OSH AT WORKPLACE

OSH AWARENESS TALK SERIES

Presented by

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Case of collapsed flyover... Who’s fault is this?
Who’s neck is on the line?

THURSDAY 14 JULY, 2005
Should Engineers be blamed too? ...
What is engineers’ role? ...

Pekerja mati tersangkut atas tiang elektrik

AINI SELIKANG


Kejadian tersebut menyebabkan seluruh bandar Sarikel bergalak hampir setengah jam. Mangsa disahkan meninggal dunia kira-kira jam 8.45 malam ketika dibawa dengan ambulans ke Hospital Daerah Sarikel.

Lebih 5,000 penduduk berkerumun untuk menyaksikan kejadian menyebabkan kesesakan teruk di beberapa jalan utama di sini.

Menurut jurucalap bomba, kejadian berlaku kira-kira jam 7.30 malam ketika mangsa sedang membaiki kerosakan elektrik.

Bomba yang dimaklumkan mengenai kejadian tersebut bergalak ke tempat kejadian kira-kira jam 7.40 malam.
1. INTRODUCTION TO NIOSH BACKGROUND;
2. RELATED OSH LEGISLATION;
3. OSH RISK MANAGEMENT;
4. Q&A SESSION;
5. CONCLUSION.
1. NIOSH BACKGROUND
National Institute of Occupational Safety and Health (NIOSH):
- Under the Malaysian Companies Act 1965;
- Established as a Company Limited by Guarantee;
- Under Human Resource Ministry.

Established in 1992 to enhance OSH in Malaysia, mainly through:
1. Training and curriculum development;
2. Consultation;
3. Research and Development; and
4. Information dissemination.
ORGANISATION CHART

MINISTER

DEPUTY MINISTER

SECRETARY GENERAL

DEPARTMENT

- LABOUR DEPT. (PENINSULAR MALAYSIA)
- INDUSTRIAL RELATIONS DEPT.
- MANPOWER DEPT.
- TRADE UNION AFFAIRS DEPT.
- OCCUPATIONAL SAFETY & HEALTH DEPT.
- NATIONAL VOCATIONAL TRAINING COUNCIL
- INDUSTRIAL COURT
- LABOUR DEPT. (SABAH)
- LABOUR DEPT. (SARAWAK)

DEPUTY SECRETARY GENERAL (POLICY)

- INFORMATION TECH. DIV.
- HUMAN RESOURCES POLICY DIV.
- LABOUR POLICY DIV.
- INTERNATIONAL DIV.
- LABOUR ATASE GENEVA

DEPUTY SECRETARY GENERAL (MANAGEMENT)

- INTERNAL AUDITOR
- LEGAL ADVISOR
- ADMINISTRATION DIV.
- FINANCE DIV.
- HUMAN RESOURCE MANAGEMENT DIV.
- SKILL DEVELOPMENT DIV.
- SKILL ENFORCEMENT SECTION

STATUTORY BODIES/COMPANY

- SOCIAL SECURITY ORGANISATION (SOCIO)
- HUMAN RESOURCES DEVELOPMENT COUNCIL
- NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH (NIOSH)
NIOSH PROFILE

- **NIOSH HQ** and main campus in B B Bangi, SELANGOR
- 5 Branches:
  - Seberang Jaya, PENANG
  - Johor Bahru, JOHORE
  - Bintulu, SARAWAK
  - Kemaman, TERENGGANU
  - Kota Kinabalu, SABAH
- **1 Site office**:
  - Kuching, SARAWAK
2.RELATED OSH LEGISLATION
CONTROL ON MACHINES, WORKERS AND PLACE OF WORK:

- MACHINERY REQUIRING CERTIFICATE OF FITNESS (FROM DOSH):
  - STEAM BOILERS
  - HOISTING EQUIPMENT
  - LIFTING EQUIPMENT
  - PRESSURE VESSELS
FMA 1967

- **CERTIFICATES OF COMPETENCY FOR WORKERS:**
  - **DRIVERS:** BOILER, STEAM ENGINE, INTERNAL COMBUSTION ENGINE
  - **ENGINEER:** BOILER, STEAM ENGINE, INTERNAL COMBUSTION ENGINE
    - CLASSIFICATION: FIRST OR SECOND GRADE ENGINEER, VISITING ENGINEER, OPERATOR
  - **CRANE OPERATORS** (MOBILE, TOWER)
  - **SCAFFOLDER**

- **PLACES OF WORK:** MONITORING AND MEDICAL SURVEILLANCE
OSHA 1994 (ACT 514)

UNDANG-UNDANG MALAYSIA

LAWS OF MALAYSIA

AKTA KESELAMATAN DAN KESIHATAN PEKERJAAN 1994
(Akta 514)

OCCUPATIONAL SAFETY AND HEALTH ACT 1994
(Act 514)
THE SCOPE OF OSHA 1994

ALL "PERSONS AT WORK" EXCEPT:

✓ THE ARMED FORCES (ARMY, NAVY AND AIR FORCE)
✓ WORKERS WORKING ON BOARD MERCHANT SHIPS
OSHA 1994 – FIRST SCHEDULE

INDUSTRY INCLUDED ARE:

- 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
OBJECTIVES OF OSHA

1. To **secure** the safety and health of persons at work

2. To **protect** persons at a place of work **other than employees**

3. To **promote** an appropriate and suitable environment for persons at work

4. To enable **previous legislation to be replaced by regulations and approved industry codes of practice operating in combination with the OSH Act 1994**
PHILOSOPHY

THE RESPONSIBILITY FOR DOING SOMETHING ABOUT SAFETY AND HEALTH LIES WITH THOSE WHO CREATE THE RISKS AND THOSE WHO WORK WITH IT

THE ACT EMPHASIZES ON:

- SELF-REGULATION;
- CONSULTATION;
- WORKERS / EMPLOYERS COOPERATION; AND
- PARTICIPATION
CERTAIN PARTS OF THE ACT ARE NOT ABSOLUTE IN NATURE, FOR EXAMPLE IN SECTION 15, DUTIES OF EMPLOYER, THE GUIDING PRINCIPLE IS

"SO FAR AS IS PRACTICABLE......."

OTHER TERM USED

- "AS LOW AS REASONABLY PRACTICABLE (ALARP)"
- "AS LOW AS REASONABLY ACHIEVABLE (ALARA)"
GENERAL DUTIES OF EMPLOYEES (SECTION 24)

- Reasonable care for safety and health of himself and others
- Co-operate with employer and others
- Wear and use PPE
- Comply with instructions on OSH
DUTIES OF EMPLOYERS & SELF EMPLOYED PERSONS (Section 15)

“So far as is practicable…….”

• Provide and maintain safe plant and systems of works

• Make arrangements for the safe use, operation, handling, storage and transportation of substance and plant
DUTIES OF EMPLOYERS & SELF EMPLOYED PERSONS (Section 15)

• PROVIDE INFORMATION, INSTRUCTION, TRAINING, AND SUPERVISION – DUTIES OF EMPLOYER

- INFORMATION
- INSTRUCTION
- TRAINING
- SUPERVISION
DUTIES OF EMPLOYERS & SELF EMPLOYED PERSONS

- Employer not to charge PPE on employees.  
  *(Section 26)*

- Employer / trade union not to discriminate  
  (dismiss, injure or alter position)  
  *(Section 27)*

- To report accidents, dangerous occurrences,  
  occupational poisonings and diseases  
  *(Section 32)*
GENERAL DUTIES OF DESIGNERS, MANUFACTURERS AND SUPPLIERS

So far as is practicable:-

- To ensure plant / substance is designed and constructed to be safe and without risk to health when properly used
- Arrange for carrying out testing and examination
- Adequate information
- For designers and manufacturers:-
  - arrange for research to eliminate or minimize hazards
  - Safe erection and installation
OSH REGULATIONS UNDER OSHA 1994

1. OSH (EMPLOYERS SAFETY AND HEALTH GENERAL POLICY STATEMENTS) (EXCEPTION) REGULATIONS 1995
2. OSH (CONTROL OF INDUSTRIAL MAJOR ACCIDENT HAZARDS) REGULATIONS 1996
3. OSH (SAFETY AND HEALTH COMMITTEE) REGULATIONS 1996
4. OSH (CLASSIFICATION, PACKAGING AND LABELLING OF HAZARDOUS’ CHEMICALS) REGULATIONS 1997
5. OSH (SAFETY AND HEALTH OFFICER) REGULATIONS 1997
6. OSH (USE AND STANDARDS OF EXPOSURE OF CHEMICALS HAZARDOUS TO HEALTH) REGULATIONS 2000
7. OSH (NOTIFICATION OF ACCIDENT, DANGEROUS OCCURRENCE, OCCUPATIONAL POISONING AND OCCUPATIONAL DISEASE) REGULATIONS 2004
GUIDELINES & CODES OF PRACTICE

1. Codes of Practice on Safe Working in a Confined Space
2. Codes of Practice on Prevention and Management of HIV / AIDS at Work Place
3. Code of Practice on Indoor Air Quality

1. Guidelines on First-Aids Facilities In the Workplace
2. Guidelines on Occupational Safety and Health In the Office
3. Guidelines on Occupational Safety & Health in Tunnel Construction
4. Assessment of the Health Risk Arising From the Use of Hazardous Chemicals in the Workplace
5. Guidelines for Classification of Hazardous Chemicals
6. Guidelines for Labeling of Hazardous Chemicals
7. Guidelines for Formulation Chemical Safety Data Sheet
8. Guidelines for the Preparation of a Chemical Register
9. Guidelines for the Registration of Assessors, Hygiene Technicians and Occupational Health Doctors
CONSEQUENCES OF NON-COMPLIANCE OF OSHA 1994

TO THE EMPLOYER (SECTION 15):
- Penalty: RM 50,000 / 2 years jail or both

TO THE EMPLOYEE (SECTION 24):
- Penalty: RM1,000 / 3 months jail or both
ICEBERG THEORY – ACCIDENT COST

DIRECT COST

INDIRECT COST
Tigers and Snakes at the Workplace...

Confined Spaces
Toxic waste
Unsafe Acts
Dust
Rubbish
Unguarded Machinery
Unsafe Conditions
Unsafe Acts

Electricity
Chemicals

Confined Spaces
Noise
ACCIDENTS AT WORKPLACES
ACCIDENT INVESTIGATION

PURPOSE:

- To establish the causes of the accidents
- To establish proper control measures so that future accident can be prevented
- To record all facts about the accident for various reasons (compensation, claims etc.)
- To analyse trend and cost for long term planning
WHO SHOULD INVESTIGATE (UNDER THE ACT):

• SUPERVISOR,
• SAFETY & HEALTH OFFICER,
• SAFETY & HEALTH COMMITTEE MEMBERS,
• SPECIAL TEAM.
OSH (SAFETY AND HEALTH COMMITTEE) REGULATIONS 1996 STIPULATED THAT SAFETY INSPECTION MUST BE CARRIED OUT AT THE PLACE OF WORK

- **WHO SHOULD DO IT:** SAFETY COMMITTEE MEMBERS, SHO, SPECIAL INSPECTING TEAM
- **HOW:** USE CHECKLIST SPECIFICALLY PREPARED FOR THE INSPECTION PURPOSE
- **FREQUENCY:** AT LEAST ONCE IN THREE MONTHS
- **REPORT:** MUST BE PREPARED AND SUBMITTED TO THE MANAGEMENT
DEFINITION OF...

- **Hazard:**
  A source or a situation with a *potential for harm* in terms of
  - human injury or ill health,
  - damage to property,
  - damage to the environment or
  - a combination of these.

(Source: MS1722 Part 1:2005)

- **Danger:**
  Relative exposure to hazard eg high voltage, very toxicity, very dangerous etc
DEFINITION OF ...

• **Risk:**
  A combination of
  the *likelihood* of an *occurrence* of a hazardous event within specified period or in specified circumstances and
  the *severity* of injury or damage *to the* health of people, property, environment *or any* combination of these caused by the event.
BASIC PRINCIPLES OF OSH RISK MANAGEMENT

1. Integrate Risk Management as part of planning at all levels of business
2. Accept all risks (**prioritize**)
3. Make risk control decisions appropriately (depending on level of risk)
4. Accept risks when benefits outweigh costs
5. Manage the risk
BASIC COMPONENTS OF OSH RISK MANAGEMENT

• Hazard Identification;
• Risk Assessment;
• Risk Control; and
• Review.
<table>
<thead>
<tr>
<th>SOURCES OF HAZARDS</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Man</td>
<td>Unsafe acts</td>
</tr>
<tr>
<td>Machinery</td>
<td>Installation, layout and design of equipment</td>
</tr>
<tr>
<td>Materials</td>
<td>Substances such as chemicals and gases use in the workplace</td>
</tr>
<tr>
<td>Method</td>
<td>The way people carry out their work</td>
</tr>
<tr>
<td>Media</td>
<td>Workplace condition i.e. air quality, ventilation, lighting, noise, vibration etc.</td>
</tr>
</tbody>
</table>
### Example of Potential Sources of Hazards

<table>
<thead>
<tr>
<th>Hazards</th>
<th>Example of Potential Sources of Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>Pinch points, sharp points and edges, overload or force a tool beyond its capabilities and grinding wheel without guard</td>
</tr>
<tr>
<td>Electrical</td>
<td>Electrical cord insulation damaged, electrical face plate or cover broken or missing and fan cord insulation pulled loose</td>
</tr>
<tr>
<td>Biological</td>
<td>Exposed to airborne and blood borne viruses, bacteria and fungus</td>
</tr>
<tr>
<td>Hazards</td>
<td>Example of Potential Sources of Hazards</td>
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<tr>
<td>Chemical</td>
<td>Exposed to carcinogens chemicals, sensitizers and corrosive chemicals.</td>
</tr>
<tr>
<td>Ergonomics</td>
<td>Repeated exposure to unnatural postures and unnatural movement, wrong design of workstation, tools and task.</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>Stress, sexual harassment and violent at work.</td>
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</tbody>
</table>
MECHANICAL HAZARDS...
ELECTRICAL HAZARDS...
CHEMICAL HAZARDS...
ERGONOMICS HAZARDS…
PSYCHOLOGICAL HAZARDS...

- Stress
- Drug abuse
- Shift Work
- Interpersonal relationship
- Outstation
- Violence at work
SPOT THE HAZARDS
• Risk Assessment:

The process of evaluating the risk to safety and health arising from hazards at work.
• **Risk control** is the process used to identify all **practicable measures** for **eliminating or reducing** the **likelihood of injury, illness or disease** in the workplace, to **implement the measures** and to **continually review** the measures in order to ensure their effectiveness.