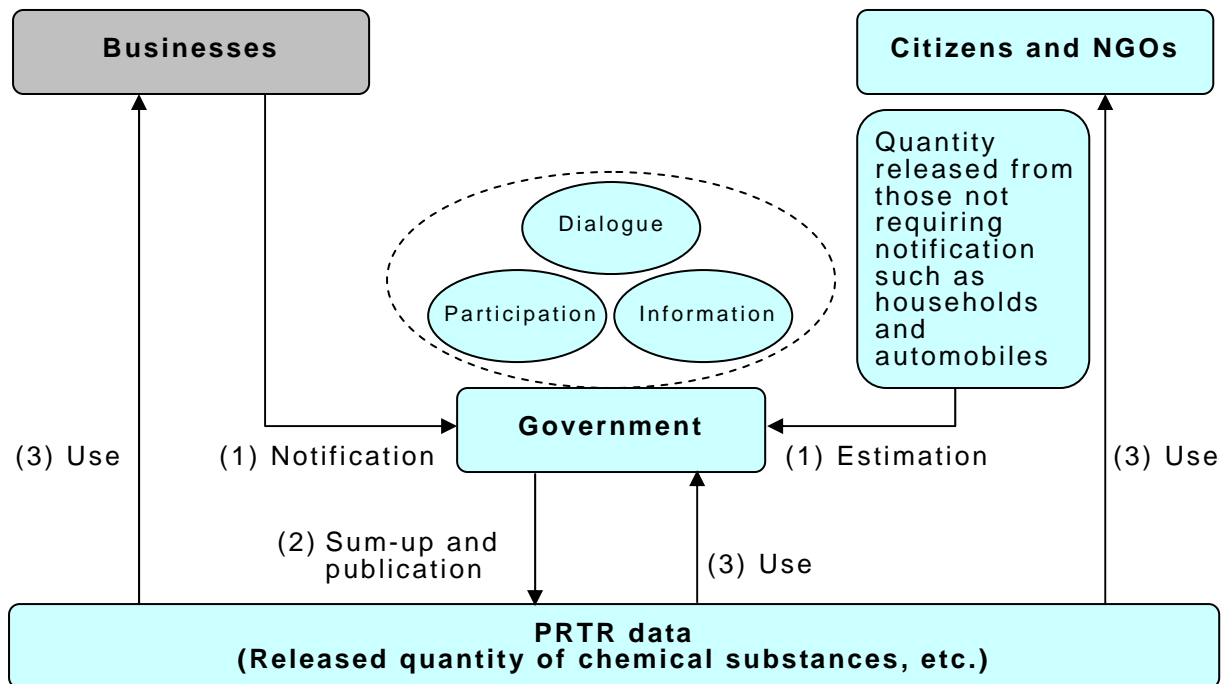
(→ pI-6).

(2) Citizens and NGOs

It is very important for citizens and NGOs to become interested in chemical substances existing in the environment by learning about the release and management conditions of chemical substances through the PRTR data published. This will make them aware of the importance of reducing the use of toxic chemical substances in households, and by improving communication with the government and businesses on risks, they can reduce environmental risks incurred by chemical substances.

(3) Government

The government organizes and sums up the data of released quantities submitted by businesses; estimates the quantities released from households, farms and automobiles; publishes the two types of data; and uses them for environmental protection and chemical substance management. For example, the data is used for determining the priority in taking various measures against the discharge of chemical substances such as environmental monitoring and suppression of chemical substance discharge. It is also used by the government and local administrations for assessing environmental risks.



1-3 Advantages to businesses of the PRTR system

(1) Advantages of improvement of chemical substance management

By assessing by themselves the quantity of chemical substances they release to the environment from various parts of their operations, not only discharge outlets, businesses can learn from where those substances are released and whether such release is avoidable. Based on the information obtained, they can then review how they manage chemical substances, and reduce the released quantity (the load on the environment), which may also reduce costs such as raw material costs.

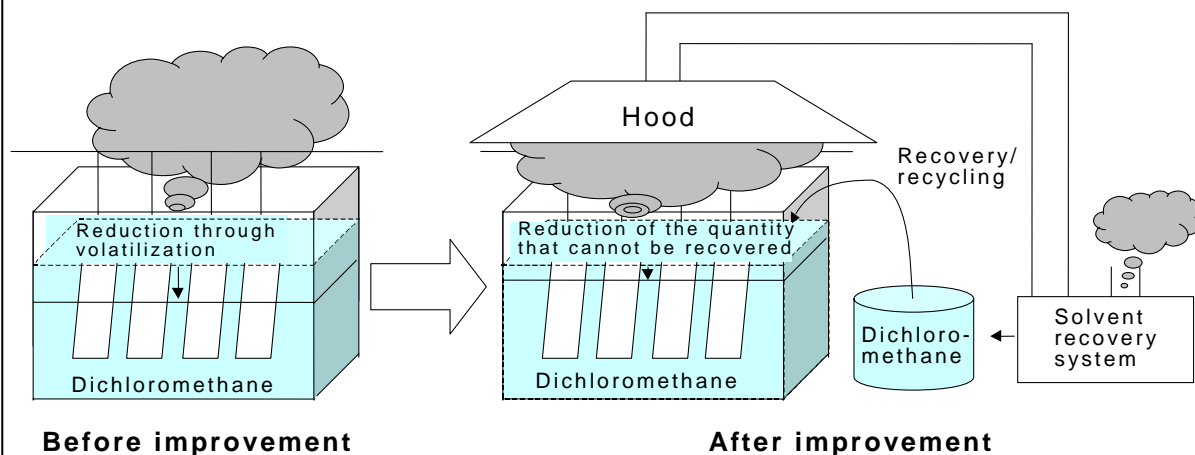
This approach to improving chemical substance management may help businesses to win the trust of local communities and boost their own image.

For details of voluntary management of chemical substances, refer to the chemical substance management guideline established based on the Law.

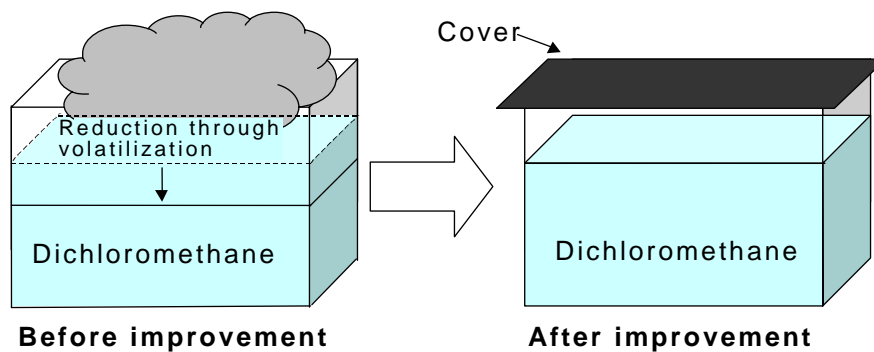
Example: When dichloromethane (methylene chloride) is used as a washing solvent for metal parts
Based on the PRTR system, the release of dichloromethane to the atmosphere can be assessed.
A detailed review indicates that those substances are released in the following two forms.

Those released through volatilization during washing

The substance is released during washing. Such release can be reduced by reducing volatilization or installing a recovery system.



Those released through volatilization while the washing device is left open for a long time
The substance is released unnecessarily while work is not done.
By covering the washing device while washing is not performed, you can suppress the release of dichloromethane and thus reduce purchase quantities.

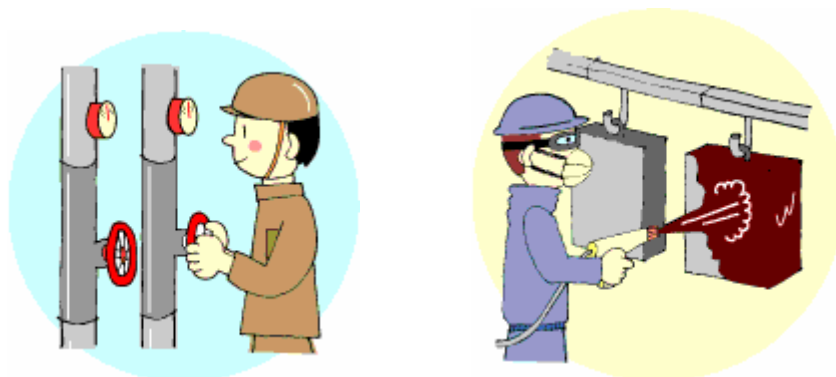


As shown in the above examples, there are various measures ranging from one that incurs almost no cost (Case 1 : simply do not leave the device open for a long time) to one that incurs the cost of installing a recovery system (Case 2). Choose the most appropriate method to suit your situation.

(2) Benefits of employee education on chemical substance management

Businesses can raise the knowledge of not only those who handle chemical substances but also other employees, on the handling and release of chemical substances by giving them information on the released quantity, etc. of chemical substances assessed through PRTR and training on the management status, safety, etc. of the chemical substances they handle.

These activities will encourage employees to handle chemical substances more carefully, thus enhancing awareness of handling and safety.



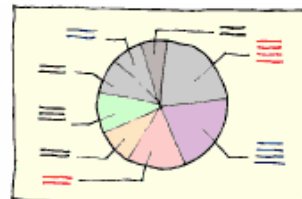
(3) Benefits of communication with local residents

Article 4 of the Law (→ pIII-299) defines that business establishments subject to the PRTR system are obliged to keep people including local residents informed on the status of chemical substance management.

Since anyone can request the disclosure of PRTR data of individual business establishments, businesses may be asked by local residents to explain the data. Businesses should therefore communicate with local residents by setting up a forum to explain the PRTR data and status of chemical substance management.

If businesses make efforts to protect the environment, local residents will learn to trust them, leading to better relations between the two.

It is essential for businesses to communicate with local residents to enable the residents to understand their environmental policy and measures taken, and to learn about chemical substances handled.



(Reference) Website of Ministry of Economy, Trade and Industry and the Ministry of the Environment on risk communication

http://www.meti.go.jp/policy/chemical_management/law/risk-com/index.htm
<http://www.env.go.jp/chemi/communication/index.html>