SAICM National Implementation Plan of Japan

(provisional translation)

September 2012

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Appendix

Chapter 1 Introduction

"Strategic Approach to International Chemicals Management (SAICM)" is an international strategy and action plan adopted by the First International Conference on Chemicals Management (ICCM1) in 2006 to address the WSSD2020 Goal, an international objective to address "by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures, taking into account the precautionary approach."

Based on this, Japan has worked on promotion of chemicals management measures through revision of relevant laws and regulations, etc. and promotion of its concept, while positioning chemical management as a measure with international viewpoint based on SAICM in our Third Basic Environment Plan which was developed in 2006, and setting up the Inter-Ministerial Meeting on SAICM within the Government to implement better communication and coordination.

Prior to the Third International Conference on Chemicals Management (ICCM3) to be held in September 2012, Inter-Ministerial Meeting on SAICM has recently reviewed the past measures of Japan on chemicals management based on SAICM and summarized SAICM National Implementation Plan of Japan as the future strategy for addressing the WSSD2020 Goal after a lot of discussion of "Policy Dialogue on Chemicals and the Environment," which is a forum for exchange of opinions participated by various stakeholders including citizens, NGOs/NPOs, workers, businesses, government agencies, academic experts, etc., as well as public consultation in which all levels of civil society of Japan submitted their opinions.

This SAICM National Implementation Plan has been prepared based on the Fourth Basic Environment Plan decided by the cabinet in April 2012 regarding the environmental field, and on the specific measures and future directions implemented by the policy of the other fields related to chemicals management such as occupational health. It is positioned as a future implementation plan for comprehensive chemicals management in Japan.

1. Development of SAICM National Implementation Plan

The so-called WSSD2020 Goal to address "by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures, taking into account the precautionary approach." is an international objective on chemicals management that has been agreed in World Summit on Sustainable Development (Johannesburg Summit, WSSD) in 2002. As an international strategy and action plan to address this goal, the First International Conference on Chemicals Management (ICCM1) held in February 2006 adopted "Strategic Approach to International Chemicals Management (SAICM)." Parties including national governments, international organizations, industries, and NGOs have been promoting various measures based on this SAICM. SAICM comprises of the following 3 documents:

- High-Level Declaration ("Dubai Declaration")
  The political declaration comprising of 30 items specified with the goal to ensure that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment by 2020.
- Overarching Policy Strategy
  The document describing the scope, necessity, purpose, financial matters, principle and approach, implementation and evaluation of progress in SAICM.
- Global Plan of Action

The guidance document listing the 273 action items stating the possible actions for the stakeholders in order to address the goals of SAICM.

In the United Nations Conference on Sustainable Development (Rio+20) which was held in June 2012, the WSSD2020 Goal was reaffirmed and effective implementation and strengthening of SAICM were demanded.

In Japan, it was declared that "chemicals management will be tackled from international viewpoint according to SAICM" in the Third Basic Environment Plan, which was decided by the cabinet in April 2006 based on the adoption of SAICM, and the Inter-Ministerial Meeting on SAICM, comprising of Cabinet Office, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, and Ministry of the Environment, was set up to implement better communication and coordination between the concerned ministries in promoting national chemicals management measures based on SAICM.

The principal measures of Japan so far, based on SAICM, include amendment of Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (amended in 2009, fully enforced in Fiscal 2011) and a review of the PRTR System (Pollutant Release and Transfer Register System) based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (fully enforced in Fiscal 2011).

Furthermore, Japan has contributed to international implementation of SAICM. The Government served as the representative of Asia and Pacific region of the International Conference on Chemicals Management (ICCM) which oversees the progress of SAICM, and to other developing countries in capacity building for chemicals management.

The Fourth Basic Environment Plan, which was decided by the cabinet in April 2012, describes that the Government will continue to address "chemicals management from international viewpoint according to SAICM" and that the Government will "develop and implement a SAICM National Implementation Plan to reflect the opinions of various stakeholders including citizens, NGOs/NPOs, workers, businesses, government agencies and academic experts and contribute to international implementation of SAICM by coordination of the concerned ministries."

Based on such trends within and outside the country, with awareness that the development of SAICM National Implementation Plan will be beneficial in showing the status of Japan's efforts to stakeholders of both domestic and international and ensuring implementation of the measures by the stakeholders while using the Plan in coordination among the concerned ministries in taking chemicals management measures, Inter-Ministerial Meeting on SAICM recently prepared and compiled this SAICM National Implementation Plan, which provides the future strategy of Japan in order to address the WSSD2020 Goal.

2. Processes of Plan development

In preparing this SAICM National Implementation Plan, Inter-Ministerial Meeting on SAICM decided to (1) ensure participation of stakeholders and (2) take into account the existing relevant national plans based on Paragraph 22 of Overarching Policy Strategy.[1]

[1] Paragraph 22 of Overarching Policy Strategy: " Implementation of the Strategic Approach could begin with an enabling phase (Omission of a passage) to develop, with relevant stakeholder participation, a national Strategic Approach implementation plan, taking into consideration, as appropriate, existing elements such as legislation, national profiles, action plans, stakeholder initiatives and gaps, priorities, needs and circumstances."

(1) Involvement of stakeholders

This SAICM National Implementation Plan has been prepared through discussion in "Policy Dialogue on Chemicals and the Environment" (established in Fiscal 2011), which is the forum for exchange of opinions participated by various stakeholders including citizens, NGOs/NPOs, workers, businesses, government agencies and academic experts, and based on the opinions, etc. submitted in public consultation implemented in July through August 2012.

(2) Related national plans

○ Basic Environment Plan based on Basic Environment Law

Article 15 of Basic Environment Act (Act No. 91, 1993) stipulates that the Government should prepare the Basic Environment Plan on "the outline of comprehensive and long-term measures for protection of the environment." The Fourth Basic Environment Plan decided by the cabinet in April 2012 positions the "comprehensive measures for establishment and promotion of measures against chemicals" as one of the focused fields. Thus the description related to the environmental field in this SAICM National Implementation Plan is assumed to incorporate the specific measures related to SAICM implementation in Japan, while also being based on the Fourth Basic Environment Plan.

○ National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants

In implementation of SAICM in Japan, the measures regarding persistent organic pollutants (hereafter referred to as "POPs") will be based on the National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants (established in June 2005, amended in August 2012).

○ Government Plan to Reduce Dioxin Levels Resulting from Business Activities in Japan

Of the measures against POPs, the measures related to reduction in emission of dioxins generated unintentionally will be developed pursuant to Government Plan to Reduce Dioxin Levels Resulting from Business Activities in Japan (established in September 2000, amended in August 2012), which is based on Act on Special Measures against Dioxins (Act No. 105, 1999).

3. Target of SAICM National Implementation Plan

(Scope)

Since the Overarching Policy Strategy specifies the scope of SAICM as follows, this SAICM National Implementation Plan also has a similar scope.

> *3. The Strategic Approach has a scope that includes:*
>
> *a. Environmental, economic, social, health and labour aspects of chemical safety,*
>
> *b. Agricultural and industrial chemicals, with a view to promoting sustainable development and covering chemicals at all stages of their life-cycle, including in products* [2]

As described above, the specific description of the measures for the environmental field was prepared in this SAICM National Implementation Plan through discussion on "Policy Dialogue on Chemicals and the

[2] Footnote for the Third paragraph in the Overarching Policy Strategy: The Strategic Approach does not cover products to the extent that the health and environmental aspects of the safety of the chemicals and products are regulated by a domestic food or pharmaceutical authority or arrangement.

Environment" and based on "comprehensive measures for establishment and promotion of measures against chemicals," which is a focused field in the Fourth Basic Environment Plan and also on the opinions, etc. submitted in public consultation. The specific measures in the scope of SAICM not covered by the Fourth Basic Environment Plan (e.g.: industrial safety and health, chemical safety measures for household products, and measures against indoor air pollution) are described after discussion on "Policy Dialogue on Chemicals and the Environment" and based on the opinions, etc. submitted in public consultation.

(Target period)

Since SAICM is an international strategy and action plan for addressing the WSSD2020 Goal, this SAICM National Implementation Plan should describe the measures of Japan to address the WSSD2020 Goal.

4. Framework of SAICM National Implementation Plan

Chapter 1 "Introduction" describes the processes of the establishment of this SAICM National Implementation Plan, its target and framework.

Chapter 2 "Standing Situation in Japan" organizes the "laws, regulations and other mechanisms, etc. for chemicals management" (Section 1, Chapter 2) and "status quo and challenges of measures related to chemicals management" (Section 2, Chapter 2) regarding the current situation of Japan in chemicals management.

Section 1 "Basic concept" of Chapter 3 "Implementation and enforcement measures – Strategy of SAICM National Implementation Plan" describes the "objective" and "coordination among stakeholders" in this SAICM National Implementation Plan. While this SAICM National Implementation Plan describes the measures which the Government implement, coordination between the national government and various stakeholders including citizens, NGOs/NPOs, workers, businesses, government agencies and academic experts is essential for implementation of SAICM, as it is indicated in Overarching Policy Strategy, and Global Plan of Action. To address this coordination, the roles to be assumed by the Government, and the roles expected for each of these stakeholders are described as "coordination among stakeholders." In Section 2, Chapter 3 "Tangible approaches," the individual measures and their directions are described as specifically as possible at this point of time. The measures to be addressed in medium to long term in particular are summarized as the issues to be examined in the future ((6), Section 2 of Chapter 3).

Chapter 4 describes the review of the performance of SAICM National Implementation Plan and its revision.

Outline of SAICM National Implementation Plan of Japan

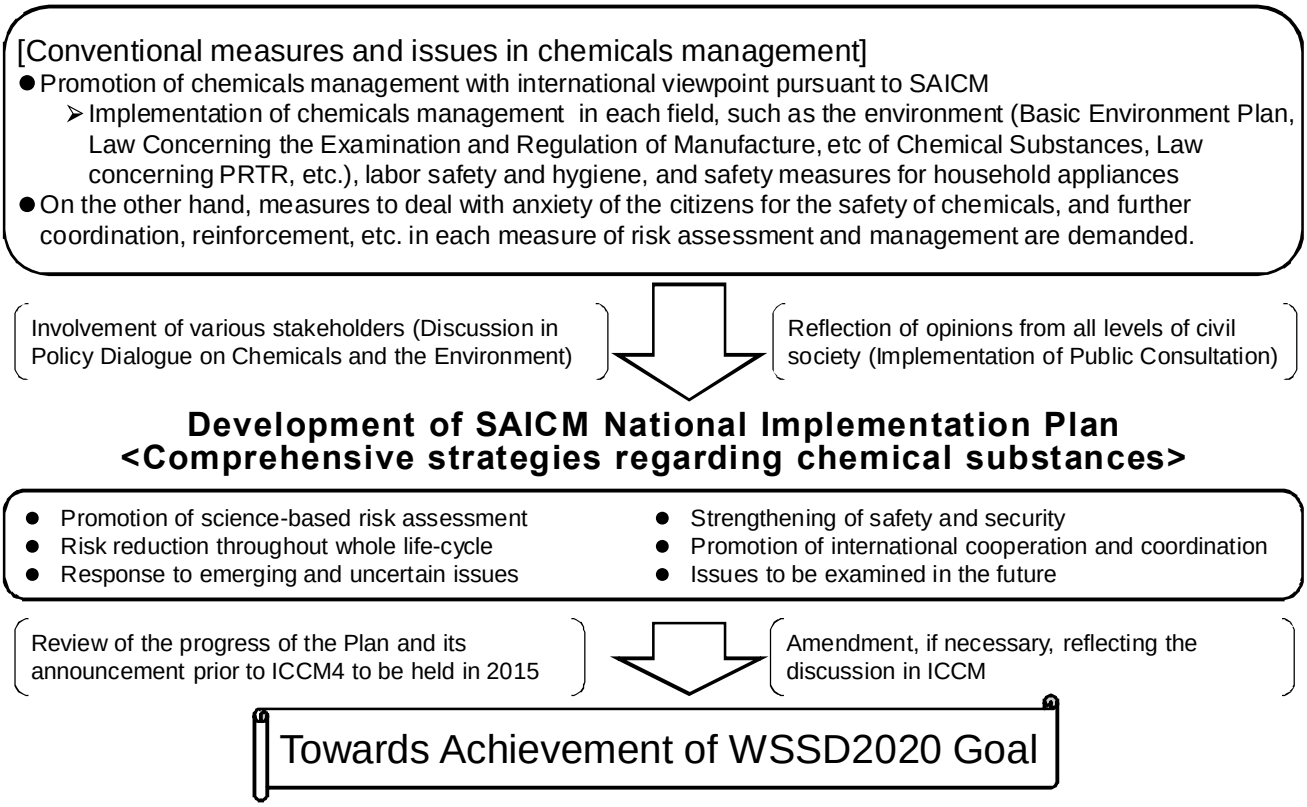

Figure 1.Outline of SAICM National Implementation Plan

Chapter 2 Standing Situation in Japan

1. Laws, regulations and other mechanisms, etc. for chemicals management

The laws and regulations for chemicals management, procedures based on the laws and regulations, measures to address the Convention and the activities other than the legislation in Japan are described as follows (see Appendix 3 for details):

(1) Major laws and regulations for chemicals management

Major laws and regulations for chemicals management in Japan and their outlines are shown in Table 1 of Appendix 3. Of these, the major laws that describe the measures relating to this SAICM National Implementation Plan are listed below:

In addition, Appendix 3 shows the mandate of Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, and Ministry of the Environment, which have mandate over chemicals management, the activities of incorporated administrative agencies, and an overview of activities by concerned industries, public organizations and research institutes.

(Laws relating to risk assessment)

- Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc (Act No. 117, 1973)
- Agricultural Chemicals Regulation Law (Act No. 82, 1948)
- Industrial Safety and Health Act (Act No. 57, 1972)
- Poisonous and Deleterious Substances Control Act (Act No. 303, 1950)

(Laws related to risk management)

- Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc (written again)
- Agricultural Chemicals Regulation Law (written again)
- Industrial Safety and Health Act (written again)
- Act on Control of Household Products Containing Harmful Substances (Act No. 112, 1973, hereafter referred to as “Household Products Control Act”)
- Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Act No. 86, 1999)
- Air Pollution Control Act (Act No. 97, 1968)
- Water Pollution Control Act (Act No. 138, 1970)
- Soil Contamination Countermeasures Act (Act No. 53, 2002)
- Waste Disposal and Cleansing Act (Act No. 137, 1970, hereafter referred to as “Waste Disposal Act”)
- Act on Special Measures Against PCB Waste (Act No. 65, 2001)
- Act on Special Measures against Dioxins (Act No. 105, 1999)
- Poisonous and Deleterious Substances Control Act (written again)
- Building Standard Act (Act No. 201, 1950)

(2) Measures to address international agreements

The list of international agreements relating to chemicals management to which Japan has acceded is shown in Table 5, Appendix 3. Of these, the measures relating to the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention, POPs Convention), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention, PIC Convention), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), etc. are described in this SAICM National Implementation Plan.

(3) Relative activities by stakeholders other than the Government

Examples of activities for chemicals management other than legislation include the following:

○ Examples of measures by local governments

- Measures through ordinances, etc.

Some local governments implement measures against chemicals through establishment, enforcement, etc. of ordinances appropriate for the local circumstances in addition to the measures based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, Air Pollution Control Act, etc. Specifically, some local governments obligate additional/stringent items of information to be notified, subjected businesses, subjected chemicals, etc. in their own notification system, preparation and submission of chemicals management plan, management goals, etc., or notification on the status for addressing the management goals in addition to the PRTR system. Some also establish their own ordinances, guidelines or promote popularization and enlightenment of businesses, etc. to reduce the risk of chemicals in case of accidents or disasters.

- Measures relating to risk communication

Some local governments take measures to add up the amount of release by region for chemicals registered by businesses based on the PRTR system, or officially announce the relationship between the amount of release and the environmental concentration. There are also local governments that promote risk communication through setting a place of dialogue where local residents, businesses and the local government can participate, seminars and consultative meeting on the necessity and implementation of risk communication, in order to facilitate the understanding of local residents on chemicals, understanding of local businesses including small- and medium-sized businesses on measures against chemicals, and awareness of the stakeholders for reducing risks of chemicals in the region.

○ Examples of activities by the industry

- Responsible care

Japan Chemical Industry Association (JCIA) developed “Basic Policy of JCIA on the Environment and Safety” in 1990, and established Japan Responsible Care Council (JRCC) as an organization to promote the responsible care activities along with businesses manufacturing or handling chemicals in 1995. JCIA implemented the voluntary standardization of data acquisition on PRTR since 1992, and has been reported the aggregated data on released amounts to the authorities since 1997.

• New chemical management activities (JIPS)

JIPS (Japan Initiative of Product Stewardship) is a voluntary activity of the domestic industry promoted by JCIA based on Global Product Strategy (GPS), an international chemicals management strategy by the International Council of Chemical Associations (ICCA). GPS is a new framework for chemicals management determined by ICCA, upon receiving the conclusion of SAICM by the United Nations in 2006, and it is intended to establish credibility from the Government and society for the chemical industry by developing "Product Stewardship" to reduce risks by promoting risk-based chemicals management and expanding the management throughout the lifecycle by year 2020.

• Joint Article Management Promotion-consortium (JAMP)

Joint Article Management Promotion-consortium (JAMP) was established as an organization to promote cross-industry activities for product management in 2006. To promote appropriate and smooth management of information on contained chemicals in products in the supply chains, specific and common establishment of a mechanism for receiving and disclosing information, especially the management of information on contained chemicals by the midstream small- to medium-sized businesses, JAMP maintains the list of substances to be controlled and promotes the popularization of information transmission form called JAMP AIS /MSDSplus.

JAMP promotes seminars and human resource development for utilization of a common mechanism, in cooperation with major organizations not only in Japan but also in Thailand, Malaysia, South Korea, Taiwan, China, etc.

• Japan Green Procurement Survey Standardization Initiative (JGPSSI)

Japan Green Procurement Survey Standardization Initiative (JGPSSI) is a voluntary association established in 2001 to standardize information disclosure on chemicals contained in parts and materials of electric and electronic products through effective survey methods. JGPSSI has prepared Joint Industry Guideline (JIG), an industrial guideline on information disclosure for chemicals contained in the products, in cooperation with industrial associations of the U.S. and Europe, and plans to succeed their corresponding standardization activities to IEC TC111, the parent organization for examination, in concurrence with the enactment of the international standard IEC 62474 (March 2012).

• Voluntary management plan for hazardous air pollutants by businesses

The revised Air Pollution Control Law of 1996 stipulates businesses have responsibilities to assess the emissions of hazardous air pollutants and take necessary measures for emission reduction. Responding to this revision, each industry had been formulating and implementing a voluntary management plan to reduce emissions of 13 hazardous air pollutants over a three-year period beginning in Fiscal 1997. They also prepared and implemented a voluntary management plan for 12 substances as the second plan from Fiscal 2001 to 2003 and prepared a regional voluntary management plan for benzene, whose environmental standard achievement rate is low, subjecting high-concentration areas. These activities led to the dramatic reduction in emission and improvement in air quality.

• Preparation of Voluntary Chemical Safety Standards for Household Products

Industrial associations have established Voluntary Chemical Safety Standards for Household Products in order to further improve their chemical safety. These Voluntary Chemical Safety Standards have been established so that the intrinsic properties of the products can be fully delivered, with the highest priority on ensuring consumer safety, not to speak of complying with domestic laws and regulations. They also include

clear indication of ingredients, etc. regarding expected hazard information on product containers, etc. As of August 2012, Voluntary Chemical Safety and Health Standards have been established for wet wipers, fragrances and deodorants, mold-removers and antifungal agents for home use, cotton swabs, insecticides for distasteful insects, liquid cleaner, stain removers, bleaches, contact lens care products, and textile, leather and fur products (for specified aromatic amines).

- A joint program among the private and the public sectors for collecting and disseminating safety information of Japan HPV existing chemical substances) (so called “Japan HPV Challenge Program”)

Starting in June 2005, measures have been taken “to accelerate collection of the safety information on existing chemicals and disseminate the information on chemical safety widely to the citizens through cooperation between industry and government.” In the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. is amended in April 2011, a mechanism was developed to steadily collect information on hazard of all chemicals produced or imported in quantities of 1 ton or larger through screening and risk assessment based on the law. Thus this Program will be discontinued at the end of Fiscal 2012, and the processes of information collection will shift to the screening and risk assessment within the framework of amended Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. starting from Fiscal 2013. The information on chemical hazard, etc. collected in Japan HPV Challenge Program will be utilized in assessment of chemical safety. Furthermore, the outcomes of Japan HPV Challenge Program are released on websites of Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry, and Ministry of the Environment.

- Activities relating to reduction in the amount of chemicals released from product manufacture processes

To address the reduction in release of chemicals subjected to PRTR system, some businesses have improved the efficiency of process sequences in product manufacture processes, improved chemical process management and operation including improved maintenance, changed the manufacture systems, installing exhaust gas treatment or wastewater treatment systems, or switching to materials with low levels of PRTR subject chemicals or to solvent-less materials.

○ Activities by NGOs/NPOs

There are many organizations in Japan that work to provide or popularize information on chemicals and address enlightenment of citizens. For example, NPO Toxic Watch Network tries to reduce hazardous chemicals by utilizing the PRTR information, and offers a PRTR search database from which the PRTR notification data can be viewed or compared using various search methods on their website.

Organization for Research and Communication on Environmental Risk of Chemicals posts the PRTR data such as information of “uses, toxicity and physical properties” on PRTR subject chemicals on its website.

2. Status quo and challenges related to chemicals management

While various chemical substances make our daily life convenient in the present society, some are concerned to have effects on human health or the environment. Chemicals may be released into the environment in various stages of their lifecycles, including manufacture, import, processing, use of chemicals or products containing chemicals, recycling and disposal, and some may be formed unintentionally through combustion of other materials, etc. Furthermore, chemicals vary in their forms and distribution in the environment, or hazardousness, etc. It is therefore necessary to take measures against chemicals through scientific evaluation of the possibility of adverse effects (risk) of chemicals on human health or the ecosystems with consideration of the hazardousness of the chemicals, the level of exposure of humans and other organisms, and reduction of the risk as much as possible based on the evaluation results, while sharing accurate information among stakeholders and communicating properly during the process.

In addition, to reduce the total risks of these chemicals, it is important to strategically promote a comprehensive approach that combines various measures in all the stages of their lifecycles.

The major laws that deal with wide ranges of chemicals in Japan are [1] Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc and [2] Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. The chemicals are managed comprehensively addressed to be as [1] establishes necessary regulations on manufacture, import, use, etc. of chemicals, and [2] promotes voluntary improvement of chemical management by businesses and prevents environmental pollution through management of chemical release. As the major measures of Japan in the past according to SAICM, [1] Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. was amended in 2009 to subject existing chemicals for notification under the law starting in 2011 and introduce an efficient, effective and comprehensive chemical management system where risk assessment is implemented after prioritizing chemicals through screening assessment (2. (1)). In the review of the PRTR system based on [2] Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, it was decided that the data from individual businesses on the amount of chemicals released, etc. to the environment are to be released and disclosed from 2009, and the subject substances and business types were reviewed (2. (2)). This amendment was applied from the data for Fiscal 2010. Moreover, the Safety Data Sheet (SDS)[3] System was revised to introduce "the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)" in 2012.

Including the above, the main measures of Japan on chemicals management and the future issues are summarized as follows:

(1) Risk assessment

(Key approaches)

Based on Basic Environment Law, environmental standards are set up for air pollution, water pollution, soil pollution, etc. as the desired standards that should be maintained in protecting human health and the living environment. Regarding dioxins, environmental standards and tolerable daily intake levels are set up based on Act on Special Measures against Dioxins. In addition, substances for which the environmental standards are not

[3] Safety Data Sheet, which is called SDS or MSDS, had been referred to as MSDS in Japan. In this plan, "SDS" is used which is defined by GHS, with a view to international consistency

specified are regulated as necessary with guideline values for hazardous air pollutants, guideline values for items that need to be monitored in ambient water and ground water, etc. Thus environmental standards, etc. are set up for chemicals as necessary.

Regarding general-purpose (industrial) chemicals newly manufactured or imported, regulatory measures are taken as necessary as the Government examines the notifications from businesses in advance, based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. For existing chemicals which had been manufactured or imported at the time of enactment of this law (1973), the Government has implemented safety evaluation by itself to take necessary regulatory measures and cooperated with the industry sector to accelerate the safety evaluation process through participation in the Organization for Economic Cooperation and Development (OECD) HPV Chemicals Program, etc. In 2009, Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. was partially amended to cover the existing chemicals as subjects for notification from 2011. Screening assessment has so far resulted in 95 priority chemicals (as of August 2012). Of these chemicals, “risk assessment I (primary)” was conducted on 86 chemicals which were designated as priority chemicals by April 1, 2011 and whose total domestic production and import quantities were equal to or exceeded 10 ton. The results were announced in July 2012. Additional 46 chemicals are to be designated as priority assessment chemical substances within this year as a result of screening assessment in July 2012.

Screening assessment will be continued to add to the list of priority chemicals in concurrence with the risk assessment.

Regarding agricultural chemicals, the Government evaluates the data submitted upon registration application from the businesses, and conducts risk assessment based on the Agricultural Chemicals Regulation Law. Based on the risk assessment, the standards to withhold registration are set up from the view point of protecting environment such as prevention of adverse effects on aquatic animals/plants, or water pollution. The evaluation method to set up these standards has been improved.

Based on the viewpoint to ensure workplace safety and health for workers, Industrial Safety and Health Act requires the manufacturers and importers to notify any new chemicals, on which the Government implements hearing on people of experience or academic standing regarding the investigation results and provide instructions on measures to prevent health impairment of workers if necessary.

Furthermore, risk assessment relating to health impairment of workers is conducted on existing chemicals with hazardousness such as carcinogenicity using reports on work exposure to hazardous chemicals from businesses and exposure-related information collected based on Industrial Safety and Health Act. For work processes considered to have especially high risks of health impairment as the results of evaluation, regulation measures, etc. are taken according to the special rules based on this law, depending on the degree of risk, etc.

The essential prerequisites for risk assessment include grasping the environmental persistence of chemicals and exposure assessment based on it in addition to data collection and assessment of hazardousness. Thus various studies, monitoring, etc. are implemented as Environmental Survey of Chemical Substances, hazardous air pollutant monitoring survey, water quality measurement on ambient water and ground water, comprehensive survey on measures against agricultural chemical residue, etc., and utilization of the data on released amount, etc. obtained from PRTR system based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof in exposure evaluation has been promoted while efforts were made to improve concentration prediction models, etc.

Regarding the Environmental Survey of Chemical Substances which has been implemented since 1974 in particular, the investigation system has been reviewed several times in the past to make sure that the investigation results are utilized effectively in relevant measures based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and the PRTR system. At present, investigation is implemented with the 3 main systems of initial environmental survey, detailed environmental survey and monitoring survey, and residual conditions of 1,222 substances have been grasped by Fiscal 2010. Furthermore, monitoring of environmental persistence of POPs over years has been implemented as a part of monitoring survey in Environmental Survey of Chemical Substances starting in Fiscal 2002 to monitor the existence of POPs-related pollutants and confirm the effects of measures for elimination and reduction of POPs.

As methods of risk assessment, [1] development of assessment methods on endocrine disruption of chemicals (measures, based on "Further Actions to Endocrine Disrupting Effects of Chemical Substances – EXTEND2010 –" (July 2010, Ministry of the Environment), Health and Labour Sciences Research, etc.), [2] development of new methods including quantitative structure-activity relationship (QSAR), category approach and toxicogenomics (Health and Labour Sciences Research, METI research and development subsidy, etc.), and [3] development of new risk assessment methods for properly evaluating the environmental effects of agricultural chemicals are being implemented while addressing international cooperation within the framework of OECD, etc.

(Challenges)

To address the WSSD2020 Goal, taking an advantage of high technology in Japan, it is necessary that further collection and utilization of hazard and exposure information, improvement of various models and methods, etc. should be promoted in the future through cooperation between the Government and the private so that risk assessment can be accelerated even further. It is necessary to further sophisticate the assessment methods to minimize the risks of chemicals and products using chemicals throughout their lifecycles.

(2) Risk management

(Key approaches)

Chemicals are used in various applications, and they not only vary in their hazardousness and behavior in the environment but also have possibility to be released in the environment in all the stages of their lifecycles. Therefore, risk management needs to be addressed through a comprehensive approach that combines various measures depending on the characteristics of the chemicals such as voluntary activities by businesses, measures regarding handling of information including disclosure and sharing by various stakeholders and establishment of platform to enable disclosure or sharing, regulations on various stages of manufacture, use, release, disposal, etc., other regulatory measures to prevent exposure that may cause soil pollution and remove pollution, etc. and throughout the lifecycle stages.

Regarding manufacture, import and use of general-purpose (industrial) chemicals and agricultural chemicals, regulatory measures have been implemented according to Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and the Agricultural Chemicals Regulation Law, respectively. As described previously, Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. was partially amended in 2009, and a comprehensive chemicals, including existing chemicals, management system was introduced in Fiscal 2011. Specifically, it is a mechanism in which all businesses which manufactured or imported any chemicals including existing chemicals exceeding a certain quantity are required to notify the quantity, etc.

every fiscal year, and the Government narrows down the chemicals to be subjected to detailed safety assessment with priority to conduct assessment.

Regarding agricultural chemicals, the manufacturers are obligated to indicate the information about toxicity on the label if the agricultural chemical is toxic to humans, livestock or aquatic animals/plants based on the Agricultural Chemicals Regulation Law. Instructions on use and precautions for the agricultural chemical also must be indicated on the label. The Government thoroughly instructs agricultural chemical users to comply with the requirements on the label. In addition, agricultural chemical manufacturers/importers are required to report the manufactured/imported quantity to the Minister of Agriculture, Forestry and Fisheries every year.

For prevention of labor disasters involving chemicals, indication of the hazard information on the container at transfer or provision of the chemical and issuance of a document stating the hazard information (safety data sheet) are promoted, as hazard information on the chemical is inevitable. The stipulation relating to indication was added to Industrial Safety and Health Act in 1972, and the stipulation relating to document issuance in 2000 as a legal obligation, and subsequently the subject chemicals have been added as necessary. In addition, the amendment of Ordinance on Industrial Safety and Health in 2012 has specified indication and document issuance at transfer or provision of specific hazardous substances with designated classes, types, etc. in the GHS classification (see Chapter 2, 2 (4)) which are not specified in the above obligations. Furthermore, for substances that may cause serious health impairment, special ordinances such as Ordinance on Prevention of Dangers Due to Specified Chemical Substances and Ordinance on the Prevention of Organic Solvent Poisoning are used to obligate the businesses to take specific measures to prevent health impairment of workers.

For manufacture, import and sales of household products, regulatory measures have been taken based on Household Products Control Act. Regulatory standards for chemicals in textile products, liquid cleaner, wood for gardening, etc. in Household Products Control Act to prevent health damages by the chemicals used in household products.

In addition, based on “The Concept of Comprehensive Risk Management on Chemical Household Products” (1997, Ministry of Health and Welfare) which is used as the guidelines for household product manufacturers to promote measures to prevent health damages, “Guide to Preparation of Manual for Ensuring Chemical Safety of Household Products” is prepared for each household product group for assisting the manufacturers to take safety measures for their products.

For the measures against indoor air pollution by chemicals, etc. (so called “sick house problem” in Japan), “Review Meeting on the Sick House (indoor air pollution) Problem” was held, nine times in total, from April 2000 to January 2002 with special focus on the indoor air pollution problem to make examination on future measures including setting Air Quality Guideline Values based on the latest knowledge at the time including the investigation results of indoor air quality in Japan. The Guideline Values are also utilized in various domestic measures related to indoor air environment.

For promotion of improvements in voluntary chemicals management by businesses and prevention of hindrance of environmental protection, the PRTR system and the SDS system are provided based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. The overall amount of release for subject chemicals notified from businesses based on the PRTR system has tendency to decrease. Regarding the PRTR system, the subject chemicals, subject businesses,

etc. specified in Enforcement Order for Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof were reviewed in 2008, and have been enforced fully in Fiscal 2011. In the SDS system, provision of information on properties and handling is stipulated for the designated chemicals, etc. transferred or provided between businesses. The SDS system was amended in April 2012 to introduce GHS to stipulate the new obligation to make efforts for label indication for designated chemicals, etc.

In addition to the obligation to provide SDS and require businesses handling designated chemicals to work on improving voluntary management of chemicals according to the Japanese Industrial Standards (JIS) Z7252 (method of classification of chemicals based on GHS) and Z7253 (method of transmission of hazard information on chemicals based on GHS-Labeling, indication in workplace, safety data sheet (SDS)).

For substances with especially high risks, emission regulation is stipulated according to Air Pollution Control Act and Water Pollution Control Act. Air Pollution Control Act regulates emission of lead, cadmium, chlorine, hydrogen chloride, etc. as soot and smoke. For other substances, voluntary measures are taken by the businesses as hazardous air pollutants. The list of substances that may apply as hazardous air pollutants and substances requiring priority action were reviewed in Central Environment Council Report titled "future direction of measures against hazardous air pollutants (the ninth report)" in October 2010, which also organized and clarified the measures of the stakeholders including the national government, local municipalities and businesses regarding how the measures should be taken depending on the degree of risks of the hazardous air pollutants. Furthermore, Water Pollution Control Act was partially amended in 2011 to tighten the system for preventing ground water pollution caused by factories and workplaces based on the fact that the cases of ground water pollution are still observed consistently.

Regarding the health risks of residual chemicals in soil, measures are taken to implement investigation when facilities handling specified toxic substances are disused, etc. and prevent exposure or remove the pollution as necessary if the standards are exceeded as a consequence based on Soil Contamination Countermeasures Act. The law was amended in Fiscal 2009 to reinforce the measures to prevent diffusion of pollution through grasping the pollution status and treating.

For wastes containing harmful chemicals, proper treatment is promoted based on Waste Disposal Act and Act on Special Measures Against PCB Waste. Waste Disposal Act also specifies the special treatment standards are specified for "specially controlled wastes," which may cause damages related to human health or the living environment due to explosibility, toxicity, infectiousness, etc. which require special caution in stages from disposal to treatment. To promote proper recycling and disposal of wastes, the Fundamental Plan for Establishing a Sound Material-Cycle Society (cabinet decision in March 2008) was established to promote voluntary measures by the manufacturers and establish a mechanism for proper collection, recycling and disposal based on the concept of the responsibilities of businesses as specified in Section 2, Article 8 of Basic Environment Law.[4]

Comprehensive measures are taken for dioxins based on Act on Special Measures against Dioxins including measures relating to emission regulation and polluted soil.

[4] Section 2, Article 8 of Basic Environment Law: To prevent hindrances to the protection of the environment according to the basic principle, businesses will be responsible for taking the necessary measures to ensure that proper disposal measures are taken if their products and other objects related to their business activities are regarded as wastes while they conduct their business activities of manufacture, processing, sales, etc.

Measures by local governments include enactment and enforcement of ordinances suited to the local circumstances, popularization and enlightenment of local businesses including small- to medium-sized businesses and residents, and some advanced measures such as promotion of risk communication, in addition to ensuring enforcement of the laws.

As voluntary activities by industry, responsible care activities to voluntarily ensure “environment, safety and health” and have dialogue or communication with the communities in all stages of chemical lifecycles are implemented by various businesses in the chemical industry. In recent years, they have been especially focusing on the promotion of comprehensive management and the disclosure and sharing of risk information over the entire supply chain (GPS/JIPS: Global Product Strategy/Japan Initiative of Product Stewardship). To disclose and share the risk information (including GPS/JIPS), organization and substantiation of information is being addressed with consideration of international coordination and harmony. Many businesses with different sizes and characteristics are taking voluntary activities on sound chemicals management, and these activities have led to improved international credibility of Japanese businesses. Voluntary Chemical Safety Standards for Household Products are established by various industrial associations, and development of products with high safety and provision of product information to consumers are also promoted. For hazardous air pollutants subjected under Air Pollution Control Act, the overall level of emission into the atmosphere and the atmospheric concentration are decreasing as a result of promotion of voluntary management by businesses, etc.

(Challenges)

By these measures/activities in the past, certain outcomes were delivered for chemicals with especially high risks. However, it is necessary to manage various measures even more efficiently and effectively in various stages from manufacture/use to release/disposal of chemicals by covering wider range of chemicals with concerned risks in order to address the WSSD2020 Goal. It is needed to promote the measures from the viewpoint of those who are affected by chemicals, by reinforcing the coordination among relevant laws, regulations and system for protecting environment, consumers and workers, while further promoting smooth implementation of the relevant laws and regulations and voluntary activities of the businesses.

(3) Ensuring further safety and security

(Key approaches)

To ensure the safety and security of citizens, it is important that the stakeholders share the information and knowledge on the risks of chemicals, have common understanding and establish confidential relationships among them. Based on this viewpoint, the measures by local governments, the responsible care activities by businesses, GPS/JIS, etc. have been promoting dialogue or communication with the communities and disclosure and sharing of information as described previously. Furthermore, the Government establishes various platforms including provision of information via database, etc., promotion of classification and indication, provision of opportunities for risk communication, and human resource development. Local governments also take measures for chemicals management depending on the regional circumstances, such as promotion of population and enlightenment of businesses and local residents and risk communication, and enforcement of ordinances, etc. However, “public opinion poll on chemicals around us,”, implemented by the Government in June 2010, indicated that 66.9% they felt “concerned about many chemicals” regarding the safety of chemicals around them on human health as well as animals and plants. It is considered that further measures are necessary in the future.

To ensure the safety and security of citizens, it is also necessary to address emerging and uncertain issues with a view to precaution. Thus the Government conducts leading-edge domestic and international studies and surveys including measures to establish a method to evaluate the endocrine disruption effects of chemicals, (development of various guidelines and measures for establishment of assessment methods regarding nanomaterials), and investigation of children's health and the environment (e.g.: Japan Environment and Children's Study (JECS)), and also studies and investigations on new issues through Health and Labour Science Research, Funds for the Overall Promotion of Environmental Research, etc. including related studies to the above. With regards to studies by the industry, the Japan Chemical Industry Association also promotes Long-range Research Initiative (LRI), a voluntary activity to assist studies on "the effects of chemicals on human health and the environment" over a long period.

(Challenges)

To address the concerns of citizens regarding the safety of chemicals, it is necessary to provide the information on the risks of chemicals in an easily understood manner including the information on the progress in addressing emerging and uncertain issues and promote risk communication further in the future so that there will be better understanding.

To properly transmit and provide the hazard information on chemicals to the supply chain workers and final consumers, unified GHS indication for worker/consumer/ environmental protection, and how the information of chemicals, including article containing chemicals, should be provided, etc. is being examined.

(4) Measures to address international issues

(Key approaches)

Since chemicals are produced and used in various countries and move in trades, etc. as economic globalization continues, it is necessary to address international cooperation and coordination regarding the management methods. Governments of many countries, international organizations, industries, NGOs, etc. have begun measures according to SAICM. Japan has also started working to popularize SAICM by holding seminars on SAICM and exchanging information and opinions among stakeholders, while reviewing the previously described Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and PRTR system, etc. It has also contributed to international implementation of SAICM through capacity development on chemicals management such as support for implementation of chemicals management policy in Thailand and Bhutan and the enforcement of chemicals management, as well as assumption of the role of vice-chair of Asia and Oceania Region Representatives of ICCM.

In individual fields, necessary measures are taken based on POPs Convention, Rotterdam Convention, Basel Convention, etc. In addition, the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury establishment of a convention on mercury has been held since 2010 with the negotiation aiming to adopt the convention on mercury in 2013 in progress, and the Japanese Government participates actively. Regarding GHS issued by the United Nations in 2003, the Government has taken necessary measures including amendment of laws and regulations such as Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof and Industrial Safety and Health Act and promoted measures to disclose the results of classification according to GHS, incorporation of GHS into Japanese Industrial Standards (JIS) in order to promote internationally common classification and

indication of hazard and toxic information on chemicals by businesses. The Government has been taking measures such as disclosure of classification results based on GHS and incorporation of GHS into Japan Industrial Standards (JIS), and further measures need to be taken to correspond to the international trends in hazard communication on chemicals, etc. Some industries have launched voluntary indication measures. Besides these measures, the Government actively participates in development of chemical testing methods by OECD, etc. and information sharing among OECD countries.

In the emerging and developing Asian countries which have shown rapid economic growth, the production volume of chemical products has shown tendency to grow. However, some point that those countries, the technologies to properly handle the chemicals may not be sufficiently popularized, or the regulatory system may not be fully applicable. Since Japan has close relationships to other Asian countries and there are urgent matters of environmental pollution in these countries as well as transboundary pollution in Japan caused by the pollution in them, it is extremely important to ensure coordination and cooperation with Asian countries in measures against chemicals. Japan, therefore, promotes multi-layered cooperation with the Asian countries through multilateral or bilateral frameworks and coordination between the Government and the private sector, including dialogue with Asian countries, development and implementation of the systems, technical cooperation, and assistance in human resource development.

(Challenges)

In the future, it is necessary to continue to work actively on chemicals management from an international viewpoint through relevant international conventions, OECD framework, etc. according to SAICM and promote further cooperation with Asian countries with our experiences and technologies so that the capacity building will be facilitated.

Chapter 3 Implementation and enforcement measures – Strategy of SAICM National Implementation Plan

1. Basic concept

(1) Objectives

With Chapter 2 in the background, the measures will be taken to reduce the risks of chemicals with the following objectives, in order to ensure the safety of citizens and address a society in which citizens can live with security.

[1] Addressing the WSSD2020 Goal

The WSSD2020 Goal, which specifies “by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures and science-based risk management procedures, taking into account the precautionary approach.”

[2] Establishment and promotion of “comprehensive measures against chemicals”

Based on the concept of SAICM to prevent adverse effects on worker health, the health of vulnerable groups such as children and pregnant women, and the susceptible environment from the viewpoint of protecting the health of citizens and the environment, comprehensive measures against chemicals will be established and promoted by including risk reduction through entire lifecycle of each chemicals from manufacture /use to disposal/combining various methods for countermeasures, while further reinforcing and promoting coordination, cooperation and information sharing among relevant agencies.

[3] Actions to reduce the risks by various stakeholders

Various stakeholders including consumers, workers, businesses, private groups, and the Government will improve their understanding of the risks of chemicals and mutual trust further and take actions to reduce the risks with recognition of the role of each.

[4] Further promotion of international cooperation and coordination

International coordination and cooperation in chemicals management will be promoted further. Japan will also make a large contribution in international measures to ensure the safety of chemicals.

(2) Coordination among stakeholders

To take measures and address the above objectives, it is inevitable to address coordination among stakeholders: [1] the Government which is the main body implementing this SAICM National Implementation Plan, [2] local governments, [3] citizens, [4] NGOs/NPOs, [5] workers, [6] businesses, etc. involved in measures against chemicals. In this case, the role expected for each implementing body is described as follows:

[1] The Government will work on development and operation of a system to reduce the risks, including risk assessment and management, while establishing the platform for measures by local government, citizens,

NGOs/NPOs, labor organizations and businesses through human resource development and various assistance measures for risk assessment of chemicals by substantiating the opportunities for training, etc. The Government will implement assistance measures and platform establishment to promote local measures including risk communication and environmental education in various opportunities. The Government will also provide opportunities for dialogue among various stakeholders including citizens, NGOs/NPOs, workers, businesses, government agencies and academic experts, and promote opinion exchange and consensus forming, considering that SAICM presents the concept that it is important to ensure participation of various stakeholders and transparency in the policymaking processes.

[2] The local government are expected to play an important role in further promotion of chemicals management by businesses including small to medium-sized ones, local promotion of risk communication, etc., in addition to the thorough implementation of laws and ordinances suited to the local circumstances.

[3] The citizens are expected to endeavor to obtain and understand proper information on the risks of chemicals from various sources using information media such as labeling, etc., and reduce the health risks and environmental loads relating to the chemicals they use in their daily life, including selection of products with lower health risks and environmental loads and proper waste disposal as consumers so that their actions will result in avoiding risks.

[4] NGOs/NPOs are expected to work as mediators for activities by various stakeholders such as the citizens, businesses and the Government, while also taking positive activities such as provision of objective information on the risks of chemicals in an easy-to-understand manner.

[5] The workers are expected to observe the applicable laws and regulations, and cooperate with the businesses or other stakeholders in measures to prevent labor disasters when they work on processes such as manufacture or handling of chemicals that may cause hazards or health impairment. They shall also do their best to prevent disasters by discussing the necessary matters with the business owners in advance if there are risks or health concerns at workplace. Agricultural chemical users are responsible for preventing adverse effects on humans or livestock and will use the chemicals properly.

[6] Businesses are expected to endeavor to voluntarily assess and manage the risks of chemicals, provide information, hold dialogue with local residents, etc., in addition to observing the relevant laws and regulations during manufacture, import, sales, use, disposal, etc. They are also expected to work actively so that the information of chemical risks on health and environment, which is necessary for using chemicals or products, is available to all stakeholders including consumers. More specifically, they are expected to observe the laws and regulations and continue to promote voluntary activities such as Responsible Care Activities, JIPS, development of Voluntary Chemical Safety Standards for Household Products in coordination with the Government.

2. Tangible approach

Addressing the WSSD2020 Goal taking into consideration Chapter 2 and SAICM, measures will be taken with the viewpoint that the health of the citizens and the environment should be protected while also considering precautionary approach. These measures to reduce the risks throughout entire lifecycle of the chemicals from

manufacture/use to the disposal will be implemented based on the concept of SAICM to prevent adverse effects on worker health, the health of vulnerable groups and susceptible environment. Various methods will be combined in these measures, and coordination, cooperation and information sharing among the relevant government agencies will be reinforced further to establish and promote the comprehensive measures against chemicals, so that the safety of citizens is ensured and a society where the citizens can live securely can be addressed.

Specifically, SAICM will be implemented in Japan as follows. The following section describes the matters to be dealt with focus by the Government, based on SAICM Global Plan of Action, the discussion on “emerging policy issues” in ICCM, etc.

(1) Promotion of science-based risk assessment

Risk assessment will be promoted efficiently on the basis of scientific evidence, while the Government will also work on the development and practical application of new methods of assessment. More specific measures are described below:

For general-purpose (industrial) chemicals, all general chemicals including existing chemicals will be screened to specify the priority assessment chemicals which need to be assessed with priority due to concern on risks to human health, etc. through screening assessment based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. In addition, to address the WSSD2020 Goal, risk assessment will be conducted by 2020 to determine which priority assessment chemicals are confirmed to cause considerable risks to human or flora and fauna in the living environment, and necessary regulatory measures will be taken for such chemicals.

Risk assessment will be conducted on agricultural chemicals based on the Agricultural Chemicals Regulation Law. The standards to withhold registration will be set up from the view point of protecting environment such as prevention of adverse effects on aquatic animals/plants, or water pollution. Monitoring survey will also be implemented so that the results can be used to take necessary risk management measures. In addition, based on the risk assessment, the Government will take measures to ensure the safety of operators.

Risk assessment will be conducted regarding health impairment of workers in labor environment using Report of Work Exposed to Harmful Substances, etc. based on Industrial Safety and Health Act. Examination will be made so that the method for selection of subject chemicals for risk assessment can be connected to selection of subject chemicals for risk assessment in other systems. To conduct this risk assessment properly, a review meeting comprising of academic experts will be held, where they will evaluate based on the hazardousness and level of exposure for workers. If specific work processes pose especially high risks of health impairment, regulatory measures will be taken using special rules based on Industrial Safety and Health Act depending on the degree of the risk, etc.

For chemicals whose risks cannot be covered by the risk assessment based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. or the Agricultural Chemicals Regulation Law, such as chemicals that are generated unintentionally in concurrence with burning of materials or decomposition of other chemicals in the environment, and chemicals whose paths of environmental release or human exposure are not clearly identified, the groups of chemicals that may cause adverse effects on human health or the environment

will be narrowed down and implemented primary risk assessment using literature information, monitoring results, etc.

Regarding the persistence of various chemicals in the environment, necessary investigations including Environmental Survey of Chemical Substances, hazardous air pollutant monitoring survey, water quality measurement in public water and ground water, and comprehensive residual agricultural chemical survey will be implemented and their outcomes utilized in risk assessment. Especially for POPs, environmental persistence over time will be monitored in the monitoring survey conducted as a part of Environmental Survey of Chemical Substances according to the National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants. Monitoring of the level of human exposure to chemicals is conducted by expanding the range of blood dioxin concentration monitoring starting in Fiscal 2002, and monitoring on POPs, heavy metals, etc. in blood and urine was started in Fiscal 2011. This monitoring will be continued in the future.

As new methods for facilitating more efficient risk assessment, any further detailed examination for utilization of QSAR and category approach will be made for application with general-purpose (industrial) chemicals. Other new methods such as screening and risk assessment methods at all stages of lifecycles from manufacture to use, disposal and treatment of chemicals, risk assessment methods in sea areas, and toxicogenomics will also be examined. For agricultural chemicals, examination will be made while accumulating scientific knowledge so that new risk management will be possible based on quantitative evaluation subjecting organisms or populations other than aquatic plants and animals, or the overall ecosystem, and risk assessment and risk management methods to elucidate the effects on human health via air pollution will also be examined.

For hazardous air pollutants which are also substances requiring priority measures whose environmental objective values (environmental standards, guideline values) are not set up, scientific knowledge will be accumulated so that the environmental objective values can be set up in order, and the quantitative evaluation methods will be further improved to support the establishment of environmental objective values. Scientific knowledge will be accumulated and reviewed as necessary regarding water quality environmental standards and guideline values.

(2) Risk reduction throughout whole life-cycle

The measures to reduce the risks to be taken based on the risk assessment results will be further promoted so that the overall risks of chemicals throughout their lifecycles can be reduced. Specifically, the following measures will be promoted while ensuring organic coordination among relevant laws, systems and political measures and properly combining various methods.

For manufacture, import and use of chemicals, the Government will take appropriate regulatory actions based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. and the Agricultural Chemicals Regulation Law. For general-purpose (industrial) chemicals, comprehensive chemicals management system introduced in Fiscal 2011 based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. will be employed smoothly, and proper chemical management will be implemented during the distribution process in order to prevent environmental pollution by specified chemical substances or products using the said chemical substances. For agricultural chemicals, as described previously, the standards to withhold

registration will be set up from the view point of protecting environment such as prevention of adverse effects on aquatic animals/plants, or water pollution. Monitoring survey will also be implemented so that the results can be used to take necessary risk management measures. In addition, based on the risk assessment, the Government will take measures to ensure the safety of operators. When agricultural chemicals are to be used on plants in public facilities such as schools, nursery facilities, hospitals and parks, on street trees, or near/in residential areas, the Government will instruct agricultural chemical users to take necessary measures for preventing adverse effects on the health of the residents and children caused by the drift of the chemicals, based on a ministerial ordinance entitled the "Standards to be Complied with by Agricultural Chemical Users," a notice entitled the "Use of Agricultural Chemicals near/in Residential Areas" and a technical guidance document entitled the "Manual for the Control of Pests and Weeds in/on Parks and Street Trees."

To prevent labor disasters and health impairment in workplaces, proper measures to prevent exposure to chemicals, etc. will be implemented based on Industrial Safety and Health Act. In addition, the measures to prevent the exposure of workers to asbestos during building demolition work will be promoted, and banning of the import of asbestos-containing products will be ensured.

For manufacture, import and sales of household products, the Government properly implements regulation, etc. based on Household Products Control Act through coordination with local government. The Government will also take proper measures according to Household Products Control Act regarding hazardous chemicals with high risk to health, while promoting proper product management by businesses and taking cases of health damage, risk information on chemicals, etc. into consideration.

Regarding emission/release of chemicals into the environment, the Government will take the following measures in coordination with local government:

- Proper management of the PRTR system based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof will be executed and voluntary management improvement by businesses will be promoted through aggregation and disclosure of notification data from businesses on the amounts of chemicals released into the environment and the amounts transferred outside the business site as wastes, disclosure and announcement of data for individual businesses, estimation and disclosure of amount of release from release sources that are not subjected to notification, etc.
- Regarding hazardous air pollutants based on Air Pollution Control Act, voluntary emission-suppression measures by businesses will be promoted through implementation of atmospheric environmental monitoring to grasp the air pollution status, grasping of facts about emission, collection of technical information on emission-suppression, etc. For designated substances such as benzene, businesses will be required to submit reports on the conditions of emitting facilities to give necessary advice for suppression of emission or dispersal of designated substances if necessary as a result of examination of the local circumstances.
- While proper regulation on effluent, measures against groundwater pollution, etc. based on Water Pollution Control Act will be continued and discharge reduction will be attempted, new information will be collected for examination of further measures if necessary. In this case, the Government will assist local government through provision of information on instruction case examples, guidelines, etc. For dioxins generated unintentionally, proper promotion of measures will be taken under the "Government Plan to Reduce Dioxin Levels Resulting from Business Activities in Japan," which is based on Act on Special Measures against Dioxins.

- For other substances that are formed unintentionally as chemical products decompose in the environment , etc., or substances whose emission path, exposure path , etc. are not clearly identified, measures will be taken as necessary based on the results of primary risk assessment as described previously.

Regarding recycling or disposal stages , etc. of chemicals or products containing chemicals, the Government will take measures as follows in coordination with local government :

- Based on Waste Disposal Act, proper measures will be promoted. Designation as specially controlled waste will also be made if necessary by examining the risks at disposal for substances feared to pose hazard or persist in the environment.
- Based on the results of risk assessment, consistency will be ensured for risk management methods on each lifecycle stage, and whether they should be reviewed will be examined if necessary. In addition, thorough implementation of disposer responsibility and extended producer responsibility (concept that producer of the product or the party who designed the product or decided to introduce the product into the market should be responsible to some degree physically and financially for proper treatment or recycling even in the later stages of the product), and further promotion of environment-friendly design from the production stages will be promoted further.
- Based on the actual state of hazardous chemicals contained in imported products, etc., necessary measures will be examined including proper handling of products containing organic fluorides, brominated flame retardants, etc. which are specified as subject chemicals for the Stockholm Convention on Persistent Organic Pollutants as having toxicity, persistence, bioaccumulation properties and long range mobility, and alternative methods, selection methods or proper treatment methods for appropriate waste disposal.
- Regarding hazardous chemicals produced in the past, polluted soil, etc., proper treatment, etc. will be continued based on applicable laws including Act on Special Measures Against PCB Waste, and Soil Contamination Countermeasures Act.
- For end-of-life electric and electronic equipment containing hazardous substances, clarification of judgment criteria for those equipment, an analytical method for hazardous components and so on when those equipment is exported will be examined in order to appropriately enforce the Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes which is the relevant domestic law for Basel Convention.

Keeping in mind that the prevention of damage is most important in measures in case of accidents or disasters involving chemicals, the Government will take measures as follows in coordination with local government :

- In case facility failure, damage or other accidents occur where hazardous substances, etc. are discharged into the environment, when it is considered that urgent measures are needed. The Government will take necessary measures according to applicable laws such as Air Pollution Control Act and Water Pollution Control Act, including giving instructions.
- If any labor disasters caused by chemicals occur including explosion and poisoning, the businesses are obligated to report the incident to Labour Standards Inspection Offices. The Government will investigate disasters which are large in scale, and take necessary measures including instruction for correction of violations or prevention of recurrence based on the results.
- How information on chemical hazards, handling procedures in case of accidents, etc. should be provided, and how information on accident cases handled by local government should be shared will be examined in coordination with local government .

To promote the measures by businesses to suppress the use or emission/release of hazardous chemicals and convert to safer alternative substances, environmental improvement will be implemented through measures including development of guidelines to be used as reference, promotion of the so-called Green and Sustainable Chemistry (GSC) which will contribute to the realization of sustainable society, promotion of research and development relating to promotion of alternative products, technologies and GSC, guiding the consumption and investment activities through disclosure and provision of information on alternative products and technologies, and promotion of procurement of eco-friendly goods by the state and other entities, etc. based on Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities.

(3) Response to emerging and uncertain issues

From the viewpoint of precautionary approach, emerging and uncertain issues, especially the following issues that need to be dealt with, will be handled properly. In particular, the effects of exposure to chemicals on the health of vulnerable or sensitive groups such as children and pregnant women will be tackled with caution so that the health of the citizens and the environment can be protected.

Regarding the effects of exposure to chemicals on children's health, "Japan Environment and Children's Study (JECS)," which is a follow-up investigation on nearly 100,000 children begun in Fiscal 2010, will be continued to invite and register 100,000 more participants (pregnant women) for three years starting in January 2011, collect, store and analyze biological samples, and follow up the children until they reach the age of thirteen in questionnaire, etc. In addition, research on evaluating the effects of chemicals on children will be conducted as Health and Labour Science Research, and research relating to elucidation of environmental factors that affect the children's health through Funds for the Overall Promotion of Environmental Research.

There are many scientifically unknown elements in the endocrine disruption effects of chemicals. The Government will actively participate in development of test methods by OECD, etc. while also continuing the measures based on "Further Actions to Endocrine Disrupting Effects of Chemical Substances – EXTEND2010 –" (July 2010, Ministry of the Environment) and research activities through Health and Labour Science Research (on evaluating the effects of chemicals on children). Based on the accumulation of knowledge through these, the assessment methods on endocrine disruption effects will be established, necessary tests conducted and evaluation of effects be accelerated.

Since concerns about health effects of trace chemicals have been pointed both domestically and internationally, knowledge from domestic and international studies will be collected and organized, and survey and research will be conducted to understand and analyze the pathology and causes of health effects.

In addition to the above, survey and research on new issues will be conducted using Funds for the Overall Promotion of Environmental Research from the viewpoint of improving the risk management and assessment methods with precautionary approach, including risk management with consideration of difference in sensitivity to chemicals.

Regarding combined effects of multiple chemicals on human health or the environment and effects of chemicals on populations, ecosystems or biodiversity, accumulation of scientific knowledge, elucidation of the mechanisms, development of assessment methods, etc. will be tackled in accordance with the international trends. For

combined effects, agencies of other countries including European Union (EU), the U.S. Environmental Protection Agency (USEPA), and World Health Organization (WHO) have also started examination recently as an important issue for the future. Japan will also actively implement various measures such as research/survey and examination of assessment methods upon organizing the issues.

Nanomaterials, which are rapidly being applied in commercial use in the recent years, are expected to bring us great benefits in a wide range of fields including advances in telecommunication, environment and energy saving. However, their effects on human health and the environment have not been clarified sufficiently. Thus Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry and Ministry of the Environment have issued notices, guidelines, etc. since Fiscal 2007. Japan will continue to discuss and tackle appropriate management of nanomaterials in the future. Organizations such as OECD are also developing the assessment and test methods for nanomaterials, Japan will establish risk assessment methods and assess nanomaterials with participating in such international activities. The Government will also collect the latest knowledge through Health and Labour Science Research (comprehensive research on assessment methodology for human health risk of nanomaterials), Ministry of Economy, Trade and Industry-commissioned project (development of nanomaterial safety assessment technology) and examine how to establish the framework for risk management, etc.

(4) Strengthening of safety and security

As the platform for ensuring safety regarding chemicals which leads to the sense of security for citizens, various monitoring processes will be continued. The following specific measures will be promoted:

- As described in 2. (1), development and introduction of new methods will be promoted including monitoring of the level of human exposure to chemicals and the result will be utilized in necessary measures, while continuing various environmental survey and monitoring processes.
- Improvement of concentration prediction models and establishment of emission factor by use will be implemented. In addition, assistance in improving the precision of notification data from businesses and improvement in precision of methods for estimating the amount of release that is not required to be notified by the Government will be tackled regarding the amount of chemicals released subjected in the PRTR system. The data obtained by the PRTR system, various monitoring results will be used to continuously verify, and evaluate the chemicals management status so that the measures against chemicals are promoted under coordination with local government and other relevant stakeholders.

To share the understanding of chemical risks among all stakeholders including the citizens, workers, businesses and government, and build up a relationship of trust among them while each would play their role, risk communication will be further promoted. Specifically, the following measures will be promoted:

- To further promote mutual understanding on chemicals among the stakeholders, information on the risks of chemicals and risk communication will be organized, this information will be used to prepare and provide easy-to-understand materials on chemicals, provide latest information tools, etc. on PRTR and other data to local government while also assisting and promoting human resource development and environmental education on chemicals including risk assessment. Promotion of local risk communication will also be assisted through utilization of Chemical Advisers, etc.
- Arrangement of the framework for transmission of information on contained chemicals through the supply chain including provision of hazard information to consumers in labeling, etc., and assistance to small- to medium-sized businesses will be implemented.

- "Workplace Safety Site" has been established on the website of Ministry of Health, Labour and Welfare and "GHS-related Information Site" on the website of National Institute of Technology and Evaluation to post information on GHS model label/SDS data and risk evaluation by the Government, and further promote the utilization by businesses.

The following measures will be promoted on chemicals contained in products:

- How to proceed with disclosure and provision of unified hazard information in supply chain including the viewpoints of worker protection, consumer protection and environmental protection will be examined with consideration of measures regarding international trends such as globalization of the supply chains and promotion of hazard information on chemicals.
- For household products, the Government makes an effort to promote instruction and educational activities for preventing accident with publication of information on serious product accidents concurring use of household products which are assumed to have been caused by specific chemicals, and with brochures on health damage related to household products collected from medical institutes, etc. In addition, trial purchase investigation will be conducted on household products in prefectures, cities with public health centers or special wards every year to monitor or supervise on sales, etc. of household products not complying with regulatory standards. The Government summarizes the results and disseminates the information continuously.
- Promotion of procurement of environmental goods, etc. for which standards are specified in terms of restriction of use of specific chemicals, etc. will be continued, based on Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities.

(5) Promotion of international cooperation and coordination

According to SAICM, relevant ministries will cooperate with one another, work on chemicals management from international viewpoint, and contribute to the implementation of SAICM.

While observing international conventions related to measures against chemicals, the Government will contribute to the international activities based on the conventions. Specific measures obligated to the parties of POPs Convention contracting parties including evaluation of effectiveness specified in Article 16 of POPs Convention will be promoted under international cooperation based on the National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants (to be amended in August 2012), which was established based on the POPs Convention. Activities related to reinforcement of cooperation under the three Conventions related to measures against chemicals (POPs Convention, Rotterdam Convention and Basel Convention) will be promoted. To prevent repetition of health damages or environmental destruction similar to the case of Minamata disease in any other country, the Government will actively contribute to negotiation of the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on Mercury in 2013 and take necessary measures to ensure domestic security based on the progress in negotiation. The Government will also contribute to the promotion of international actions against mercury through UNEP Global Mercury Partnership, etc.

Development and international harmonization of assessment methods, data sharing, etc. will be further implemented under the international frameworks such as that of OECD.

In Japan Environment and Children's Study (JECS), coordination and cooperation will be further implemented including sharing and standardizing the study items for health effects, exposure measurement, etc. in order to unify data, conduct analysis in large-scale cohort study on births in coordination with similar studies of other countries (such as the U.S. National Children's Study) and organizations including WHO.

To prevent environmental pollution and health damages caused by chemicals in the Asian region, promotion of proper chemicals management, construction of the harmonization and cooperation systems and methods to enable the management will be implemented through active transmission of information based on the experiences and technologies of Japan, international cooperation, technical assistance, etc. using various frameworks such as SAICM regional meetings, monitoring networks, policy dialogues, ODAs, etc. Regarding POPs, Workshop on Environmental Monitoring of Persistent Organic Pollutants in East Asian Countries has been held since the Fiscal 2002, it will be continued in the future in order to accurately grasp the transitions in POPs existence in the East Asian environment, and construct a cooperative system in the area in the future.

(6) Issues to be examined in the future

The Government will continue to promote the measures by various stakeholders on chemicals in products (see 2 (2) of Chapter 3 for risk reduction, 2 (4) of Chapter 3 for information transmission including proper product labeling), nanotechnologies and manufactured nanomaterials (see 2 (3) of Chapter 3), e-waste (electric and electronic equipment wastes) and lead contained in paints, which are pointed as "emerging policy issues" in SAICM in ICCM2, and examine further measures as necessary based on international discussion, etc. in ICCM3.

For indoor air pollution by chemicals (so-called "sick house problem" in Japan), Air Quality Guideline Values are established for 13 substances as of August 2012. Based on the fact that there are concerns about problems caused by new alternative substances (including insecticides) in the living environment, factual investigation on indoor air pollution, etc. will be conducted and necessary measures will be examined based on the investigation results.

Furthermore, the issues which need to be addressed in the future include the effects of agricultural chemicals and other chemicals on the ecosystem, and "biocides", which are used in the living environment including termiticides.

Taking into account their urgency and society's needs and based upon discussions at the "Policy Dialogue on Chemicals and the Environment" which is a forum for opinion exchanges with a participation of various stakeholders, these various issues will be examined and prioritized. Feasible measures will be introduced and implemented promptly.

Chapter 4 Review of progress in the implementation of SAICM National Implementation Plan and its revision

The progress of SAICM National Implementation Plan will be reviewed in the Inter-Ministerial Meeting on SAICM prior to ICCM4 to be held in 2015, and the results will be announced.

In addition, this SAICM National Implementation Plan may be amended by the Inter-Ministerial Meeting on SAICM if necessary, reflecting the review of SAICM or discussion on emerging policy issues in ICCM, revision of other related domestic plans, and other environmental circumstances or changes in society and economy.

When the SAICM National Implementation Plan is to be reviewed or amended, opinions from all relevant stakeholders will be invited, and public consultation will be held.

Appendix

1. National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants (revision in August 2012) Table of Contents

2. Government Plan to Reduce Dioxin Levels Resulting from Business Activities in Japan (revision in August 2012) Table of Contents

3. Mechanisms of laws and regulations, etc. for chemicals management, related stakeholders and their activities in Japan

[Prepared based on the National Profile on Chemicals Management Japan (October 2003)]

3.1. Major laws and regulations for chemicals management

[1] Overview of laws related to chemical substances

Table 1 Chemical related laws (in order of enactment)

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
Food Sanitation Act 1947 Act No. 233	Ministry of Health, Labor and Welfare	Food products, additives, apparatus, containers and packaging, toys, detergents	The purpose of this Act is to prevent the sanitation hazards resulting from eating and drinking by enforcing the regulations and other measures necessary, from the viewpoint of public health, to ensure food safety and thereby to protect citizens' good health.
Agricultural Chemicals Regulation Law 1948 Act No. 82	Ministry of Agriculture, Forestry and Fisheries Ministry of the Environment	Agricultural chemicals	By establishing the agricultural chemical registration system and regulating the sales and use, proper quality, safety and proper use of agricultural chemicals are ensured, thereby contributing to the stability of agricultural production and the protection of the health of Japanese people, as well as the protection of their living environment.
Fire Service Act 1948 Act No. 186	Ministry of Internal Affairs and Communications	Hazardous materials	Fire Service Act protects the life, health and assets of Japanese people from fire by classifying the substances with fire risk rating by the risk categories and regulating storage/handling of the corresponding substances, thereby maintaining peace and order and contributing to the promotion of social and public welfare in the society.
Fertilizers Regulation Act 1950 Act No. 127	Ministry of Agriculture, Forestry and Fisheries	Chemical fertilizers, etc.	To protect the quality, etc. of fertilizers and ensure fair trade and safe application, the standards for fertilizers and their application are regulated, registered, tested and so forth, thereby contributing to the maintenance and improvement of agricultural productivity and protection of the health of Japanese people.
Explosives Control Act 1950 Act No. 149	Ministry of Economy, Trade and Industry	Gunpowder, etc. (gunpowders, explosives and priming materials)	Disasters by explosives and so forth are prevented and public safety is ensured by regulating manufacture, sales, storage, transfer, consumption and so forth of explosives and so forth.
Building Standard Act 1950 Act No. 201	Ministry of Land, Infrastructure, Transport and Tourism	Substances that may cause hygiene problems in rooms	Life, health and assets of the Japanese people are protected by specifying the lowest standards for premises, structures, facilities and applications of buildings, thereby contributing to the improvement of public welfare.

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
		(chlorpyrifos and formaldehyde)	
Poisonous and Deleterious Substances Control Act 1950 Act No. 303	Ministry of Health, Labour and Welfare	Specified poisonous substances, poisonous substances, deleterious substances	From the viewpoint of health and hygiene, necessary control is implemented on poisonous and deleterious substances.
High Pressure Gas Safety Act 1951 Act No. 204	Ministry of Economy, Trade and Industry	High-pressure gases (compressed gases, liquefied gases, etc.)	To prevent disasters caused by high-pressure gases, this law regulates the manufacture, storage, sales, transport and other handling, and consumption of high-pressure gases, as well as manufacture and handling of containers, and promotes the voluntary activities on security of high-pressure gases by private businesses and the High Pressure Gas Safety Institute of Japan, thereby ensuring public safety.
Water Supply Act 1957 Act No. 177	Ministry of Health, Labour and Welfare	Water supplied by pipes	Contributing to the improvement of the living environment and public health by providing clean, abundant and inexpensive water through improving water systems and its administration as well as protecting and promoting water projects.
Pharmaceutical Affairs Act 1960 Act No. 145	Ministry of Health, Labour and Welfare Ministry of Agriculture, Forestry and Fisheries	Drugs, quasi drugs, cosmetic products and medical devices	The purpose of this Act is to provide necessary controls for ensuring the quality, efficacy and safety of drugs, quasi-drugs, cosmetics and medical device, and to improve the public health and hygiene through taking the measures for regulations for scheduled medicinal substances as well as through necessary measures taken to promote research and development of drugs and medical device which are of particular importance to the medical practice.
Household Goods Quality Labeling Act 1962 Act No. 104	Cabinet Office, Ministry of Economy, Trade and Industry	Textile products, plastic goods, electrical appliances and apparatuses, and miscellaneous manufactured goods used by general consumers in their daily lives which are extremely difficult for general consumers to discern the	The purpose of this act is to ensure proper labeling of the quality of household goods and to protect the interests of general consumers.

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
		quality of at the time of purchase	
Air Pollution Control Act 1968 Act No. 97	Ministry of the Environment	Hazardous air pollutants, etc.	By regulating the emission of smoke, volatile organic compounds and dust generated in concurrence with the business activities at plants and business sites as well as demolition of buildings and so forth, promoting the implementation of measures against hazardous air pollutants, specifying the permissible limits related to automobile exhaust gas and so forth, this law protects the health of the Japanese people, protects the living environment regarding air pollution and protects the victims of health damages caused by air pollution through specification of the liability for damage in businesses.
Act on Maintenance of Sanitation in Buildings 1970 Act No. 20	Ministry of Health, Labour and Welfare	Buildings	Promoting the improvement of public health by ensuring a healthy environment in buildings used and accessed by a large number of people through the establishment of necessary terms for environmental health in relation to the maintenance and administration of buildings.
Act on Prevention of Marine Pollution and Maritime Disaster 1970 Act No. 136	Ministry of the Environment (part of this law that applies to chemicals management)	- Hazardous liquid wastes, etc. - Oil, hazardous liquid substances and wastes from ships, marine facilities or aircrafts	While ensuring proper treatment of waste oil by regulating discharging oil, hazardous liquid substances and wastes from ships, marine facilities or aircrafts and incineration of these materials on ships or marine facilities, pollution of the sea and maritime disasters are prevented through measures to control discharged oil, hazardous liquid substances, wastes and other materials, prevent maritime fire and risks to ship traffic in concurrence with such fire. It also ensures proper implementation of international agreements on prevention of marine pollution and maritime disasters to contribute to the protection of marine environment as well as life, health and assets of people.
Waste Disposal and Cleansing Act 1970 Act No. 137	Ministry of the Environment	Wastes	The purpose of this law is to protect the living environment and improve public health by suppression of waste discharge and keeping the living environment clean through proper separation, collection, transport, recycling, disposal and so forth of wastes.

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
Water Pollution Control Act 1970 Act No. 138	Ministry of the Environment	Effluent, etc.	Pollution of ambient water and groundwater (including deterioration of water properties other than quality. Hereafter the same applies) is prevented by regulating discharge of effluent water from plants or business sites into ambient water or permeation of such water into the ground and promoting measures against household wastewater, thereby protecting the health of the Japanese people and the living environment, as well as the victims of health damages caused by foul water or effluent discharged from plants or business sites through specification of the liability for damage in businesses.
Agricultural Land Soil Pollution Prevention Act 1970 Act No. 139	Ministry of Agriculture, Forestry and Fisheries Ministry of the Environment	Specified hazardous substances	This law prevents the production of agricultural and livestock products that may cause damage in human health and inhibition of the growth of crops and so forth through necessary measures to prevent or remove pollution of farmlands by specified hazardous substances and rationalize the use of polluted farmlands, thereby contributing to the protection of the health of the Japanese people and the living environment.
Industrial Safety and Health Act 1972 Act No. 57	Ministry of Health, Labour and Welfare	Chemicals related to workplaces	The purpose of this law is to secure, in conjunction with the Labour Standards Act, the safety and health of workers in workplaces, as well as to facilitate the establishment of comfortable working environment, by promoting comprehensive and systematic countermeasures concerning the prevention of industrial accidents, such as taking measures for the establishment of standards for hazard prevention, clarifying the safety and health management responsibility and the promotion of voluntary activities with a view to preventing industrial accidents.
Act on Control of Household Products Containing Harmful Substances 1973 Act No. 112	Ministry of Health, Labour and Welfare	Substances contained in household products	The purpose of this act is to contribute to protecting the health of citizens by imposing necessary controls on household products containing harmful substances from the viewpoint of sanitation.
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. 1973 Act No. 117	Ministry of Health, Labour and Welfare Ministry of Economy, Trade and Industry Ministry of the Environment	Chemicals (However, agricultural chemicals, fertilizers, drugs and so forth that are subjected by other laws and regulations shall be exempted.)	The purpose of this law is to establish a system for evaluating the new chemical substances before their manufacture or import and for implementing necessary regulations with respect to the manufacture, import, use, etc. of chemical substances, with due consideration to their properties, etc., in order to prevent environmental pollution by chemical substances that poses a risk of impairing human health or of interfering with the population and/or growth of flora and fauna.

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes 1992 Act No. 108	Ministry of Economy, Trade and Industry Ministry of the Environment	Specified hazardous wastes	To ensure proper and smooth implementation of Basel Convention and so forth, regulatory measures on export, import, transport and disposal of specified hazardous wastes are taken, thereby contributing to the protection of human health and the living environment.
Act on the Prohibition of Chemical Weapons and the Regulation of Specific Chemicals 1995 Act No. 65	National Police Agency Ministry of Foreign Affairs Ministry of Economy, Trade and Industry	Hazardous substances, substances that can be used as raw materials for hazardous substances, etc.	To ensure proper implementation of the International Convention on the Prohibition of the Development, Manufacture, Stockpiling and Use of Chemical Weapons and on their Destruction, this law bans the manufacture, possession, transfer and reception of chemical weapons and specifies the measures to regulate the manufacture, use and so forth of specified substances.
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof 1999 Act No. 86	Ministry of Economy, Trade and Industry Ministry of the Environment	Chemicals (including ozone-depleting substances)	The purpose of this law is to promote voluntary improvement of the management of chemical substances by business operators and to prevent any impediments to the preservation of the environment by taking measures for the confirmation of release amounts, etc. of specific chemical substances in the environment, measures for the provision of information concerning the properties and handling of specific chemical substances by business operators, and other relevant measures, while giving consideration to the trend for international cooperation on the management of chemical substances pertaining to the preservation of the environment, taking into account scientific knowledge on chemical substances and the condition of the manufacture, use, and other handling of chemical substances, and gaining the understanding of business operators and citizens.
Act on Special Measures against Dioxins 1999 Act No. 105	Ministry of the Environment	Dioxins	In consideration of the fact that dioxins may cause serious effects on human life and health, the purpose of this law is to protect the health of Japanese people by specifying the standards on which the measures against dioxins shall be based and necessary regulations and measures related to soil pollution and so forth to prevent and remove environmental pollution with dioxins.

Law	Competent Authority	Subject Areas of Regulation	Objective of Laws
Law Concerning the Promotion of Procurement of Eco-friendly Goods and Services by the State and Other Entities 2000 Act No. 100	Ministry of the Environment	--	The purpose of this law is to establish society which can enjoy sustainable development with a lower environmental impact, by establishing the necessary provisions a) to encourage the State, independent administrative institutions, etc. and local governments to procure eco-friendly goods, etc., b) to provide information on eco-friendly goods, etc. and c) to encourage a shift in demand towards eco-friendly goods, etc., in order to contribute to a sound and cultural lifestyle for citizens today and in the future.
Act on Special Measures Against PCB Waste 2001 Act No. 65	Ministry of the Environment	Polychlorinated biphenyl wastes	In consideration of the fact that polychlorinated biphenyls are persistent chemicals that may cause damage in human health and the living environment and that polychlorinated biphenyl wastes have not been properly disposed in Japan for a long period, the purpose of this act is to protect the human health and the living environment by providing necessary regulation on storage, disposal and so forth of polychlorinated biphenyl wastes, promptly establishing and the necessary system for disposal of polychlorinated biphenyl wastes and promoting sound and proper disposal.
Soil Contamination Countermeasures Act 2002 Act No. 53	Ministry of the Environment	Specified hazardous substances	The purpose of this law is to facilitate the implementation of counter-measures against soil contamination by formulating measures to apprehend situations of soil contamination by specified hazardous substances and measures for the prevention of harmful effects on human health by such contamination, and thereby to protect the health of the citizens.
Food Safety Basic Act 2003 Act No. 48	Cabinet Office	Food products, additives, agricultural chemicals, drugs for animals, equipment and container packaging, chemicals and hazardous substances	In consideration of the vital importance of precise responses to the development of science and technology, and to the progress of internationalization and other changes in the environment surrounding Japan's dietary habits, the purpose of this act is to comprehensively promote policies to ensure food safety by establishing basic principles, by clarifying the responsibilities of the national and local governments, and food-related business operators and the roles of consumers, and establishing a basic direction for policy formulation, in order to ensure food safety.

[2] Principal chemical-related legal system of Japan

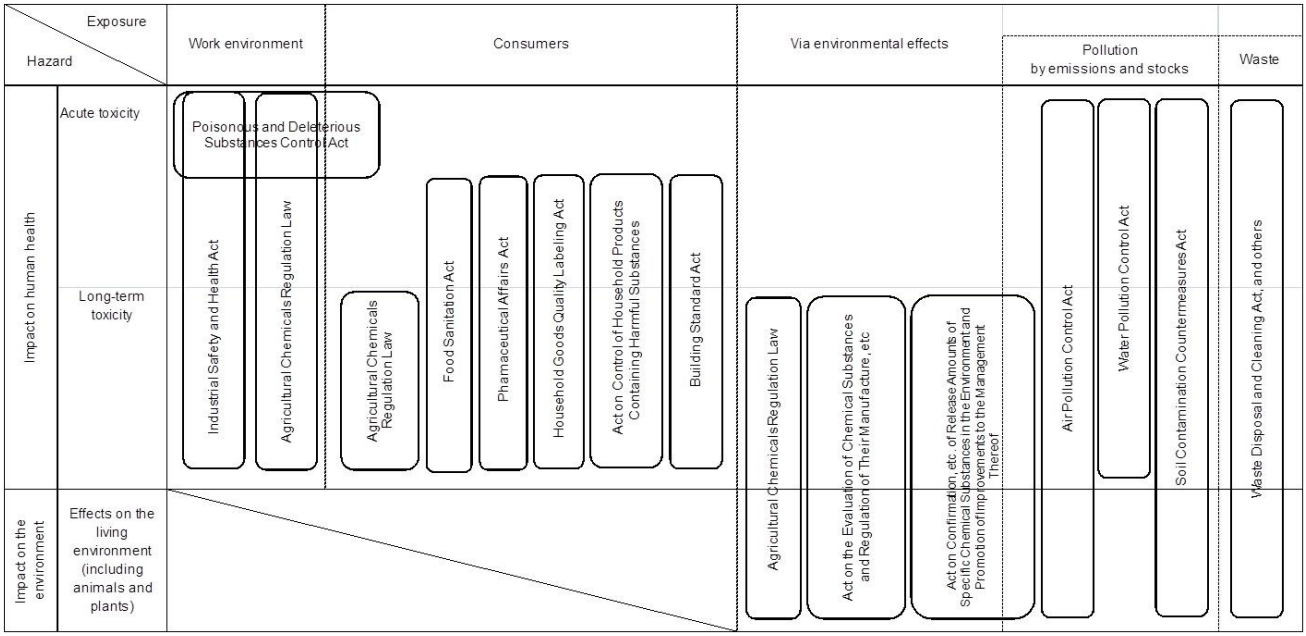

Fig.2 Principal chemical-related legal system of Japan

3.2. Measures to address international agreements

(a) Response to the PIC Convention

Since 1992, Japan has participated in the international actions based on the London Guidelines by regulating export of toxic chemicals with Foreign Exchange and Foreign Trade Act and Export Trade Control Order. The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC Convention) was adopted on September 11, 1998 and came into effect in February 2004. Japan concluded its agreement in June 2004 and the Convention came into effect in Japan in September. In addition to the chemicals listed in the Annex III of the Convention, Japan executes its obligation specified by the Convention on prohibited or severely restricted chemicals (see Table 2).

Table 2 Banned or severely restricted chemicals

Banned or severely restricted chemicals	Level of restriction	Details of banned or severely restricted chemicals
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances	SR	Substances with persistence and accumulability may impair human health upon continuous intake.
Industrial Safety and Health Act Prohibited substances	SR	Substances that cause severe health impairment in workers
Poisonous and Deleterious Substances Control Act Specified poisonous substances	SR	Substances with strong acute toxicity
Agricultural Chemicals Regulation Law Agricultural chemicals of which the distribution and use is prohibited	SR	Substances that may cause adverse effects on humans or livestock

Note: SR: severely restricted based on the criteria of the PIC Convention

(b) Response to the POPs Convention

Stockholm Convention on Persistent Organic Pollutants (POPs Convention) was adopted in May 2001 and came into effect in May 2004. Japan concluded its agreement in August 2002 and established the related domestic laws and regulations before it came into effect. Based on Article 7 of the Convention, each participant country was to develop the SAICM National Implementation Plan to execute the obligations of this Convention within 2 years from the year it came into effect. In Japan, “the liaison and adjustment meeting of the ministries concerned with Stockholm Convention on Persistent Organic Pollutants” was established in January 2003 to prepare the SAICM National Implementation Plan under coordination among the concerned ministries. This plan was approved by the Council of Ministers for Global Environment in June 2005. Manufacture, use, import and export of substances subject to the POPs Convention are prohibited or practically prohibited by Export Trade Control Order and Import Trade Control Order based on Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc, the Agricultural Chemicals Regulation Law, Pharmaceutical Affairs Act, and Foreign Exchange and Foreign Trade Act.

(c) Response to the AFS Convention

Regarding the 2001 International Convention on the Control of Harmful Anti-Fouling Systems on Ships (AFS Convention), Japan has played a leading role in formulation of the Convention by refraining from the use of ship bottom paints in addition to the introduction of regulations on organotin compounds earlier than any other countries. Japan submitted the Instrument of Acceptance for the AFS Convention and accepted the Convention in July 2003.

(d) Response to the Basel Convention

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) was adopted in 1989 and entered into force in 1992. To implement the agreement in this Convention, Japan established the Law for the Control of Export, Import and Others of Specified Hazardous Wastes and Other Wastes (Basel Law). Japan deposited the document of acceptance in 1993, and the Convention came into effect in Japan during the same year.

3.3. Relative activities by stakeholders other than the Government

A) Examples of measures by local government

(a) Measures through ordinances, etc.

Some local governments implement measures against chemicals through establishment, enforcement, etc. of ordinances appropriate for the local circumstances in addition to the measures based on Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof, Air Pollution Control Act, etc., such as:

- ✓ Obligation of additional/stringent items of information to be notified, subjected businesses, subjected chemicals, etc. in their own notification system such as ordinances (Sapporo City, Fukushima Pref., Gunma Pref., Saitama Pref., Saitama City, Tokyo Metropolis, Kanagawa Pref., Sagamihara City, Ishikawa Pref., Aichi Pref., Nagoya City and Osaka Pref.)
- ✓ Requirement for preparation and submission of chemicals management plan, management goals, etc. (Sapporo City, Gunma Pref., Saitama Pref., Saitama City, Tokyo Metropolis, Kanagawa Pref., Sagamihara City, Aichi Pref., Nagoya City, Osaka Pref. and Kagawa Pref.)
- ✓ Requirement for notification on the status for addressing the management goals (Sagamihara City and Osaka Pref.)
- ✓ Establishment of their own ordinances, guidelines to reduce the risk of chemicals in case of accidents or disasters (Miyagi Pref., Saitama Pref., Chiba Pref., Kanagawa Pref., Yokohama City, Niigata Pref. and Osaka Pref.)
- ✓ Promotion of popularization and enlightenment of businesses, etc. to reduce the risk of chemicals in case of accidents or disasters (Sapporo City, Saitama City, Nagoya City and Wakayama Pref.)

(* The local governments which answered to the “Questionnaire about the Enactment of Ordinance, etc., related to the PRTR System and the Risk Control in Case of Disaster" (conducted in FY2011) are shown as examples.)

(b) Measures relating to risk communication

Some local governments take measures to add up the amount of release by region for chemicals registered by businesses based on the PRTR system (Hokkaido and Aomori Pref., etc.) or officially announce the relationship between the amount of release and the environmental concentration (Osaka Pref.). There are also local governments that promote risk communication through setting a place of dialogue where local residents, businesses and the local government can participate (Kanagawa Pref., etc.), seminars (Kawasaki City and Aichi Pref., etc.) and consultative meeting on the necessity and implementation of risk communication (Saitama Pref.), in order to facilitate the understanding of local residents on chemicals, understanding of local businesses including small- and medium-sized businesses on measures against chemicals, and awareness of the stakeholders for reducing risks of chemicals in the region.

(* The local governments whose activities are introduced in the "Guidebook for Citizens to Interpret the PRTR Data," etc., are shown as examples.)

B) Examples of activities by the industry

(a) Responsible care

Japan Chemical Industry Association (JCIA) developed "Basic Policy of JCIA on the Environment and Safety" in 1990, and established Japan Responsible Care Council (JRCC) as an organization to promote the responsible care activities along with businesses manufacturing or handling chemicals in 1995. JCIA implemented the voluntary standardization of data acquisition on PRTR since 1992, and has been reported the aggregated data on released amounts to the authorities since 1997.

(b) New chemicals management activities (Japan Initiative of Product Stewardship (JIPS))

JIPS (Japan Initiative of Product Stewardship) is a voluntary activity of the domestic industry promoted by JCIA based on Global Product Strategy (GPS), an international chemicals management strategy by the International Council of Chemical Associations (ICCA). GPS is a new framework for chemicals management determined by ICCA, upon receiving the conclusion of SAICM by the United Nations in 2006, and it is intended to establish credibility from the Government and society for the chemical industry by developing "Product Stewardship" to reduce risks by promoting risk-based chemicals management and expanding the management throughout the lifecycle by year 2020.

(c) Project of Supply chain Chemical Risk Management and Useful Mechanism discussion (SCRUM Project)

SCRUM Project is a project jointly initiated by Japan Chemical Industry Association (JCIA) and Joint Article Management Promotion-consortium (JAMP) to implement the transmission of information necessary to ensure proper risk assessment and chemicals management by the entire supply chain and construct a common mechanism for these actions.

(d) Joint Article Management Promotion-consortium (JAMP)

Joint Article Management Promotion-consortium (JAMP) was established as an organization to promote cross-industry activities for product management in 2006. To promote appropriate and smooth management of information on contained chemicals in products in the supply chains, specific and common establishment of a mechanism for receiving and disclosing information, especially the management of information on contained chemicals by the midstream small- to medium-sized businesses, JAMP maintains the list of substances to be controlled and promotes the popularization of information transmission form called JAMP AIS /MSDSplus.

JAMP promotes seminars and human resource development for utilization of a common mechanism, in cooperation with major organizations not only in Japan but also in Thailand, Malaysia, South Korea, Taiwan, China, etc.

(e) Japan Green Procurement Survey Standardization Initiative (JGPSSI)

Japan Green Procurement Survey Standardization Initiative (JGPSSI) is a voluntary association established in 2001

to standardize information disclosure on chemicals contained in parts and materials of electric and electronic products through effective survey methods. JGPSSI has prepared Joint Industry Guideline (JIG), an industrial guideline on information disclosure for chemicals contained in the products, in cooperation with industrial associations of the U.S. and Europe, and plans to succeed their corresponding standardization activities to IEC TC111, the parent organization for examination, in concurrence with the enactment of the international standard IEC 62474 (March 2012).

(f) Voluntary management plans for hazardous air pollutants by businesses

The revised Air Pollution Control Law of 1996 stipulates businesses have responsibilities to assess the emissions of hazardous air pollutants and take necessary measures for emission reduction. Responding to this revision, each industry had been formulating and implementing a voluntary management plan to reduce emissions of 13 hazardous air pollutants over a three-year period beginning in Fiscal 1997. They also prepared and implemented a voluntary management plan for 12 substances as the second plan from Fiscal 2001 to 2003 and prepared a regional voluntary management plan for benzene, whose environmental standard achievement rate is low, subjecting high-concentration areas. These activities led to the dramatic reduction in emission and improvement in air quality.

✓ Leading Organizations/groups

- 1st stage: 77 trade associations, 2nd stage: 74 trade associations (Japan Chemical Industry Association, Petroleum Association of Japan, the Japan Iron and Steel Federation, Japan Automobile Manufacturers Association, the Japan Society of Industrial Machinery Manufacturers, Japan Paper Association, the Japan Gas Association, etc.)
- Party leading the local voluntary management plan on benzene (5 entities including Mizushima Complex Environmental Safety Information Exchange Meeting)

✓ Related organizations

- Ministry of Economy, Trade and Industry, Ministry of the Environment: While establishing the “Guidelines for Promotion of Voluntary Management of Hazardous Air Pollutants by Business Entities” (amended in June 2001), the Ministries request the related industries for development of voluntary management plan and receive their reports on planning and results.
- Working Group on Measures against Hazardous Air Pollutants, Risk Management Subcommittee, Chemicals and Bio-industry Committee, Industrial Structure Council; Expert Committee on Emission Suppression of Hazardous Air Pollutants, Atmospheric Environment Committee, Central Environment Council: Implement check-and-review, etc. on the voluntary management plan and the local voluntary management plans on benzene established by the industry as well as their implementation status.

✓ Target substances

[1] acrylonitrile, [2] acetaldehyde, [3] vinyl chloride monomer, [4] chloroform, [5] 1,2-dichloroethane, [6] dichloromethane, [7] tetrachloroethylene, [8] trichloroethylene, [9] 1,3-butadiene, [10] benzene, [11] formaldehyde, [12] trinickel disulfide and nickel sulfate

Note: Although dioxins were included in the 1st stage of the voluntary management plan, they were

deselected from the 2nd stage in concurrence with the enforcement of Act on Special Measures against Dioxins.

✓ Outcomes of the activities

The results of the 1st stage voluntary management plan from Fiscal 1997 to Fiscal 1999 showed reduction of 12 hazardous air pollutants except for dioxins by 41% compared to the reference year (Fiscal 1995) as total emission by simple addition. 36% reduction was addressed for dioxins.

The results of the 2nd stage voluntary management plan from Fiscal 2001 to Fiscal 2003 showed that the emission was reduced to approximately 16,000 to 14,000 tons in Fiscal 2003 from approximately 38,000tons in the reference year (Fiscal 1999). The local voluntary management plan on benzene resulted in reduction to approximately 144 tons in Fiscal 2003 from approximately 1,048 tons in the reference year (Fiscal 1999).

Since emission reduction and improvement in atmospheric environmental concentration were addressed due to the voluntary management plan of each industry, it was decided that the measures against hazardous air pollutants would be done by voluntary measures led by the community in coordination between local public bodies and businesses, including voluntary emission suppression measures of individual businesses. The Industry & Environment Subcommittee, Committee of Environment, Industrial Structure Council; Joint Working Group on Industrial Measures against Environmental Risks, Risk Management Subcommittee, Chemicals and Bio-industry Committee; and Expert Committee on Emission Suppression of Hazardous Air Pollutants, Atmospheric Environment Committee, Central Environment Council have implemented follow-ups using PRTR data and hazardous air pollutant monitoring data.

(g) Preparation of Voluntary Chemical Safety Standards for Household Products

Industrial associations have established Voluntary Chemical Safety Standards for Household Products in order to further improve their chemical safety. These Voluntary Chemical Safety Standards have been established so that the intrinsic properties of the products can be fully delivered, with the highest priority on ensuring consumer safety, not to speak of complying with domestic laws and regulations. They also include clear indication of ingredients, etc. regarding expected hazard information on product containers, etc. As of August 2012, Voluntary Chemical Safety and Health Standards have been established for wet wipers, fragrances and deodorants, mold-removers and antifungal agents for home use, cotton swabs, insecticides for distasteful insects, liquid cleaner, stain removers, bleaches, contact lens care products, and textile, leather and fur products (for specified aromatic amines).

(h) A joint program among the private and the public sectors for collecting and disseminating safety information of Japan HPV existing chemical substances) (so called “Japan HPV Challenge Program”)

Starting in June 2005, measures have been taken “to accelerate collection of the safety information on existing chemicals and disseminate the information on chemical safety widely to the citizens through cooperation between industry and government.” In the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. is amended in April 2011, a mechanism was developed to steadily collect information on hazard

of all chemicals produced or imported in quantities of 1 ton or larger through screening and risk assessment based on the law. Thus this Program will be discontinued at the end of Fiscal 2012, and the processes of information collection will shift to the screening and risk assessment within the framework of amended Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. starting from Fiscal 2013. The information on chemical hazard, etc. collected in Japan HPV Challenge Program will be utilized in assessment of chemical safety. Furthermore, the outcomes of Japan HPV Challenge Program are released on websites of Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry, and Ministry of the Environment.

(i) Voluntary management activities regarding nonylphenol by businesses

In consideration of the circumstances where nonylphenol is detected in the environment with resulting possibility of ecological effects, Japan Surfactant Industry Association, an association of detergent manufacturers, decided and announced in October 2001 that they would further reinforce their conventional voluntary efforts to suppress discharge of nonylphenol-type detergents.

Since those voluntary movements of the industry, associations including Industrial Detergent Industry Association, Japan Auto Chemical Industry Association, Japan Floor Polish Manufacturer' Association, and Japan Cleaning Detergent Industry Association decided to discontinue the use of nonylphenol-type detergents which were used for open-system applications and switch to alternative products one after another from the end of 2001 to 2002, and began corresponding measures.

Further improvement in the environment is expected thanks to such voluntary efforts of the industry.

Table 3 Nonylphenol detection frequency in rivers

	2005	2006	2007	2008	2009
Number of points where nonylphenol was detected/total number of investigation points (rate of detected points in total investigation points (%))	9/64 (4.1)	13/69 (18.8)	16/65 (24.6)	7/22 (31.8)	6/19 (31.6)

Source: Ministry of Land, Infrastructure, Transport and Tourism, the results of FY 2009 field study on trace chemicals in Class A rivers in Japan

(j) Voluntary management activities on lead and lead compounds by businesses

Since May 1996, Japan Chemical Industry Association and 13 other related associations conducted risk management measures as follows:

- Limitation of use of lead and lead compounds (in the past, use of lead compounds was prohibited in waterworks pipes, gasoline, plastic used in stationery and toy products, food containers or packages, and medical products. Limitation of use was newly applied to printed films for interiors and boards)
- Limitation in lead elution amount (compliance to Food Sanitation Act and voluntary industrial standards)
- Prevention of exposure of workers and the environment
- Provision of information, enlightenment (SDS, warning label, etc.)

- International cooperation (provision of information)

(k) Voluntary management activities by businesses on cadmium and cadmium compounds

Japan Chemical Industry Association, Battery Association of Japan, Japan Chemical Fertilizer Industry Association, and Resin Color Industry Association have cooperated the following risk management measures since December 1996:

- Further expansion of Ni-Cd battery collection and recycling system
- Switching to rock phosphate with little cadmium content as the raw material for phosphatic fertilizers
- Use of alternate plastic colorants
- Proper control on discharge from manufacture and use processes
- Provision of SDS
- International cooperation (provision of information)

(l) Voluntary management activities on specified brominated flame retardants by businesses

Japan Chemical Industry Association and Flame Retardant Chemicals Association of Japan have cooperated the following risk management measures since July 1995:

- Continued restriction of production, import, sales and so forth of polybrominated diphenyloxides other than polybrominated biphenyls, decabromodiphenyloxide (decabromide, DBDPO) and octabromodiphenyloxide (octabromide, OBDPO)
- Manufacture of high-purity products (minimization of low-bromination substance concentration)
- Minimization of environmental discharge quantity from manufacturing plants
- Provision of safety information (issuance of SDS, etc., provision of seminars)
- Prevention of accidents (instruction on handling using SDS, thorough notification of emergency measures)
- Waste management (provision of information on disposal methods, etc. by SDS)
- Promotion of recycling
- International cooperation (cooperation in international toxicity study programs, etc.)

(m) Activities relating to reduction in the amount of chemicals released from product manufacture processes

To address the reduction in release of chemicals subjected to PRTR system, some businesses have improved the efficiency of process sequences in product manufacture processes, improved chemical process management and operation including improved maintenance, changed the manufacture systems, installing exhaust gas treatment or wastewater treatment systems, or switching to materials with low levels of PRTR subject chemicals or to solvent-less materials.

C) Activities by NGO/NPO, etc.

There are many organizations in Japan that work to provide or popularize information on chemicals and address enlightenment of citizens. For example, NPO Toxic Watch Network tries to reduce hazardous chemicals by utilizing the PRTR information, and offers a PRTR search database from which the PRTR notification data can be viewed or compared using various search methods on their website.

Organization for Research and Communication on Environmental Risk of Chemicals posts the PRTR data such as information of "uses, toxicity and physical properties" on PRTR subject chemicals on its website.

3.4. Ministries and other government organizations related to the chemicals management, etc.

[1] Ministries

MINISTRY, ORGANIZATION	Mandate
Cabinet Office(CAO)	
Representation Division, Consumer Affairs Agency	- Matters related to the labeling standards specified in Section 1, Article 3 of Household Goods Quality Labeling Law (1962 Act No. 104)
Ministry of Internal Affairs and Communications(MIC)	
Dangerous Goods Safety Office, Fire Prevention Division, Fire and Disaster Management Agency	- Regulation on storage or handling of dangerous goods (substances with fire hazards)
Ministry of Health, Labour and Welfare(MHLW)	
Office of Chemical Safety, Evaluation and Licensing Division, Pharmaceutical and Food Safety Bureau	- Matters related to control of poisonous and deleterious substances - Evaluation of chemicals that may cause adverse effects on human health or on living or growth of plants and animals in the living environment from the viewpoint of environmental health, and regulation of manufacture, import, use and other handling of such chemicals - Matters related to regulation of household products containing hazardous substances - Matters related to tolerable daily intake of dioxins
Chemical Hazards Control Division, Industrial Safety and Health Department	- Matters related to labor health involving hazards of hazardous materials - Matters related to industrial safety involving hazards of dangerous materials
Chemicals Evaluation Office, Chemical Hazards Control Division, Industrial Safety and Health Department	- Matters related to investigation of hazards of dangerous and hazardous materials at workplace and matters related to evaluation of the possibilities of labor disasters caused by chemicals - Matters related to labeling and notification of hazards of dangerous and hazardous materials
Work Environment Improvement Office,	- Matters related to the improvement of work environment

MINISTRY, ORGANIZATION	Mandate
Industrial Health Division, Industrial Safety and Health Department	
National Institute of Health Sciences	- Examination and testing of pharmaceuticals, foodstuffs, etc. being required for approvals by the National Assays, and necessary research for conducting those tasks. - Examination and testing (excluding biological testing of disinfectants, insecticides and rodenticides) of pharmaceuticals (excluding biological preparations and antibiotics, and their preparations), quasi-drugs, cosmetics, medical devices, foodstuffs, etc. for domestic consumption, and necessary research for conducting those tasks. - Examination and testing of poisonous and deleterious substances as well as necessary research for conducting those tasks. - Experimental production of pharmaceuticals, quasi-dugs and cosmetics. - Experiments, study and research regarding other items required for public health.
Ministry of Agriculture, Forestry and Fisheries (MAFF)	
Environment Policy Division, Minister's Secretariat	- Matters related to planning of comprehensive policies for environmental protection under the jurisdiction of MAFF
Plant Products Safety Division, Food Safety and Consumer Affairs Bureau	- Matters related to production processes in clerical work for ensuring safety of food as agricultural and forestry products (except for matters related to food sanitation and ensuring safety of agricultural chemicals under the jurisdiction of Ministry of the Environment) - Matters related to prevention and removal of soil pollution in farmlands - Matters related to promotion, improvement and adjustment of production, distribution and consumption of fertilizers and agricultural chemicals (except for matters under jurisdiction of Agricultural Production Bureau and the matters related to production of fertilizers over which METI has jurisdiction)
Animal Products Safety Division, Food Safety and Consumer Affairs Bureau	- Matters related to promotion, improvement and adjustment of production, distribution and consumption of feed, feed additives, drugs, quasi drugs and medical devices for animals (except for matters under jurisdiction of Agricultural Production Bureau)
Ministry of Economy, Trade and Industry (METI)	
Chemical Management Policy Division, Manufacturing Industries Bureau	- Clerical work related to chemicals management under jurisdiction of METI
Chemical Safety Office, Chemical Management Policy Division, Manufacturing Industries Bureau	- Clerical work related to the execution of Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc
Chemical Weapon and Drug Materials Control Policy Office, Chemical	- Matters related to the execution of Act on the Prohibition of Chemical Weapons and the Regulation of Specific Chemicals - Matters related to regulation of the use of chemical industrial products as

MINISTRY, ORGANIZATION	Mandate
Management Policy Division, Manufacturing Industries Bureau	chemical weapons or their materials, or use as raw materials for narcotics, psychotropic agents or similar materials under jurisdiction of METI
Ozone Layer Protection Policy Office, Chemical Management Policy Division, Manufacturing Industries Bureau	- Clerical work related to the execution of Act on the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures
Chemical Risk Assessment Office, Chemical Management Policy Division, Manufacturing Industries Bureau	- Clerical work related to the execution of Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof - Clerical work related to risk assessment of chemicals
Chemicals Division, Manufacturing Industries Bureau	- Matters related to promotion, improvement and adjustment of export, import, production, distribution and consumption of chemical industrial products, etc. - Matters related to promotion, improvement and adjustment of distribution and consumption of industrial salts - Matters related to promotion, improvement and adjustment of export, import and production of chemical fertilizers
Industrial Safety Division, Nuclear and Industrial Safety Agency	- Matters related to regulation of explosives - Matters related to ensuring safety of high-pressure gases - Matters related to disaster prevention in petrochemical complexes, etc.
Ministry of Land, Infrastructure, Transport and Tourism(MLIT)	
Building Guidance Division, Housing Bureau	- Matters related to building standards, improvement of building quality, and other matters related to development and improvement of architecture
Ministry of the Environment(MOE)	
Environment and Economy Division, Environmental Policy Bureau	- Matters concerning the development, planning and promotion of the basic policies for environmental preservation (limited to those involving the measures taken by operators themselves to reduce the environmental impact (except those, however, under the jurisdiction of the minister's secretariat or other bureaus). - Matters involving the supervision of the works under the jurisdiction of the MOE among those listed below: (snip) - Matters concerning the promotion of use of products and services that contribute to the reduction of the environmental impact.(The rest omitted)
Environmental Health and Safety Division, Environmental Health Department	- Matters related to preparation of standards, etc. from the viewpoint of environmental protection to grasp the amount of chemicals discharged into the environment from business sites due to the business activities and the amount of chemicals moving outside of the corresponding business site in concurrence with the disposal of wastes generated in business activities, and promote improvement of chemicals management, aggregation of the amounts of chemicals grasped, and disclosure of the results - Matters related to investigation, research and assessment of chemical

MINISTRY, ORGANIZATION	Mandate
	pollution with unknown mechanisms under jurisdiction of Environmental Health Department
Environmental Risk Assessment Office, Environmental Health and Safety Division, Environmental Health Department	- Matters related to tolerable daily intake of dioxins - Matters related to environmental risk assessment in clerical work related to investigation, research and assessment of chemical pollution with unknown mechanisms under jurisdiction of Environmental Health Department
Chemicals Evaluation Office, Policy Planning Division, Environmental Health Department	- Matters related to preparation of standards, etc. under regulation of evaluation, manufacture, import, use and other handling of chemicals from the viewpoint of environmental protection, and implementation of this regulation
Office of Fluorocarbons Control Policy, Global Environmental Issues Division, Global Environment Bureau	- Matters related to preparation of standards, etc. and regulation for suppression of greenhouse gases from the viewpoint of environmental protection (limited to matters regarding hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride) - Matters related to preparation of standards, etc., regulation and so forth for protection of the ozone layer from the viewpoint of environmental protection
General Affairs Division, Environmental Management Bureau	- Matters related to specification of environmental standards on air pollution and dioxins
Dioxins Control Office, General Affairs Division, Environmental Management Bureau	- Matters related to prevention of environmental pollution by dioxins
Air Environment Division, Environmental Management Bureau	- Matters related to regulation to prevent pollution (air pollution, noise, vibration and foul odor) - Matters related to clerical work and projects mainly to protect the environment (matters related to air pollution that are implemented to protect human health)
Water Environment Management Division, Environmental Management Bureau	- Matters concerning the establishment of the environmental standards for water pollution and dioxins. - Matters concerning the regulations to prevent water pollution.
Soil Environment Management Division, Environmental Management Bureau	- Matters related to specification of environmental standards on soil pollution and dioxins - Matters related to regulations to prevent soil pollution
Agricultural Chemicals Control Office, Soil Environment Management Division, Environmental Management Bureau	- Matters related to preparation of standards, etc. on registration, retention and use of agricultural chemicals and implementation of the corresponding regulation from the viewpoint of environmental protection
Office of Groundwater and Ground Environment, Soil Environment Management	- Matters related to specification of environmental standards on groundwater pollution and dioxins - Matters related to regulation to prevent groundwater pollution

MINISTRY, ORGANIZATION	Mandate
Division, Environmental Management Bureau	
Water Environment Management Division, Environmental Management Bureau	- Matters related to environmental standards on water pollution and dioxins - Matters related to regulation to prevent water pollution
Waste Management Division, Waste Management and Recycling Department	- Matters related to suppression of generation and proper disposal of general wastes - Matters related to preparation of standards, etc., regulation and so forth on maintenance and management of sewage terminal treatment plants from the viewpoint of environmental protection - Matters related to overall clerical work on technical development and popularization under jurisdiction of Waste Management and Recycling Department
Industrial Waste Management Division, Waste Management and Recycling Department	- Matters related to suppression of generation and proper disposal of industrial wastes
Office of Waste Disposal Management, Industrial Waste Management Division, Waste Management and Recycling Department	- Matters related to regulation of export, import, transport and disposal of specified hazardous wastes, etc. - Matters related to proper disposal of wastes with properties that may cause adverse effects on human health or the living environment, including explosibility, toxicity, and infectivity

[2] Incorporated Administrative Agencies

Incorporated Administrative Agencies	Overview of Businesses
National Institute of Occupational Safety and Health, Japan (JNIOSH)	- Comprehensive investigation and research regarding prevention of workplace disasters, promotion of health maintenance for workers, and other matters related to occupational diseases including cause, diagnosis and prevention of occupational diseases
Pharmaceuticals and Medical Devices Agency, JAPAN (PMDA)	- To provide quick relief service for people who have suffered from severe illness and disabilities caused by adverse drug reactions of pharmaceuticals or infection from biological products, etc., and to conduct scientific reviews to improve the quality, efficacy and safety of drugs , etc.
National Institute of Advanced Industrial Science and Technology (AIST)	- Implementation of research and development of scientific technology in mining and manufacturing industries, establishment and supply of national measurement standards, geological survey, improvement in technologies of local industry, human resource development to contribute to the reinforcement of technology management capability to help ensure development of economy and industry as well as stable and efficient supply of mineral resources and energy - Research on risk assessment and management methods including safety evaluation for nanomaterials and indoor exposure analysis on chemicals to address safe society with sustainable development
National Institute of Technology and Evaluation (NITE)	- Systematic collection, evaluation, organization and provision of technological knowledge, know-how and so forth necessary for economy, industry and government administration in fields of biotechnology, chemicals management, conformity assessment and product safety through technological assessment, analysis, research and investigation on industrial products
Food and Agricultural Materials Inspection Center (FAMIC)	- Safety inspection on fertilizers, agricultural chemicals, feed, pet food and so forth, efficient and effective promotion on food product labeling, provision of information on food products and agricultural production materials and so forth
National Institute for Environmental Studies (NIES)	- Wide range of investigation and research on protection of the environment including grasping of environmental conditions, effects on the environment and reduction of environmental load in global environment to local environment, and collection, organization and provision of information on the environment

3.5. Activities by industry associations, public organizations and research institutes

[1] Related organizations and their activities

(a) Chemical industry associations

(i) Vinyl Environmental Council (VEC)

(http://www.vec.gr.jp/)

It was established in May 1998. It has 9 member companies and 4 supporting member companies.

Conducts investigation and research on various problems in vinyl chloride industry related to the environment and safety and popularizes the correct understanding on vinyl chloride, while also investigating and studying production, technology, distribution, consumption and so forth of vinyl chloride to contribute to the healthy development of vinyl chloride industry. The specific functions are listed as follows:

- Investigation, research, and development and promotion of measures regarding various problems in vinyl chloride industry related to the environment, security and safety,
- Popularization and enlightenment of correct understanding on vinyl chloride,
- Investigation and research on production, technology, distribution, consumption and so forth in vinyl chloride industry, and
- Exchanges and cooperation with internal and external associated organizations on vinyl chloride.

(ii) Japan Dyestuff and Industrial Chemicals Association (JDICA)

(http://www.kaseikyo.jp/)

After the establishment as "Japan Chemical Products Association" in September 1946 and renamed as "Chemical Products Meeting" in May 1947, the current "Japan Dyestuff and Industrial Chemicals Association" was established on May 18, 1948. There are 104 formal member companies and 15 supporting member companies.

With the purpose to contribute to the healthy development and improvement of chemical products industry through investigation and research on necessary matters for the development of chemical products industry, this association conducts the following activities:

- Activities related to product safety and environmental protection,
- Activities related to addressing internationalization,
- Activities to support business activities,
- Activities to support educational activities, and
- Public relations and consultation.

(iii) Japan Plasticizer Industry Association (JPIA)

(http://www.kasozai.gr.jp/)

It was established on June 1, 1957. There are 8 member companies. To encourage the plasticizer industry development healthily and facilitate friendship among the member and supporting member companies, it delivers the following functions:

- Investigation, research and development and promotion of measures against various problems in plasticizer industry related to the environment and safety,
- Public relations and advertising activities to promote correct understanding on plasticizers,
- Investigation and research related to production, technology, distribution and so forth in plasticizer industry, and
- Exchanges and cooperation with internal and external associated organizations on matters related to plasticizers, etc.

(iv) Japan Petrochemical Industry Association (JPCA)

(http://www.jpca.or.jp/)

It was established in June 1958 based on “Petrochemical Industry Meeting” formed in February 1957. There are 31 member companies.

The activities include investigation and research in petrochemical industry, preparation of statistical data, collection and distribution of materials and information, knowledge enlightenment, popularization and advertisement, and announcement and proposal of opinions as the industry with the purpose of contributing to the healthy development of petrochemical industry and the development of the national economy.

(v) Japan Surfactant Industry Association (JSIA)

(http://www.jp-surfactant.jp/)

After being established as Japan Textile Oil Industry Association in September 1950 and renamed as Japan Oil Solution Industry Association in 1953, it was renamed again as the current Japan Surfactant Industry Association in April 1961.

This association comprises of 45 surfactant product manufacturers. In addition to examination of the issues on surfactants that involve the entire industry among representatives of the member companies, they collect and organize information on surfactants related to the environment and safety, popularize the correct knowledge on surfactants and provide various data on surfactants.

(vi) Japan Chemical Industry Association (JCIA)

(http://www.nikkakyo.org/)

It was established as Japan Chemical Industry Association in April 1948, reorganized as a legal entity in June 1991, and changed into a general incorporated association in April 2011.

The purpose of this association is to encourage the chemical industry develop healthily and thus contribute to the prosperity of Japanese economy and improvement in the life of the people by investigating and studying the production, distribution, consumption and so forth in chemical industry, and investigating, studying and planning and promoting measures against various problems in chemical industry regarding technology, labor, the environment and the safety of chemical products, and there are 171 member companies and 79 firm members as of 2012.

Their major activities are listed as follows:

- Investigation and research on production, distribution, consumption and so forth in chemical industry,
- Investigation, research, and planning and promotion of measures against problems related to technology, labor, environment, safety and so forth in chemical industry,
- Awarding of excellent technologies developed in the chemical industry, safety results and so forth,
- Collection and provision of information in the chemical industry,
- Promotion and enlightenment on chemical industry, and
- Organizing of training workshops, seminars and so forth in chemical industry.

(vii) Japan Chemical Exporters and Importers Association (JCEIA)

(http://www.jcta.or.jp/index.html)

It was established in April 2010 with a new name as Japan Chemical Products Exporters Association and Japan Chemical Products Importers Association merged. It later became a general incorporated association, and has 237 member companies as of April 2012.

The purpose of this association is to facilitate harmony of the industry with the international economy and society, assist the healthy development of chemical products trade and contribute to the prosperity of the Japanese economy and improvement of the life of the people through investigation and research on import and export of chemical products, and investigation, research, and planning and promotion of measures against various issues on safety, the environment, distribution, security export control and so forth of chemical products.

Their major activities are listed as follows:

- A role as the bridge between the industry and the government as an organization of businesses importing or exporting chemical products,
- Promotion of common benefits for businesses in chemical products trade, and
- Thorough notification of laws and regulations in safety management of chemicals and security export control.

(viii) The Federation of Pharmaceutical Manufacturers' Associations of Japan (FPMAJ)

(http://www.fpmaj.gr.jp/)

Founded on 16 October 1948, the Federation of Pharmaceutical Manufacturers' Associations of Japan (FPMAJ) undertakes the following activities with the aim of contributing to the sound development of the pharmaceutical industry and the advancement of the life of Japanese nationals.

- Collection and provision/publication of relevant materials
- Study and research on common issues of the industry and the promotion of innovation with company management and advancement of pharmaceutical technology
- Compilation of the industry opinions, and if necessary, offering opinions to the government or related organizations
- Improvement of quality of pharmaceuticals and their raw materials, improvement of standards and enhancement of efficiency in production or distribution
- Study and investigation, etc. into the situation surrounding the production of pharmaceuticals in various countries

(ix) Japan Soap and Detergent Association (JSDA)

(http://jsda.org/w/index.html)

After being established as Oil and Fat Industry Federation in 1947 and reforming, Japan Fat & Oil Processors Association and Japan Soap Association were organized. Later in 1955, the two merged into Japan Fats & Oil Association. In 1961, Japan Household Synthetic Detergent Association was established, which merged with

Japan Fats & Oil Association in 1973 to form the current Japan Soap and Detergent Association. There are 23 formal member companies as of September 2011, and 36 supporting companies as of January 2012.

The purpose of this association is to summarize the fair opinion of the industry and contribute to the stable improvement of the life of Japanese people by delivering the fruit of cooperation on matters necessary for healthy development of oil and fat industry, soap and detergent industry and other related industries.

It comprises of manufacturers of soap, detergent and so forth and the manufacturers of oil and fat products which are used as the raw materials.

(x) Japan Soda Industry Association (JSIA)

(http://www.jsia.gr.jp/)

It was established on May 28, 1948. There are 26 member companies as of April 2012.

With the purpose of facilitating healthy development of the soda industry in Japan through investigation and research of various problems on soda industry, this association mainly implements the following activities:

- Announcement of industry opinions and reporting to the government and so forth,
- Investigation and research on production, distribution, consumption, raw materials and fuel,
- Investigation and research on rationalization of production technologies and various standards,
- Investigation and research related to the environment, security and safety and health,
- Exchanges with international organizations and investigation and research on overseas circumstances, and
- Enlightenment and public relations activities widely over the society

(xi) Japan Paint Manufacturers Association (JPMA)

(http://www.toryo.or.jp/index.html)

Established as a private organization on April 5, 1948 with paint manufacturers as members, and reorganized in 1986 as Japan Paint Manufacturers Association. It is a major member of “International Paint & Printing Ink Council” and “Asian Paint Industry Council.” It mainly comprises of formal members who are paint manufacturers and supporting members which manufacture or distribute raw materials for paints. As of April 2012, there are 96 formal member companies or organizations, and 166 supportive member companies or organizations.

The major activities are listed as follows:

- Investigation and research related to management of paint industry,
- Investigation and research related to paint technology development,
- Investigation and research on demand and supply of paints and their raw materials,
- Investigation and research related to paint standards,
- Popularization and enlightenment related to paint functions, colors and standards, and
- Collection and provision of information on prevention of pollution with paints, etc.

(xii) The Japan Plastics Industry Federation (JPIF)

(http://www.jpif.gr.jp/index.html)

Beginning as the Plastics Association established on July 1, 1950, the Japan Plastics Industry Federation was formed as a general organization with addition of associated companies in June 1962.

As a major organization in plastics industry in Japan, the association implements activities regarding various relevant issues over a wide range from raw material resins and molding to disposal of used products.

Their major activities are listed as follows:

- Activities to deal with "Act on the Promotion of Sorted Collection and Recycling of Containers and Packaging,"
- Activities to ensure environment and safety,
- Activities to deal with "Product Liability Act,"
- Domestic examination for International Organization for Standardization (ISO), and
- Activities for host country for ISO, etc.

(xiii) The Japan Aromatic Industry Association, Inc. (JAIA)

(http://www.jaia-aroma.com/)

It was established as "Japan Tar Association" on June 1, 1948 and renamed as an incorporated association in 1967, and shifted to a general incorporated association in 2011. There are 14 formal member companies and 34 supporting member companies.

This association conducts activities including investigation of production, distribution, consumption and so forth, and investigation, research and development related to various problems in product and manufacture technologies, labor, environment, safety and so forth in aromatic and tar industry to contribute to the stability and improvement of the life of Japanese people and promotion of wealth by ensuring stable, efficient and safe production and supply of aromatic and tar products, which are basic raw materials for chemical products.

The main activities are listed as follows:

- Investigation and research regarding aromatic and tar industries as well as products,
- Statistical work regarding production, shipment, import, export and so forth of aromatic and tar products,
- Investigation and research for industrial standardization and cooperation in standardization,
- Research and investigation on improvement of technologies in aromatic and tar industries and production efficiency improvement, and
- Preparation and distribution of information materials on aromatic and tar industries, etc.

(xiv) Japan Inorganic Chemical Industry Association (JICIA)

(http://www.mukiyakukyo.gr.jp/)

It was established on May 27, 1948. There are 74 member companies as of April 2012. With the purpose of addressing healthy development of inorganic chemical industry, they implement the following activities:

- Investigation and research on inorganic chemicals,
- Investigation and research on production, consumption and raw materials for inorganic chemicals,
- Investigation and research on import and export trends and international circumstances surrounding inorganic chemicals,

- Enlightenment and public relations activities to improve the social recognition of inorganic chemicals,
- Investigation and research on standards for inorganic chemicals, and
- Investigation and research on the environment and safety, etc.

(xv) Japan Crop Protection Association (JCPA)

(http://www.jcpa.or.jp/)

The predecessor organization is the incorporated association called Agricultural Chemicals Association established in 1946, which was shifted to the current association in 1953 after playing the role for inspection and supervision on agricultural chemicals after the war. As of 2012, there are 40 formal member companies and 35 supporting member companies.

The purpose is to deliver social mission of agricultural chemical industry, address the improvement in management efficiency and contribute to the society.

The major activities are listed as follows:

- Safety measures for agricultural chemicals,
- Promotion of proper use of agricultural chemicals,
- Public relations activities on agricultural chemicals, and
- Promotion of international activities regarding agricultural chemicals and measures including technology, safety, public relations, distribution and so forth in coordination with international organizations, etc.

(b) Public organizations and research institutes

(i) Japan Chemical Industry Ecology-Toxicology & Information Center (JETOC)

The former Japan Chemical Safety Center was established in 1978. It was later reorganized as incorporated entity Japan Chemical Industry Ecology-Toxicology & Information Center in 1980 and shifted to a general incorporated association in 2011. The purpose of this organization is to contribute to the following items by promoting investigation and research on chemical safety:

- Ensuring safety and sanitation of workers in workplace
- Healthy development of related industry
- Improvement in health and sanitation of the people of Japan

(ii) Japan Industrial Safety & Health Association (JISHA)

It was established in 1964. It is an organization established based on Industrial Accident Prevention Organization Act with the purpose to improve labor safety and sanitation and eliminate labor disasters through promotion of voluntary labor disaster prevention activities of businesses, and it implements support for proper chemicals management including model safety data sheet preparation for chemicals, and investigation of the hazards and health effects of chemicals used in workplace.

(iii) Japan Bioassay Research Center (JBRC)

It was established in 1982. This center implements general toxicity studies, carcinogenicity studies,

reproductive and developmental toxicity studies, mutagenicity studies and so forth on chemicals.

(iv) Food and Drug Safety Center (FDSC)

It was established in December 1970. This center implements various safety studies on food, drugs, various chemicals, medical materials, and medical tools. They also participate in public research and investigation projects from the research and technology viewpoints.

(v) Public Interest Incorporated Foundation BioSafety Research Center (BSRC)

It was established in September 1978. They implement various tests, investigations and studies on the safety of drugs, agricultural chemicals, food, general chemicals, medical tools and so forth.

(vi) The Institute of Environmental Toxicology (IET)

It was established in 1970. This institute implements investigation and research on safety of agricultural chemicals and so forth, various consigned tests, training on test skills, information exchange, popularization of test skills and knowledge and so forth.

(vii) Chemicals Evaluation and Research Institute, Japan (CERI)

Its former body, incorporated foundation Rubber Products Testing Association was established in 1949. It was renamed in 1972, again in 1973, and in 1999 as incorporated foundation Chemicals Evaluation and Research Institute, and shifted to a general incorporated foundation in 2010. This institute works to improve the quality of chemicals and so forth, ensure their safety, protect the environment and maintain health through testing, inspection, evaluation, research and development, etc. regarding chemicals.

(viii) Japan Chemical Innovation and Inspection Institute (JCII)

This institute was established as Celluloid Inspection Association in 1949. It was renamed in 1958 and 1964, and again in 1985 as Japan High Polymer Center. In 1998, Japan High Polymer Center was reorganized as Japan Chemical Innovation Institute, and it was renamed as the current Japan Chemical Innovation and Inspection Institute in 2011. Its main field of work includes research and development and testing and evaluation of high polymers.

(ix) Center for Environmental Information Science (CEIS)

The preparatory group for establishment was formed in 1971 by scientists and engineers from various fields who were interested in environmental sciences. It was established as incorporated association Center for Environmental Information Science in 1977, and shifted to general incorporated association Center for Environmental Information Science in 2011. This center conducts scientific research in various fields related to the natural and social environment as well as studies on systemization and integration of environmental sciences, and promotes popularization and enlightenment in environmental sciences. It also implements investigation and research on PRTR, risk communication, environmental learning and so forth.

(x) Japan Environmental Sanitation Center (JESC)

It was established in 1956. This center devote environmental sanitation and promote the welfare of the local residents by popularizing the concept of environmental sanitation through technical instruction, assistance and so forth to related organizations and promoting the improvement of the living environment.

[2] Overview of available specialized knowledge other than governments

Research institutes, universities, industrial/public organizations, labour unions, functional organizations, consumers and civil groups are also involved in the collection of chemical data, testing/evaluation, training/education, monitoring and information provision to the general public.

3.6. Coordination and cooperation structure among government ministries and agencies, etc.

It is recognized that recent issues regarding chemical substances require cooperation of government ministries and agencies by transcending their frameworks, for which the following inter-ministerial meeting, etc., have been established in cooperation by the various ministries and agencies in order to promote various measures regarding management of chemical substances effectively and efficiently.

Table 4 Coordination and cooperation structure among ministries and agencies

Name	Responsibility	Secretariat	Members	Legal authority /Objectives
Inter-Ministerial Directors' Committee for Cooperation on Endocrine Disrupting Chemicals	Regarding the issues of endocrine disrupting chemicals, exchanging information on effects on human health and activities by international organizations, as well as communicating and coordinating among relevant ministries and agencies if necessary.	Rotation among Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry, and Ministry of the Environment	Directors of the relevant divisions/offices at Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, and Ministry of the Environment	Exchange of information, and communication and coordination
Inter-Ministerial Meeting on Indoor Air Pollutants	Exchanging information on matters regarding indoor air pollutants among the relevant ministries and agencies, as well as communicating/ coordinating among relevant officers if necessary.	Ministry of Health, Labour and Welfare	Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment	Exchange of information, and communication and coordination

Name	Responsibility	Secretariat	Members	Legal authority /Objectives
Council of Ministries and Agencies on Dioxin Policy	Ensuring close communication among the relevant administrative institutions on policies regarding dioxin pollution and its effect on human health, and promoting it effectively and comprehensively.	Ministry of the Environment	Cabinet Office, National Police Agency, Ministry of Internal Affairs and Communications, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment	Communication/ coordination
Inter-Ministerial Meeting on GLP	Exchanging information on GLP as well as communication/coordination among relevant ministries and agencies for effective and efficient implementation of GLP schemes.	Ministry of Health, Labour and Welfare	Employees of Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment, and staff from GLP-related organizations	Exchange information, and communication and coordination

Name	Responsibility	Secretariat	Members	Legal authority /Objectives
Inter-Ministerial Meeting on GHS	Exchanging information on domestic/international activities related to GHS and promoting communication/coordination among relevant ministries and agencies, if necessary.	Ministry of Health, Labour and Welfare	Employees of Ministry of Foreign Affairs, Ministry of Internal Affairs and Communications, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment, Consumer Affairs Agency, and other concerned organizations	Exchange information, and communication and coordination
Inter-Ministerial Director-Generals' Meeting on the Stockholm Convention on Persistent Organic Pollutants	Developing National Implementation Plan of Japan under the Stockholm Convention on Persistent Organic Pollutants and promoting communication/coordination among relevant ministries and agencies to review the progress and to promote an effective implementation of the Convention.	Ministry of the Environment	Ministry of Foreign Affairs, Cabinet Office, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment	Exchange information, and communication and coordination

Name	Responsibility	Secretariat	Members	Legal authority /Objectives
Inter-Ministerial Conference on the Prevention of Illegal Traffic of Wastes	Taking preventive measures against illegal export of waste, and Appropriate countermeasure in case illegal exports take place.	Ministry of the Environment	National Police Agency, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Coast Guard, Ministry of the Environment	Exchange information, and communication and coordination
Inter-Ministerial Meeting on the Rotterdam Convention	Implementation of better communication and coordination among the concerned ministries in implementation of the duties of Japan based on “The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.”	Ministry of Foreign Affairs	Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment	Exchange information, and communication and coordination
Inter-Ministerial Meeting on Strategic Approach to International Chemicals Management (SAICM)	Implementation of better communication and coordination among the concerned ministries and agencies on promotion of chemicals management measures of Japan according to the Strategic Approach to International Chemicals Management (SAICM).	Ministry of the Environment	Cabinet Office, Ministry of Foreign Affairs, Ministry of Finance, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment	Exchange information, and communication and coordination

Name	Responsibility	Secretariat	Members	Legal authority /Objectives
Inter-Ministerial Conference on promotion of international measures against mercury	Implementation of better communication and exchange of information and opinions among the concerned ministries and agencies including domestic related measures on mercury control, regarding the measures of Japan in the Intergovernmental Negotiating Committee to prepare a global legally binding instrument on mercury.	Ministry of Foreign Affairs (chairman), Ministry of Economy, Trade and Industry and Ministry of the Environment (vice chairman)	Cabinet Office, Ministry of Foreign Affairs, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment	Exchange information, communication/ coordination
Working-level Meeting on the safety of nanomaterials	Exchange of information on matters related to the safety of nanomaterials in the concerned ministries and agencies.	Ministry of Economy, Trade and Industry	Cabinet Office, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment	Exchange information

3.7. Participation in international agreements/procedures on chemicals management

Table 5 Participation in international agreements/procedures on chemicals management

International agreement	Competent Government Ministries and Agencies
United Nations Recommendations on the Transport of Dangerous Goods	Ministry of Foreign Affairs
General Agreement on Tariffs and Trade/World Trade Organization Rules (regarding trade of chemical substances)	Ministry of Foreign Affairs, Ministry of Finance, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)	Ministry of Foreign Affairs
International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78)	Ministry of Foreign Affairs, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment
FAO Code of Conduct	Ministry of Foreign Affairs, Ministry of Agriculture, Forestry and Fisheries
Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer	Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry, Ministry of the Environment
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry, Ministry of the Environment
ILO Convention No.170	Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare
Agenda 21 United Nations Commission on Sustainable Development, CSD	Ministry of Foreign Affairs, Ministry of the Environment
Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction	Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry
The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC Convention)	Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment
Stockholm Convention on Persistent Organic Pollutants (POPs Convention)	Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and

	Fisheries, Ministry of Economy, Trade and Industry, Ministry of the Environment
International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS Convention)	Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment
Japan-EC Mutual Recognition Agreement (MRA) (regarding GLP for industrial chemical and GMP of drugs)	Ministry of Foreign Affairs, Ministry of Health, Labour and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry