Departmental Safety Representatives

Safety Talk

Rheo Lam
Assistant Director of Safety
Objectives

Provide a brief discussion on
• Safety Legislation
• Accident Reporting
• Fire Safety Programme
Objectives

Learning Outcomes

• DSRs are able to have a better understanding of the topics in discharging their roles
Safety Legislations
Safety Legislations

- Confined spaces
- Blasting by abrasives
- Woodworking m/cs
- Construction
- Lifting appliances and lifting gear
- Abrasive wheels
- Flammable liquids
- Goods lifts
- Cartridge fixing tools
- Manual handling

- Protection of eyes
- Noise
- Fire precautions
- Asbestos
- Electricity
- Carcinogens
- First aid
- Suspended platforms
- Dangerous substances
- Display screen equipment
Safety Legislations

• Compliance of applicable legislations
• A standard adopted by legislators (society) and enshrined in law e.g. “Occupational Safety and Health Ordinance Cap 509 (1997)”. 
Empire State Building
1930's

Riveting
Safety Legislations

- A standard to follow
- Define statutory responsibilities of different persons in ensuring H & S
- Codes, guidance and standards developed with the Risk Assessment concept.
Occupational Safety and Health Ordinance Cap 509
DSE Reg Applies
Occupational Safety and Health Ordinance Cap 509

• Section 6 (1)
  - “Every employer must, as far as is reasonably practicable, ensure the safety and health at work of all his employees”
A worker welds at a construction site in Nanjing, the capital of East China’s Jiangsu Province.
Occupational Safety and Health Ordinance Cap 509

• Who are involved?
• Section 33
  – "where....the offence was committed with the consent or connivance of or was attributable to any neglect on the part of any director, manager, secretary or other similar officer of the company then that person shall be guilty of the like offence".
Factories and Industrial Undertakings Ordinance Cap 59
Factories and Industrial Undertakings Ordinance Cap 59

- Forerunner to OSHO and lays out very prescriptive legal requirements.
- Applies to “factories and industrial undertakings”.
- Applies to Construction activities.
- Doesn’t apply to other activities.
Subjects of regulations made under the F&IU Ordinance

- Confined spaces
- Blasting by abrasives
- Woodworking m/cs
- Construction
- Lifting appliances and lifting gear
- Abrasive wheels
- Flammable liquids
- Goods lifts
- Cartridge fixing tools
- Protection of eyes
- Noise
- Fire precautions
- Asbestos
- Electricity
- Carcinogens
- First aid
- Suspended platforms
- Dangerous substances
Safety related Legislations

- Fire Services Dept
- Buildings Dept
- EPD
- AFCD
- EMSD
- Radiation Board
- Labour Dept
- Gas Authority
- DG/FSI
- Means of escape
- Air/Water/Noise etc
- Pesticides
- Lifts/Electrical
- Radioactivity
- Boilers/Pressure Vessels
- Natural Gas & LPG
Why Legislations Required?
Why Legislations Required?

• Protection of operatives and other persons
Why Legislations Required?

• Provides a “consensus” standard
  A standard adopted by legislators (society) and enshrined in law, e.g. “Occupational Safety and Health Ordinance Cap 509 (1997)”.
• Only a minimum standard
• Acts as a reference standard on Common Law Claims
F&IU Regulations

- Descriptive
- Telling exact requirements
  - E.g. 7 inches No Smoking Sign
• Adopts Reasonably Practicable concept
• Risk Assessment Approach
“reasonably practicable”

Quantum of risk on the one hand

vs.

Sacrifice in measures that need to be taken to avert that risk (whether in money, time or trouble)
Accident Reporting
Accident Reporting

• Statutory
  – Required by Employee Compensation Ordinance Cap. 282
  – Fatal Accidents – 24 hours in writing to C for L
  – 3 Days or less (Form 2B) within 7 days
EMPLOYEES' COMPENSATION ORDINANCE
(CAP. 282)
Section 13(1)(a)(b)
NOTICE BY EMPLOYER OF AN ACCIDENT TO AN EMPLOYEE
RESULTING IN INCAPACITY FOR A PERIOD
NOT EXCEEDING 3 DAYS
FORM 2B

Important Notes

(1) This form shall be completed and returned in DUPLICATE to the Commissioner for Labour within 14 days of the accident, irrespective of whether the accident gave rise to any liability to pay compensation, which results in incapacity to an employee for a period not exceeding 3 days.

(2) If the period of incapacity in respect of the employee extends beyond 3 days after submitting this form, the employer shall report the accident again in the prescribed form (Form 2A) under S. 15 (1A)(b) of the Employees' Compensation Ordinance.

(3) An employer who fails to give notice as required or who gives any false or misleading information to the Commissioner for Labour may be prosecuted.

(4) Place 'X' in the appropriate box.

(5) For the purpose of calculating compensation to the injured employee, the monthly earnings shall be taken as the earnings of the employee for the month immediately preceding the date of the accident, or the average monthly earnings for the previous 12 months of employment (or any lesser period if the employee has not been so long employed), whichever calculation is more favourable to the employee.

Earnings includes:
(a) basic wage;
(b) the value of any privileges or benefits which may be estimated in cash, e.g. food, fuel or quarters supplied to the employee if, as a result of the accident, he is deprived of any of these;
(c) overtime or other special remuneration for work done, whether in the form of bonus, allowance or otherwise; and
(d) customary tips

But remuneration for intermittent overtime, counsel payments of a non-monetary nature, the value of travelling allowances or commission and the employer's contributions to provident funds are not included.

To: Department/Unit Heads:

(i) Complete Sections A & C only.

(ii) Send one copy to the Personnel Unit, Registry, and one copy to Safety Office both with a brief description of the accident.
Accident Reporting

- Statutory
  - More than 3 Days (Form 2)
FORM 2

EMPLOYEES' COMPENSATION ORDINANCE
(CAP. 282)

SECTION 15

NOTICE BY EMPLOYER OF THE DEATH OF AN EMPLOYEE
OR OF AN ACCIDENT TO AN EMPLOYEE RESULTING
IN DEATH OR INCAPACITY

Important Notes
(1) To be completed and returned in duplicate to the Commissioner for Labour —
(a) within 3 days of the accident in the case of death; or
(b) within 14 days of the accident in the case of injury; or
(c) within such period as required by the Commissioner for Labour.
(2) An employer who fails to give notice as required or who gives any false or misleading information to the Commissioner for Labour may be prosecuted.
(3) Part II is to be completed only if the accident occurred on a construction site.
(4) If more than one employee was injured or died as a result of an accident, please complete a separate form in duplicate for each employee.
(5) Please insert "X" in the appropriate box.
(6) Please read the instructions carefully before completing this Form.

To: Department/Unit Heads:

i) Complete sections A & D, and, if the sick leave period is less than 7 days, section H;

ii) Complete relevant boxes in sections I to M;

iii) Send one copy to Safety Office and one copy to the Personnel Unit, Registry (for further processing).
In-House

- Details in Staff Manual
- Department to notify Registry & FEO
- Registry to notify Labour Department c.c. Safety Office
- Safety Office screen for prevention investigation purpose
In-House

- Post investigation recommendation
- Departments to keep notifying staff of their duties to report work accidents
Fire Safety Programme
Why Fire Safety Important?

• Hong Kong Fire Risk
# Hong Kong Serious Fires

<table>
<thead>
<tr>
<th>DATE</th>
<th>PLACE</th>
<th>Casualty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DATE</td>
<td>DEATH</td>
</tr>
<tr>
<td>09/01/1994</td>
<td>SHEK KIP MEI, HONG KONG BANK</td>
<td>12</td>
</tr>
<tr>
<td>11/07/1995</td>
<td>CHAI WAN YUE WAN ESTATE PUBLIC HOUSING</td>
<td>2</td>
</tr>
<tr>
<td>10/02/1996</td>
<td>PAT SIN RANGE COUNTRY PARK</td>
<td>4</td>
</tr>
<tr>
<td>20/11/1996</td>
<td>GARLY BUILDING</td>
<td>40</td>
</tr>
<tr>
<td>25/01/1997</td>
<td>PRAT AVENUE TST (KARAOKE CLUB)</td>
<td>15</td>
</tr>
<tr>
<td>08/04/1997</td>
<td>MEI FU SUN CHUEN, PRIVATE RESIDENTIAL</td>
<td>7</td>
</tr>
<tr>
<td>12/01/2005</td>
<td>W.T.S. PUBLIC HOUSING</td>
<td>3</td>
</tr>
<tr>
<td>10/08/2008</td>
<td>CORNWALL COURT (RESIDENTIAL &amp; COMMERCIAL)</td>
<td>4</td>
</tr>
</tbody>
</table>
Why Fire Safety Important?

• University Fires
# University Fires

<table>
<thead>
<tr>
<th>DATE</th>
<th>PLACE</th>
<th>Casualty</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/12/2003</td>
<td>*MOSCOW'S PEOPLE'S FRIENDSHIP UNIVERSITY</td>
<td>40</td>
</tr>
<tr>
<td>30/10/2005</td>
<td>UNIVERSITY OF SOUTHAMPTON (One Building Destroyed)</td>
<td>--</td>
</tr>
<tr>
<td>June 2007</td>
<td>UNIVERSITY OF WESTMINSTER</td>
<td>--</td>
</tr>
</tbody>
</table>
Moscow People’s Friendship University Fire Dec. 2003

Causes

- Blocked stair exit
- 33 mins delayed reporting
- No alarm
- Locked exits
On Sunday 30th October 2005 there was a major fire at the University of Southampton. The fire destroyed the Mountbatten Building (Building 53), which included some laboratories and offices used by the Optoelectronics Research Centre (ORC). The ORC was split between two buildings, and the headquarters in the Physics Building (Building 46) were not directly affected.
Why Fire Safety Important?

- High fire risk operations e.g.
  - Laboratory
## Some Laboratory Fires

<table>
<thead>
<tr>
<th>DATE</th>
<th>PLACE</th>
<th>CASUALTY</th>
<th>DAMAGE</th>
<th>NATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>31/5/95</td>
<td>Chem 6/F lift lobby</td>
<td>Burn at forearm</td>
<td>Wall &amp; door</td>
<td>n-Hexane ignited by sodium.</td>
</tr>
<tr>
<td>10/12/96</td>
<td>Chem Rm 202</td>
<td>No</td>
<td>No</td>
<td>Flash fire caused by ether vapour from rotary vacuum evaporator.</td>
</tr>
<tr>
<td>14/9/99</td>
<td>Chem Rm 615</td>
<td>Burn at forearm</td>
<td>No</td>
<td>Fire from disposal of sodium left in solvent bottle.</td>
</tr>
<tr>
<td>10/8/99</td>
<td>Chem Rm 509</td>
<td>No</td>
<td>No</td>
<td>Minor fire from cutting sodium in moist atmosphere.</td>
</tr>
<tr>
<td>11/5/99</td>
<td>Chem Rm 614</td>
<td>No</td>
<td>Fumehood and mantle</td>
<td>Solvent overflow from still head, design of the still head need review.</td>
</tr>
<tr>
<td>24/2/03</td>
<td>Chem Rm 202</td>
<td>No</td>
<td>No</td>
<td>Minor fire from overheated oil bath.</td>
</tr>
<tr>
<td>21/4/03</td>
<td>Chem Rm 204</td>
<td>No</td>
<td>Fumehood</td>
<td>Minor fire from destruction of sodium.</td>
</tr>
<tr>
<td>8/2004</td>
<td>Chem Rm 619</td>
<td>No</td>
<td>No</td>
<td>Flash fire caused by ether vapour from rotary evaporator.</td>
</tr>
<tr>
<td>21/11/04</td>
<td>Chem Rm 609</td>
<td>2nd degree burn to both hands</td>
<td>Fumehood</td>
<td>Quenching of NaK alloy from solvent still.</td>
</tr>
<tr>
<td>10/10/06</td>
<td>Chem Rm 413A</td>
<td>Burn on face &amp; neck</td>
<td>Fumehood</td>
<td>Fire from reaction of ether with LiAlH₄.</td>
</tr>
<tr>
<td>18/3/07</td>
<td>Chem Rm 608</td>
<td>Nil</td>
<td>Fumehood</td>
<td>Fire from hydrogenation reaction.</td>
</tr>
</tbody>
</table>
Why Fire Safety Important?

• High fire risk operations e.g.
  – Laboratory
  – Architecture
  – Welding
  – Naked Flame
Fire Safety Programmes

• Organization – Head/DSR assisted by Fire Wardens
• Instruction – Fire Action Sign
Fire action

If you discover a fire:
- Raise the alarm by operating the nearest manual call point.
- Tackle the fire with the appliances provided, taking no personal risks.
- If your efforts are not immediately successful leave the building.
- Dial 999.

If you hear the continuous alarm:
- Leave the building immediately.
- Close doors behind you.
- Go directly to the assembly point at:

Do not stop to collect personal belongings.
Do not use lifts.
Do not re-enter the building until authorised.
Fire Safety Programmes

• Training – Fire Warden, Students & Staff, and on Fire Extinguishers
• Drills – Annual drills for students hostels, teaching blocks & offices.
• Fire Service Installations (FSI) – installed by EO, maintained by SO.
Fire Safety Programmes

• Continuing Upgrading Programmes, e.g. Sprinklers Installed, Visual Fire Alarms
• False Fire Alarm Prevention
  – Investigation
  – Keep Occupants Informed of causes
• Feed Back System – Evacuation Report Form
THE UNIVERSITY OF HONG KONG

REPORT ON *FIRE / EMERGENCY EVACUATION / DRILL

This form is designed to help the Fire Warden to review an evacuation and is to be completed by the Fire Warden or the deputy.

To: Director of Safety

From: Department

1. Alarm actuated at ________ hrs. on: ________
2. Location of *Fire/Emergency Reported: ________ Floor ________ Building
3. Time of FSD in attendance ________ hrs (if known).

Please tick (•) the appropriate box for the following questions:

1. Did all in your department hear the alarm? YES NO NOT APPLICABLE
2. Were all non-essential items of machinery and electrical appliances including the air conditioning plant switched off before evacuating the premises? YES NO NOT APPLICABLE
3. Was a portable fire extinguisher available nearby to extinguish the fire? YES NO NOT APPLICABLE
4. Were the lights left on? YES NO NOT APPLICABLE
5. Were all disabled/pregnant staff assisted? YES NO NOT APPLICABLE
6. Was a check carried out to ensure all persons left the building (including toilets, etc.)? YES NO NOT APPLICABLE
7. Were windows shut? YES NO NOT APPLICABLE
8. Were doors closed but not locked before leaving? YES NO NOT APPLICABLE
9. Were the smoke lobby doors properly closed? YES NO NOT APPLICABLE
10. Were all exit doors opened without difficulty? YES NO NOT APPLICABLE

* Delete as appropriate.

11. Was the evacuation
   i) quick
   ii) in need of prompting

12. Is any one detailed to explain to the fire brigade on its arrival,
   i) the location and type of fire,
   ii) whether the evacuation of personnel was complete,
   iii) any disabled persons taking refuge in the smoke lobby?

This person is

13. How long did it take from hearing the alarm to evacuate your floor / site (arrival at the assembly point):
    ________ min. ________ sec.

14. Comment/suggestion for improvement:

Name: ____________________________ Signature: ____________________________
Department: ______________________ Date: ________________________________
Telephone No.: ____________________

* Delete as appropriate.
香港大學
THE UNIVERSITY OF HONG KONG

*大警演習／緊急事故／疏散報告

防災訓練可利用填詞卷去檢查疏散時可採取的行動及應注意的事項，
此問卷可由防災訓練及教官副手填寫。

受文者：安全事務處

發文者：_____________（部門）

有關事故發生資料：

1. 事故發生在_____________樓／大廈_____________樓。
2. 火警場合在______年______月______日上／下午：_____時_____分響警。
3. 消防員約在______時______分抵達。

請用(✓)去表示合適的答案：

1. 樓層各處皆可聽到火警警報?
2. 非必要的電器用品在疏散時已關掉?
3. 附近有滅火筒?
4. 電燈沒有關掉?
5. 傷殘人士及懷孕婦女有適當照顧?
6. 已經查丟各處（包括洗手間）確定各人已離去?
7. 所有窗都關上?
8. 門只關上但未有上鎖?
9. 所有隔間間之門已關上?
10. 所有出路門皆可隨時及容易開啟?

是 否 不適用

11. 消防員抵達時，已有指定人員指示
    (I) 火警地點及性質，
    (II) 各人已經疏散,
    (III) 傷殘人士暫避在隔間

    該指定人員是__________________________

快速 緩慢 要催促

12. 疏散是

13. 由警鐘至完全疏散到集合地點所需時間約為______分______秒

14. 請提出所遇的困難或其他改善的建議：

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

姓名：_________________ 簽名：_________________

電話：_________________ 日期：_________________

*副手不適用

(2014/11/13)
Thank You