

# ***Comparing Chemical Reporting Requirements in China, Korea and Japan***



*Enabling Chemical Compliance  
for A Safer World*

**Mr Yunbo Shi**  
**16-17 Oct 2013, Shanghai, China**  
**Email: [yunbo.shi@cirs-reach.com](mailto:yunbo.shi@cirs-reach.com)**

# Table of Content



<b>Introduction to Reporting &amp; PRTR</b>	<b>3</b>
<b>Chemical Report Requirements</b>	<b>10</b>
- China	10
- Korea	15
- Japan	18
<b>Comparison</b>	<b>20</b>
<b>Summary &amp; Key Messages</b>	<b>23</b>
	<b>25</b>

# Common Chemical Management Models



# Why Reporting?



## 1) Helping authorities

- Obtain essential data for policy-making;
- Prioritize chemical substances for risk assessment or specific control;
- Provide information to the public and promotion of their understanding of chemical substances ;

## 2) Helping enterprises improve EHS management level

- Establishing an inventory of chemical substances produced/used and knowing their hazards & environmental impacts;
- Monitoring environmental release info and communicating this info to the public and authorities;
- Ensuring better protection of workers & customers;

# Registration vs Reporting

	Registration	Reporting
Main goal	▪ Ensure product safety	• Gather information for policy-making and public disclosure
Main info provided	<ul style="list-style-type: none"><li>▪ Hazard data(physio-chemical/toxicological /eco-toxicology studies);</li><li>▪ Exposure info &amp; risk assessment;</li><li>▪ SDS/label, etc.</li></ul>	<ul style="list-style-type: none"><li>• Site;</li><li>• Volume;</li><li>• Uses;</li><li>• C&amp;L;</li><li>• Pollutant release &amp; transfer register(PRTR);</li></ul>
Frequency	• One-off job	• Annually or every 1-3 years.
Complexity & Duration	<ul style="list-style-type: none"><li>• Could be very expensive &amp; time-consuming;</li><li>• Government review &amp; approval required.</li></ul>	• Usually less time-consuming & complicated;

*"A **Pollutant Release and Transfer Register (PRTR)** is a national or regional environmental database or inventory of potentially hazardous chemical substances and/or pollutants released to air, water and soil and transferred off-site for treatment or disposal." - OECD*

<http://www.prtr.net/>

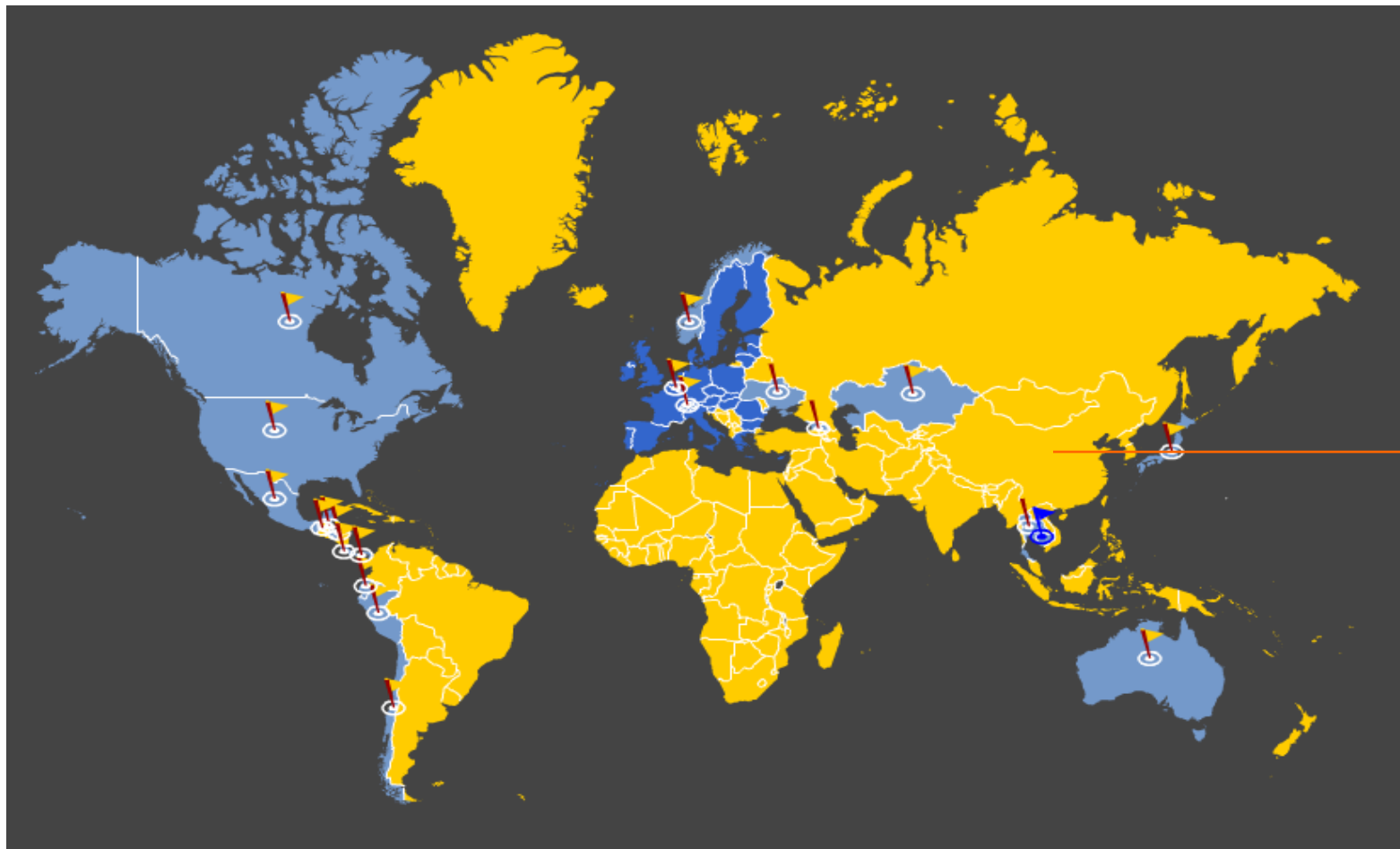
## 1) Main Benefits

- Help government set priorities for risk assessment or reducing or even eliminating the most potentially damaging releases;
- Dissemination of PRTR data has led to a competition among generators of hazardous chemicals and/or pollutants to reduce their releases.

## 2) Variances of National PRTR System

- Hazardous chemicals and pollutants reported;
- Industry sectors or business categories that must report;
- Threshold for reporting(volume, No. of staff, etc);

## 3) PRTR Adoption (Before 2013)



Latest

# Table of Content



Introduction to Reporting & PRTR	3
<b>Chemical Report Requirements</b>	<b>10</b>
- China	10
- Korea	15
- Japan	18
Comparison	20
Summary & Key Messages	23
	25

## 1) National Environmental Investigation of Chemicals – China MEP

- Duration & Deadline: **1 Jan 2013 ~ 31 Dec 2013**;
- Who : Chemical producers in China;
- Scope: All chemical substances;
- Information Reported:
  - company info;
  - inventory of substances produced in China and ingredients used in 2012;
  - volume;
  - characteristic pollutants;

 <b>中华人民共和国环境保护部</b> <small>Ministry of Environmental Protection of the People's Republic of China</small>		<b>政府信息公开</b>	
索引号: 000014672/2012-00687	发布机关: 环境保护部办公厅	分类: 环境管理业务信息\污染源管理	生成日期: 2012年10月22日
名称: 关于开展全国生产化学品环境情况调查的通知	文号: 环办[2012]129号	主题词:	
<b>环境保护部办公厅文件</b>			
环办[2012]129号			
关于开展全国生产化学品环境情况调查的通知			

## 2) Annual Reporting Under China MEP Order No. 7

- Deadline: **1 Feb of each year.**
- Target substance: notified new substance;
- Who shall report: Certificate holder(manufacturer/importer/OR).

Type	Category	Reported Information
<b>Typical notification (*)</b>	<b>General new substances</b>	Record-keeping
	<b>Hazardous new substances</b>	<ol style="list-style-type: none"> <li>1. Volume &amp; recipient information of previous year;</li> <li>2. Information on implementation of RMMs;</li> <li>3. Environmental exposure &amp; release info;</li> <li>4. Effects on human health &amp; environment.</li> </ol>
	<b>High environmental concern substance</b>	<ol style="list-style-type: none"> <li>5. Plan for production or import volume for next calendar year;</li> <li>6. Preparation for RMMs.</li> </ol>
<b>Simplified notification</b>		<ol style="list-style-type: none"> <li>1. Volume &amp; recipient information of previous year.</li> </ol>

*(\*) First activity report is also required.*

## 3) Environmental Administration Registration of Hazardous Chemicals – China MEP Order 22

- Deadline: **From 1 March 2013, every 3 years.**
- Scope:
  - The Catalogue of Hazardous Chemicals;
- Who shall report: Producers and users;
- Information Reported:
  - Volume, uses and use descriptions;
  - Hazard classification, SDSs and labels;
  - Measures on preventing and controlling environmental exposure, emission of chemical pollutants, and disposal of hazardous chemical waste.

## 4) Pollutant Release & Transfer Register(PRTR)– China MEP Order 22

- Deadline: **31 Jan of each year;**
- Scope:
  - Priority Hazardous Chemicals for Environmental Management(PHCs);
  - List to be enacted by MEP;
- Who shall report: Producers and users of PHCs;
- Information Reported:
  - Information on the release, disposal and recycling of priority hazardous chemicals and characteristic pollutants, as well as relevant calculation data;
  - Prevention and control management plan;

# Chemical Reporting in China: Penalties



Failure to Report	Penalties	Repeated Infringement
Under MEP Order No. 7	Up to RMB 10,000	
Under MEP Order No. 22	Up to RMB 10,000	RMB 10,000- RMB 50,000

RMB 10,000 = USD 1,630

## 1) Annual Report Under K-REACH

- Who: Manufacturer/importer/only representative;
- Frequency & Deadline: **Starts from 1 Jan 2015, annually;**
- Target substance:
  - New substance; and
  - Existing substance  $\geq 1\text{t/y}$ ;
- Information Reported: volume & use;
- Reporting of change of use required;
- Exemptions: substance in article(not released), R&D substance prescribed by presidential decree, etc.;

## 2) Pollutant Release & Transfer Register - Toxics Release Inventory (TRI)

- Who: Producers/Users(39 sectors, >30 employees);
- Frequency & Deadline: Annually
- Target substance: 415 substances
  - Group I Designated Chemical Substances: 16 substances( $\geq 1\text{t/y}$ );
  - Group II Designated Chemical Substances: 399 substances( $\geq 10\text{t/y}$ );
- Information Reported:
  - Released amount (air, water, land, disposal);
  - Transferred amount(sewage, off-site).
- Exemptions: Below than 0.1% or 1%(see below) or below than volume.

번호	CAS No.	품명		조사대상범위 [무게함유율(%)]
		품명(국문명)	품명(영문명)	
1	000050-00-0	포름알데히드	Formaldehyde	0.1 이상
2	000056-53-1	디에틸 스틸베스테롤	Diethylstilbesterol	0.1 이상

List: <http://ncis.nier.go.kr/tri/>

# Chemical Reporting in Korea: Penalties



Failure to Report	Penalties	Repeated Infringement
Under K-REACH	Up to 3 years prison or 50 million won	-
Pollutant Release & Transfer	Cancellation of permits or suspension of business up to 6 months	-

50 million won ~ USD 46,450

# Chemical Reporting in Japan



## 1) Chemical Reporting Under CSCL

- Who: Domestic manufacturer/importer;
- Deadline: Annually
- Target substance: Existing substances & notified substance.

General chemicals	Priority Assessment Chemicals	Monitoring substances
<ul style="list-style-type: none"><li>•Substances M/I <math>\geq 1</math> ton/year</li><li>• No need to report constituents &lt;10% in mixtures</li></ul>	<ul style="list-style-type: none"><li>•Substances M/I <math>\geq 1</math> ton/year</li><li>•No need to report constituents which is &lt;1% as impurities.</li><li>•Constituents added intentionally should be reported.</li></ul>	<ul style="list-style-type: none"><li>•Substances M/I <math>\geq 1</math> kg/year</li><li>•No need to report constituents which is &lt;1% as impurities.</li><li>•Constituents added intentionally should be reported.</li></ul>

## 1) Chemical Reporting Under CSCL

### ■ Required info:

- Chemical identity (MITI No., CAS No.(if available)
- Volume manufactured, imported (previous fiscal year)
- Use category and shipped volume, etc.

### ■ Exemptions:

- non-industrial use;
- the mixture is imported in the form which is ready to be sold in the stores (e.g. bottled products.)
- substances in articles (e.g. ink in ballpoint pens);
- Other criteria set by ministries(R&D purpose, etc.)

## 2) Pollutant Release & Transfer Register - Law for PRTR and Promotion of Chemical Management

- Who: Producers/Users(21 industries,  $\geq 21$  employees);
- Frequency & Deadline: Annually
- Target substance:
  - Specific Class 1 Designated Chemical Substances: 12 substances (annual amount handled:  $\geq 0.5\text{t/y}$ );
  - Class I Designated Chemical Substances: 354 substances( $\geq 1\text{t/y}$ );
- Information Reported:
  - Released amount (air, water, land, disposal);
  - Transferred amount(sewage, off-site).

Specific Class I Designated Chemical Substance	
CAS	Substance
1332-21-4	asbestos
75-21-8	ethylene oxide

# Chemical Reporting in Japan: Penalties



Failure to Report	Penalties	Note
General chemical substances	Up to 200,000 Yen	CSCL ( <a href="http://www.meti.go.jp/policy/chemical_management/english/files/Act%20on%20CSCL_provisional.pdf">http://www.meti.go.jp/policy/chemical_management/english/files/Act%20on%20CSCL_provisional.pdf</a> )
Priority assessment chemicals/ Monitoring chemical substances	Up to 300,000 Yen	
Pollutant Release & Transfer	Up to 200,000 Yen	PRTR Law ( <a href="http://www.env.go.jp/en/chemi/prtr/regulations/pdf/prtr_act.pdf">http://www.env.go.jp/en/chemi/prtr/regulations/pdf/prtr_act.pdf</a> )

200,000 Yen ~ 2,048 USD

# Table of Content



Introduction to Reporting & PRTR	3
Chemical Report Requirements	10
- China	10
- Korea	15
- Japan	18
Comparison	20
Summary & Key Messages	23
	25

# Chemical Reporting: China vs Korea vs Japan



Items	China	Korea	Japan
General Reporting -Target	<ul style="list-style-type: none"> <li>- New substances;</li> <li>- Catalog of Hazardous Chemicals</li> </ul>	<ul style="list-style-type: none"> <li>New substance;</li> <li>Existing substance<math>\geq</math>1t/y;</li> </ul>	<ul style="list-style-type: none"> <li>Existing substances<math>\geq</math>1t/y;</li> <li>Notified substance.</li> </ul>
General Reporting - Who	<ul style="list-style-type: none"> <li>- Certificate holder(M/I/OR)</li> <li>- Producer/User – HazChems</li> </ul>	M/I/OR;	M/I;
General Reporting -Information	<ul style="list-style-type: none"> <li>- Volume &amp; recipient for new substance;</li> <li>- Volume, use, classification, etc.</li> </ul>	Volume & uses	Volume & uses
Frequency	<ul style="list-style-type: none"> <li>- Annually for new substance.</li> <li>- Every 3 years.</li> </ul>	Annually	Annually
Penalty	<ul style="list-style-type: none"> <li>-Up to 1,630 USD for new substance;</li> <li>- Up to 8,150 USD for hazardous chemicals.</li> </ul>	<ul style="list-style-type: none"> <li>Up to 3 years prison or 46,450 USD</li> </ul>	Up to 2,048 USD

# Chemical Reporting: China vs Korea vs Japan



Items	China	Korea	Japan
PRTR – Target	Priority Hazardous Chemicals for Environmental Management(PHCs);	Group I Designated Chemical Substances(16); Group II Designated Chemical Substances(399);	Class 1 Designated Chemical Substances(354)
PRTR - Who	Producer/User	Producer/User	Producer/User
PRTR Threshold - Enterprise	<u>Not specified</u>	39 sectors & >30 employees	21 sectors & >21 employees
PRTR Threshold - Volume	<u>Not specified</u>	Group I: 1t/y Group II: 10t/y.	Specified Class I: 0.5t/y Class I: 1t/y
PRTR Frequency	Annually	Annually	Annually
PRTR - Penalty	Up to 8,150 USD	Cancellation of permits or suspension of business up to 6 months	Up to 2,048 USD

## 1) Significance of China MEP's Order 7 & 22

- Established general reporting requirements for new substances and chemicals in the Catalog of Hazardous Chemicals;
- Established Pollutant Release and Transfer Register(PRTR) system in China;
- Environmental management of chemicals reaching a new level

## 2) Challenges for China

- No volume threshold for reporting hazardous chemicals in the Catalogue;
- No volume threshold for the report of release and transfer of PHCs;
- No threshold for enterprise/facility for PRTR(sector, No. of staff etc).



*Enabling Chemical  
Compliance  
for A Safer World*



Thank you for your time!  
谢谢您的时间！  
시간 내주셔서 감사합니다！  
お時間をいただき！