

# **Chemicals/Hazardous Substances Management in Indonesia**



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# I. Introduction

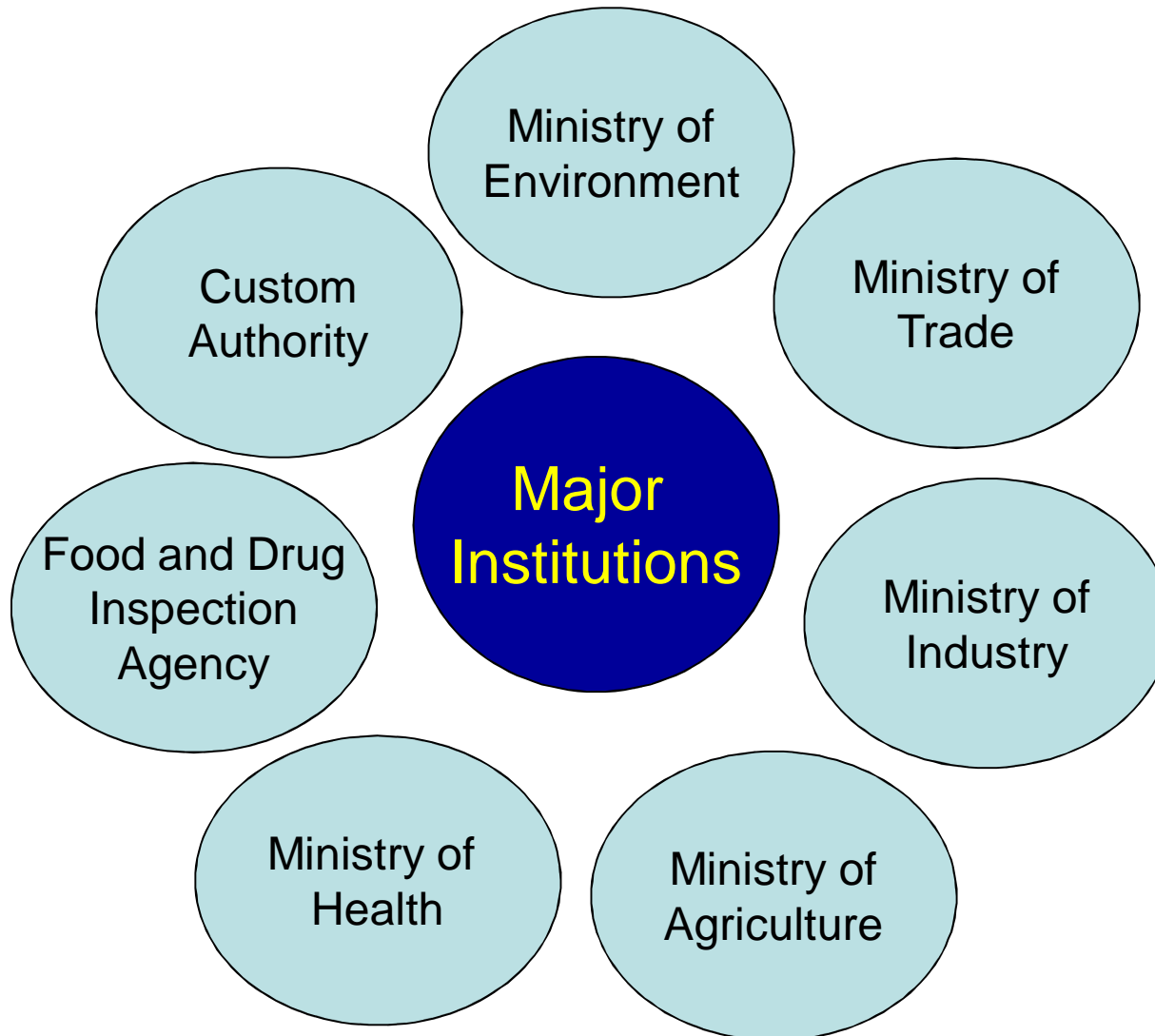
## Challenges

- The largest archipelagos
- Agriculture based industry
- Chemical industry
- Petrochemical

- Illegal Trafficking
- Persistent Organic Pollutants
- Hazardous wastes treatment facilities



## 2. Related Government Actors Chemical Management

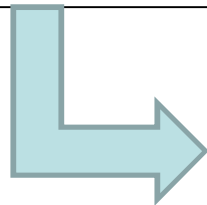




### 3. Environmental Related Policy Framework

- Environmental Protection and Management ACT No. 32/2009

- Government Regulation No. 18/1999 Juncto Government Regulation 85/1999 on Hazardous Wastes Management
- Government Regulation No 74/2001 on Hazardous Substances Management



Currently being revised

- Ratification of Basel Convention on 1993
- Ratification Montreal Protocol 1995
- Ratification of Stockholm Convention on 2009
- Ratification of Rotterdam Convention on 2013
- Signed of Minamata Convention on 2013



## 4. Hazardous Substances (B3) Management

Government Regulation No 74/2001 on Hazardous  
Substances Management

### Objective

Prevent and/or reduce impact and risk of hazardous  
substances to the environment, human health and  
life being

### Principles

- ✿ B3 minimization
- ✿ Integrated management (production; storage; usage)
- ✿ Sustainable development principle



# Government Regulation No. 74 Year 2001

- Definition
- Scope of regulation
- Hazardous substances classification
- Registration, notification, storage, symbol and label, transportation, controlling
- List of chemicals



## Definition

Hazardous substances is substance/material which its nature or and its amount and or its concentration, either directly or indirectly, can pollute or damage the environment, and or may endanger the environment, human health, and survival of human beings as well as other life.



## Scope of Regulation : EXCEPTION

- Radioactive materials,
- Explosives,
- Mining and production of oil and gas and their processed products,
- Food and beverages and other food additives,
- Household medical supplies,
- Cosmetics,
- Pharmaceutical ingredients,
- Narcotics, psychotropic substances and precursors as well as other addictive substances,
- Chemical weapons and biological weapons





# Classification

## Characteristics

1. Explosive
2. Oxidizing
3. Extremely flammable
4. Highly flammable
5. Flammable
6. Extremely toxic
7. Highly toxic
8. Moderately toxic
9. Harmful
10. Corrosive
11. Irritant
12. Dangerous to the environment
13. Carcinogenic
14. Teratogenic
15. Mutagenic

## Usage

- Can be used
- Limited used
- Banned for used





# Hazardous substances Controlling Instrument

Registration  
Mechanism

Producer or  
Importer B3

Notification  
Mechanism

Exporter or importer  
-Limited used B3  
-Other than listed B3

Symbol,  
and Labelling

Production,  
transportation,  
distribution, and  
storage



# Registration and Notification

## REGISTRATION

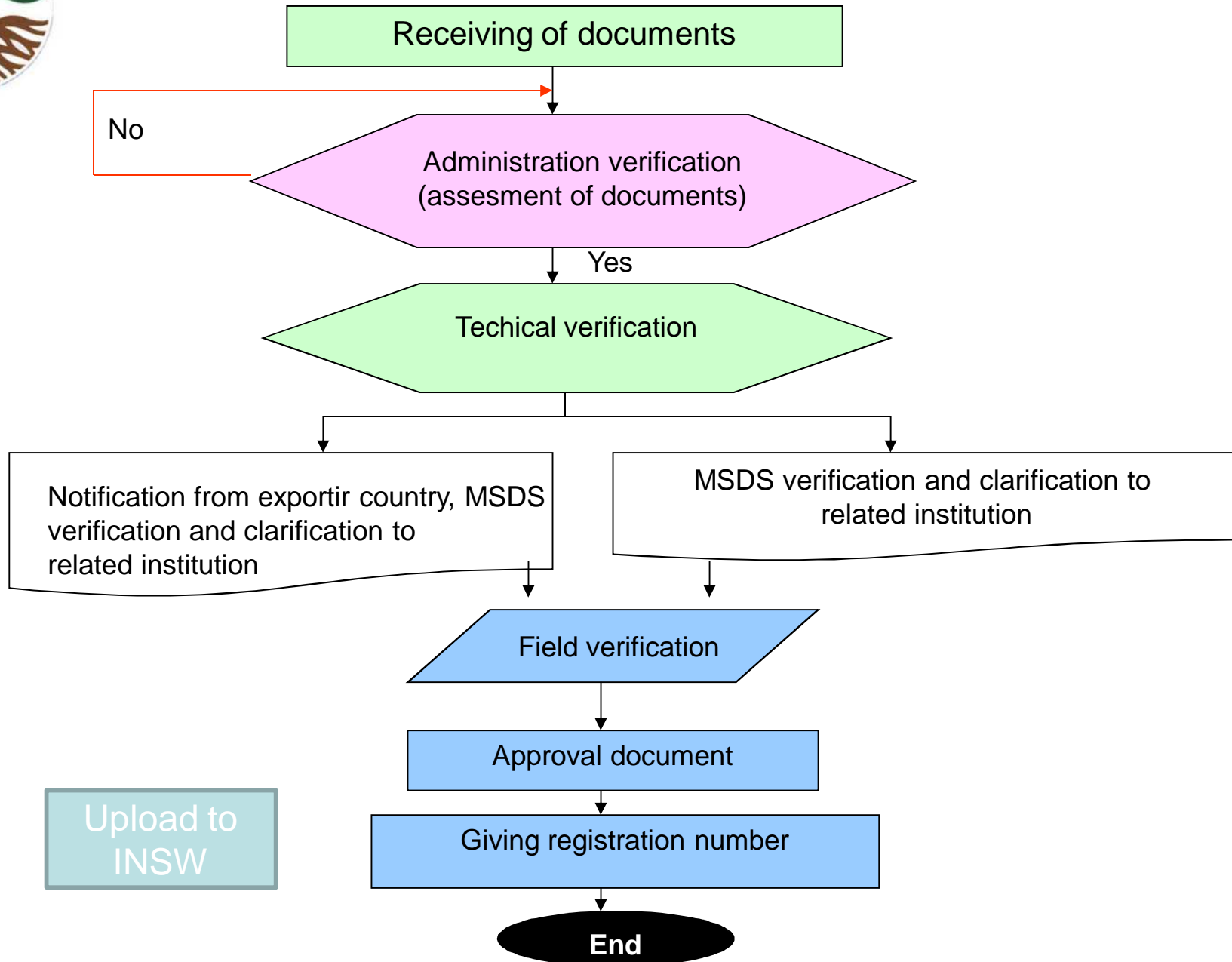
- Registration of hazardous substances which are manufactured and imported with the purpose to find out the distribution of hazardous substances in Indonesia.
- Each hazardous substances should be registered by producer or importer.

## NOTIFICATION

- Notifications for importation is the prior informed consent from the authorities of the exporting country regarding the transboundary movement of restricted hazardous substances or first imported hazardous substances.

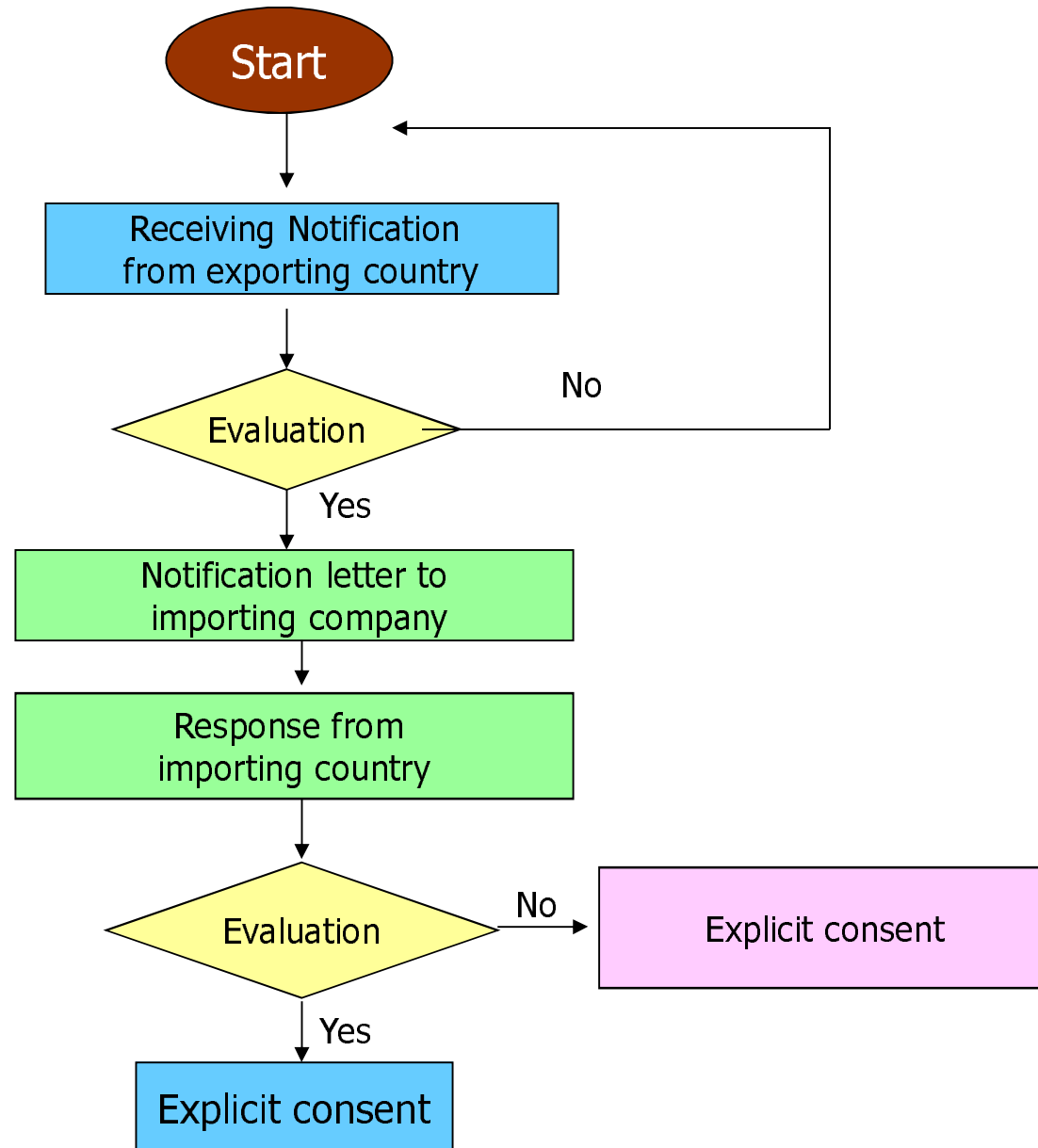


# Registration Procedure





# Notification Procedure





# Symbol and Label

Ministerial Decree No. 03 year 2008 on Procedure for Providing of Symbol and Label on Hazardous and Toxic Substance

- Every packaging of B3 shall be provide with symbol and label of B3 in accordance to their classification
- Every storage and transportation vehicle shall be provided with symbol and label of B3 in accordance to their classification

- Single substance

- Moving forward to Global Harmonized System



# Indonesia National Single Window

## DEFINITION

An Indonesian national system that provide single submission of data and information, single and synchronous processing of data and information and single decision making for custom release and clearance of cargoes.

## OBJECTIVE

To increase efficiency of time and cost in customs release and clearance of cargoes process and at the same time to prevent illegal trafficking of hazardous substance;



# LATEST DEVELOPMENT







## 5. Revision of GR No. 74/2001

- Basis for revision
  - Mandate of Act No. 32/2009
  - International Agreement or Convention : Stockholm Convention, Rotterdam Convention, SAICM, GHS
  - Chemical development
  - Evaluation of the implementation
- Changes
  - Classification : characteristics ⇒ GHS
  - Type of chemicals : single, mixture, preparation
  - List of chemicals
  - Scope of regulation
  - Technical team



## Revision of GR No. 74/2001 (con'td)

- Latest development:
  - Draft has been discussed with other ministries :
    - Harmonization with draft of chemical act
    - Role of ministries and local government
    - List of chemicals
  - Issues that have been raised by industrial sectors:
    - Scope of regulation
    - Cut-off value
    - List of chemicals
    - Information access for public
    - Harmonization and synchronization with others existing chemical regulations



# Guideline of Hazardous Substances Storage

- Basis for development :
  - Article 18 GR No. 74/2001
- Latest development :
  - Draft of guideline has been discussed with industries and laboratories.



# Hazardous Substances Technical Team

- Basis for formation :
  - Article 21 GR No. 74/2001
- Draft of Technical Team
  - Members : relevants ministries, universities, industrial associations, environmental organizations
  - Tasks : recommend hazardous substance categorization and importation on new hazardous substance



## Technical Team (con'td)

- Latest development:
  - Initial meeting with relevant ministries has been done. Issues that has arised were purpose of formation, scope of work and relation to other existing teams.



# Chemical Inventories and Data

- Registration and Notification Data
  - Hazardous substances that can be used
  - Hazardous substances that limited used



## Simple database

- Name of chemical
- Country of origin
- Volume of import
- The usage



## **6. GHS Implementation in Indonesia**



# Globally Harmonised System (GHS)

Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is:

- ❑ an international system that harmonized the classification and labelling of hazardous chemicals
- ❑ a logical and comprehensive approach for:
  - defining health, physical, and environmental hazard of chemicals
  - applying agreed hazard criteria to classify chemicals based on their hazardous effects
  - communicating hazard information on labels and safety data sheets





# GHS Application for Chemicals

GHS is applied for chemicals excluding pharmaceutical, additives used as end products in food, cosmetics, chemical residue, and waste





# Sectors of GHS implementation

1. Workplace, **particularly industrial workplace**
2. Agriculture (pesticide), involve both workplace and consumer exposures
3. Transport, including distribution of hazardous chemicals
4. Consumer products, involve products sold to general public, and exposures of vulnerable population



## Benefits of GHS

1. Enhances the protection of human health and the environment through the provision of harmonized chemical safety and health information
2. Reduces the need for duplicative testing of chemicals
3. Provides the informational infrastructure for chemical safety and health management programs
4. Increases efficiencies; reduces costs of compliance; lower health care costs



# Current Status

## Legal Basis

- UN GHS Purple Book (Latest version)

## Ministry of Industry

- Decree of Minister of Industry No. 87/M-IND/PER/9/2009 regarding Globally Harmonized System of Classification and Labeling of Chemicals
- Decree of Minister of Industry No. 23/M-IND/PER/4/2013 regarding the Revision of Decree of Minister of Industry No. 87/M-IND/PER/9/2009 regarding Globally Harmonized System of Classification and Labeling of Chemicals
- Decree of Director General of Agrochemical No. 21/IAK/PER/4/2010 regarding Technical Training of GHS Implementation for Classification and Labelling on Chemicals



# GHS Regulation in Indonesia

Previous	Current
<b>Decree of Minister of Industry No. 87/M-IND/PER/9/2009</b>	<b>Decree of Minister of Industry No. 23/M-IND/PER/4/2013</b>
GHS is mandatory for single substance and will be mandatory in December 31 <sup>st</sup> 2013 for mixtures	GHS is mandatory for single substance and will be mandatory in December 31 <sup>st</sup> 2016 for mixtures
It is not clearly stated that GHS application for import and domestic products	It is clearly stated that GHS application for import and domestic products, plus the exemptions for Small Medium Enterprises (SMEs)
Refer to UN GHS Purple Book 2 <sup>nd</sup> Edition	Refer to UN GHS Purple Book 4 <sup>th</sup> Edition
There is no class for environmental hazards	Class for environmental hazards: hazardous to aquatic (acute and chronic) and ozone layer
MSDS (Material Safety Data Sheet)	Changed to : SDS (Safety Data Sheet)



# Current Status

(Cont'd)

## **Summary of Decree of Minister of Industry. No. 23/M-IND/PER/4/2013 (as Revision of Decree of Minister of Industry No. 87/M-IND/PER/9/2009)**

- Chemical substances are obliged to be tagged with label(s)
- Chemical substances are obliged to own Safety Data Sheet (SDS)
- Every stakeholder who produce chemical substance is obliged to determine classification hazard tag label onto the package compiling Safety Data Sheet (SDS), review and revise at least for 5 years
- Every stakeholder who repack chemical substance is obliged to tag label(s), name and address of repacker, net weight, and compiling Safety Data Sheet (SDS)
- Every stakeholder as mentioned in referenced Decree is obliged to give report to Director General of Manufacturing Industry Basis, Ministry of Industry



# Current Status

(Cont'd)

Covers 28 physical, health, and environmental hazards

				
<ul style="list-style-type: none"><li>· Oxidizers</li><li>· Organic Peroxides</li></ul>	<ul style="list-style-type: none"><li>· Flammables</li><li>· Self Reactives</li><li>· Pyrophorics</li><li>· Self-Heating</li><li>· Emits Flammable Gas</li></ul>	<ul style="list-style-type: none"><li>· Explosives</li><li>· Self Reactives</li><li>· Organic Peroxides</li></ul>	<ul style="list-style-type: none"><li>· Acute Toxicity (severe)</li></ul>	<ul style="list-style-type: none"><li>· Corrosive</li></ul>
				
<ul style="list-style-type: none"><li>· Gases under pressure</li></ul>	<ul style="list-style-type: none"><li>· Carcinogen</li><li>· Respiratory sensitizer</li><li>· Reproductive</li><li>· Target organ toxicity</li><li>· Mutagenicity</li></ul>	<ul style="list-style-type: none"><li>· Environmental toxicity</li></ul>	<ul style="list-style-type: none"><li>· Irritant</li><li>· Dermal Sensitizer</li><li>· Acute Toxicity (harmful)</li></ul>	



# GHS Application

- Single substance chemicals both for domestic production and import are compulsory and required to implement GHS ever since **March 24<sup>th</sup> 2010**
- Chemical Mixtures are voluntarily required to implement GHS, however after **December 31<sup>st</sup> 2016**, mixtures both for domestic production and import are compulsory and required to implement GHS. Exemption: Small Medium Enterprises (SMEs)

- Companies especially MNCs and export's manufacturers have implemented Safety Data Sheet and Labels based on GHS
- Compile the Draft of Technical Instruction of Director General of Manufacturing Industrial Base (as revision Decree of Director General of Agrochemical No. 21/IAK/PER/4/2010) to determine building block, cut-off value for chemicals, and Confidential Business Information (CBI)



## 7. International Cooperation





## Rotterdam Convention

Indonesia ratified  
Rotterdam Convention  
at 2013. Act No. 10  
Year 2013



## Stockholm Convention

Ratified of Stockholm  
Convention at 2009. Act  
No. 19 year 2009

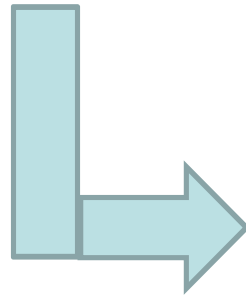
## Minamata Convention

Indonesia signed of  
Minamata Convention  
at 2013



# Implementation in Indonesia

Rotterdam Convention



B3 Notification

# Stockholm Convention

## UPOPs (dioxin/furan)

- *Demonstration project* : Implementation of BEP in *fossil fuel utility industrial sector* – *monitoring of dioxin/furan*
- Curriculum Development on *green boiler*
- *Boiler study and biomass fuel*
- Capacity building : training for boiler operator, training on curriculum development

## PCBs

- Monitoring of PCBs residue in water, sediment, biota.
- Inventarisation of equipment with PCBs content

## Pesticides

- Monitoring of pesticides POPs residue in water, sediment, biota

## Up-date NIP

- Inventarisation of new and the original POP's
- work plan



# Minamata Convention

Current Activities that is being done to support the ratification

1. Identification and Inventarisation of regulation and technical data through the activities:
  - Workshop/Sosialization
  - Monitoring and analisis
  - Data processing
  - Preparation of the study
2. Technical and Coordination Meeting
3. Preparation of National Action Plan





## 8. Challenges: Planning and Implementation of Regulations

- The consistency of national regulations with international policies and other countries' policies .
- The growing demands of chemical substances should be anticipated by the regulations.
- The number of ministries who involved in chemical management provide challenges in coordination.
- The capacity of human resources and infrastructure.



## 9. Strategic Directions

### Governance

- Technical team for Hazardous Substances
- Preparation of Chemicals Act
- Revision of Government Regulation No. 74 Year 2001

### Other chemicals International Cooperation and agreements

- SAICM

### Monitoring Capacity

- Human Resources
- Infrastructure including laboratory



**Terima kasih**  
**Thank you**  
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