

Session 1, September 1, 2011
Open Seminar on Chemicals Management Policies

Current Trends of Chemical Management Policies on Legal Framework in Japan

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Today's Contents

1. Countermeasures in Chemical Management for the Great East Japan Earth quake
2. Current trend of Chemical Management in Japan
 - Enforcement of the Chemical Substances Control Law (amendment in 2009)
3. Topics
 - GHS
 - Compatibility with the Stockholm Convention on POPs
 - Mercury Management

1. Countermeasures in Chemical Management for the Great East Japan Earth quake

Thank you for
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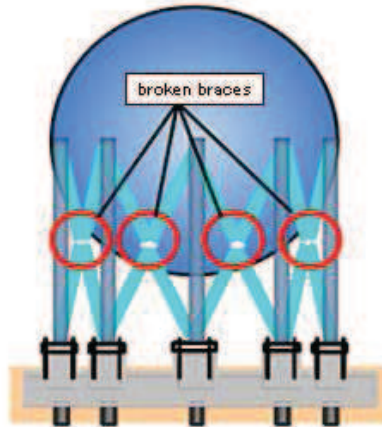


11/3/ 2011
the Great East Japan
Earthquake

**Pictures : HP of Ministry
of Foreign Affaires, Japan**

The events that occurred on March 11, 2011

Accident example (Chiba Refinery of Cosmo Oil Co.)



Braces broke that supported the legs holding the LPG tank



*4. Leaked LPG caught fire.

(Please refer the point where the fire broke out in the image shown in the layout of the tank area*2 on the previous page.)

Major Damages

- 1) Human damage: 1 major injury and 5 minor injuries
- 2) Material damage: All 17 LPG tanks, the pipelines and the roads were damaged and its affected the asphalt tanks, facilities of surrounding companies and some residential areas.
- 3) Environmental Damage: All LPG stored affected has burned by the fire and explosion and the leaked asphalt has been completely collected. **As a result, no impact on air, waters nor soil by the accident has been observed.**



What was happened

- Several legs holding up LPG tank No. 364 bent and the tank collapsed.
- The collapse lead to the damage of several pipes which caused LPG leakage.
- Leaking LPG spread out and caught fire near Tank No. LPG364.
- Due to the fire spreading fire from one tank to another.
- Due to the spreading fire, a number of neighboring LPG tanks exploded, further expanding the fire.
- Efforts to extinguish the fire began immediately after the outbreak of the fire and fully extinguished on March 21 at 10:10.

Influence to the Chemicals Industry

Pressure from a paradigm shift of Japanese economy and the reexamination of the engine for sustainable growth

- Power shortage (uniformly 15% cut, high price petroleum → industrial power plant)
- Shredded supply chain (domestically and globally, strong yen → halt in production, move to overseas)

External condition

- Uncertain market orientation in the face of a perceived unprecedented crisis especially for the manufacturing industry in Japan such as Car and Electronics
- Ethylene derivative from the shale gases in North America

Earthquake support of the MOE (chemical substances)

○ Management of the disaster waste containing harmful substances

- Disaster waste contaminated with the asbestos waste
 - Airing handling procedure and disposal method
- PCB waste
 - Electrical equipment such as transformers and etc. in the disaster waste within the tsunami-devastated area
 - for the public : calling attention to electric equipment that may contain PCB
 - for the person in charge : guiding the coping process for the electrical equipment such as transformers or condensers in the disaster waste※
 - (when it is confirmed)
 - Publishing the number of the outflow of the transformers and condensers

※ 1. Discriminate PCB using equipment from non-PCB using equipment

2. Handling of PCB using equipment etc.

3. Handling of the electrical equipment etc. other than PCB using equipment

○ Environment Monitoring

The government conducted monitoring survey urgently on air and water quality etc., because of the concern about negative influence for human health or living environmental degradation.

○ Response to the report concerning Law Concerning the Examination and Regulation of Manufacture, etc of Chemical Substances

When manufacturers and importers who have received the confirmation of the following can not operate their business, the government will respond quickly and flexibly as possible.

- Confirmation of the manufactured and imported quantity for the newly registered small amount chemicals
- Judgment notice for the newly registered chemicals
- Confirmation of the manufactured and imported quantity for the newly registered chemicals with low production volume

2. Current trend of Chemical Management in Japan

- Enforcement of the Chemical Substances Control Law
(amendment in 2009)**

Key Points of Amendment in 2009 (1)

(1) Shift to Risk-based chemical management

$$\text{Risk} = \text{Hazard} \times \text{Potential Exposure}$$

Hazard: Potential adverse effects of chemicals for human health and the environment

Amount of Exposure: Potential Exposure to human and ecosystem

Before the Amendment

Regulations are mainly based on hazards of chemicals



After the Amendment

Regulations shall be mainly based on risks of chemicals

Key Points of Amendment in 2009 (2)

(2) Introduction of a comprehensive control system that covers the existing chemical substances

- (a) Companies that have manufactured or imported any chemical substance, including existing one, in excess of the specified amounts are newly obliged to notify quantity and other information for every fiscal year.
- (b) Chemical substances which the government identifies from contents of the notifications and available knowledge of their hazardous properties shall be designated as “Priority Assessment Chemical Substances,” which have higher priority in the risk assessment.”
- (c) Manufacturers and importers of the Priority Assessment Chemical Substances are required to submit information on hazardous properties, and companies handling them are required to report their uses when necessary.
- (d) Among the Priority Assessment Chemical Substances, substances which raise concerns about adverse effects on humans or the environment through the gathered information and the risk assessment shall be subject to regulations on manufacture and use as “Class II Specified Chemical Substances,” which category is stipulated in the previous law.

Key Points of Amendment in 2009 (2)

(2) Introduction of a comprehensive control system that covers the existing chemical substances

(e) In addition to “chemical substances which is persistent in the environment,” which have been under control, “chemical substances which is not persistent in the environment” are regulated in the amended law.

Before the Amendment

to prevent environmental pollution caused by chemical substances that are persistent, because such chemicals remain in the environment for a long term.



After the Amendment

Non-persistent chemicals are also regulated, because they may have adverse effect on the environment, when they are emitted more than that can be decomposed through natural processes.

Key Points of Amendment in 2009 (3)

(3) Appropriate control on chemical substances in the supply chain

To prevent environmental pollution by Class II Specified Chemical Substances and products containing those, the law requires companies handling those to adhere to specific handling standards and to label those as needed for transactions.

Before the Amendment

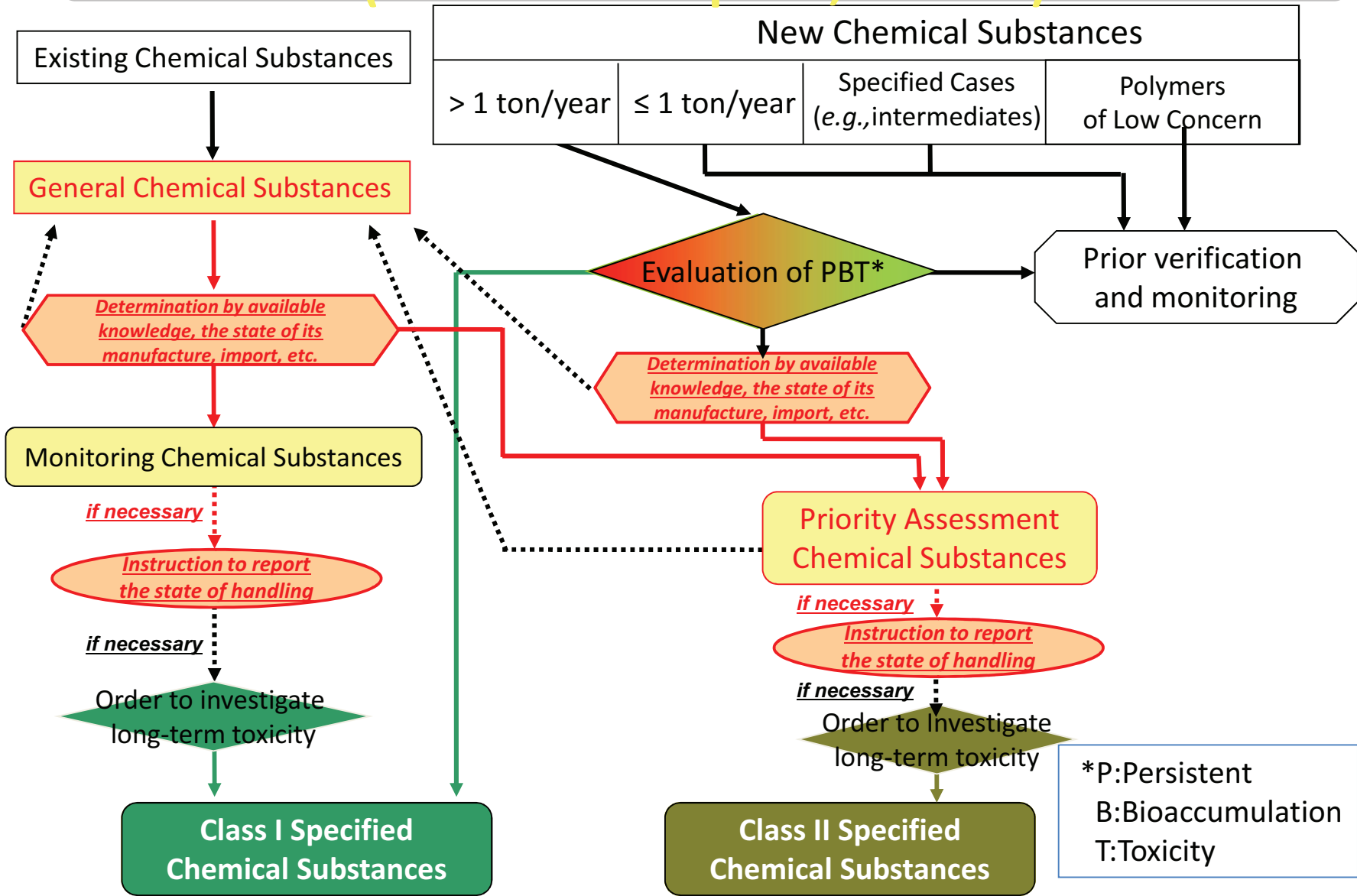
Companies manufacturing and importing specified chemicals are required to adhere to specific handling standards and to label those as needed for transactions.



After the Amendment

Companies handling specified chemicals and products containing those are also required to adhere to specific technical standards and to label them as needed for transactions.

CSCL amended in 2009 (Enforced at April 1, 2011~)



Obligatory reporting of hazard information obtained by business