

SKF 4163 : Safety in Process Plant Design

Safety Legislations in Malaysia

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Once upon a time

- Accidents were regarded as part of the job
- Usually blame on the carelessness of workers
- Safety was regarded as something for sissies

What is an Act:

A law enacted by the parliament or congress

For example: Factory Act 1802

This is the first known safety legislation and issued in England.

During this time, the safety philosophy was based on the idea that.....

‘Safety can be achieved through regulations and supervision by government’

Until came.....Lord Robben,

Lord Robben Committee Report (1972) on OSH introduced a new safety philosophy:

‘Responsibilities to ensure the safety and health at the workplace lies with those who create the risk and with those work with the risk’

The acts (legislations) related to safety and the agency in charge in Malaysia

1. Factory and Machinery Act 1967

Factory & Machinery Dept (FMD)
or Jab Kilang dan Jentera (JKJ).

2. Petroleum (Safety Measures) Act 1984

Factory & Machinery Dept (FMD)
or Jab Kilang dan Jentera (JKJ).
Also Local/Relevant Authority

3. Occupational Safety and Health Act (OSHA) 1994

Dept of Occupational Safety and Health (DOSH)
or Jab Keselamatan dan Kesihatan Pekerja (JKKP)
(New name for FMD or JKJ)

The acts (legislations) in Petroleum Industry and agency in charge in Malaysia

Petroleum Development Act 1974

Petronas

Min. of Int. Trade and Industry (MITI)

Min. of Domestic Trade and Consumer Affairs

Gas Supply Act 1993

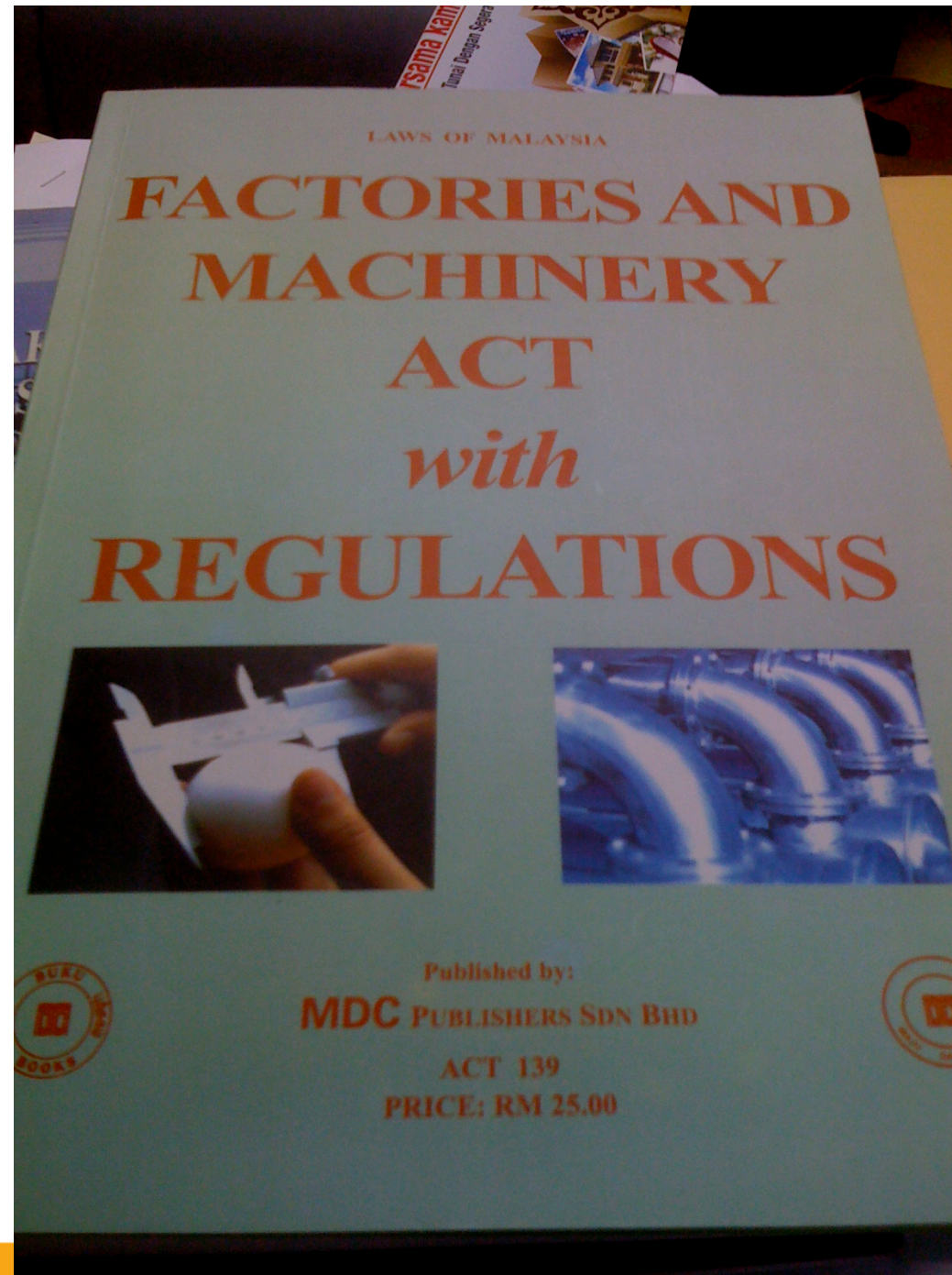
Suruhanjaya Tenaga

(Used to be under Jabatan Bekalan Elektrik dan Gas
(JBEG))

What is DOSH?

- At the beginning of the 20th century,
It was a safety division in Mines Department
(To inspect steam boiler)
- After second world war,
 - It became Machinery Department
 - Machinery Ordinance 1953

- Then became Factory and Machinery Department (FMD),
 - - Under Ministry of Labour
 - Factory and Machinery Act 1967 that contains 14 legislations
- Then became Department of Occupational, Safety and Health (DOSH)
 - Occupational Safety and Health Act (OSHA) 1994



Legislations in FMA 1967

1. Factories and Machinery (Certificates Of Competency-Examinations) Regulations, 1970
2. Factories and Machinery (Electric Passenger And Goods Lift) Regulations, 1970
3. Factories and Machinery (Fencing Of Machinery And Safety) Regulations, 1970
4. Factories and Machinery (Notification, Certificate of Fitness And Inspections) Regulations, 1970

5. Factories and Machinery (Person-In-Charge) Regulations, 1970
6. Factories and Machinery (Safety, Health And Welfare) Regulations, 1970
7. Factories and Machinery (Steam Boiler And Unfired Pressure Vessel) Regulations, 1970
8. Factories and Machinery (Administration) Regulations, 1970
9. Factories and Machinery (Compoundable Offences) Regulations, 1978

10. Factories and Machinery (Lead) Regulations, 1984
11. Factories and Machinery (Asbestos Process) Regulations, 1986
12. Factories and Machinery (Building Operations And Works Of Engineering Construction) (Safety) Regulations, 1986
13. Factories and Machinery (Noise Exposure) Regulations, 1989
14. Factories and Machinery (Mineral Dust) Regulations, 1989

Rule:

1. Factories and Machinery (Compounding of Offences) Rules, 1978

Amendments:

1. Factories and Machinery (Notification, Certificate of Fitness and Inspection) (Amendment) Regulations, 2004
2. Factories and Machinery (Steam Boiler and Unfired Pressure Vessel) (Amendment) Regulations, 2005

Functions of the DOSH

1. To study and review the policies and legislations of occupational safety and health (OSH).
2. To **enforce** the following legislations:
 - a) OSHA 1994 and its regulations
 - b) FMA 1967 and its regulations.
 - c) Part of Petroleum Act 1984 (Safety Measures) and its regulations.
3. To conduct research and technical analysis on issues related to OSH at the workplace

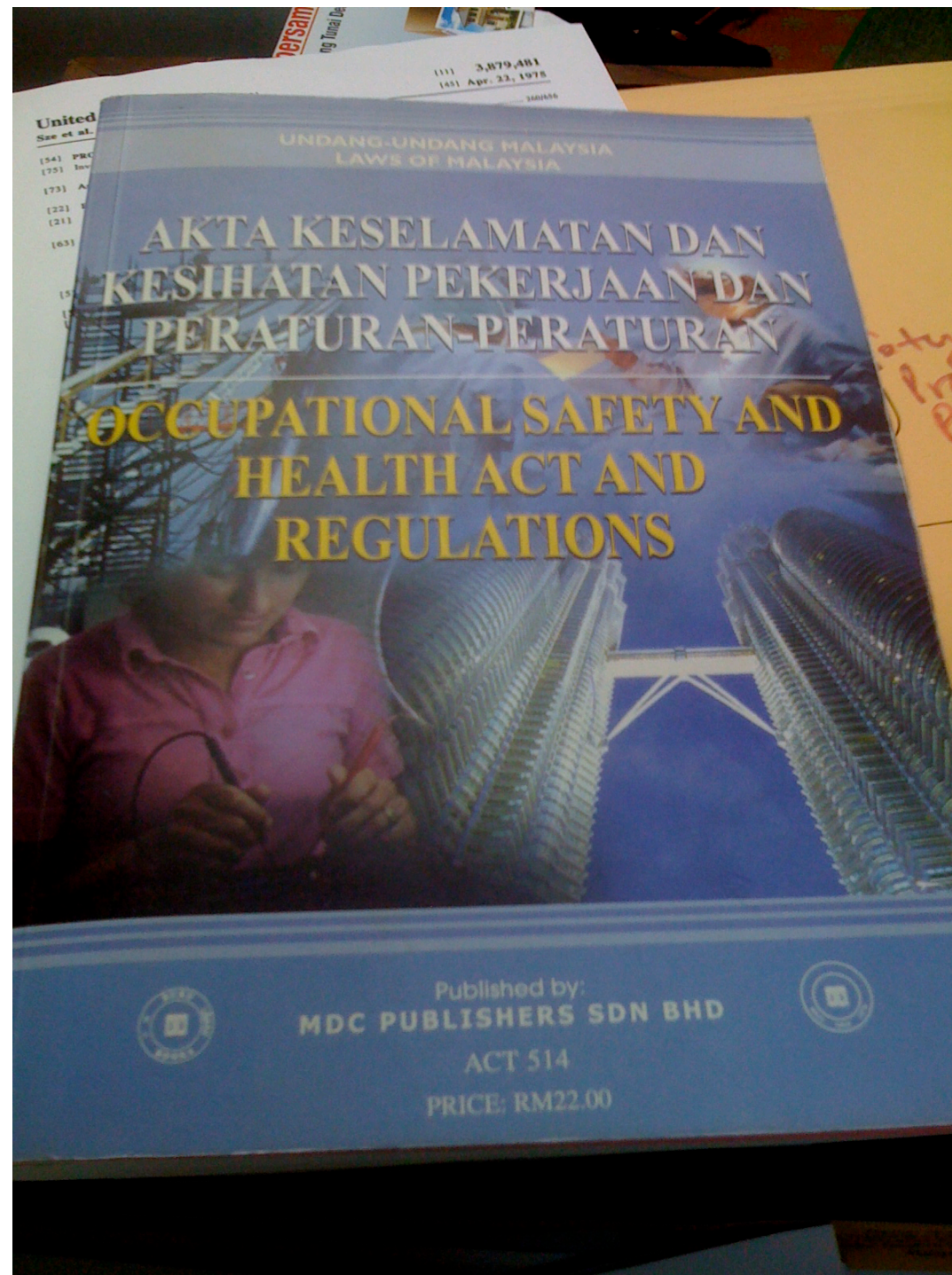


4. To carry out promotional and publicity programs to employers, workers and the general public to foster and increase the awareness of OSH
5. To provide advisory service and information to government and private agencies pertaining to management and technical aspects of OSH
6. To become a **secretariat** for the National Council for OSH



Purpose of OSHA 1994

To promote and encourage OSH awareness among workers and to create organisation with effective safety and health measures.



OSHA 1994

It covers,

Manufacturing, Mining and Quarrying, Construction, Agriculture, Forestry and Fishing, Utilities (Electricity, Gas, Water; and Sanitary services), Transport, Storage and Communication, Wholesale and Retail Trades, Hotels and Restaurants, Finance, Insurance, Real Estate and Business Services, Public Services and Statutory Authorities

Except: 1. Work on board of ship 2. Armed Forces

Note:

The Factory and Machinery Act 1967 only covers, manufacturing, mining, quarrying and construction industries

Main Principles of OSHA 1994

- **1. Self-regulation**

Employers must develop a **good and orderly OSH management system**.

2. Consultation-tri partite

Where **employers, employees and the government** must negotiate to settle issues and problems relating to OSH at the workplace.

3. Co-operation,

where **employers and employees** must co-operate to take care, nurture and to increase the quality of OSH at the workplace.

Objective of OSHA 1994

1. To secure the safety, health and welfare of workers against risks
2. To protect persons at a place of work (other than persons at work) against risks
3. To **promote** an occupational environment for persons at work which is adapted to their physiological and psychological needs.
4. To provide the means whereby the associated OSH legislations **may be progressively replaced** by a system of regulations and approved industry codes of practice operating in combination with the provisions of this Act designed to maintain or improve the standards of safety and health.

Concept of OSHA 1994

- Accident prevention is an essential part of good management and workmanship
- Top management must take the lead
- Management and workers must cooperate
- A define and known safety and health policy
- Organization and resources to achieve policy
- Best available knowledge and methods

FMA 1967 vs OSHA 1994

	FMA 1967 (Act 139)	OSHA 1994 (Act 514)
Scope	Only cover OSH in the manufacturing, mining, quarrying, works of engineering and construction Cover 24 % of the manpower	Cover ALL economic activities & gov. except armed forces & seafarers Cover 90% of the manpower
Approach	<ul style="list-style-type: none"> - Prescriptive - Too dependent on gov - Concern for inspection by regulation authorities 	<ul style="list-style-type: none"> - self regulation - supported by code of practices, guidelines etc - tripartite responsibilities - worker cooperation & participation
Objective	<ul style="list-style-type: none"> - focus on control of factories & machinery - registration & inspection of machines - less provision for health 	<ul style="list-style-type: none"> - to safeguard, health & welfare of employees & those at the place of work e.g visitors, contractors etc

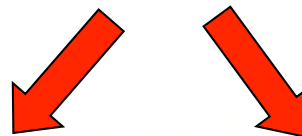
Act 514
Occupational Safety and Health Act (OSHA) 1994



Regulations under OSHA 1994



Order



Guidelines

Code of practice

Sections in OSHA 1994

- Appointment of Officers
- National Council for OSH
- General duties of
 - Employers, self-employed
 - Designers, manufactures and suppliers
 - Employees
- Safety & health organization
- Reporting of accident, dangerous occurrence, occupational poisoning, and disease
- Prohibition of the use of plant (machine) or substance
- Industry codes of practice
- Enforcement and investigation
- Liability for offences
- Appeals
- Penalties

Regulations Under OSHA 1994

There are 7 regulations:

1. OSH (Employers' Safety and Health General Policy Statements) (Exception) Regulations 1995
2. OSH (Control of Industrial Major Accident Hazards) Regulations 1996 - CIMAH
3. OSH (Safety and Health Committee) Regulations 1996 -SHC
4. OSH (Classification, Packaging and Labeling of Hazardous Chemicals) Regulations 1997- CPL

5. OSH (Safety and Health Officer) Regulations 1997
- SHO

6. OSH (Use and Standards of Exposure of
Chemicals Hazardous to Health) Regulations
2000 - USECHH

7. OSH (Notification of Accident, Dangerous
Occurrence, Occupational Poisoning and
Occupational Disease) Regulations 2004
- NADOOPOD

1. OSH (Employers' Safety and Health General Policy Statements) (Exception) Regulations 1995

- Every employer and self employed person must develop a Safety and Health POLICY
- Exception : ~~less than 5 employees~~
 - Less than 6 employees



2. OSH (Control of Industrial Major Accident Hazards) Regulations 1996

CIMAH

- Part 1: Preliminary
- Part 2: Identification and notification of an industry activities
- Part 3: Demonstration of safe operation for non-major hazard installation
- Part 4: Report on industrial activity and preparation of emergency plan for major hazard installation
- Part 5: Notification of major accident
- Part 6: Penalty

3. OSH (Safety and Health Committee) Regulations 1996

SHC

- Part 1: Preliminary
- Part 2: Composition of safety and health committee
- Part 3: Functions of safety and health committee
- Part 4: Meetings of safety and health committee
- Part 5: Provisions of training and information
- Part 6: Penalty

4. OSH (Classification, Packaging and Labeling of Hazardous Chemicals) Regulations 1997 CPL

1. Citation and commencement
2. Interpretation
3. Application
4. Duty of supplier to classify
5. Packaging requirements
6. Seal of package
7. Labeling
8. Dimension of label
9. Duty of supplier to furnish Chemical Safety Data Sheet
10. Confidential information on chemical

5. OSH (Safety and Health Officer) Regulations 1997 SHO

- Part 1: Preliminary
- Part 2: Registration of a safety and health officer
- Part 3: Notification of a safety and health officer
- Part 4: Duties of an employer
- Part 5: Duties of safety and health officer
- Part 6: Miscellaneous

6. OSH (Use & Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000

USECHH

- Part 1: Preliminary
- Part 2: Identification of chemical hazardous to health
- Part 3: Permissible exposure limit
- Part 4: Assessment of risk to health
- Part 5: Action to control exposure
- Part 6: Labeling and relabeling

- Part 7: Information, instruction and training
- Part 8: Monitoring of exposure at the place of work
- Part 9: Health Surveillance
- Part 10: Medical removal protection
- Part 11: Warning sign
- Part 12: Record keeping

7. OSH (Notification of accident, dangerous occurrence, occupational poisoning and occupational disease) Regulations 2004

NADOOPOD

- Part 1: Preliminary
- Part 2: Notification and reporting of a accident, dangerous occurrence, occupational poisoning and occupational disease
- Part 3: No interference at accident or dangerous occurrence scene
- Part 4 : Maintenance of all records of a accident, dangerous occurrence, occupational poisoning and occupational disease
- Part 5: Miscellaneous

OSH(Safety and Health Officer) Order 1997

- Citation and commencement
- Interpretation
- Class or description of industries required to employ safety and health officer

OSH (Prohibition of Use of Substance) Order 1999

- Citation and commencement
- Prohibition of use of substance

4-aminodiphenyl; benzidine;2- naphthylamine; 4- nitrodiphenyl; their salt & substance exceeding 0.1%	Manufacture and use for all purposes including any manufacturing process in which a substance described in column (1) is formed, except for research or analytical purposes	To prevent cancer
White phosphorus	Use in the manufacture of matches	Chronic phosphorus poisoning (osteomyelitis of the jaw bone)
Benzene	Cleaning and degreasing purposes	Human carcinogen
Carbon disulphide; carbon tetrachloride and n-hexane	Cleaning and degreasing purposes	Damage to nervous system Liver or kidney necrosis Damage to peripheral nerves
Crocidolite	All purposes except for research or analytical purposes	Lung cancer and mesotheliomas



1	Guidelines for Public Safety and Health at Construction Site	1994
2	Guidelines on Occupational Safety and Health in the Office	1996
3	Guidelines on First-Aid Facilities in the Workplace	1996
4	Examination Syllabus for Engineer's Certificate of Competency (Steam and Internal Combustion Engines) Examination	1996
5	Guidelines on Method of Sampling and Analysis for Airborne Lead	1997
6	Guidelines for the Formulation of a Chemical Safety Datasheet	1997
7	Guidelines for the Classification of Hazardous Chemicals	1997
8	Guidelines for Labelling of Hazardous Chemicals	1997
9	Guidelines on Occupational Safety and Health in Tunnel Construction	1998
10	Garis panduan Pendaftaran Tenaga Pengajar dan Pengendalian Kursus Induksi Keselamatan dan Kesihatan Pekerja Sektor Binaan 2000	
11	Guidelines for the Registration of Assessors, Hygiene Technician and Occupational Health Doctor	2000
12	Guidelines for the Preparation of a Chemical Register	2000
13	Guidelines on Trenching for Construction Safety	2000
14	Assessment of the Health Arising from Use of Hazardous Chemical in the Workplace (2nd Edition)	2000
15	Guidelines on the Control of Chemicals Hazardous to Health	2001
16	Guidelines on Medical Surveillance	2001
17	Garis panduan Penyediaan Dokumen Demonstrasi Operasi Selamat (Am)	2001
18	Garis panduan Penyediaan Dokumen Demonstrasi Operasi Selamat (Penstoran Gas Petroleum Cecair Di Dalam Selinder)	2001
19	Panduan Bagi Pencegahan Tekanan Dan Keganasan Di Tempat Kerja	2001
20	Guidelines on Monitoring of Airbone Contaminant For Chemicals Hazardous To Health	2002
21	Guidelines on Occupational Safety and Health for Standing at Work	2002
22	Guidelines on Reproductive Health Policy & Programmes at the Workplace	2002
23	Guidelines on Occupational Safety and Health in Agriculture	2002
24	Guidelines on Occupational Vibration	2003
25	Guidelines on Occupational Safety and Health for Seating at Work	2003
26	Garis panduan Untuk Memohon Sebagai Pusat Pengajar Pegawai Keselamatan dan Kesihatan	2003
27	Guidelines on Occupational Safety and Health in Fishing and Aquaculture Operation	2003
28	Guidelines on Gender Issues in Occupational Safety and Health	2003
29	Guidelines on Occupational Safety and Health for Working with Video Display Unit (VDU' s)	2003
30	Guidelines on Occupational Safety and Health In Logging Operations	2004
31	Guidelines on Preventing and Responding to Drugs and Alcohol Problems In The Workplace	2004
32	Guidelines on Occupational Safety and Health In Service Sector	2004
33	Guidelines on First-Aid in the Workplace (2nd Edition)	
34	Guidelines on Occupational Health Services	



Examples of CODES OF PRACTICE

- Code of Practice on Prevention and Management of HIV/AIDS at the Work Place
- Code of Practice for Safe Working in a Confined Space
- Kod Amalan Pencegahan dan Pembasmian Penyalahgunaan

Dadah, Alkohol dan di Tempat Kerja

- Code of Practice on Indoor Air Quality

Ministry of Human Resources

Department of Occupational Safety and Health
(DOSH)

<http://dosh.mohr.gov.my>



REFERENCES

- Occupational Safety and Health Act (OSHA) and Regulations, MDC Publishers Sdn Bhd, Malaysia
- Factory and Machinery Act (FMA) with Regulations, MDC Publishers Sdn Bhd, Malaysia