# JAPAN'S APPROACH FOR THE PREVENTION OF ENVIRONMENTAL POLLUTION CAUSED BY CHEMICALS

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## Regulation on Industrial Chemicals

### **1973**

Promulgation of Chemical Substances Control Law (CSCL)

- to prevent environmental pollution caused by PCB-like chemicals
- for protecting human health
- by controlling manufacture, import and use

### 1973 CSCL Existing **New Chemicals** Chemicals >1 ton/year ≤1 ton/year **Evaluation** of PBT **Evaluation of PBT** Prior verification for approval -Based on!data - P:Persistency generated by GOJ - B: Bioconcentration; - T: Toxicity (human health) - Based on data submitted from companies - Prior permission is required for manufacture and /or import **Specified Chemicals** - Virtually prohibited

### Banned POPs under CSCL

- 1974: PCBs

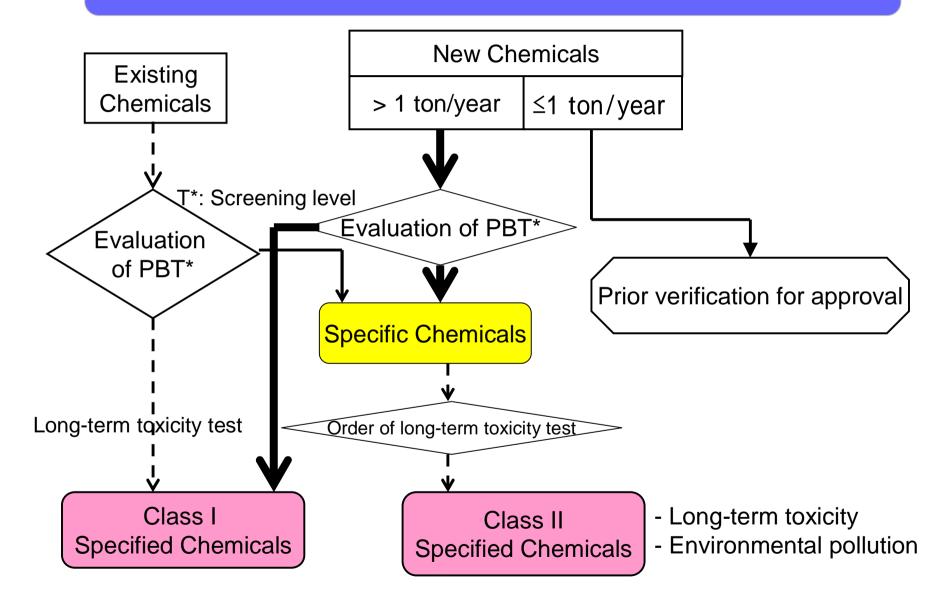
- 1979: HCB

- 1981: DDT, Aldrin, Dieldrin, Endrin

- 1986: Chlordane, Heptachlor

- 2002: Mirex, Toxaphene

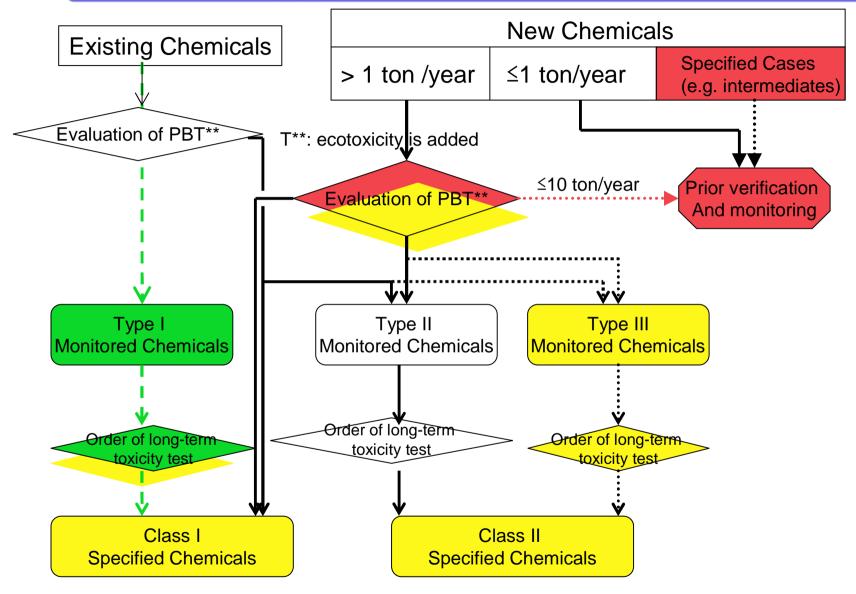
## 1986 Amended CSCL



## 2003 Amendments to CSCL

- i) Introduction of evaluation and regulation of chemicals from the viewpoint of ecotoxicity
- ii) Introduction of control on persistent and highly bioacuumulative existing chemicals
- iii) Amendment to prior evaluation scheme for new chemicals by taking into account their exposure
- iv) Introduction of obligatory reporting of hazard information obtained by business

## 2003 Amended CSCL



Obligatory reporting of hazard information obtained by business

## Regulated Chemicals under CSCL for Protecting the Ecosystem

Type III Monitored Chemicals	<ul><li>persistent</li><li>not highly bioaccumulative</li><li>have ecotoxicity</li></ul>
Class II Specified	- persistent
<u>Chemicals</u>	- not highly bioaccumulative
	- have toxicity for flora and fauna in the human living environment
	- confirmed to have the potential to cause damage by environmental pollution
Class I Specified	- persistent
<u>Chemicals</u>	- highly bioaccumulative
	- have long-term toxicity for humans or toxicity on top predators

## Regulation on Chemicals under CSCL for Protection of the Ecosystem

Type III Monitored Chemicals	- mandatory reporting of manufactured and/or imported amount (Note: These amounts are announced publicly.) - compliance with guidance provided by GOJ
Class II Specified Chemicals	<ul> <li>mandatory reporting of planned manufactured and/or imported amounts</li> <li>subject to governmental orders that require the change of planned amounts</li> <li>labelling</li> <li>compliance with technical guidance provided by GOJ and/or governmental recommendation on a legal basis</li> <li>compliance with guidance provided by GOJ</li> </ul>
Class I Specified Chemicals	<ul> <li>-prior permission required for manufacture and/or import (Note: Permission is prohibited in essential.)</li> <li>- prohibition of use unless authorized in advance</li> <li>-prohibition of import of products containing the Class I specified chemicals</li> <li>- recovery of the products</li> </ul>

## 2005 Japan Challenge Program

- < When was this program initiated?>
  - June 2005.

#### <What is the purpose?>

 Collection and dissemination of safety data (e.g. degradability, bioaccumulation, toxicity, ecotoxicity) on existing chemicals through partnership between of government and industry

#### <What will be done?>

- Collection and dissemination of safety data of priority chemicals (ca. 700 chemicals) by 2008
  - Note) Data items to be reported are the same as OECD/SIDS essentially.
- Voluntary participation of industry for generating data of ca. 160 chemicals that has no or insufficient data

http://www.env.go.jp/chemi/kagaku/kison\_index.html (in Japanese)

## Japan's 3<sup>rd</sup> Environmental Basic Plan

- based on "Environmental Basic Law"
- to be released in 2006.
- <Chemicals (draft)>
- Taking into account the goal set out at WSSD, in order to minimize risks due to hazardous chemicals by 2020, the effects of chemicals to human health and the ecosystem should be evaluated based on scientific knowledge through developing simple and rapid approaches such as structure-activityrelationship (SAR).

## "Chemicals in the Environment" JMoE' Environmental Monitoring Report

- JMoE has issued "Chemicals in the Environment" since 1974 on an annual basis.
- This environmental monitoring report presents the results of environmental surveys that JMoE has carried out in a systematic way to identify chemicals in the environment and to monitor their levels.

http://www.env.go.jp/chemi/kurohon/index.html (in Japanese)
http://www.env.go.jp/chemi/en/kurohon/http2003e/index.html

(in English)(2003 version)

### JMoE's Environmental Monitoring Program

- 1) The Initial Environmental Survey
- 2) The Advanced Environmental Survey
- 3) The Environmental Survey for Exposure Study
- 4) The Monitoring Investigation
- The Environmental Survey for human biological samples



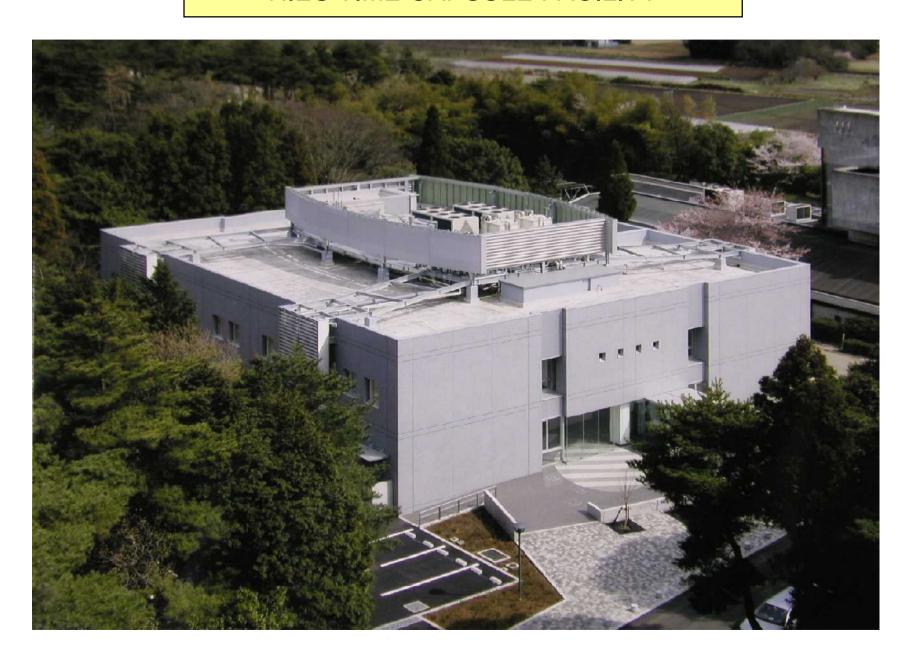




Modeling Analysis of Environmental Fate of Chemicals

Development of Analytical Method Environmental
Specimen Bank
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