

Updates On Chemical Management in Malaysia



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2015 Organization Chart



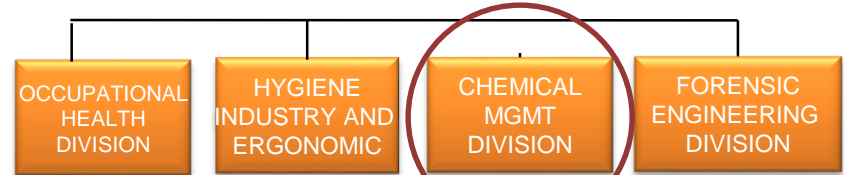
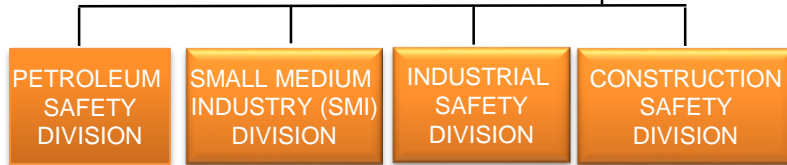
DIRECTOR GENERAL



DEPUTY DIRECTOR GENERAL (Occ. Safety)



DEPUTY DIRECTOR GENERAL (Occ. Health)



Legal Advisor

POLICY, INTERNATIONAL AND RESEARCH DEVELOPMENT DIVISION

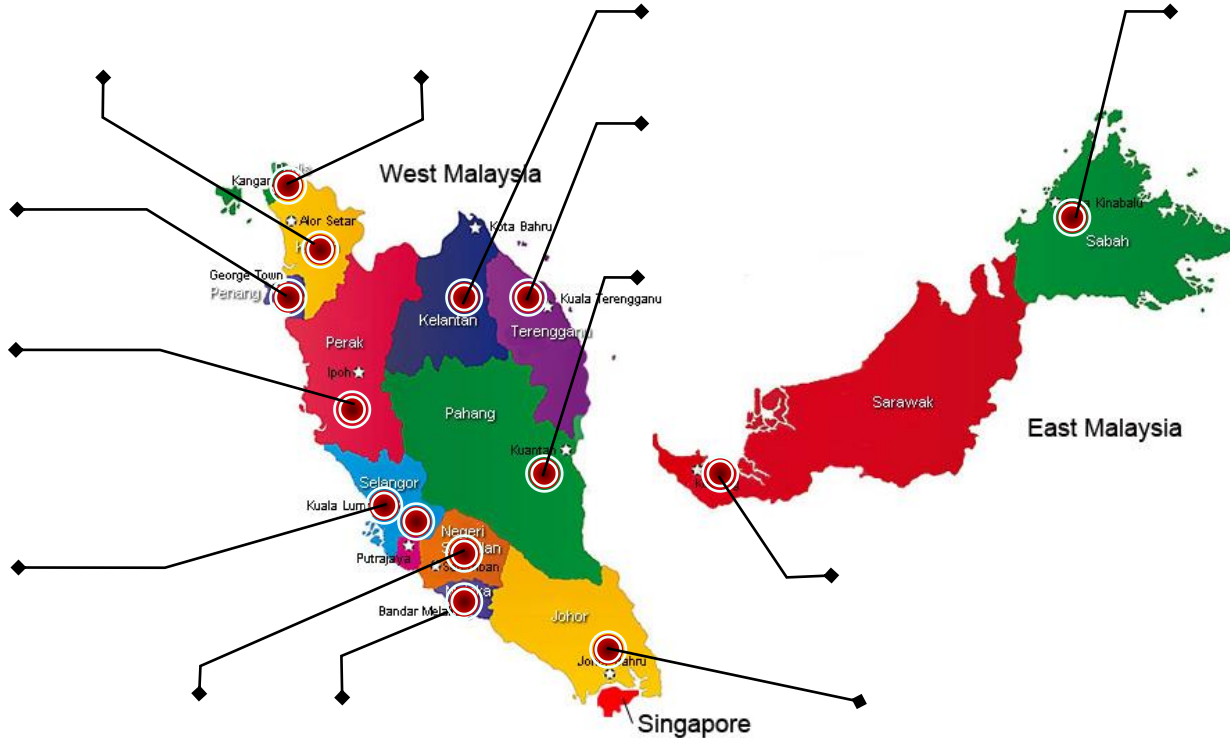
CORPORATE SERVICES DIVISION

NATIONAL COUNCIL OF OCCUPATIONAL SAFETY AND HEALTH

STATE OFFICE DIRECTOR (14)

Head of Branch Office (5)

DOSH State Office



In order for Government to provide a safe and healthy working environment,

- 1 Standard setting 
- 2 Enforcement 
- 3 Promotion and publicity 

Enforcement Activities

Year	Total Inspection	Notices Issued	Compound Issued	Prosecution Case
2011	170, 818	6,261	234	183
2012	212,532	15,591	466	247
2013	210,413	18,186	415	350
2014	222,612	18,346	426	300



Ratio Profession : Target Group

Profession	Ratio to target group
JKKP	DOSH officers : Total workforce (2014) 1421 : 13 599 408 1 : 9570 (All) 1 : 12 733 (Technical Officer)
Doctor	Doctor : Population 1 : 600
Police	Police : Population 1 : 250
Teacher	Teacher : Student 1 : 16 (Primary) 1 : 17 (Secondary)
JKKP + OYK/OYB	JKKP + OYK/OYB : Workers 28107 : 13 599 408 1 : 483

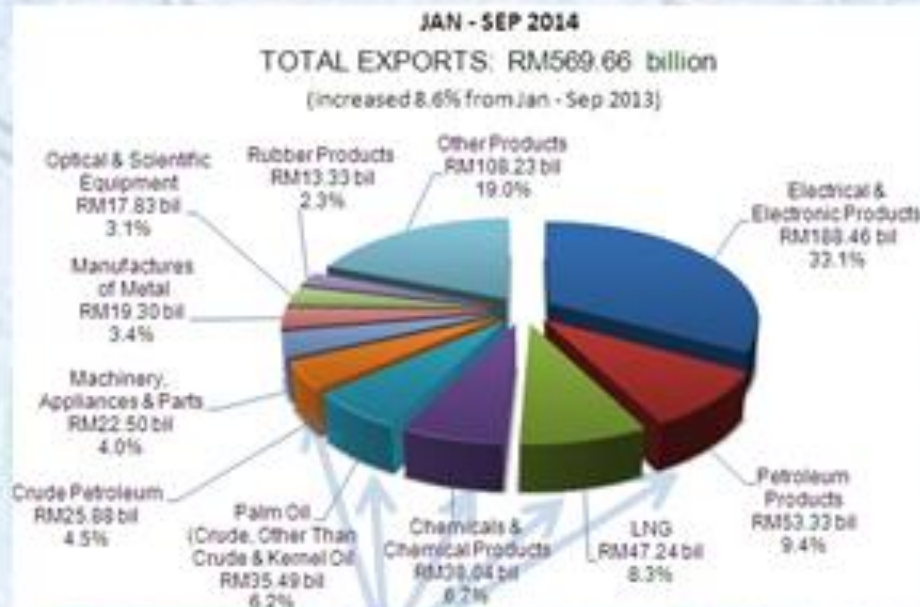
Promotion & Training Program – Salam FM Radio Interview

No.	Topic	Officer	Date
1	Potential Adverse Health Effects of Asbestos & Control Measures	Ir. Dr. Majahar Abd Rahman	8/8/2015
2	Management of Chemicals in the Workplace (USECHH)	Ir. Roslenda Hasan	29/8/2015
3	Hazard Communication (CLASS)	Pn. Shabanon Sharif	19/9/2015
4	Risks Arising From Exposure To Chemicals in the Workplace	Pn. Rusnah Nanyan	17/10/2015
5	Use of Personal Protective Equipment in the Workplace	En. Mohd Norhisyam Omar	7/11/2015
6	Indoor Air Quality (IAQ)	En. Muhammad Faisal Jusoh	28/11/2015
7	Career Opportunities in the Field of Chemical Management	En. Mohd Azam Tumijan	19/12/2015

Program /International Chemical Conventions

- **Basel Convention** (Control of trans boundary movement of hazardous waste
- **Rotterdam Convention** on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade – ratified on 4th September 2002
- **Stockholm Convention** on Persistent Organic Pollutants – active involvement in activities under this convention
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (**Chemical Weapon Convention**)
- The **Minamata Convention on Mercury** -designed to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds
- ILO's "Safety in the use of chemicals" Convention & Recommendations
- Strategic Approach to International Chemical Management (SAICM) 2020
- CWC Associate Program – Industrial Module
- CWC – Mentorship Program (Myanmar & Sudan)
- ASEAN- Japan Chemical Safety Database
- APEC- Chemical Dialogue
- CHEMCON Conference
- Japan Technical Assistance on Asbestos Management Program – Jointly with LESTARI
- OPCW Assistance Program on Chemical Safety & Security Program

MALAYSIA EXPORT JAN- SEPT 2014



Total Chemical Products= RM
199.98 b (35.1%)

Source: Department of Statistics, Malaysia

Occupational Diseases Investigated by DOSH

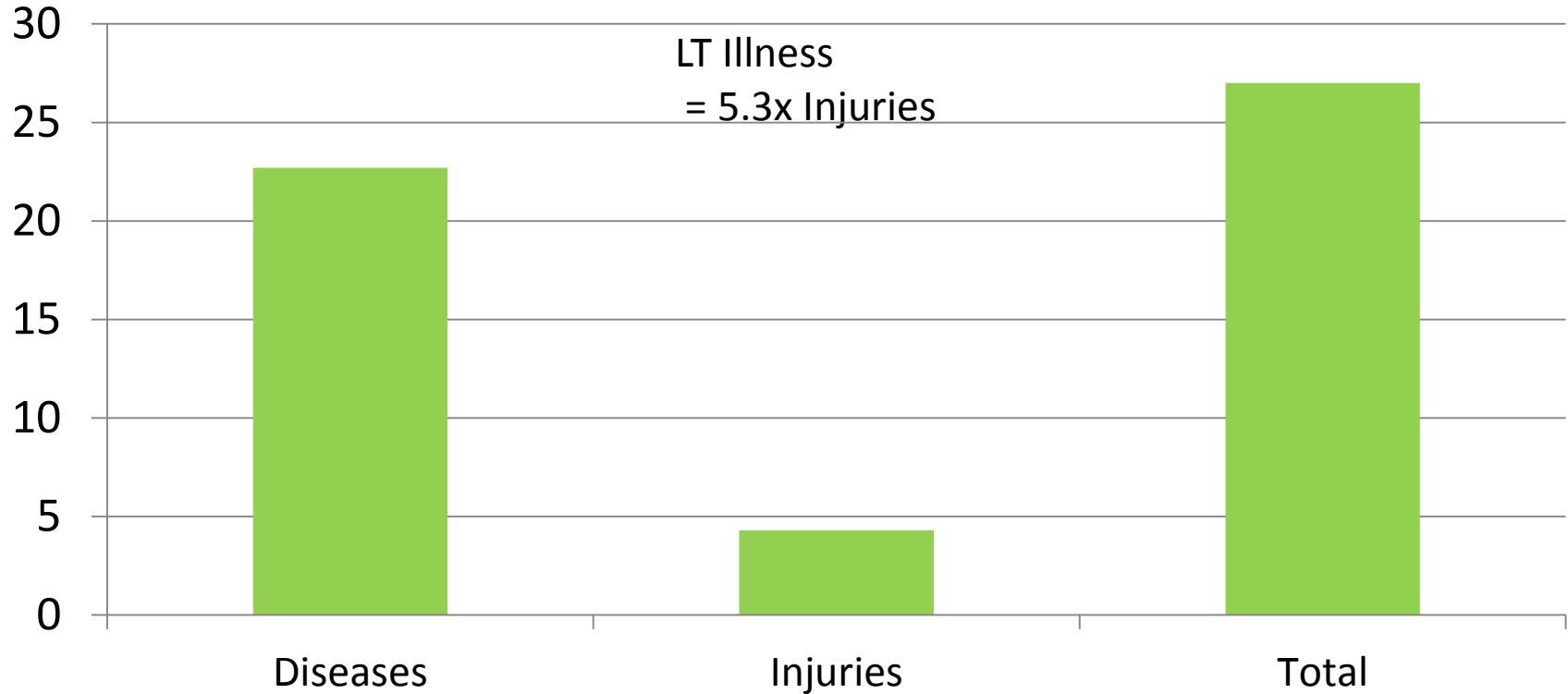
(2005-2012)

No	Type of Diseases	2005	2006	2007	2008	2009	2010	2011	2012
1.	Occupational Lung Disease	51	38	50	56	57	43	65	111
2.	Occupational Skin Disease	57	30	192	70	53	78	81	48
3.	Occupational Noise-induced Hearing Lost	190	106	120	169	427	467	514	956
4.	Occupational Musculoskeletal Disorder	10	22	18	31	57	30	55	95
5.	Disease Cause by a Chemical Agent (Poisoning)	139	116	117	41	61	15	31	58
6.	Disease Cause by a Biological Agent	0	3	1	2	3	4	1	32
7.	Occupational Cancer	0	2	1	3	2	0	3	1
8.	Other Disease and Non-occupational Disease	4	45	47	81	2	24	17	36
	TOTAL	451	362	546	453	662	661	767	1337

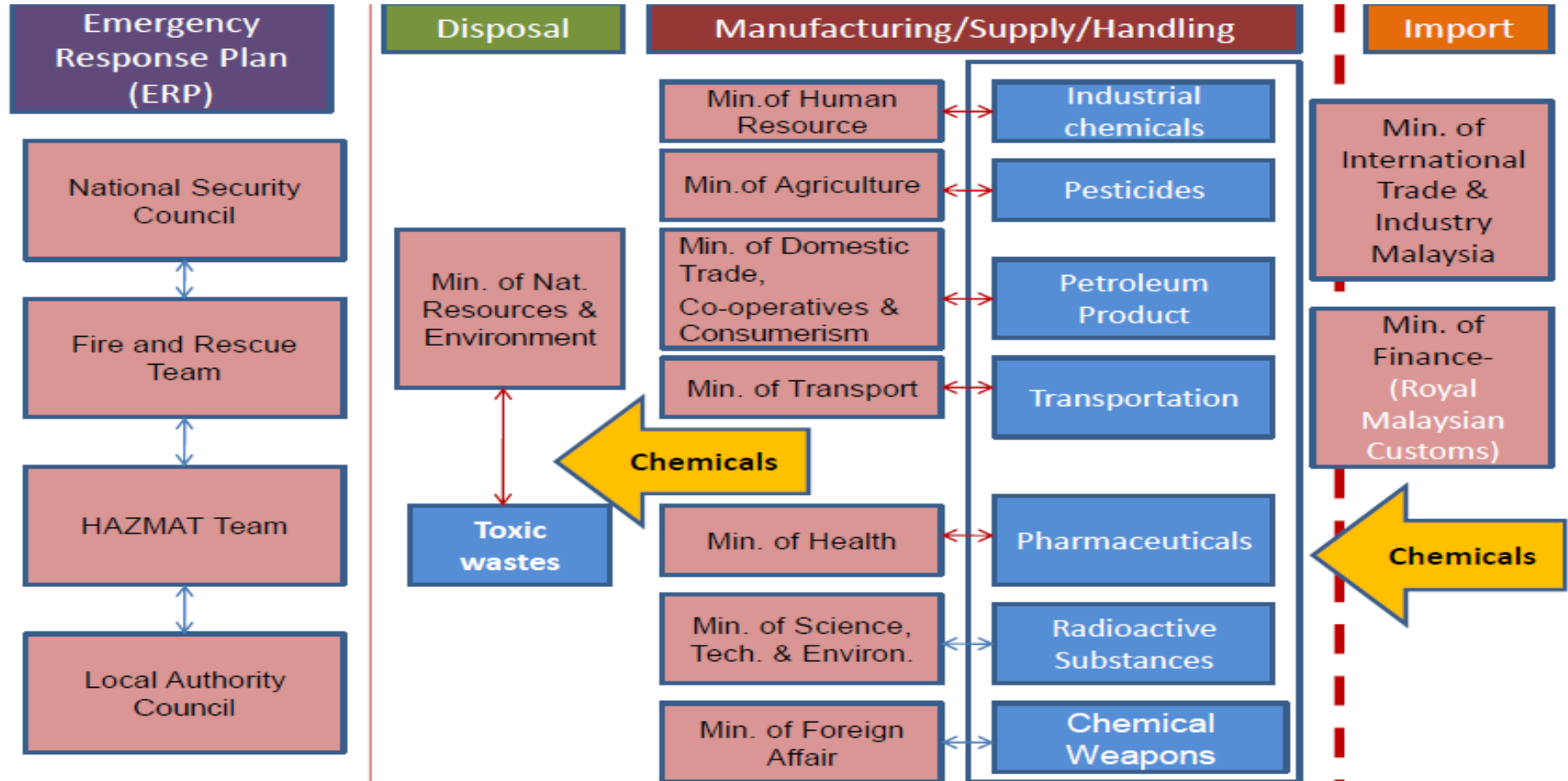
 **Disease related to chemical exposure**

Lost Time (LT) Cause by Occupational Diseases vs Workplaces Injuries

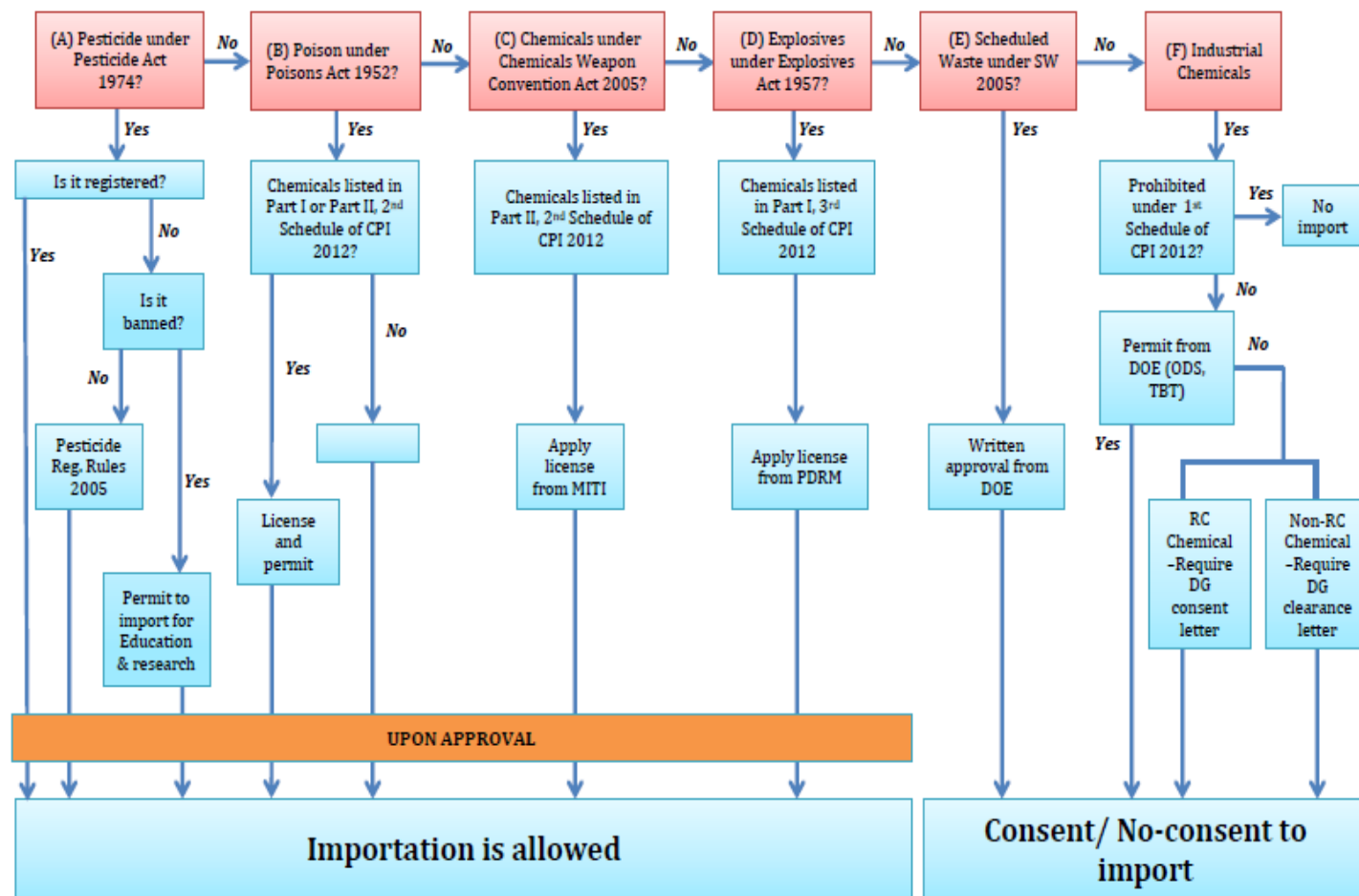
United Kingdom 2011/12 (million days)



Agencies Involved In Chemical Management



Import of Chemicals (exclude articles and radioactive materials)



CPI 2012 - Customs (Prohibition of Imports) Order 2012
 SW 2005 - Environmental Quality (Scheduled Waste) 2005
 MITI - Ministry of International Trade and Industry
 PDRM - Royal Malaysia Police
 DOE - Department of Environment

ODS - Ozone Depleting Substance
 TBT - Tributyltin
 PFOS - Perfluorooctane Sulfonic Acid
 RC - Rotterdam Convention

Chemical Management Legislation Enforced By DOSH

1. OSH (Control of Industrial Major Accident Hazards) Regulations 1996 (CIMAHA)
2. OSH (Prohibition of Use of Substances) Order 1999
3. OSH (Use & Standard of Exposure of Chemicals Hazardous to Health) Regulations 2000 (USECHH)
4. OSH (Chemical Classification, Labelling and Safety Data Sheets) Regulations, 2013 (CLASS)

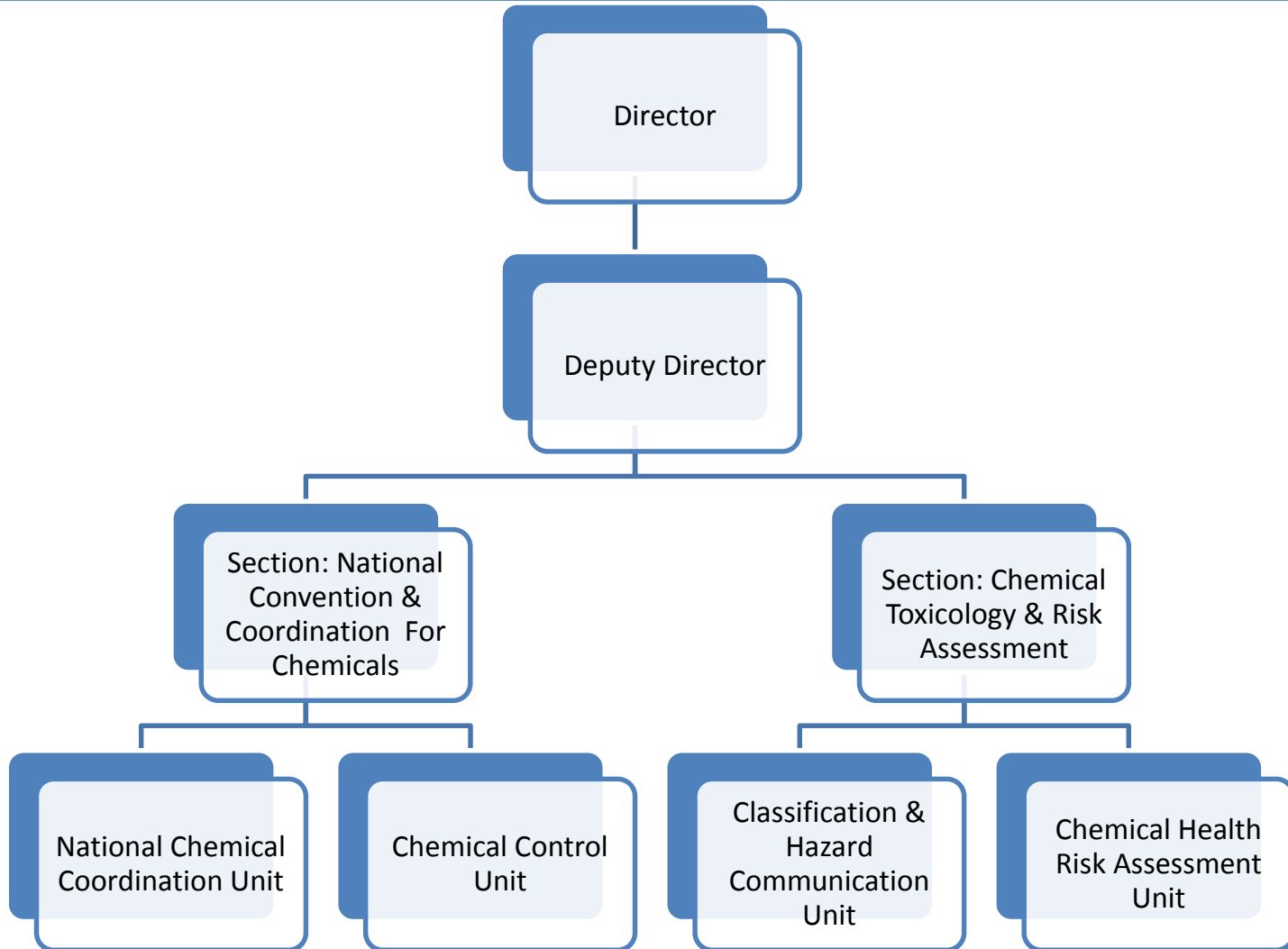
Guidelines / Legislation In the Development Stage

- Guideline of Asbestos Removal
- Guideline of Identification and Handling of Nano materials
- Assessment of the Health Risks Arising from The Use of Chemicals Hazardous to Health at Work Place (CHRA 3rd Edition)
- Manual on Simple Risk Assessment and Control for Chemical (SiRAC)
- Use and Standard of Exposure of Chemicals Hazardous to Health (USECHH) Regulations

OSH Legislation Approach

Type of Standards	Description	Examples
1.Prescription	Tell the duty holders precisely what preventive measures to take and how to make a goal	FMA Regulations
2. Principle Based	Tell the duties holder general duties to ensure health and safety at work so far as is reasonably practicable	General duties under OSHA 1994
3. Performance Based	Specify the outcome of the OSH improvements of the desire level of the performance but leave the concrete measures to achieve this open for the duty holder to adapt to local circumstances	Exposure standards of chemicals under USECHH, 2000
4. Process Based	Identify a particular process, or series of steps to be followed in the pursuit of managing a specific hazards, or OSH in general . Often used when the regulator has difficulty specifying a goal or outcome but has confidence the risk of injury/diseases will be reduced if particular steps are followed	CHRA HIRARC OSHMS

Chemical Management Division Organization Chart



Activities Carried Out By Chemical Management Division: Indoor Air Quality Monitoring



Activities Carried Out By Chemical Management Division: Generic CHRA Verification

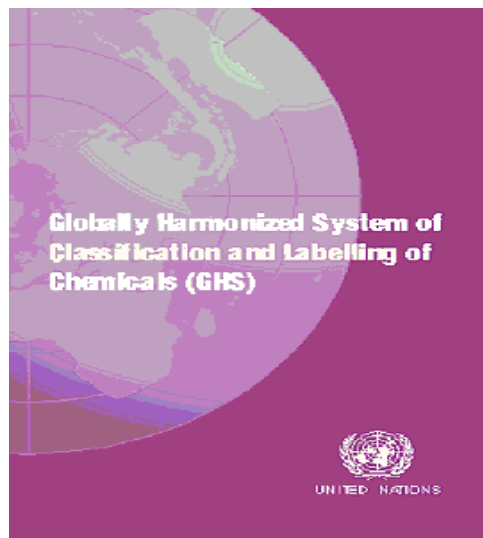


Activities Carried Out By Chemical Management Division: Chemical Weapon Convention Inspection

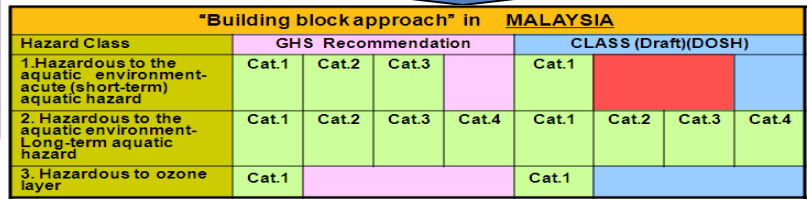
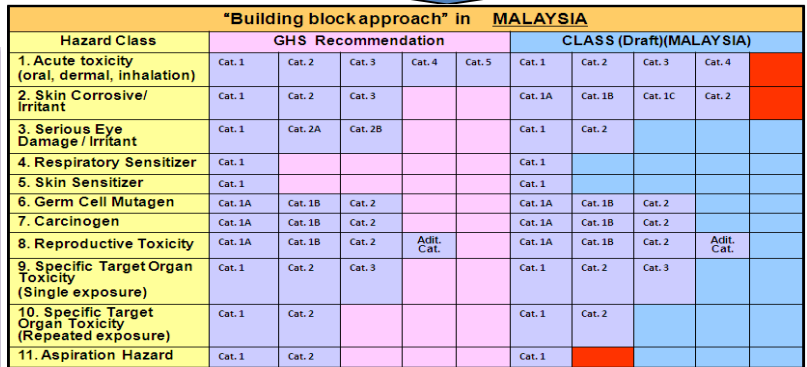
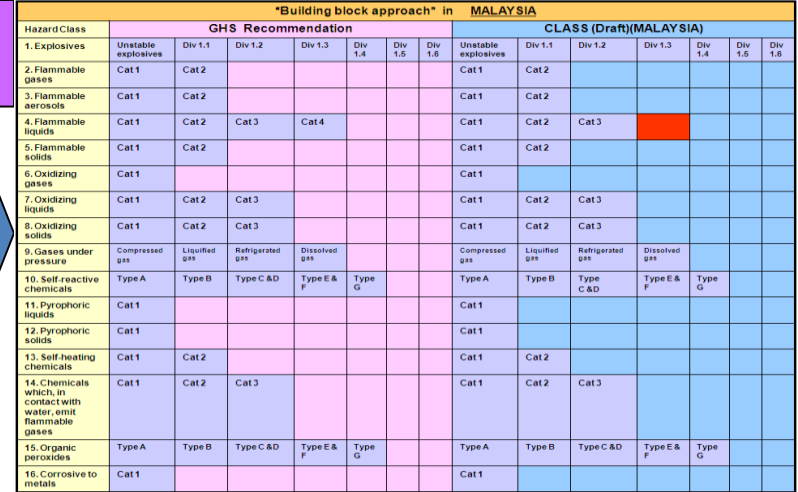




NEW INITIATIVES CREATIVITY & INNOVATION ENHANCEMENT ACTIVITIES



TRANSFORMATION OF CLASSIFICATION AND LABELLING SYSTEM OF HAZARDOUS CHEMICALS IN MALAYSIA: CLASS REGULATIONS



Chemicals Information Management System (CIMS)

Chemical Information Management System version: 1.0 - Windows Internet Explorer

http://cims.dosh.gov.my/

File Edit View Favorites Tools Help

Google Search Share More >> Sign In

MSN.com Fundamental and Appl... Zimbra: Inbox (121) Chemical Informati...

JKKP

Guest

Chemicals Information Management System

Language: English Language

Login: ☐ Staff ☒ Importer/Manufacturer




User ID:

Password:

Login

Register Forgot Password

DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH [D.O.S.H.]



OCCUPATIONAL SAFETY AND HEALTH REGULATIONS
(Chemicals Classification, Labelling and Safety Data Sheets) 201X

DOSH, through the Chemical Management Division is responsible of being the focal point for the "Globally Harmonised System for Hazard Classification and Labelling and Safety Data Sheets" for industrial chemicals. The Classification And Hazard Communication Unit is specifically made in charge of ensuring that the system is implemented from the year 2005 to date.

In the event of implementing the Globally Harmonised System (GHS) for classification, labelling and safety data sheets in work places, DOSH is in the process of legislating a new regulation: Occupational Safety and Health Regulation (Chemical Classification, Labelling and Safety Data Sheets) 20XX, or better known as the CLASS regulation. The effort of implementing GHS in work places is also done in order to conform to the Occupational Safety and Health Act 1994. The CLASS regulation will be replacing the existing Occupational Safety and Health Regulation (Classification, Packaging and Labelling of Hazardous Chemicals) 1997 and expected to come in force by late 2011.

List of GHS Hazard Statement & Pictograms

For enquiry, please call: 03 - 8888 8343 or email: jkkp@dosh.gov.my
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ELSA & ESSA



**KEEP
CALM
AND
USE
ELSA**

Express Labelling Self-Assessment
Semakan Kendiri Label Ekspres

Mula di sini jika anda ingin memeriksa kandungan label selaras dengan kehendap ICOP CHC. Pastikan anda mempunyai SDS dan ICOP CHC sebagai rujukan.

Start here if you want to check the contents of the label is in accordance the requirements of ICOP CHC. Make sure you have the SDS and ICOP CHC as reference when selecting this menu.



↓ SUPPLIER / PEMBEKAL ↓

JABATAN KESELAMATAN & KESIHATAN PEKERJAAN MALAYSIA

1. INTRODUCTION

- To help the employer to carry out a **simple assessment** on the use of chemicals hazardous to health at the workplace
- To meet duties under **USECHH**.

SiRAC 2014 (Simple Risk Assessment Control for Chemicals)

2. APPLICATION

• Does **NOT** apply to the following types of chemicals:

1. Chemical classified as :
 - *carcinogenicity* category 1;
 - *mutagenicity* category 1 or
 - *respiratory sensitization* category 1.
2. Process generated dusts and fumes
3. Organic dust
4. Gases
5. Scheduled waste (1st schedule in EQR 2005)

Only covers routes of entry:

- Inhalation
- Skin absorption

3. WHO CAN CONDUCT?

Anyone who has knowledge on :

1. Understanding of hazard and risk
2. Work processes and tasks
3. Basic principles of HIRARC
4. How to interpret SDS
5. Basic requirement of OSHA, USECHH and relevant guidelines.
6. Has been trained on SiRAC.
7. **Has knowledge on the Simple Risk Assessment and Control for Chemicals (SiRAC) manual.**

- Form SA1**
- Chemical register
 - * SDS- BP, VP, Risk phrase
 - * Label
 - * Task and work process
 - * Existing control measures

1. Gather Information

2. Identify chemical

Form SA 2a

Is Direct
Advice?

Yes

No

3. H-Code

Get Hazard Group-Use
Table 3.1 and Table 3.2

4. Scale of use - Use Table 3.3

Form SA 2b

Hazard group
A
B
C
D
S

Small
Medium
Large

Low
Medium
High

Liquid- to decide
volatility
- Use **Table 3.5a** or
3.5b or **Figure 3.1**

Solid- level of
dustiness
- Use **Table 3.4**

Low
Medium
High

5. Selection of control approach- Use Table 3.6

R43/ H317 ≥ 0.1% but < 0.5%

Frequency & Duration Adjustments= Threshold of 15-minute use per day is applied.

Rules for mixtures= volatility should relate to the major component(s) of the mixture.
Use **Table 3.7**

6. Select relevant control guidance sheets (CGS)

Suitability
Practically

Form SA 3

7. Develop and implement action plan

8. Report Writing & Record Keeping

6. Selection of task specific control guidance sheet - Use Table 3.8

- Content assessment based on Reg. 11(4) USECHH Reg.

- Document keep in hard or soft copies

- SiRAC record should be maintained at least 30 years

Easy steps to control health risks from chemicals.

Under Part IV of the Occupational Safety and Health (Use and Standard of Exposure of Chemicals Hazardous to Health) Regulations 201X, hereinafter referred to as USECHH Regulations 201X, the duty to perform an assessment of health risks arising from the use of chemicals hazardous to health at the place of work is mandatory whereby employers are not permitted to use any chemicals hazardous to health unless an assessment has been conducted. However, the employer may choose to conduct a simple assessment instead of the full assessment if the chemical meets the criteria specified under sub regulation 10(3) of the USECHH Regulations 201X:

SiRAC does not generally apply to the following types of chemicals, though they are covered by USECHH Regulations 201X:

- (a) chemical classified as carcinogenicity category 1, mutagenicity category 1 or respiratory sensitization category 1;
- (b) process generated dusts and fumes (e.g. wood dusts, solder and welding fume)*
- (c) organic dust, e.g. grain dust, cotton dust and paddy husk dust;
- (d) gases, e.g. hydrogen sulphide, ammonia, hydrogen, etc.; and
- (e) scheduled waste as listed in the First Schedule to the Environmental Quality (Scheduled Wastes) Regulations 2005.

Note:

*These are not classified and are not listed in the chemical register, although many of the solutions described in SiRAC can successfully control these problems.

A simple assessment involves a process of grouping workplace risks into control bands based on combination of hazard and exposure information. A simple assessment may be conducted, instead of the full assessment, if all chemicals hazardous to health used in a particular work unit meets the criteria of subregulation 10(3) of USECHH Regulations 201X.

[Begin Assessment](#)

[Home](#) : [About SiRAC](#)

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**Pertambahan
aktiviti
300%**

**Penjimatan
tenaga kerja
75%**



IAQ Mobile

**MEMUDAHKAN AKTIVITI
PEMONITORAN**

ALAT MESRA PENGGUNA

STESEN LEBIH STABIL

**MENGHAPUSKAN MASALAH
ERGONOMIK**

**MENINGKATKAN
KESELAMATAN PERALATAN
PEMONITORAN**

"Most people spend 90% of their times indoor."
-American Lung Association

"50% of all illness is aggravated or caused by
polluted indoor air." -American College of
Allergies

"... Indoor Air Quality pollution is responsible for up to 3.7% of the
burden disease, while the same factor no longer features among the
top 10 risk factors in industrialized countries." -WHO

CHIKARA



KUMPULAN INOVATIF DAN
JABATAN KEMENTERIAN
KEMENTERIAN

"Level
INSIDE the
2 to 5 times
than O
-Environment
Protection Agency



"An ounce of prevention
costs way less expensive
than a pound of cure."



**Penjimatan
Masa
54.82%**

Wall Mounted IAQ Monitor



Systematic Occupational Health Enhancement Level Program



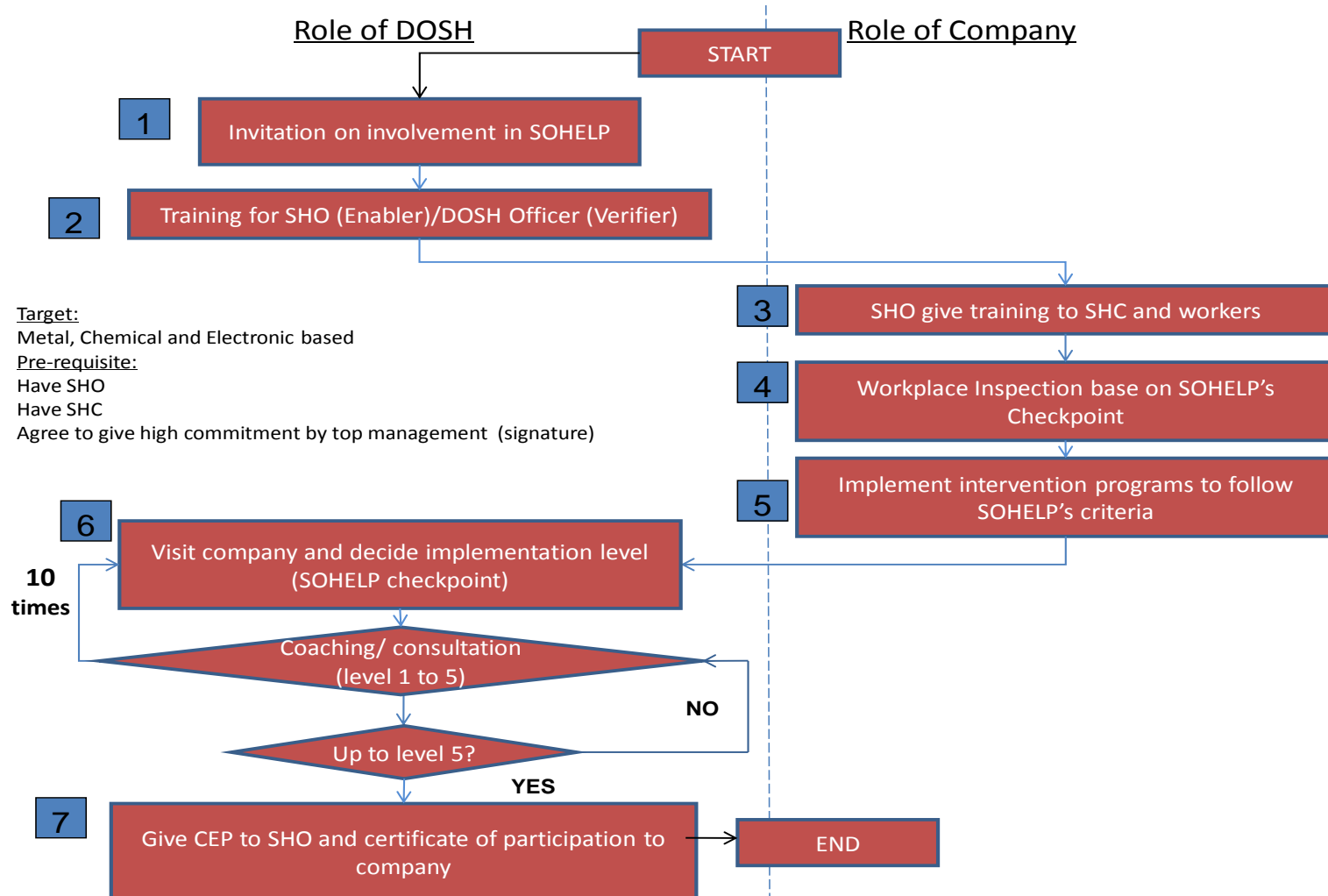
SOHELP®

PROGRAM INOVATIF MERAKYATKAN KESIHATAN PEKERJAAN

LEVEL OF IMPLEMENTATION OF SOHELP

LEVEL	ERGONOMICS	CHEMICALS	HCP
5 (EXCELLENT)	<ul style="list-style-type: none"> Implement all action to be taken identify in the ergonomic checklist No new case of health problem related to ergonomic 	<ul style="list-style-type: none"> Implement all action to be taken in the CHRA/SiRAC report No new case of occupational disease related to chemical 	<ul style="list-style-type: none"> Annual audiometric test Provide training & supervision Hearing conservation campaign
4 (ADVANCE)	<ul style="list-style-type: none"> Implement most (50%) action to be taken identify in the ergonomic checklist 	<ul style="list-style-type: none"> Implement most (50%) action to be taken in the CHRA/SiRAC report Good record system Good ventilation system 	<ul style="list-style-type: none"> Audiometric testing Provide instruction & training Implement administrative & engineering control
3 (INTER-MEDIATE)	<ul style="list-style-type: none"> Establish SOP in Ergonomics Conduct Ergonomic Checklist Conduct risk assessment Conduct training 	<ul style="list-style-type: none"> Conduct CHRA/SiRAC Conduct information, instruction and training Implementation PPE programme 	<ul style="list-style-type: none"> Identify hearing protection zone Warning signs Provide PPE & control Provide information Record keeping
2 (BASIC)	<ul style="list-style-type: none"> PIC attended program Warning signs Provide PPE 	<ul style="list-style-type: none"> PIC attended program Prepare chemical register Label of CHH & SDS Warning signs Availability and maintenance of welfare facility 	<ul style="list-style-type: none"> PIC attended program Conduct HIRARC Conduct risk assessment
1 (ENTRY)	<ul style="list-style-type: none"> Commitment from management to implement program Appointment of person- in-charge (PIC) to implement program 		

SOHELP Implementation Methodology



Interactive CD

- The CD-based Resource Tool
<http://www.unep.org/chemicalsandwaste/POPsandScience/Pesticides/ToxicologyintheClassroom/tabid/104445/Default.aspx>

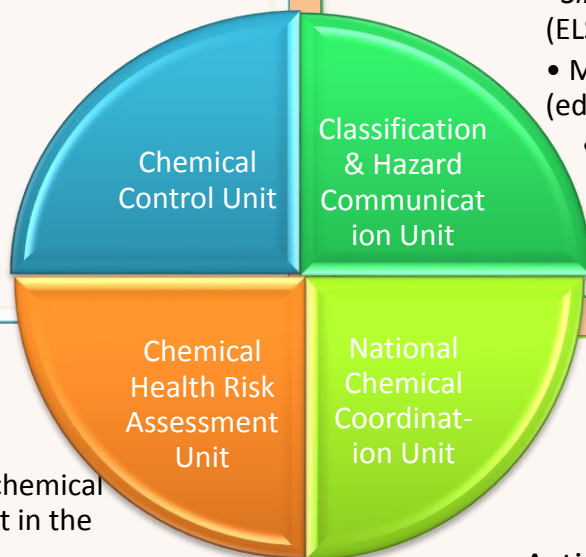


Toxicology in the Classroom



- Aims at raising awareness among young students about potential adverse effects of chemicals and help reduce careless use of pesticides.
- Infants and children are particularly vulnerable to pesticides and other toxic chemicals because their bodies are smaller and still developing.
- Children also face greater exposure than adults due to their hand-to-mouth behaviors.
- Help provide basic understanding of toxicology and awareness of the need for protective and precautionary measures to avoid adverse effects on human beings and the environment.

- Promotion using *simplified tools*
- Simple checklist (IAQ Self- Checking)
- *Wall mounted IAQ*
- NEHAP



- Strengthen chemical management in the workplace
- Full application on SiRAC
- Control of Asbestos and Carcinogenic
- SOHELP
- Amendment USECHH
- SREC (*Self report evaluation checklist*)

- Full application on CIMS (*Submission information sharing*)
- Improving hazard communication in the workplace
- *Simplified tools* (ELSA/ESSA)
- Market forces (educating buyers)
- Control of chemical at the border

- Active participation in national and international collaboration
- National Chemical Management Board

Future Chemical Management Program

Epidemiological data

- Death certificate
- Review medical records and patient care

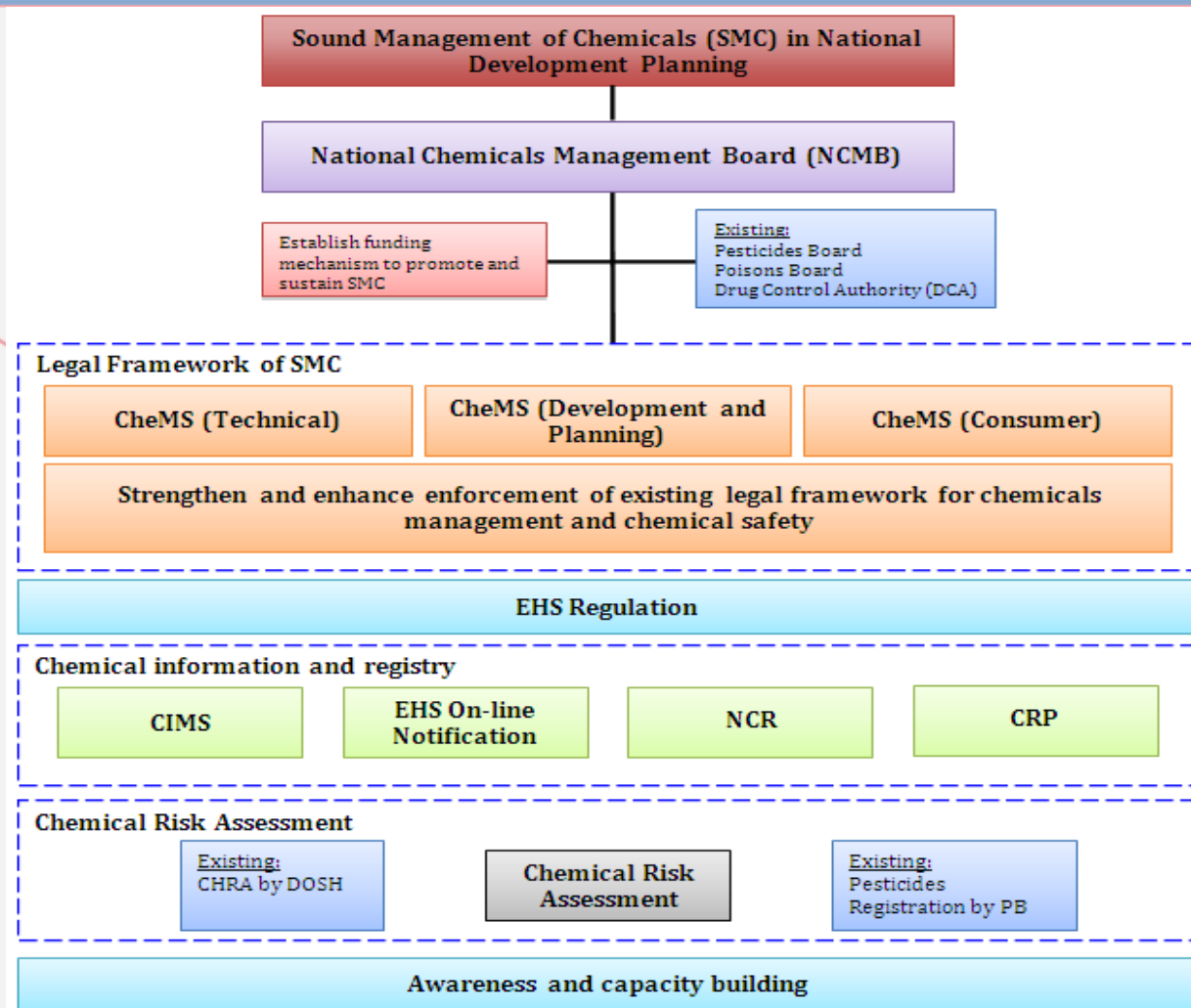
Information Sharing

- The Innovation Centre
- Online feedback
- Interactive System

Development Expertise / Skills Officer

- Experts relevant field

Proposed Formation of National Chemical Management Board



CheMS: Chemicals Management Section
EHS: Environmentally Hazardous Substances
CIMS: Chemicals Information Management System
CRP: Chemicals Regulatory Platform
NCR: National Chemicals Registry
CHRA: Chemical Health Risk Assessment

CONCLUSION

- OSH is a dynamic field
- Current OSH programmes show certain degree of achievement
- DOSH is moving towards further enhancement of OSH management system in Malaysia including in the aspect of Industrial chemical management.

Thank You!



Thank You

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