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# Commitment by the Construction Industry Council (CIC) to site safety and the Joint Declaration

### 建造業議會響應工地安全反《聯合宣言》的行動

Mr. Cheung Hau-wai!
Chairman, Committee on Construction Site Safety!
Construction Industry Council

建造業議會 工地安全委員會主席 張孝威先生



# Commitment by the Construction Industry Council (CIC) to site safey and the Joint Declaration 建造業議會響應工地安全及《聯合宣言》的行動

Mr. Cheung Hau-wai
Chairman, Committee on Construction Site Safety
Construction Industry Council

建造業議會 工地安全委員會主席 張孝威先生

#### Related functions of Construction Industry Council 建造業議會之相關職能







- 向建造業提供訓練課程
- 為建造業設立及維持業界訓練中心
- 協助已完成訓練課程的人就業
- 評核任何與建造業相關的工作技術水平
- 執行建造業工人註冊主任的職能

### **Committee on Construction Site Safety**

## 工地安全委員會







#### Objectives of Com-CSS 工地安全委員會的宗旨

formed under the Construction Industry Council (CIC). 工地安全委員會成立於議會之下,職權範圍包括:-

- •To review and monitor site safety performance of the construction industry 檢討並監察建造業的工地安全表現
- •To identify and recommend measures for improving safety performance to CIC 找出可提升安全表現的措施,並向議會提出建議
- •To promote adoption of the improvement measures 向業界推廣採納改善措施

## Committee on Construction Site Safety 工地安全委員會 *(cont'd 續)*

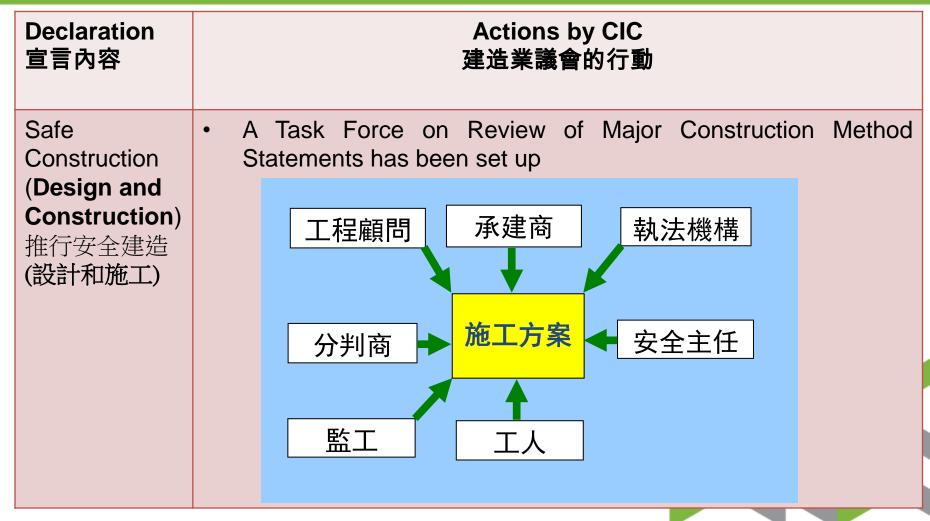
#### Approaches of Com-CSS 工地安全委員會的工作模式

- Listen to the views of all stakeholders
   聽取各持份者的寶貴意見
- Establish common goals
   與持份者建立共同目標
- Strive to reach consensus among the stakeholders on safety and health measures
  - 盡可能在改善職安健的措施上和各持份者達成共識



#### -Government Level

## - 政府層面



#### Government Level

## - 政府層面(cont' d 續)

#### Declaration 宣言內容

## Actions by CIC 建造業議會的行動

Monitor and
Support
(Legislative
and
Contractual
Enforcement,
Education
and
Promotion)

執行監控和給 予支持 (透過立法、 **教育和推廣**)









#### Government Level

## - 政府層面(cont' d 續)

#### Declaration 宣言內容

Monitor and Support (Legislative and Contractual Enforcement, Education and Promotion)

執行監控和給 予支持 (透過立法、 **教育和推廣**)

#### Actions by CIC 建造業議會的行動





## - 機構及個人層面

Declaration 宣言內容	Actions by CIC 建造業議會的行動
Strong Commitment (Lead by <b>Top Management</b> to nurture a proactive safety culture) 作出有力承擔 (透過高級管理 層,帶領積極的 安全文化)	Safety Summit 峰會

- 機構及個人層面 (cont' d 續)

Declaration	Actions by CIC
宣言內容	建造業議會的行動
Adequate Resources (Establish, Maintain and Implement a Robust safety management system) 投放充足資源 (建立、堅守 和推行一個健 全的安全管理 制度)	Issue CIC Guidelines on the application of (PFSS) to both the public and private sectors.

- 機構及個人層面 (cont' d 續)

Declaration	Actions by CIC
宣言內容	建造業議會的行動
Continuous Risk Assessments (Identify, Assess and Mitigate) 進行持續的風險 評估 (識別、評估和 消滅)	Issue CIC Guide on Site Safety Management system

## - 機構及個人層面 (cont' d 續)

#### Declaration 宣言內容

Adequate **Training** and
Promotion (All
Levels of
Stakeholders)
進行適當的培訓
和推廣
(所有階層的相
關人士)

## Actions by CIC 建造業議會的行動

#### 訓練課程

#### 全日制課程

- 基本工藝課程
- 建造業監工/技術員課程
- 成年人全日制短期課程
- 強化建造業人力訓練計劃

#### 部份時間制課程

- 技術提升課程
- 建造業安全訓練課程
- 理論技術兼讀課程
- 與測試有關之課程
- 承建商合作培訓計劃
- 指明課程
- 特約課程





- 機構及個人層面 (cont' d 續)

Declaration 宣言內容	Actions by CIC 建造業議會的行動
Adequate <b>Training</b> and Promotion (All Levels of Stakeholders) 進行適當的培訓 和推廣 (所有階層的相 關人士)	Extend to:  Site Supervisors 工地監督  University students 大學學生  Professionals, surveyors, architects and engineers 專業人士,測量師,建築師及工程師  Induction training for: 為下列人士提供入職培訓:  Workers (newly joined the industry and move to new site)  新入行及新加入工地的員工

## - 機構及個人層面 (cont' d 續)

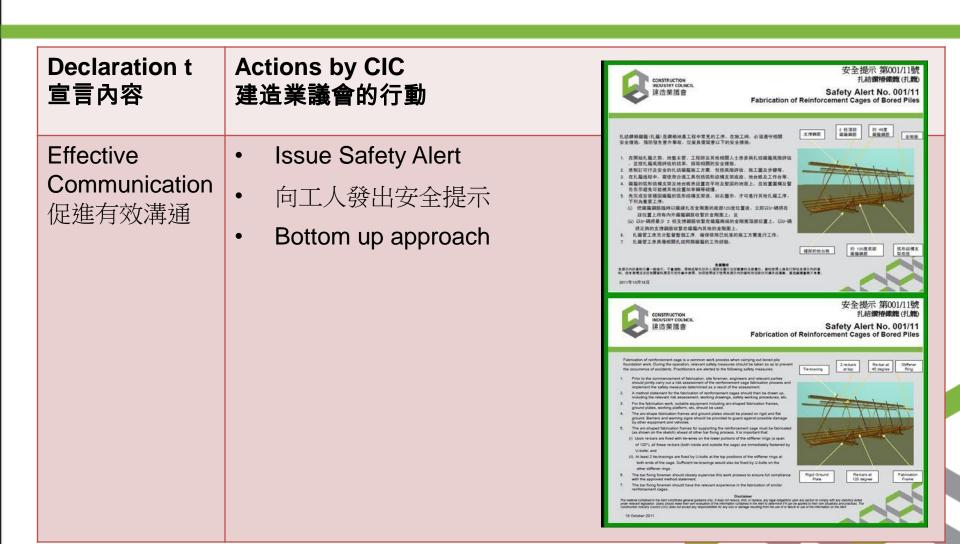
Declaration 宣言內容	Actions by CIC 建造業議會的
Caring Culture 培養關懷文 化	Study and prepare Guidelines on: 研發下列指引:  Working in hot weather (updated version)  在炎熱天氣下工作 (更新版)  Working in enclosed areas in commercial premises  在商業樓宇的密閉地方工作  New Task Forces on Site Housekeeping  Site tidiness and cleanliness enhancement  提高工地的整齊清潔  Safety Checks before work 開工前清理垃圾  Clear deris before leave 離開前清理垃圾

Protect completed building works





- 機構及個人層面 (cont' d 續)



- 機構及個人層面 (cont' d 續)

## Declaration t 宣言內容 Effective Communication 促進有效溝通

## Actions by CIC 建造業議會的行動

- Technical Seminars 講座
- Technical Visits to Japan 參觀日本
  - -Daily Safety work cycle
  - -Adoption to Hong Kong



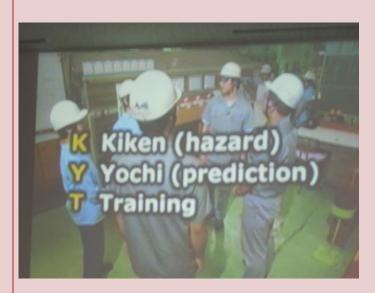


- 機構及個人層面 (cont' d 續)

#### Declaration t 宣言內容

Actions by CIC 建造業議會的行動

Effective Communication 促進有效溝通





#### ZERO ACCIDENT

## 零意外

CIC support and work towards Zero Accident 建造業議會支持這個共同目標

- Respect for life 尊重生命
- 人人有責
- Safety guidelines
- Method Statement review
- Japan Zero Accident target set in 70s (1500)





# Thank You! 多謝!

## 



## 雪川「霄意外」

~~ 決志建造業安全 ~~

章志成工程師, JP 發展局常任秘書長(工務)



# 齊心「零意外」

## ~~ 决志建造業安全 ~~

章志成工程師, JP 發展局常任秘書長(工務)





#### 内容

■ 回顧過去 - 意外統計數字

2 着眼現在 - 安全管理制度和當前挑戰

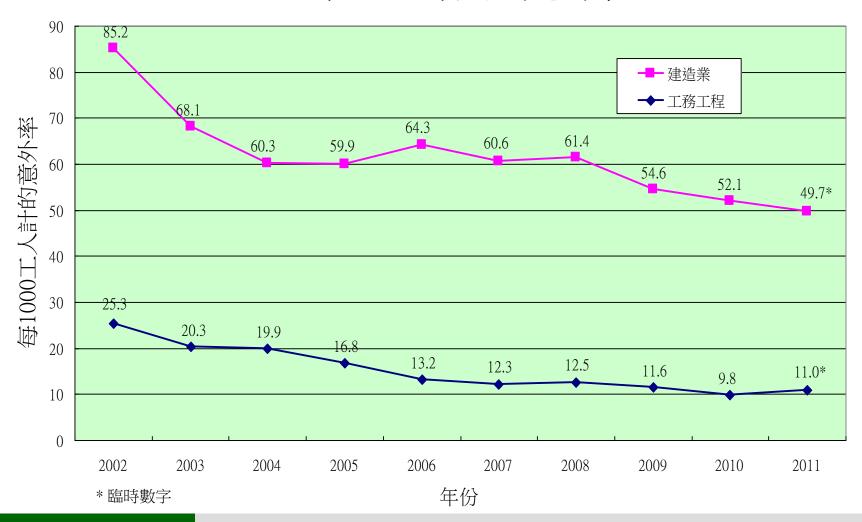
- 3 展望將來 迎接更多新挑戰
- 4 我們的抱負 我們的願景、措施和目標





## 意外率

#### 2002年至2011年建造業意外率

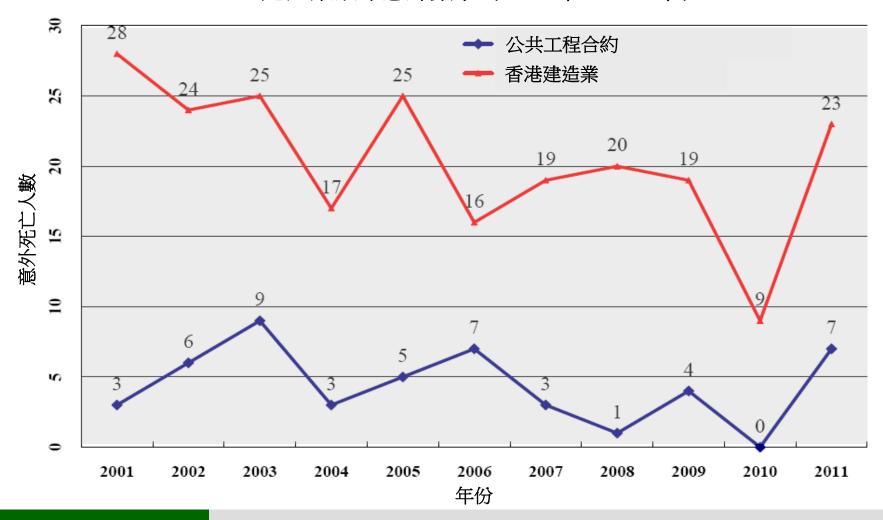






## 致命意外

#### 建造業致命意外數字(2001年至2011年)



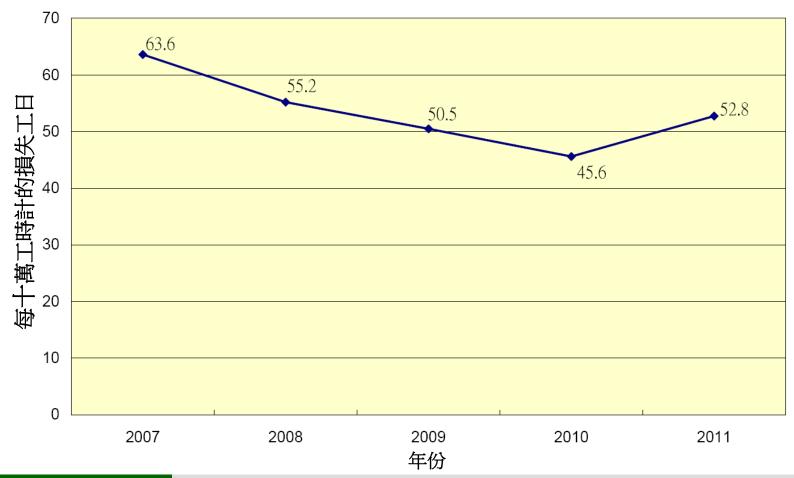
#### • 回顧過去





## 意外的嚴重程度

#### sev正務工程意始嚴重程度。1k2007年至2011年)







#### 公共工程項目的安全管理

1993 安全管理制度 1994 對安全表現欠佳的承建商採取規管行動 1995 部門安全顧問組 / 公德地盤嘉許計劃 1996 支付安全計劃 (Pay for Safety Scheme) 1997 1998 於標書評審中考慮安全表現 1999 2000 工地安全評分卡 (Score Card for Assessment of Safety Performance) 2001 為工地督導人員提供安全培訓 2002 工地安全程序 (Site Safety Cycle) 2003 2004 加強對分包商的規管 建造、設計及管理 (Construction, Design and Management) 2005 2006 2007 2008

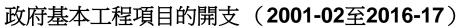
- 強化制度
- 規管/督導
- 誘因

為工地管理人員提供安全培訓





## 建造業的工程量的增長





\* 預計開支





## 五個願景 "C.A.R.E.S" (關懷)

**Commitment** (承擔)

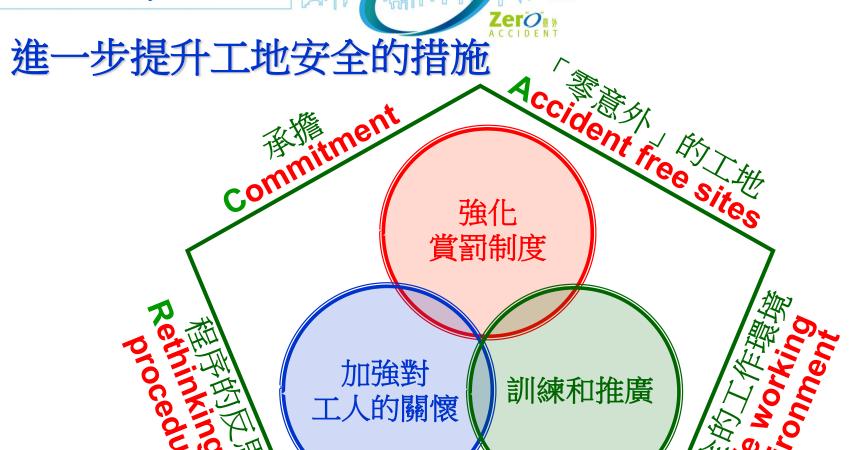
Accident free sites (「零意外」的工地)

Rethinking the procedures (程序的反思)

Embracing the workers (關懷工人)

Safe working environment (安全的工作環境)

• 我們的抱負



關懷工人 Embracing the workers

•我們的抱負 10





目標 "Z.E.R.O" (零)

Zealous(熱忱)

Enhancement seeking(追求進步)

Responsible (肩負責任)

Open-minded (態度開明)







# 齊心「零意外」

# 謝謝

## 建 造 業 安 全 周 Construction Safety Week



## 專意外· 共同顯景!

How to achieveZERO ACCIDENT?

A Perspective from Union

香港建造業總工會 理事長 周聯僑! Hong Kong Construction Industry Employees General Union! Chow Luen Kiu (Chairman)!



How to achieve ZERO ACCIDENT?

A Perspective from Union

香港建造業總工會 理事長 周聯僑

Hong Kong Construction Industry Employees General Union Chow Luen Kiu (Chairman)

# 學意外」

不是口號
是行動+決心

## 安全峰會 - 《聯合宣言》

- ❖ 為實現上述目標,我們/我承諾會:
- ❖ 在政府層面上:
  - 推行安全建造
  - 執行監控和給予支持
- ❖ 在機構層面上
  - 作出有力承擔
  - 投放充足資源
  - 進行持續的風險評估
  - 進行適當的培訓和推廣
  - 培養關懷文化
  - 促進有效溝通
- ❖ 在個人層面上
  - 嚴守法規
  - 積極參與
  - □ 保持溝通
  - 肩負責任

#### 目標:



### 積極參與

積極與各大承建商及 機構合辦職安健推廣 活動,提升工人的<u>安</u> 全意識。

#### 例如:

工地午間安全講座 夥拍商會推行工人 體檢計劃

協助肺塵基金會推 行肺部檢查計劃 到工地派發職安健 用品等

### 保持溝通

鼓勵<u>務實</u>溝通,經常 與政府部門、商會等 會面,<u>理性</u>商討改善 工地安全的<u>可行</u>措施。

#### 例如:

酷熱天氣休息安排 與地鐵公司協商, 推出人壽保險(20 萬),為猝死工人提 供保障

#### 培養 關愛文化

鼓勵前線工人與上司,特別是安全主任 司,特別是安全主任 及管理人員保持良好 <u>溝通</u>及合作,而非刻 意處於「對立面」

為自己安全負責, 並關心其他工人,如 <u>新工人</u>

公司應讓工人參與 安全政策的制定過程, 而非被動參與

## 積極參與

## 工地午間安全講座

目標:培養工人安全意識

## 工地午間安全講座

- ❖營造輕鬆的環境,與工人分享意外個案
- ❖鼓勵互動交流
- ◆第一輪:已完成20個工地,約2千人參與

第二輪:計劃擴展至40個工地

❖由香港建造商會及職安局資助工人的飯盒



### 邊食邊聽講座 吸引地盤工參加

## 兒費午餐 推廣腦安

【本報訊】建造業工業傷亡數字 急升·政府連同業界急謀對策·計 劃最快本月起在午膳及下午茶時段 走訪全港逾 100 個地盤,推廣工作 安全。其間免費請工人食午餐、嘆 下午茶,每餐以50元為上限。工 會會安排地盤意外死者家屬·親自 到場提醒工人注意安全・希望以軟 性方法,傳遞工業安全訊息。

地盤工人舉辦職安健講座,但參加人數不算踴躍,業界遂想 出新招吸引僱員「坐定定」聽講座。

#### 午餐以50元為上限

快本月起一年內,走訪全港逾100個地盤,請工人食午餐及 建商,地盤早上會加插15分鐘休息時段,午膳時間亦會延長, 記者:盧文烈 死者或傷者家屬,到場與地盤工人分享經歷,「等工友知道,

如果自己有意外,屋企人日子一定好難過,希望佢哋為咗家

#### 炎夏延長休息時間

即將踏入夏天,去年多名建築工人在工作期間中暑。居 聯僑透露,初步已有50個地盤同意在今年6至9月炎夏期間 建造業總工會理事長周聯僑表示,工會及建造業商會最 延長工人休息時間,當中包括新鴻基、俊和及金門等大型承 嘆下午茶,其間安排職安健講座,吸引工人参加,「又可以慳 不過延長休息時間後,工人要稍為提前上班或延遲放工,因 錢,又有嘢聽,一舉兩得」。免費午餐以50元為上限,商會 此員工反應不一,暫未能強制推行。勞工處發言人表示,該 及政府各支付一半費用,如果有錢剩,他們會購買一些小禮處今年會繼續推行一連串建造業安全宣傳推廣,建造業總工 物,如毛巾、水壺給工友。用膳期間,工會會安排地盤意外 會最近向勞工處提出一項關於午膳期間到地盤推廣工地安全的 贊助申請,處方已把申請轉交職業安全局審批。



午餐講座,提醒工人注意安全。 資料圖片

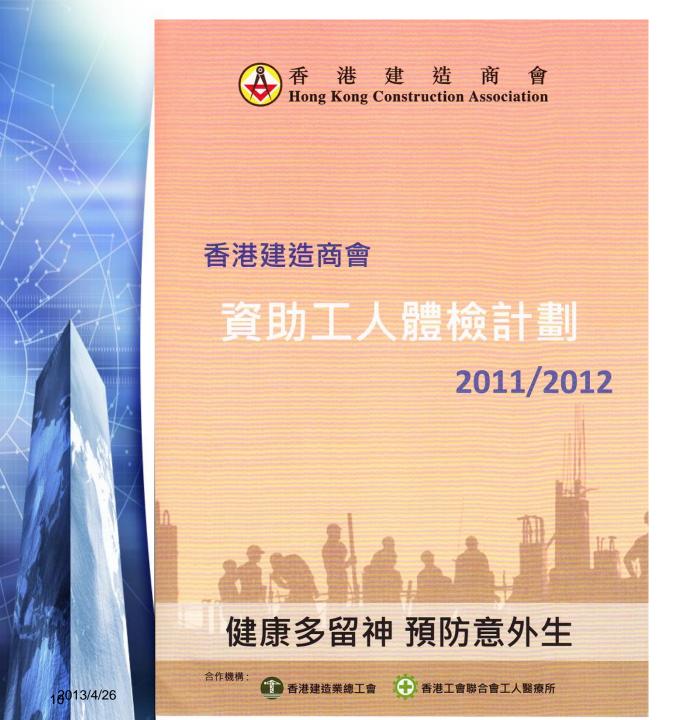
#### 2012年4月2日 (蘋果日報)



## 積極參與

## 夥拍建造商會推行 工人體檢計劃

目標:培養工人健康意識





## 香港建造商會 資助工人體驗計劃

- ❖2011-12年度:
  預計8,000名工人受惠
- ❖初步統計:
  - ■超過6成參加者血壓過高
  - 大約5成參加者總膽固醇過高
- ❖建造業工人的健康已響起了警號





## 資助萬名建造工人\$10體檢

#### 商會推動

【香港商報訊】 記者蕭瑩盈報道:

本港逾四成建築業工人年齡逾50歲,今年 首9個月更有11名工人因心臟病等猝死, 香港建造商會遂於上月起·首次推行爲期1 年的「資助工人體檢計劃」,工人只需付出 10元,就能進行血壓、尿酸及腎功能等檢 查,估計約有1萬名工人受惠。

#### 醫護人員主動到地盤

「資助工人體檢計劃」由香港建造商會斥 資200萬元展開,目標對象爲商會會員轄下 項目工程的註冊建造工人。計劃上月中實商會會長何安誠、右二為建造業總工會理事長周聯僑。 施,參加的工人只需付10元,便可進行基本 的身體檢查,包括血糖、血脂、肝功能、腎功 能及尿酸測試等。

爲保障私隱,診所會將檢驗報告直接寄給工 人。計劃爲期約一年,由於收費廉宜,加上有 醫護人員主動到地盤爲工人進行檢查、計劃推



香港建造商會斥資200萬推行工人體檢計劃。左二為建造

行不到2星期,已有逾200人做體檢,約有 2000預約,預計約有1萬名工人受惠。

#### 首9個月11工人猝死

香港建造業總工會理事長周聯僑表示,過往 建造業工人甚少進行體檢,計劃有助提升工人 的健康意識。

香港建造商會會長何安誠表示:本港約有 28 萬註冊工人,有渝四成人是年渝 50 歲, 今年首9個月就有11名工人因心臟病等猝 死,商會遂推出以上計劃,提高工人的健康 意識。計劃有別以往的守株待冤的做法,醫 護人員主動出擊,在午膳時間到地盤爲工人 進行體檢,因此更事半功倍。若計劃成績理 想,商會或考慮延長計劃。

他指出,商會已實施多項措施提高工人健 康,包括在炎夏延長工人的休息時間,由醫 生灌輸健康飲食的知識。

何又指,六成本港工人從事非特殊技術, 鑑於未來建造業的工序會愈趨複雜·業界在約 三個月前推行「師傅制」、由「師傅」帶同新 丁工作,提供技術、安全和關懷支援。另外, 商會早前針對紮鐵等高危行業推出「P牌」制 度,規定新入行員工在工地內必須佩戴不同額 色的安全帽,以資識別及保障員工安全。





## 積極參與

# 協助肺塵基金委員會推行肺部檢查計劃

目標:培養工人健康意識

## 肺塵病監測計劃助工友

【本報訊】實習記者胡禮富報道:肺塵埃沉着病 補償基金會於去年十一月開始推行的肺塵埃沉着病及 間皮瘤醫學監測計劃到目前為止已有一千名建造業工 友報名參加,其中三百人完成胸肺 x 光檢查及肺功 能測試。由於肺塵埃沉着病(肺塵病)的潛伏期由十 五年至四十年不等,建議全港合共二十八萬建造業工 人加強肺塵埃沉着病的預防工作,減低患病機會。

肺塵埃沉着病補償基金會主席何安誠表示由二〇 一一年十一月起展開醫學監測計劃,目前參加人數約 一千人,當中三百人已完成胸肺檢查。香港建造業總 工會理事長周聯僑指出,三百人中有百分之九的工友



▲右起:香港工人健康中心項目經理孫同祥、 補價基金委員會委員余德新、基金委員會主席 何安誠、香港建造業總工會理事長周聯僑、工 友黃炳賢 患有肺痨等,其中有一病人證實患上肺癌,四至五個病人疑似肺癌。基金委員會預計醫學監測計劃能在第一年中服務八千至一萬名工友,而涉及較多矽塵產生的工序,如石礦鑽孔、打磨等的工友會優先安排接受檢查,預計三至四年後能覆蓋全港二十八萬建造業工人。

目前凡十八歲以上,從事建造業工作一年且有工人註冊證的工友都可自願參加監測計劃,免費接受胸肺科專科醫生或職業醫學醫生的檢查服務及講解身體報告。現年六十四歲的黃炳賢從事建造業水喉科維修有近五十年工齡,是監測計劃的工友之一。他表示七〇、八〇年代期間長時間接觸石棉,包括利用石棉繩取代熱水銅喉等,經常處於石棉粉飛揚的工作環境,加上當時缺乏社會教育和知識,未曾做過胸肺檢查。他表示今次檢查結果尚未證實是否患上肺塵埃沉着病,不過坦言在身體健康時能跑三十二層樓梯還不氣喘,現在爬四、五層樓梯便喘不過氣。他希望工人們及早驗身,做好預防工作。

肺塵埃沉着病基金委員會將於本月開展預防石棉沉着病社區推廣計劃,針對深水埗、荃灣、九龍城、中西區、油尖旺區五大區域共二百多棟舊式工業大廈及鄰近工地,每區培訓五十人合共一百五十人的地區推廣大使,目的在於令舊樓居民及前線工人更加了解吸入石棉纖維可20至22年2月17歲四歲,減低吸引石棉粉是的風處24年2月17歲四歲,

(大公報)

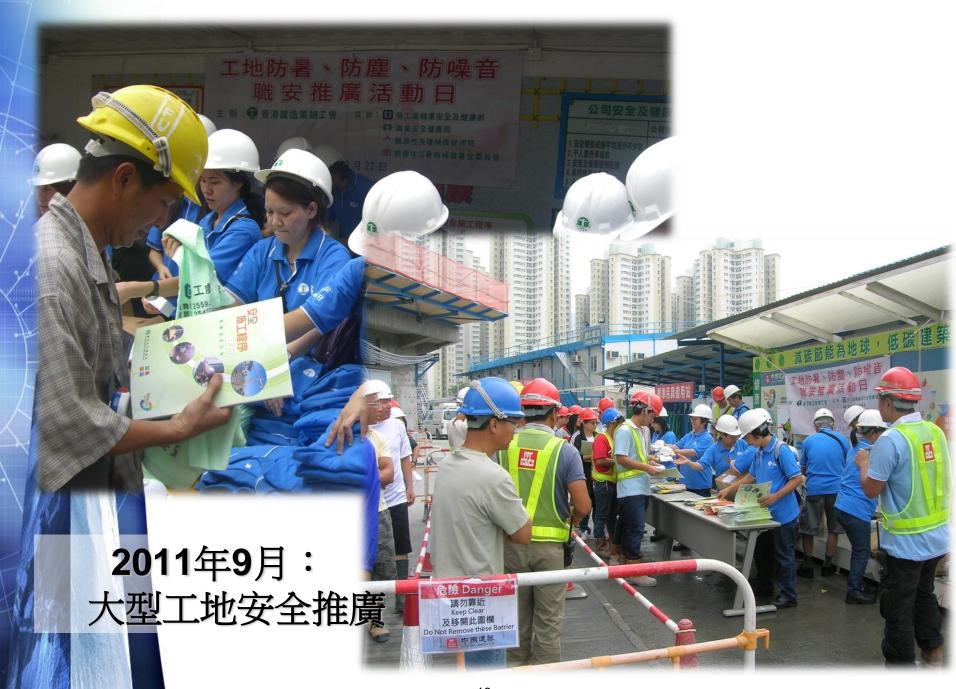




## 積極參與

## 大型工地、裝修維修 職安健推廣活動

目標:培養工人安全意識





## 保持溝通

## 與業界協商 酷熱天氣休息安排

目標:透過溝通機制,改善工地工作環境

## 猝死急升 建造業擬增工人休息時間

【明報專訊】在今年首七個半月,建造業 商會錄得有9宗建築工人在開工期間猝死個 案,較去年全年的4宗上升逾1倍。商會留 意到逾半建築工人達50歲以上,有老化趨 勢,故正與業界研究增加工人休息時間,以 減少猝死情况。

#### 逾半工人達50歲以上

商會主席何安誠表示,全港27萬建築工人 之中,逾半50歲以上,有老化趨勢,加上天 氣愈來愈熱,故正與業界商討增加工人休息 時間。

香港建造業總工會理事長周聯僑表示、增

加工人休息時間的方案包括:午膳後加多1 小時休息;早上額外增加15分鐘休息時間; 將下午「三點三下午茶時段 | 一分爲二,將 其中15分鐘「搬」到早上。

#### **紮鐵**紅板工或年內先推行

他說,勞資雙方同意增加休息時間,但工 會不希望推遲一小時下班,資方亦關注增加 休息時間變成縮短工時。他預料,勞工處、 紮鐵商會及工會及醫療衛生團體最快於下周 金,對意外受傷或身亡的業界家屬提供協 會召開會議,商討可行方案。工會希望新休 息措施可於今年内紮鐵及釘板工人界别,率 先推行。

近年天氣愈來愈熱,周坦言業界曾探討以 氣溫制定休息指引,但發覺難以執行,「幾 多度才應該停工?34度?還是36度?但天台 可能高達40幾度 | 。何安誠補充,建造商會 已去信建造業議會,爭取撥款添置流動車輛 及聘用醫生、護士,到地盤爲工人檢查身 體,讓工人了解身體狀况是否適合進行紮鐵 等長時間勞動。

另外,業界於09年底籌辦了建造業關懷基 助,至今已向56個家庭發放468萬元慰問 金,以解燃眉之急。

#### 2011年7月16日 (明報)



## 酷熱天氣休息安排

- ❖ 工會與建造商會、扎鐵商會、勞工處協商
- ❖2011年:10個地盤試行

2012年: 推展至50個地盤

- ❖建議安排:
  - 提早15分鐘開工 → 早上7:45
  - 早上10時 → 加插15分鐘休息時段
  - 午膳時間 → 由1小時延長至1小時15分鐘
  - 下午茶時段 → 由30分鐘縮減至15分鐘



## 保持溝通

## 鐵路項目工程推出 建造工人人壽保障 (20萬元)

目標:透過溝通機制,為不幸猝死的工人提供保障





建造工人人壽保障計劃 香港鐵路有限公司 香港鐵路項目工程

策劃者:達信風險管理及保險服務(香港)有限公司



LEADERSHIP, KNOWLEDGE, SOLUTIONS...WORLDWIDE.



#### 建造業籲擴大工傷保障

【本報訊】建造業總工會去年收到 12 宗建築工人工作期間中暑或心臟病發等「突發性猝死」個案,但工人猝死不受勞工法例保障,家屬不獲法定賠償。

港鐵上月初推出新措施,為旗下五個工程項目 西港島線、高鐵香港段、南港島線東段、觀塘線 延線及沙中線的建築工人提供 20 萬元人壽保險。 工人不論原因、地點不幸身故,其家屬兩星期內 可獲賠償。65 歲或以下持有效建造業工人註冊證 的工人,身故前 30 日內在上述工程項目工作不少 於 8 天,即自動受保。建造業總工會理事長周聯 僑要求政府擴大工傷保障範圍,促請發展局、房 署及公務工程帶頭推出人壽保障計劃。



2012年5月8日 (蘋果日報)

解決工人「買唔起」之苦」建造業促港府推廣



加強建造工人的職業安全保障,以及紓緩建造業嚴重青黃不接,吸納新血入 行,港鐵本月起為五個新鐵路工程項目承包 商的合資格建造工人免費購買人壽保險,每

人每年保費約六百元、根據保險條款、若工人不幸身故、其 親屬可獲廿萬港元保額,以解決建造工人購不到保險而無工 開之苦。建造業總工會表示歡迎,直言建造工人若自行購 買人壽保險甚至一年保費可高達十至廿萬元,根本「買唔 起一、希望港府能推廣港鐵這類為工人購買保險的模式。

港鐵公司工程總監周大滄表 轉行的工人「回流」:「希望吸引到 示,受保的合資格工人不論原因, 地點而不幸身故,其親屬都可獲廿 萬元保額:「喺屋企突然病死、返家 途中遇上意外死都可以保」,但若身 故是由於與非游鐵工程項目有關之 職業性意外所致,則不受保。

港鐵現時已為約五千八百名合 資格工人購買該保險,是本港首間 機構為建造業工人提供有關免費人 辭保險。

説,一直有與港鐵商討此事,在該 計劃下每名工人每年保費六百元: 而目前褡棚工人以自僱身份購買人

壽保險,一年保費可高達十至廿萬 元,若承包商替操作吊索等機械的 工人購買人壽保險,保費將佔工程

高危行業未必肯承保

建造業總工會理事長周聯僑

一萬人入行,愈多愈好。」

2012年4月30日



■周大滄指港鐵為建造工人 免費購買人壽保險,冀吸引 新血入行。 (潘嘉寶攝)

■港鐵表示一直為港鐵工程 的地盤工人提供足夠職業安 全保障。 (港鐵提供)

#### 保障計劃必須符合的資格

- 1. 為香港建造業議會計冊建造業工人
- 2. 持有有效的建造業工人註冊證
- 3. 於身故時為六十五歲以下
- 4. 受僱於港鐵五個新鐵路工程項目(即西港島線、南港島線(東 段)、廣深港高速鐵路(香港段)、觀塘延線和沙中線)之承包商或 次承包商的搭棚、操作設備工、紮鐵、木匠等非主管職位之工人
- 5. 於身故前卅天內,為港鐵指定工程項目工作不少於八天



# 支持業界推出「P牌」制度

目標:關心新入行、新進場工人的安全

### 今年死亡22宗增逾倍推防禦措施

## 新建築工人經行門開

職業安全 今年建造業致命意外 達二十二宗,較去 年高出逾倍。香港建造商會針對高危行策 如紮鐵及釘板,推出多種包括向新入行的 建築工人派發特定衣飾,讓其他工人多加 關注的「P牌」制度,推行十元驗身計劃及 「師傅制」等防禦措施,以減低新入職工遇 到意外的機會。此外,香港建造業總工會 昨到勞工處請願,要求當局加強巡查 地,又建議於午飯或下午茶時間由工會帶 同工傷意外家屬到場宣揚工業安全知識。

地盤安全。 (蔡綺琳攝請願,要求當局設法改善請願,要求當局設法改善



法遏止。(霍振鋒攝外達二十二宗,需8



香港建造業商會會長何安誠稱,關注今 年地盤致命工業意外不斷上升,故為新入行 建築工人推行「P牌」制度,即向新的建築

> 原色的安全帽或反光衣,讓管 工或其他工人識別他們為新 入行者,予以特別照顧及提 點,以減低傷亡數字。

#### 體檢只需10元

他又指,針對高危行業如 紮鐵及釘板,推出「師傅 制」,即新人會跟一名資深工友

(俗稱師傅)工作,一方面傳授技藝,一方面可協助該名員工適應地盤環境以策安全。

何又指建造業老化,現時二十八萬建築 業工人,逾四成已達五十歲,故在上月開始 推出「資助工人體檢計劃」,該會會員公司 均可報名,由會方安排醫護人員到工地為工人體檢,工人只需付款十元,便可量度血壓、血糖及血脂測試等,報告會直接寄給工人,商會及其僱主均不會得悉有關內容。他指,整個計劃耗資二百萬元,預計資助一萬名工人,如反應理想會研究延續。



2011年12月10日 (東方日報)









## 地盤專意外。 關懷建未來

## ZERO ACCIDENT ' ZERO HARM

香港建造商會會長何安誠! Thomas Ho, President, HKCA

## 地盤零意外・關懷建未來 ZERO ACCIDENT・ ZERO HARM

香港建造商會會長何安誠 Thomas Ho, President, HKCA

2004 Gammon Construction Limited.

2012年5月12日 建造業安全周峰會 Construction Safety Week Summit, 21 May 2012

#### VISIBLE LEADERSHIP

領導在前

**CULTURE** 

建立及推動文化

**ORGANIZATION** 

組織安排

RISKS...

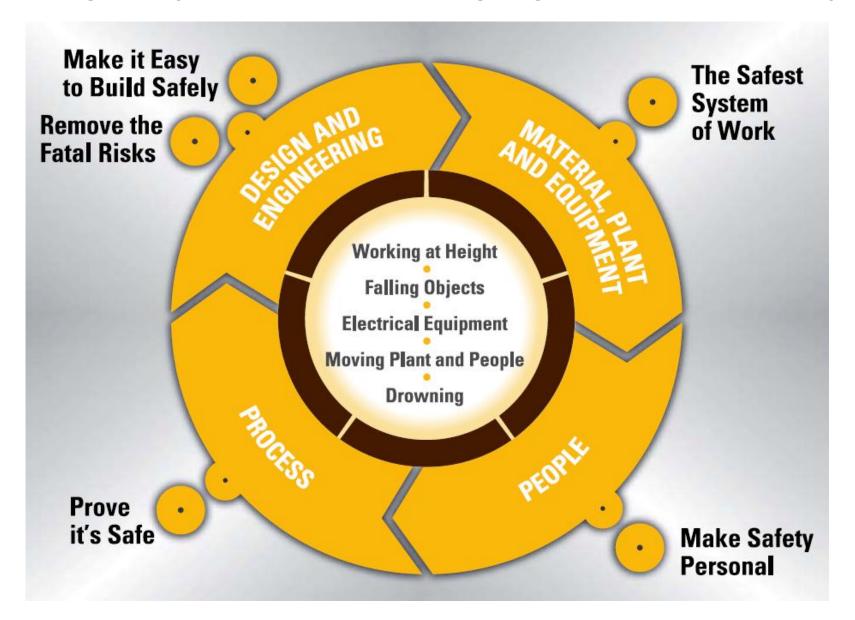
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**ZERO ACCIDENT · ZERO HARM** 

地盤零意外·關懷建未來

#### **Developing the "Industry" Safety Culture**

Installing the Layers of Protection and Targeting 5 Fatal Risks of "Industry"



#### 用心去做 Removing Obstacles

- 合理進度表
- 早作準備
- 把危險性剔除才放入工地
- 不平等條約
  - 高罰款
  - -沒有BofQ,自己計
- 多賞少罰
- 關懷 星期六休息

- Realistic Programmes
- Advance Coordination
- User Friendly Design
- Unfair Conditions
  - High LD
  - No BofQ
- More Incentives, Less Penality
- Caring No Saturday Working

## 謝謝 Thank You





## Construction Safety Week 建造業安全週!

## Safety Summit Meeting 安全高峰會議

香港國際機場! Hong Kong International Airport!





# **Construction Safety Week**

建造業安全週



# Vision & Policy 前瞻及策略



Aim for incident-free environment

旨在締造"零事故"工 作環境

Commitment to maintain and continuously improve safety standards

持續提昇安全標準

AAHK Management accountable for safety

機管局管理層問責工作 安全

Promulgation of safety awareness through safety communication and training

透過安全通訊與訓練推廣安全意識

Regular review of Safety Management System

定期檢討安全管理系統



# Problems & Analysis 疑難及分析



## Multi-layer Subcontracting System in HK Construction Industry

## 香港建造業多層分判制度

Inadequate safety commitment by sub-sub-contractors and workers

次分判商及其工人缺乏安全承擔

### **Inadequate investment in site safety**

## 短缺的安全資源

Highly competitive tendering environment can lead to reduced budgets allocated to site safety

競爭激烈的工程投標削弱安全資源的 預算

#### Insufficient time allowed for safe construction

短促的施工期引發不安全施工

Tremendous time pressure on projects jeopardises safety

追趕施工期的壓力往往犧牲工作安全

# Problems & Analysis 疑難及分析



## **Heavy reliance on law enforcement**

### 側重法例規管

Some hazardous areas may not be adequately addressed by existing safety legislation

現行安全法例未必能涵蓋所有危險範圍

Law enforcement approach cannot help build a caring and safety culture

強制執法未能幫助建立一個互相關懷和顧及安全的文化

Little motivation to change unsafe behaviour and unsafe practices

法規極少能改變不安全行為和不安全施工習慣

## Successful Measures

## 達致成功的措施



## **AA Fall Protection Rating System**

## 機管局防止高空下墮的評級系統

Promote safe working at height and advocate full provisions for fall protection

旨在推廣高空工作的安全與防墮裝備

Benchmarking contractors' standard in safety provisions against fall-fromheight

評級各承建商的防墮標準及裝備

## **AA Automatic Lightning Warning System**

機管局自動閃電預警系統

Automatic system to disseminate "紅色"與"黃色 "Red" & "Amber" lightning warnings 系統通知各承建商 to contractors

"紅色"與"黃色"閃電警告由自動系統通知各承建商

## Successful Measures

# 達致成功的措施



## **Analysis & Recapitulation of Accidents on Airport Projects**

## 機場建造工程的意外事故分析及重溫

Data useful for contractors in preparing their accident prevention programmes

有關分析資料能幫助承建商制定防止意外方案

Recap of major accidents/incidents on airport projects keep contractors alert to common site safety issues 重溫在機場建造工程發生的嚴重意外 和事故能提高各承建商對相關事故的 警覺和避免

## **Safety Highlights**

安全要點

Monthly presentations by the AA at PD Safety Management Meeting on the good & bad safety practices found on airport sites

在機管局建築工程部每月的安全管理 會上,舉列機場工地視察所見的安全 和不安全情況,讓各承建商分享及參 照

## Successful Measures 達

## 達致成功的措施



## Safety Alerts 安全警報

Provide alerts of serious accidents/incidents on local sites to raise contractors' awareness

遇有建造業的嚴重意外事故,即發放警報,以提高各承建商的警覺

## **Member of the Construction Safety Benchmarking Group**

## 建造安全基準組成員

Look to benchmark, share and improve safety standards on construction sites by regular exchanges with this Group of major construction clients

基準組成員為主要建造工程業主,於 定期會議中分享及改善施工安全標準

## **Airport Staff Safety Recognition Scheme**

## 機場員工安全嘉許計劃

Quarterly and annual promotion schemes to foster safety culture and to enhance safety awareness

季度與週年安全推廣計劃促進各機場伙伴之安全文化及提高安全意識

## Initiatives & Way Forward 主導及未來路向



Focus on preventing accidents which may be fatal or which may lead to permanent disability

目標集中防止致命或導致永久性傷殘的嚴重意外發生

Allow sufficient time for safe construction of projects

策劃足夠施工期,讓工程可安全地進 行

Ensure safety is properly considered at the planning and design stages

確保在工程的規劃和設計階段中,已 將安全元素包納

Provide safety training programmes for new workers to the construction industry and also for those new to airport project sites 對新入行及新到機場項目地盤的工人 提供安全培訓

Proactive engagement with contractors through the airport-wide Safety Management Meetings

透過每月機場安全管理會議與各承建商積極研討及促進工作安全

Continue to implement Pay for Safety

持續推行'安全項目支付計劃'

# Safety is The **HEART** of Our Business

Accident Prevention – HEART			
	Н	How	How safe is the activity or area?
	Ε	Evaluate	What is the risk of an accident?
	A	Alert	Alert others immediately of the hazard!
	R	Report	Report the hazard!
	Т	Tell	Tell others of your experience!
Hazard Report System			

Remember: "You SEE You ACT"

**Work Safely** 



# - END -

# 



# 建造業安全周一峰會! Construction Safety Week - Summit

楊啟裕先生主講! Presented by : Mr Frank<u>i</u> Yeung

香港房屋協會總監(工程策劃)! Director (Projects) of Hong Kong Housing Society!

# 建造業安全周一峰會 Construction Safety Week - Summit

楊啟裕先生主講 Presented by: Mr Franki Yeung

香港房屋協會總監(工程策劃) Director (Projects) of Hong Kong Housing Society

21/5/2012

# 房協管理層承諾

# Commitment from HS Management

健康及安全政策 Health and Safety Policy Statement 職業安全約章 Occupational Safety Charter







# 建立安全文化

# **Nurturing Safety Culture**



推行安全管理系統,建立企業安全文化 Implementing Safety Management System, to nurture a safety culture within the organisation



# 建立安全文化

# **Nurturing Safety Culture**

We believe:

我們相信:

Safety awareness changes

work behavior

安全認知改變工作習性

Work behavior changes

action

工作習性改變行為

Action changes

result

行為改變結果

推行安全管理系統,建立企業安全文化

Implementing Safety Management System, to nurture a safety culture within the organisation



# 即將開展的工程

# **Upcoming Projects**

未來數年將會是房協建造工程的高峯期,房協將緊密監督地盤承建商執行工業安全措施。

The next few years will be the peak of HKHS's construction works. HKHS is committed to monitor and ensure contractors' safety measures on site.



丹拿山項目 Tanner Hill Project



深水埗項目 Sham Shui Po Projects



筲箕灣道項目 Shau Kei Wan Project



# 達至"零意外"

# Achieving "Zero Accident"

在過往已發展和維修項目中,房協在地盤安全上取得一定的成果。在2008年9月動工,並於2011年末竣工的漁光村一期復修工程,更錄得零意外的紀錄。

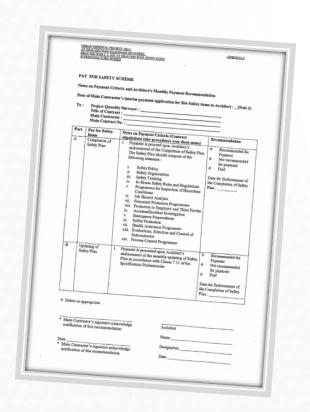
HKHS has good site safety records in our completed developments and rehabilitation projects. In the recently completed YKC-1 rehabilitation works, the accident rate was zero.





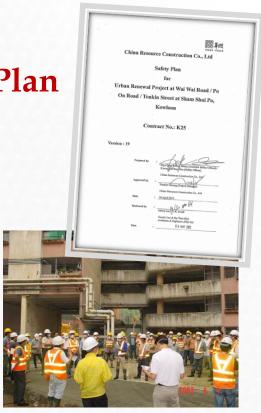


- ❖「支付安全設施」計劃 Pay For Safety Scheme
  - ■「支付安全設施」計劃列入標書內,以減除 因競爭而做成的不良後果 Included in tenders as pre-priced items to eliminate unrealistic pricing
  - 鼓勵承辦商切實執行和實施相關安全施措, 提升工地安全,使工人在更安全環境下施工 Encourage the Contractor's commitment to implement safety measures properly and diligently to enhance site safety





- ❖ 建築承辦商的安全管理計劃 Contractor's Safety Management Plan
- 大規模施工前,承辦商必須提交安全管理計劃 書供顧問團審批 Before commencement of massive construction works, the Contractor has to submit his Safety Management Plan for the Consultant's approval
- 承辦商嚴謹跟從已批核的安全管理計劃書施工 Contractor strictly follows the approved Safety Management Plan to proceed with his construction works on site





- ❖ 風險管理工作坊
  Risk Management Workshop
- 房協、工程顧問團及承辦商參與工作坊
  Jointly attended by HKHS, Consultant Team & Contractor
- 探討可能在施工時或在工地裏潛藏具風險的事項
  Identify risk registers that may exist on site and during operation
- 探討及制定可行的預防措施,以減輕爆發風險事項的機會至最低;若發生了不可避免的風險事項,其相關影響也可減至最輕 Brainstorm possible preventive measures to minimize risk occurrence and alleviate impacts if risks do happen



- ❖「五常法」管理 5-S Management
  - 工改善工地工作環境
    Tidy up working environment
  - 提高施工效率及建築質素 Improve work efficiency and quality
  - 「常組織」、「常整頓」、「常清潔」、「常規範」及「常自律」
    'Structurise','Systematise', 'Sanitise',
    'Standardise' and 'Self-discipline'







實施五常法後, 地盤變得更整潔安全



# **Tools of Site Safety Management**

## ❖ 安全管理 Safety Management

推動優質建築之餘,房協亦嚴格監管轄下工程之承建商在安全及環保各方面的表現

Apart from quality building, we also closely supervise and monitor the Contractors' performance on site safety and environmental control





# **Tools of Site Safety Management**

- ❖ 安全管理 Safety Management
  - 我們積極鼓勵承建商參與由職業安全健康局主辦的「良好工作場所整理計劃」及發展局與建造業議會合辦的「公德地盆嘉許計劃」。近期丹拿山退休房屋項目的地基工程奪得「公德地盆嘉許計劃:銅獎」

Encourage our Contractors to participate in Good Housekeeping Plan (OSHC) and Considerate Contractors Site Award (Development Bureau & Construction Industry Council)



# **Tools of Site Safety Management**

- ❖ 職安的故事
  "Working at Height" DVD
- ❖「優質工序」短片 Quality Field Practice (QFP)
  - 施工前播放優質工序短片,讓監督人員和工人明白施工流程和要求,使施工更安全

Showing QFP video to site supervisory staff and workers, aiming to arouse their awareness on safety requirements and guide them to work properly and safely







# Tools of Site Safety Management

- ❖ 工地安全巡查 Safety Site Walks
  - 聯同顧問的工地監督與承辦商的 安全主任定期巡查工地環境,以 檢視、修正及處理不安全的地方 和事項,確保工地施工安全

Regular site walks with the Consultant's Site Supervisory Team and Contractor's Safety Officer to identify and rectify any unsafe observations







# **Tools of Site Safety Management**

❖ 工地安全訓練及講座 Site Safety Training and Seminars









# **Tools of Site Safety Management**

## ❖ 安全演練 Safety Drills

顧問的工地監督與承辦商的安全主任定期於工地演練有關防火、化學物品處理及意外應變等,以加强工友的安全意識及應變能力。

Regular safety drills on fire, chemical spillage and accidental injuries can alert workers' safety mindset and proper approaches of handling accidents









# 總結

## Conclusion

- ❖ 今後的目標 HKHS's targets
- 房協將繼續在建造地盤執行建造業安全措施 HKHS is committed to support and to implement safe construction measures in our construction sites
- 企業目標是建造地盤的工業意外率低於業內普遍水平 Our corporate target is set for accident rate in our construction sites to be below the general level of local construction industry



# 多謝!

# Thank You!







Construction Safety Week 建造業安全周!

# Safety Summit 2012 安全峰鲁!

T C Chew, Project Director 工程總監 周大滄



Construction Safety Week

建造業安全周

Safety Summit 2012

安全峰會

T C Chew, Projects Director

工程總監 周大滄

MTR Corporation





## Main safety challenges in the coming years

## 未來在安全方面的挑戰

1. Five new projects being constructed simultaneously, with over 5,000 contractors staff and 16000 workers employed at the peak:

五個新鐵路項目同時進行、在高峰期將聘用超過五千名管理人員及 一萬六千名工人

- Different levels of contractor safety standards and culture 承建商有各自不同的安全文化及標準
- Possible lack of experienced and trained management, supervision and workers 有些員工、包括管理、督導及前線工人可能經驗及訓練不足
- 2. Construction activities involves high risk work in densely populated areas:

須在人口綢密的社區進行高難度的建造工程

• Over 100 work sites across the territories 超過一百個工地同時在施工





# Safety Strategy 安全策略

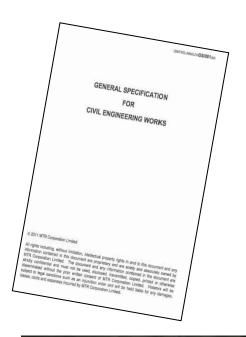






### Stringent Contractual Safety Requirement and Welfare Facilities for Workers - Rigorously enforced by site staff

## 嚴格執行合約安全及工人福利設施條文















Page 4

# Strict enforcement of method statements for high risk activities 嚴格執行高風險工序施工方案

All Site Engineers and below are trained in the development of MS and RA.

所有工程師及監工均已接受施工方案及風險評估訓練

Project site and safety staff review MS and RA against the actual work process.

工程及安全人員定期巡查確保施工方案在工地落實執行

HQ safety staff conduct independent reviews of high risk MS and RA against the actual work process.

總部安全人員不定期執行獨立檢查







## Contractors Incentive Scheme 安全表現支付計劃



#### Contractors Safety Awards 安全頒獎典禮

6-monthly safety awards are organised for contractors

每半年舉辦大型頒獎典禮:

**Best Contractor Award** 

安全大獎

- Highest DNV Audit Score Award安全稽核獎
- Best Site Condition Award

最佳工地獎

- Contractor with the lowest RAFR意外率最低獎
- Contractors Supervisors Award 最佳管工獎

Best Near Miss Report Award 最佳險失事故報告獎

Best Site Team Award

最佳團隊獎







#### Safety Conferences and Workshops安全會議

Quarterly safety conferences and workshops are organised to share lessons learned and new initiatives.

每季舉辦大型安全會議、分享經驗及新安全 策略及措施。







Safety Practitioners Conference



#### Safety Alerts & Accident News Cuttings

#### 安全事故及剪報即時傳閱



Whilst a G.I worker was assisting the unloading of a drilling rig on a scaffold working platform, he tripped over the toe board and fell to the access staircase of the working platform, causing minor fracture to his left leg below the kneecap.





1. 童外目期: 2012年1月

2. 實外地點: 茶灣一個停車場

一名工人在爬上一把人字金屬梯進行污水管/ 米,其後傷重死亡。

#### 4. 給承費問/備主的職安警常:

從事權字裝修及維修工程的承建商/僱主應

- 毒量發受進行高空工作;
- 在使用棚架或升降工作平台等均不合理地 使用流動梯子:
- 確保使用流動梯子只限於在短時間內完成:
- 提供安全使用流動梯子的適當訓練及指導。

5. 多考資料:





#### 安全提示 第001/11號 扎結鑽槽鐵籠(扎籠)

Re-bar at

45 degree

Safety Alert No. 001/11 Fabrication of Reinforcement Cages of Bored Piles

Tie-bracing

Rigid Ground

Plate

2 re-bars

at top

Re-hars at

120 degree

Eabrication

Frame

foundation work. During the operation, relevant safety measures should be taken so as to prevent the occurrence of accidents. Practitioners are alerted to the following safety measures:

- Prior to the commencement of fabrication, site foremen, engineers and relevant parties should jointly carry out a risk assessment of the reinforcement cage fabrication process and implement the safety measures determined as a result of the assessment.
- A method statement for the fabrication of reinforcement cages should then be drawn up, including the relevant risk assessment, working drawings, safety working procedures, etc.
- For the fabrication work, suitable equipment including arc-shaped fabrication frames,
- ground plates, working platform, etc, should be used. The arc-shape fabrication frames and ground plates should be placed on rigid and flat ground. Barriers and warning signs should be provided to guard against possible damage.
- The arc-shaped fabrication frames for supporting the reinforcement cage must be fabricated
- (as shown on the sketch) ahead of other bar fixing process, it is important that: (i) Upon re-bars are fixed with tie-wires on the lower portions of the stiffener rings (a span of 120"), all these re-bars (both inside and outside the cage) are immediately fastened by
  - (II) At least 2 tie-bracings are fixed by U-boits at the top positions of the stiffener rings at both ends of the cage. Sufficient tie-bracings would also be fixed by U-boits on the
- The bar fixing foremen should closely supervise this work process to ensure full compliance with the approved method statement.
- The bar fixing foremen should have the relevant experience in the fabrication of similar

The material contained in the Alext constitutes general guidance only. It does not refuse, and the replace, any legal obligations upon any person to comply with any statutory duties under released legislation. Users should make their own evaluation of the information contained in the Alext to determine if it is not be applied to their own statutions and grandous. The Construction floadily count (CIL) does not accept any responsible for any loss or desire, resulting to their use of or failure to use of the information on the Alext.

18 October 2011



#### A pre-cast concrete facade toppled and hit

#### a worker while being lifted

2012 10 2 75 16 6

Yesterday maming of a residential building site of Direk Rok Road of Tseung Rivan O, a wonee sustained seasous rightly in a account related to the intocating of a pre-coal coverede facule from a long, if was suspected that when the suspected baid wis being placed on the ground, if topped basets are site due to uneven ground surface and hit the worker who was helping the lifting operation.

The IIP was 35 years and and he was assisting the unicading of the concept bicade which was 6 feet high, 20 feet wide and weights around 3.3 formes. When the load was landed on the ground 6 toppied sideway and full the 6P on his head and he was anconscious. He was sent to Theoring Kovan O Hoopital and later transferred to Gueen. Elizabeth Hoopital for treatment. His consisten was critical and the accident was being riverstigated by Labour Department. The main contractor is Paul Y Construction



#### **Newspaper Cutting**

新聞剪報

A worker impaled by re-bars from a fall

(Partially translated from The 'Sun')

A 56 years old worker fell from 8/F to 7/F of a hotel under construction was impaled lowered down to ground level by the tower crane on a skip. He has been admitted to ICU and is in critical condition. The accident is under investigation by Labour Department. The contractor is Unistress Building Construction



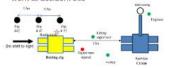
#### Memorandum

Land Transport Authority



Page 1 of 3

Schematic plan showing contiguous bored piling work at accident site



- · The boring rig moved to the right to create space to cast the pile #47
- . \*Banksman for boring rig left site for a tollet break during accident
- . The signalman was immediately sent to NUH by an ambulance.
- . The doctors confirmed that the signalman's right lower limb needs to be amputated while his left foot was treated for swelling.

Date of Issue	OSH Alert 3./2012	Reference No
3/05/2012	Page 2	LTA/SAFE/E35.002.000/548/009

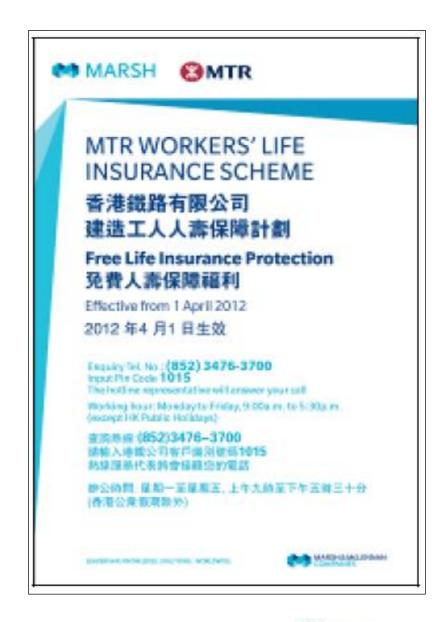


#### Workers' Life Insurance Scheme

#### 建造工人人壽保障計劃

MTR is the **first** major employer in Hong Kong to sponsor a free life insurance scheme to provide financial benefit to the family of workers in the unfortunate event of their death

港鐵公司是本港首位雇主為 建造工人購買人壽保障計劃, 如工人在職期間因病或其他 原因不幸身故,其家人將得 到一筆現金解困。



#### Aim目的

• It is our aim and our duty, to ensure that all our staff and our contractors workers go home to their families in the same condition as they arrived in one piece and healthy!



我們的責任及目標是要確保所有員工及承建商工友每天均能平安下班與家人團聚。







#### 



# 發展高任建造業安全 的角色

劉智強先生, MH, JP 香港地產建設商會 建築事務委員會

## 安全峰會 2012年5月21日

## 發展商在建造業安全的角色

劉智強先生, MH, JP

香港地產建設商會

建築事務委員會

召集人

#### 統計數字

- 2011年共有23人死於地盤意外
- 漠視安全措施 抱憾終生!
  - 2011年全港共發生3,112宗地盤意外
- 地盤意外導致數以百萬計的經濟損失!
  - 數百個家庭因而陷入困境

#### 統計數字

最常見的致命意外:

- 高處墮下
- 被下墜物擊中
- 搬運時碰撞
- 觸電

## 香港建造業安全伙件計劃



#### 香港建造業安全伙件計劃

○自願性參與「支付安全計劃」

○ 2005年正式開展

○目的:提升<u>私營</u>地盤的安全水平 至與公營地盤看齊

○目標: 零致命意外

零危險事故

全年工傷意外率低於千份之十

#### 參與會員責任

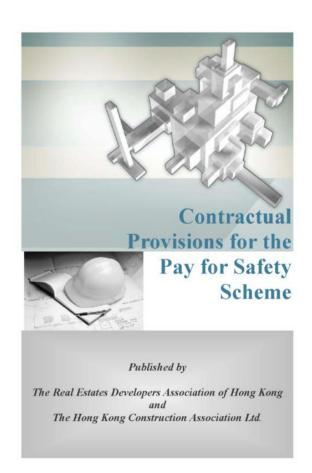
- 通過建築合約,安排及改進地盤的安全
- 將「支付安全計劃」包含在項目合約內
- ○支付註冊及安全檢查費用
- 定期檢查、檢討,完善實施安全計劃
- 提供意外資料以作統計之用

## 4份安全管理文件

#### 4份安全管理文件

- 支付安全計劃合約條款
- 建築地盤安全大綱
- ○建築地盤安全手冊
- 建築地盤安全管理實務守則

## 支付安全計劃合約條款



## 支付安全計劃合約條款

- 在合約條款內訂定條文,僱主清晰列明安全計劃的項目及承擔
- 以獎金鼓勵方式,表揚承建商有卓越的安全表現
- 以公平及公正的方式,落實「支付安全計劃」的執行

#### 建築地盤安全大綱



Published by

The Real Estate Developers Association of Hong Kong and The Hong Kong Construction Association Ltd.

#### 建築地盤安全大綱

- 提供地盤安全之管理架構,實施安全計劃的工作守則,列 舉安全供應鏈內之法定要求及合約需知
- 安全管理責任
- 建築事務監督之安全管理制度

## 建築地盤安全手冊



Published by

The Real Estate Developers Association of Hong Kong and

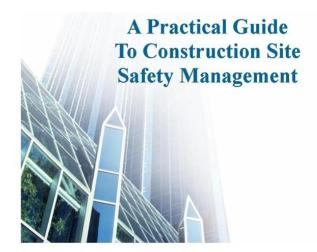
**The Hong Kong Construction Association** 



#### 建築地盤安全手冊

- 爲前線管理人員提供地盤安全事項的參考
- 提供基本安全管理架構,進行持續的改進及提升

#### 建築地盤安全管理實務守則





Published by
The Real Estate Developers Association of Hong Kong
and
The Hong Kong Construction Association.

#### 建築地盤安全管理實務守則

- 協助僱主或其代表
  - 監督承建商的安全表現
  - 執行建築設計及管理 (CDM)的概念
- 協助承建商裝備
  - 必要的知識、裝備及技能,以便有效地推行安全管理制度

## 支付安全計劃

#### 支付安全計劃

- 執行「支付安全計劃」,並遵照「建築地盤安全手冊」運作
- 會員爲每個參與的地盤支付註冊費用
- 安全成本佔總合約金額的最高上限爲 0.5% 2%
- 改善地盤安全 = 減少工傷補償保險費用
- 減少工業意外 = 改善地盤工作效率
- 參與地盤每半年會由一名**獨立的稽核員**進行安全檢查及評估

#### 支付安全計劃對發展商的意義

合約文件

合約管理

發展商自願參與以顯示他們對持續提升安全表現的良好意願。

#### 合同文件及管理

#### 由發展商代表認證



承建商順利完成與安全 相關的項目

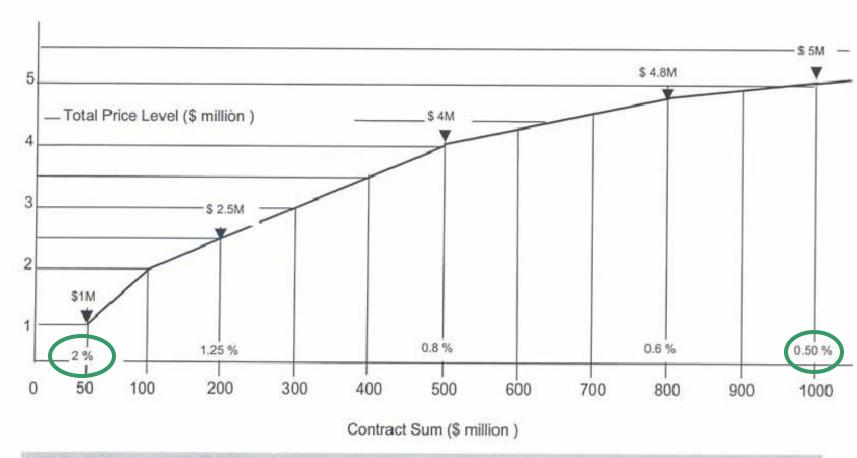


向承建商付出預定的費用

#### 合同文件及管理

Guideline on Price Value

BQ /Schedule of Rates items for Safety (\$ million)



Annex D - Sliding Scale of Pay for Safety Price Value relative to Project Sizes

#### 支付安全計劃

- ○註冊費用
- 由\$5,000至\$20,000不等, 視乎各地盤的合約期而定
- 安全檢查費用
- 由\$5,500至 \$22,000不等,視乎各地盤的合約期而定
- 地盤安全 並不昂貴!

## 例子 (1) 拆卸工程

#### 以中環進行的拆卸工程爲例

❖合約金額:\$680,000

❖合約期:30天

❖ 支付安全費用: \$15,600

❖安全從業人員:安全督導員





### 例子(2) 地基工程

#### 位於沙田的地盤

❖合約金額: \$38,398,000

❖合約期:310 天

❖ 支付安全費用: \$150,000

❖安全從業人員:

半職安全主任每月巡查地盤兩次





#### 參與地盤的意外率

年度	參與地盤數目	每千名建造業工人的 意外率
2005 (9月至12月)	16	19.03
2006	13	21.29
2007	9	18.99
2008	11	13.78
2009	11	12.43
2010	16	10.46
2011	14	17.71
2012 (1月至3月)	8	10.12
總數	98	

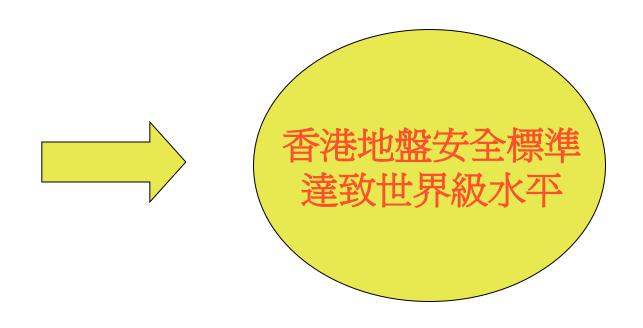
○ 自2005年計劃推行至今,參與地盤的意外率正逐年下降

#### 發展路向

- 香港地產建設商會及香港建造商會將繼續聯繫及鼓勵更多發展商參與建造業安全伙件計劃。
- 提供"先導者"優惠予現有會員,藉以鼓勵他們招募更 多會員及非會員參與計劃,提升業界的安全水平。
- 與政府、專業團體及非政府組織締結協作關係,達 致「地盤零意外」的目標。

#### 地盤安全 人人有責

大家共同努力,向著目標前進!



# 一样一样

#### 



## Safety from Heart **支金川海**!

Ir CHAN Fuk Cheung
President, HKIE
香港工程師學會會長 陳福祥工程師

#### **Construction Safety Week**









## **Safety from Heart**

## 安全心經

## Ir CHAN Fuk Cheung President, HKIE

香港工程師學會會長 陳福祥工程師

21 May 2012

二零一二年五月二十一日

### Safety and Heart 安全與小心



### 小心駛得萬年船

Safety - S.A.F.E.T.Y.

**Secure Accident Free Extending Thousand Years** 

安全是一個漫長的路程

Safety is a long journey

### Concept Change 觀念的改變



意外 - 意料之外

Accident is not controllable



意外 Accident



事故 Incident



### Concept Change 觀念的改變



### 意外 - 意料之外

Accident is not controllable





所有事故(意外)是可避免的

All accidents can be prevented



零事故(意外)是可做得到的

Zero accident is achievable

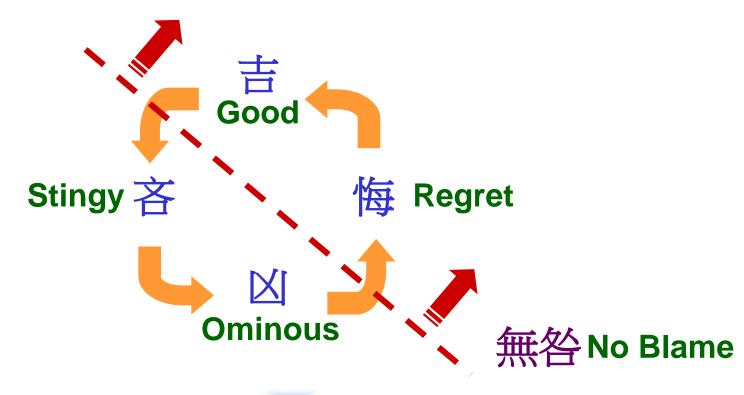


### I-Ching 易經



### 吉吝凶悔

Good, Stingy, Ominous and Regret



### Humble 謙虚



### 趨吉避凶 Toward Good & Avoid Ominous



### Humble 謙虚



### 不知知 知不知

Always make the unfamiliar familiar and the familiar unfamiliar

平常心

**Ordinary Heart** 

宣傳,提點,重溫事故 提升警覺性

Promotion, Advice, Event Review to raise Awareness

## HKIE Safety Protocol 安全議定書 HK工E INSTITUTION OF ENGINEERS 香港工程師學會

#### **HKIE Safety Protocol**

As professional engineers, we at all times are governed by the overriding interest of the general public, in particular, their environment, welfare, health and safety. As a professional institution, we attach importance to, inter alia, safety as our priority and shall take the leading role in preventing and reducing industrial accidents for engineering works and related functions. An engineer must manage safety for the various projects under his/her sphere of control part and parcel of the responsibility vested in him/her. The concept of zero accidents, to be more precise, should be called zero incidents. The purpose is that together, **WE** build a safe environment.

The Protocol consists of the following concepts and endeavours:

#### Concepts

- ✓ Every incident and accident can be avoided
- ✓ Take ownership and be accountable for safety of people, assets and the environment under one's own sphere of control
- ✓ Conduct risk assessment on work from planning to execution with necessary mitigation measures
- ✓ Take courage to initiate and persuade change and continual enhancement for work and for betterment of the society

#### **Endeavours**

#### **HKIE Activities**

- For each activity, risk assessment is to be carried out and remedial measures are to be developed
- 2. At the start of each activity, fire alarm/emergency procedure is to be announced
- Sustain commitment and promotion of safety via existing communication channels

- 4. Remind members on safety training in accordance with the CPD requirement (eg Safety Specialist Committee will provide the required safety information to Divisions and formulate promotion strategies)
- Contribute continuously for the advancement of technology and the community in upholding safety

#### Self Commitment

- 6. Strive for highest safety standards by exercising due diligence and applying the best of one's knowledge in managing all work processes
- 7. When there is divergence in view during the decision making process, always put safety as priority
- Incorporate safety in all phases of the asset life cycle (ie design, planning, construction, commissioning, operation & maintenance, decommissioning, etc)
- Be a role model on safety, continually acquire new knowledge on safety in the wide spectrum of engineering and act professionally on safety matters

#### Workplace

- 10. In delegating or subcontracting work to a third party, one's accountability on safety remains
- 11. Comply with laws, rules and regulations
- 12. Always learn from mistakes and adopt good practices from others
- 13. Record and communicate unresolved risks to stakeholders at down-stream

#### Caring Others

- 14. Influence others and take every chance to teach/coach others on safety
- 15. Be proactive in reviewing and improving work practices and work methods
- 16. Safety is an all-round process in daily life, including those in the production processes and off-the-job

### Conclusion 總結



安全長跑 Safety is a long journey

觀念改變 Concept Change

先悔無咎 Pre-regret and no blame

謙虚處事 Humble to learn and work

歷久常新 An equipped fresh mind



### **Safety from Heart**

安全心經

Ir CHAN Fuk Cheung President, HKIE

香港工程師學會會長 陳福祥工程師

### 謝謝 Thank you

### 



# 支金峰會!

## Safety Summit

香港測量師學會!

Presentation by The Hong Kong Institute of Surveyors

建築測量組主席 何鉅業先生!

Mr. Vincent HO, Chairman, Building Surveying Division!



## **Safety Summit**

Presentation by The Hong Kong Institute of Surveyors

21 May 2012





HKIS commits to the development of a safe society including a safe and healthy construction environment.

香港測量師學會致力推動建立一個安全的社會環境,其中 包括安全和健康的建築施工環境

HKIS encourages our members to take safety training to equip the knowledge in safety supervision of construction works.

香港測量師學會鼓勵我們的會員接受職業安全訓練,學習 並加強自身對於監管施工安全的相關專業知識



Construction safety and health is also an element of professional training for Building Surveyors.

安全施工是建築測量師專業訓練的一個重要元素





HKIS believes construction safety and health is not only a site matter.

測量師學會相信建築業的施工安全和工人健康不僅僅是一個工 地問題

It requires common support of :- 它需要各方面的支援,包括:

- training on safety site operation 施工安全訓練
- building design for safety construction
   建築設計對於施工安全的考慮



- building design for safety maintenance
   建築設計對於樓宇維修安全的考慮
- contract specification for site safety and health provisions
   在施工合同裡面有關工地安全的條款和要求
- supervision for site safety and health 在施工階段對於安全施工的監管



HKIS supports promotion of building design that would facilitate green and efficient construction as well as minimizing risky construction operation.

香港測量師學會支持對於環保和高效率施工的設計、以及減少高風險施工





## HKIS supports promotion of building design to :-

香港測量師學會支持以下建築設計的推廣工作:

minimize risky maintenance and repair operations

減少高風險維修保養工作的設計

enhance maintenance and repair access and provisions









To promote safety construction for maintenance and renovation works at occupied buildings, HKIS has included a standard "Protection" clause in a new Standard Form of Maintenance and Renovation Contract.

為了推廣在使用中樓宇裡面進行的維修、保養、裝修等施工的安全,香港測量師學會在新編制的"樓宇維修和裝修工程標準合同"裡面加入了"安全保護"的標準條款



The "Protection" clause requires the contractor to take every care and safety precaution to protect all persons and properties including all workers and all occupiers in the vicinity of the site.

"安全保護"條款要求承建商要使用、提供所有的安全措施去保護所有受施工場地影響的人員和財產的安全,其中包括所有工人和其他所有使用者。





## Thank you 謝謝





# 職業安全健康局給予建造業界的支援 OSHC's Support for the Construction Industry

職業安全健康局! Occupational Safety and Health Council

> 主席 黃天祥工程師! Ir Conrad WONG, Chairman!



### 職業安全健康局給予建造業界的支援 OSHC's Support for the Construction Industry

#### 職安局法定功能

#### **Statutory Functions of OSHC**

- 1. 宣傳推廣 Promotion
- 2. 教育及培訓 Training
- 3. 顧問服務 Consultancy services
- 4. 研究及策略發展 Research and strategies development
- 5. 傳遞信息 Information dissemination
- 6.促進政府、僱主、僱員、專業人員及 學術界人士彼此間的交流 Facilitate exchanges between stakeholders





### 宣傳推廣 - 普及安全文化 Promoting Safety Culture

- ➤ 加強與業界工會及商會合作,透過講座、 比賽、外展探訪等,直接接觸前線員工。 Enhance cooperation with the unions and trade associations, to reach out to the frontline workers through seminars, competitions and regular outreach visits.
- ► 針對工地的高風險工序進行推廣。 Target on high-risk works on site.
- 其他宣傳包括與地區團體合作,在社區層面加強推廣建造業及裝修維修業工作安全。
  Promote construction and RMAA Safety at community level
- ▶ 利用大眾媒體推廣建造業安全訊息。
  Use of mass media to disseminate construction safety information





### 加強安全培訓,提升職安健 Capacity Building through Safety Training

- ▶ 職安局為建造業提供130多種的安全培訓課程,形式注重「活動教學」,包括:
  - 建造業安全督導員課程
  - 配合大型基建工程而特別設計的課程,尤其聚焦 高風險作業的安全操作培訓課程(例如:高架天橋 建造,隧道挖掘,負荷物移動機械工作安全)
  - 關注新入職員工的安全訓練
- OSHC provides over 130 types of practical and interactive safety training courses for construction industry:
  - Safety Supervisor Course for Construction Industry
  - Safety training courses tailor-made for infrastructure projects (e.g.: Flyover construction, Tunneling, Loadshifting mechanical Work Safety)
  - Safety training for new employees





- ▶青衣職安健學院於2011年8月啟用,增加教學設施,提升學習環境及教學質素。
- ➤ The new OSH Academy opens in August 2011 providing enhanced teaching facilities and training qualities.

### 顧問服務-加強公司職安健能力建設

Consultancy services- Enhance Organizational OSH Capacity building

- ▶ 協助建築公司建立安全管理制度,進行安全稽核、 風險評估、職業衛生評估等。 Provide consultancy services in developing safety management system, safety audits, risk assessments, occupational hygiene assessments.
- ➤ 研發有效的安全管理工具,如「實施工作安全行為 (WSB)實用套件」,「工傷閃失事故和職業病監測軟件」,協助機構監察工作間危險因素,預防意外。 Develop safety management tools to assist the organizations in injury prevention, e.g. "Work Safe Behaviour (WSB) Program" and "Occupational Incident and Disease Surveillance System".
- ▶ 為建造業中小企提供5個財政及技術支援計劃,提升 安全水平,歷年批出2,000多宗,款項7百多萬元。 Introduced 5 sponsorship schemes for the SME to improve their safety performances; over 2,000 cases of \$7 million were approved over the years.







### 研究-針對問題 深入探討 Conduct diversified research

→ 利用「建造業工作安全氣候指數調查軟件」對全港企業安全文化水準進行全面評估。
OSHC used "Construction Industry Safety Climate Index Software" to measure the safety culture of the companies in Hong Kong.

#### 結果顯示 Major Results

- ▶ 機構及管理層對安全的承諾及領導能力指數較低 Low commitment for OSH by organization and management
- ▶ 員工對安全守則及程式的認知不足 Insufficient employees' perception of safety rules & procedures
- 管理人員和前線員工對安全風險的評估和警覺性不足 Low perception of risk by management & frontline workers
- 不安全的工作態度和行為,例如忽略安全措施 Unsafe attitude and behaviour, e.g. ignore safety measures
- ▶ 員工職安健的參與性低
  Low employee's involvement in safety and health
- ► 香港的安全文化尚未全面建立
  Safety culture in Hong Kong is not yet fully established







### 如何有效評估安全文化推廣績效

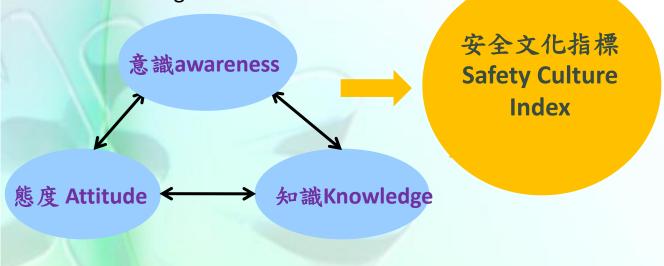
#### **Evaluate the Effectiveness of Safety Culture Enhancement Strategy**

▶ 慣常使用意外數字作為安全表現指標
Accident statistics is commonly used as safety performance indicator

▶ 可利用職安局制定的「安全文化指數」作為一個基準去量度機構的職安健表現,和安全改善策略的有效性。指標主要包括安全意識、態度及知識。

"Occupational Safety Culture Index" could also be used as a tool to assess the effectiveness of OSH intervention measures, which include awareness, attitude and





評估表現 Assessing Effectiveness of Safety & Health Intervention Measures

### 香港職業安全健康聯會

The Hong Kong Federation of Occupational Safety and Health Associations

### **CONSTRUCTION WEEK**

建造業安全週

### SAFETY SUMMIT

安全峰會





### 香港職業安全健康聯會

The Hong Kong Federation of Occupational Safety and Health Associations

- □ 使命 Mission
  - □ 促進香港各安全協會的合作,以確保職業安全及健康 得以持續發展
    - To facilitate collaborations among safety associations in Hong Kong for sustained advancement of occupational safety & health standard
  - 反映安全從業員於職安健層面上的意見 To express the opinions of the safety practitioners on occupational safety & health issues

### 香港職業安全健康聯會

The Hong Kong Federation of Occupational Safety and Health Associations

- □ 使命 Mission
  - 加強公眾對職安健的意識

    To enhance the occupational safety and health awareness of the public
  - 提升安全從業員的地位及水平
    To raise the status and competence of safety practitioners
  - □ 宣傳及推廣行業安全及健康的最佳做法
    To promote the best practice of safety & health at work

## 我們的路向 Our Way Forward

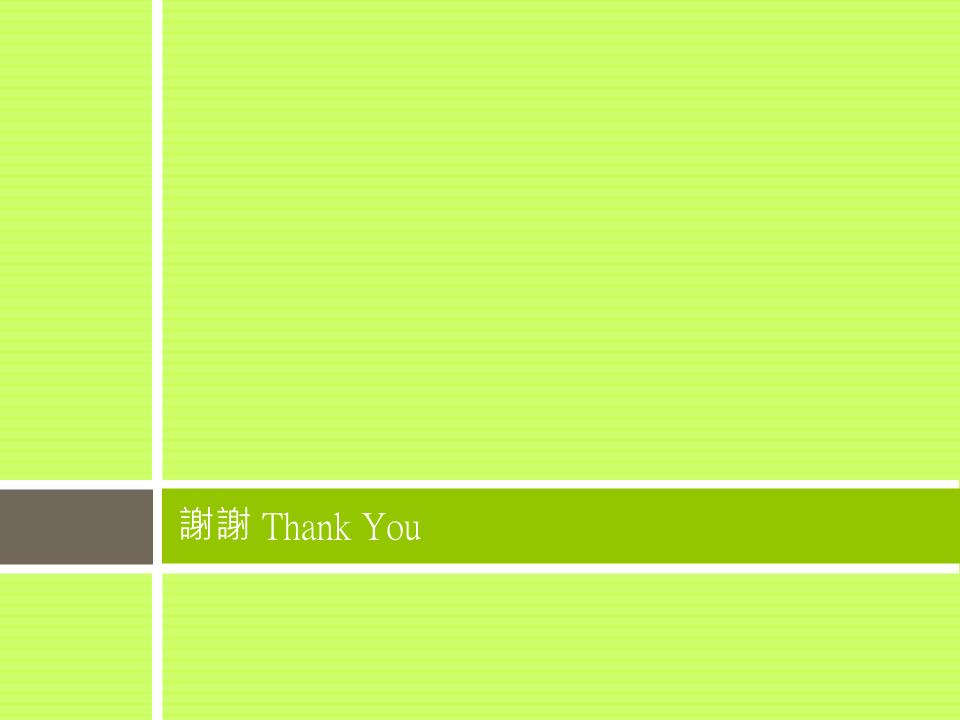
- □制定安全從業員操守指引及完善持續進修計劃
  - □為安全從業員制定『操守指引』,及進一步完善安全從業員的持續進修計劃,以確保安全從業員的服務,均達專業水平。
- Develop Code of Conduct for Safety Practitioner and enhance the Continuing Professional Development Programme
  - To develop a "Code of Conduct" and further improve the Continuing Professional Development Programme to ensure the professionalism of safety practitioners.

## 我們的路向 Our Way Forward

- □舉辦職安健講座及考察活動
  - □為安全從業員籌備各類型的活動,包括講座、研討 會和考察活動等,以拓寬安全從業員的視野,了解 行內最新的職安健發展。
- □ Organizing OSH seminars and technical visits
  - Arrange various types of activities, including seminars and technical visits to broaden the horizons of safety practitioners and to understand the latest OSH development.

## 我們的路向 Our Way Forward

- □向建造業業界推廣提升職安健水平的方案
  - ■針對建造業所面對的各種問題,建議及推廣行之有效的方法,以提升建造業界整體的職安健水平
- □ Promoting OSH programmes to improve the safety performance of construction industry
  - Provide and promote effective programmes to improve the OSH performance in Construction Industry.



### 



## 香港職業安全健康聯會

The Hong Kong Federation of Occupational Safety and Health Assocications

CONSTRUCTION WEEK 建造業安全週 SAFETY SUMMIT 安全峰會

鄺超靈 Victor Kwong

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## 安全峰會!

## SAFETY SUMMIT

### **HKFEMC**

香港機電工程商聯會

The Hong Kong Federation of Electrical and Mechanical Contractors Limited 會長 莊堅烈先生 Mr. CHONG Kin Lit Paul, Chairman



## 安全峰會

## SAFETY SUMMIT



The Hong Kong Federation of Electrical and Mechanical Contractors Limited





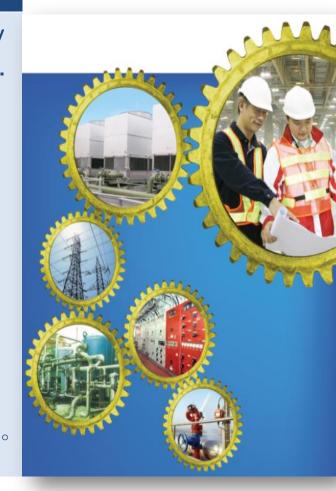


## INTRODUCTION

### 間刀

### **BACKGROUND OF HKFEMC**

- Founded in 2001 as a non-profit making body by six major trade associations in the E&M industry.
   由本港六個主要機電業商會於2001年成立的非牟 利機構。
- Constitute a common platform for stakeholders
   建立一個受業界廣泛支持的統一平台。
- Provide a single consolidated channel for various bodies to conduct dialogue with and exchange views.
  - 提供直接的溝通交流渠道有效處理行業一切事宜。





## OUR VISION 我們的抱負

#### **ZERO ACCIDENT VISION**

• Safety is a top priority concern to HKFEMC. A comprehensive range of initiatives to nurture an E&M safety culture underpins our vision.

商聯會以推動安全為首要職責,致力倡議全面 性機電工程安全文化。

 We leave no stone unturned to promote communication and facilitate coordination in our E&M supply chain and in doing so to imbue proactive culture in the industry.

全面加強機電業界之溝通和協調及促進主動積極的安全文化。







# PROBLEM & ANALYSIS 存在的問題及分析

### **NATURE OF E&M WORKS**

E&M works is often conducted in parallel with many other specialist trades under highly constrained environment, allowing no hiccup from any single trade causing delay to the whole chain. Precise coordination is most challenging.

機電工程難免與其他多個工種同時在一個狹窄空 間內施工,加上繁複多變的特性,精確的管理實 在是一項挑戰。

Safety hazards exists in installation, testing and commissioning, operation, maintenance and repair stages.

安全風險常存於安裝、調試、操作和維修等工序。





# PROBLEM & ANALYSIS 存在的問題及分析

### **SPECIFIC HAZARDS OF E&M WORKS**

 Work at height including ceiling works. 天花工程、喉管、電線、燈喉或槽管安裝的高空 工作。

· Welding and cutting for ductwork and pipework. 氣體焊接、火焰切割及電弧焊接。

 Testing and maintenance of E&M systems. 測試保養和維修電力設備及機電系統。





# PROBLEM & ANALYSIS 存在的問題及分析

### **SPECIFIC HAZARDS OF E&M WORKS**

 Maintenance of machinery or mechanical system. 保養、維修及操作機械裝置,例如電梯及自動扶梯。

 Confined space operation inside water tank, sewer or pipeline.

水箱、水渠、管道等密閉空間作業。

Installation, handling and maintenance of compressed gas cylinder.

安裝、儲存、檢查、運送及維修壓縮氣瓶。



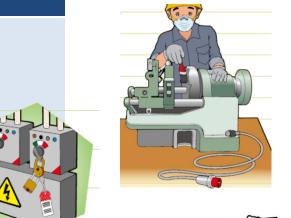


# PROBLEM & ANALYSIS 存在的問題及分析

### **SPECIFIC HAZARDS OF E&M WORKS**

- Lifting or leveling of E&M equipment. 使用起重裝備吊運重物及大型的組件。
- Use of portable hand tools. 使用便攜式工具。
- Use of hazardous substances for painting, adhering and cleaning.

使用危險品進行油漆、附貼及清洗。







## PROBLEM & ANALYSIS

## 存在的問題及分析

### **KEY CAUSES OF ACCIDENTS**

 Poor coordination between trades and crews, inadequate risk assessment, experience and supervision.

沒有與各行業及團隊事先取得充份協調,沒有足夠的風險評估、培訓、經驗和監管。

 Poor communication, lack of planning and coordination to prevent incompatible activities from being performed at the same time.

沒有預先規劃和溝通以避免抵觸性的活動同時進行。







## PROBLEM & ANALYSIS

## 存在的問題及分析

### **KEY CAUSES OF ACCIDENTS**

 Inadequate pre-work assessment of working conditions and lack of safety systems for high risk E&M works.

缺乏施工前評估及缺乏機電高危工序的安全作業系統。

 Highly compressed programme leaving little time and space for proper work execution.
 過份壓縮的時間表令施工風險增加。







### SUITABLE MEASURES

適當的措施

#### **E&M SAFETY MANAGEMENT**

 Pre-work risk assessment is crucial to reduce risk.

施工前的風險評估至關重要,以減少風險; 必須詳細考慮所有客觀環境因素、工作空間、 工作內容及工時等,然後才可施工。

 Elimination of unsafe act or condition through coordination and communication between trades and crews.

透過協調和溝通消除同行及團隊的不安全行為及施工環境。







## SUITABLE MEASURES

適當的措施

#### **E&M SAFETY MANAGEMENT**

- Prefabrication of E&M components to mitigate safety hazards at sites. 預製組件減低工地的意外風險。
- ICT and planning for safety are important to achieve E&M safety in the whole construction life cycle.
  - 信息和通信技術能有效促進整個建築生命週期的機電安全。







### SUITABLE MEASURES

適當的措施

### **E&M SAFETY MANAGEMENT**

- Inspection at source to identify and rectify human mistake as soon as possible.
   源頭檢測確保人為錯誤能及早被糾正。
- Partnering to improve communication and coordination of trades and crews so as to manage safety collaboratively and promote caring culture.

伙伴合作能加強溝通和協調,並有效地管理 安全事務及推動關懷文化。







## CONTINUOUS EFFORT

#### **CULTIVATE E&M SAFETY**

 Participate actively in working groups and public committees to develop guidelines, amend requirements and organize promotional events to uplift safety standard in the industry.

積極參與業界工作小組及委員會,制定指引、修訂規章及籌辦推廣活動去提升安全水平。

 Organize safety seminars, forums, workshops, visits and awards in collaboration with government bodies, labour unions and professional institutions.

與政府、工會和專業團體共同籌辦安全講座、論壇、工作坊、探訪及獎勵活動。





## CONTINUOUS EFFORT 不斷努力

### **CULTIVATE E&M SAFETY**

 Organize annual "E&M Safety Walk" to assemble employers, employees and government bodies in the E&M sector to cultivate safety.

舉行每年一度的「機電安全健步嘉年華」以凝聚機電業各界,推動團結的安全文化。

 Deliver public speeches and papers for institutions, seminars and conferences to promote E&M safety.

就機電安全進行公開演講及發表研究論文報告。





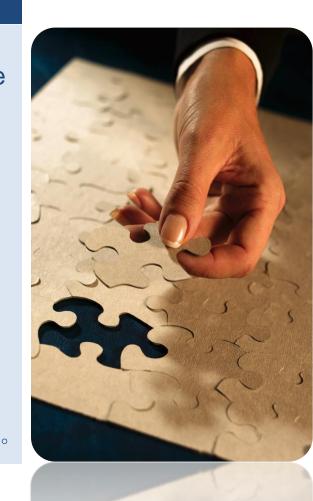


## INITIATIVES FORWARD

繼往開來

### **E&M SAFETY INITIATIVES**

- Enhance the influence of HKFEMC as a focal point for health and safety in the E&M industry and nurture a safety conscious and multi-skilled workforce. 提升商會作為機電業界職安焦點的影響力,培育具強烈安全意識及多技能的工作團隊。
- Work with respective bodies to provide enhanced training for fresh blood and in-service personnel. 與相關團體合作為業界新入職及在職員工提供對應的安全資訊及培訓。
- Continue to liaise with various bodies to organize large scale promotion and publicity activities.
   與不同界別團體繼續聯繫籌辦大規模推廣及宣傳活動。





## INITIATIVES FORWARD

繼往開來

### **E&M SAFETY INITIATIVES**

- Promote design for safety and safety planning in E&M works.
   推動機電工程的安全規劃及設計。
- Support relevant ICT initiatives such as BIM to facilitate safety planning via computer simulation.

支持利用信息和通信技術更好地以電腦模擬作有效的安全規劃。







### 『安全峰會』 建造業安全周 2012

## 香港建造業分包商聯會



會長 伍新華先生! Mr. Lawrence NG, President!

## 『安全峰會』 建造業安全周2012



### 建造業安全問題

- 正視問題
- 研究探討
- 建議方案
- 積極推行



### 正視問題

2011年度的建造業工業意外數字有明顯上升趨勢,當中涉及嚴重意外而導致死亡個案由2010年度的9宗,增加至2011年度的23宗,上升兩倍多。



## 研究探討

由於近年新建工程大幅增加,而技術工人出現短缺。而人手短缺,亦變相對工期做成重大壓力,從而影響整體安全意識。而新入行工人對建築工地的認識不足更易做成意外。



- 1. 業主
- 2. 總承建商
- 3. 分包商
- 4. 工人



- 1. 業主
  - a) 提供資源支援
  - b) 重新檢視工程項目進度的可行性



- 2. 總承建商
  - a) 現有安全培訓以外加入各工地特別介紹
  - b) 加強照顧新入職的工人
  - c) 推行「安全重於進度」的文化



- 3. 分包商
  - a) 現有安全培訓以外,加入各工種特別培訓
  - b) 與總承建商配合加強照顧新入職工人
  - c) 與總承建商合力加快招聘工人,舒緩人手 壓力
  - d) 全力督促工人嚴守安全要求



香港建造業分包商聯會

- 4. 工人
  - a. 必須堅守安全第一
  - b. 協助照顧新入職工友



## 積極推行

## 『安全峰會』 建造業安全周2012









### Safety Summit - Construction Safety Week

建造業安全周 • 安全峰會

Dedicated to Inculcating Safety Culture –
The Housing Authority's Holistic Approach
to Works Management System

銳意培育安全文化 房委會的全方位施工管理體制

Ms Ada YS FUNG, JP
Deputy Director of Housing (Development & Construction)
Hong Kong Housing Department
房屋署副署長(發展及建築)馮宜萱女士

21 - 05 - 2012



### 



Safety Summit - Construction Safety Week 建造業安全周 · 安全峰會 Dedicated to Inculcating Safety Culture -The Housing Authority's Holistic Approach to Works Management System

## 銳意培育安全文化 房委會的全方位施工管理體制!

Ms Ada YS FUNG, JPDeputy Director of Housing (Development & Construction)Hong Kong Housing Department 房屋署副署長(發展及建築)馮宜萱女士





- Problems and analysis問題剖析
- Successful measures 成功措施
- Initiatives and way forward 未來路向



### Vision and policy 宏觀策略



### Vision 里想

#### Vision and Mission 理想和工作目標

- To help all families in need gain access to adequate and affordable housing
- 協助有需要的家庭入住合適而能力可以負擔的居所

Mission 工作目標

• To provide affordable quality housing, management, maintenance and other housing related services in a proactive and caring manner.

- · Cost-effective and rational use of public resources
- Competent, dedicated and performance-oriented team.
- 積極進取、體恤關懷,提供優良的管理、妥善的保養 維修以及其他有關房屋的服務。
- 確保公屋資源得到合理的運用,符合成本效益。
- 建立能幹、盡責、講求效率的工作隊伍。

● 30+ new works construction sites – building, piling, demolition & civil engineering, with 6000+ site employees under contractors' management 現時房委會正進行的新建築工程合約共有三十多個,包括上蓋、地基、拆卸及土木工程等,承建商聘用約六千多名工地人員



As a public sector client, we take a proactive role to promote site safety through the supply chain in line with our '4C' core values

作為公營發展機構,房委會秉承「4C」的基本信念,透過供應鍵的運作,一直長期努力,積極推動工地安全

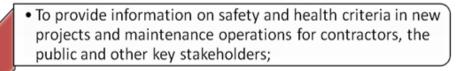
Caring





### **Overarching Safety Policy**

### 總體安全政策



提供有關安全和健康準則的資訊

 To make safety and health performance one of the critical considerations in tender selection for all new and existing building projects;

把安全和健康表現列爲篩選 標書的考慮因素之一

 To build up a safety profile of contractors for continuous assessment of safety performance; 建立承建商安全記錄資料庫, 就其安全表現進行持續評估

 To monitor contractor's performance by independent and in-house assessment: 透過獨立和內部評估, 以監察承建商的安全表現

 To work through partnership by incorporation of contractors' input in respect of safe construction technology and equipment; and

透過夥伴合作, 推廣安全建築技術

 To promote safety and health issues particularly related to HA projects to enhance the safety and health of all persons involved.

爲所有參與房委會工程項目的人士 加強對安全和健康的保障

Pincident



### Three-pronged strategy 三管齊下措施

- 有賞有罰的採購策略和表現監察機制 Procurement strategy and performance monitoring mechanisms with incentives and sanctions
  - 供應鏈管理
- 名冊管理
- 安全承諾和指標
- 表現評核和監察

Value Chain Management

Listing of Contractors & List Management

Safety Pledge & Performance Goals

**Performance** Assessment & Monitoring

- 加強合約規定和管理 Strengthening contract requirements and administration
  - 推廣最佳作業模式
- 優化實效措施
- 鞏固工地和安全管理 提升安全意識

Promote Best Practices Enhance **Physical** Measures

Enhance Site & Safety Management

Foster Safety Awareness & Training

- 與業界攜手合作,致力研究、培訓和推廣 Working in partnership with stakeholders on research, training and promotion
  - 與業界攜手合作 安全策畧和統計 - 安全獎勵和約章 - 安全推廣

Forge Partnership | Safety Strategy & Statistics

Safety Awards & Safety Charter

Safety Forum & Promotion Seminars

incident



### Uplifting performance 提升表現 精益求精

- Quality 質素
- O Safety 安全
- Environment 環境管理

力爭上游 從容達標 Strive for improvement, achieve standard at

ease

力臻完善 追求卓越 Aim for perfection, strive for excellence

發奮達標 Strive to

meet required standard

有教無類 Educate with no discrimination

勉強達標 Just meet

required standard

力有不逮 未能達標

Incompetent, fall below standard

接受淘汰

Eliminate from

**HA's Lists** 





#### 2011 : Accident Rate per 1,000 workers

- HA's new works construction sites 9
- Hong Kong's construction sites 49.7

#### 2011: Fatalities 死亡意外

- HA's construction sites 房委會新工程 0
- Hong Kong's construction sites 香港建造業 23



But this induces a lot of work for us in HA!

這卻帶來大量工作予房委會!

### Our Ideal 我們理想的

"5 – ZERO contractors" 五零 承建商:

- O ZERO accident 零 意外
- **ZERO** incident 零 事故
- **ZERO** conviction 零 檢控
- ☑ ZERO complaint 零 投訴
- **ZERO** dispute 零 糾紛



## Problems and analysis 問題剖析



#### Problem and analysis 問題剖析



#### Safe Working Environment 安全工作環境

- Challenges ahead with vast expansion of construction work volume 建造工程興旺,工地管理和工人面對更大壓力和挑戰
- Aging and lack of proper maintenance of heavy plant / machinery 重型機械高齡化及欠缺妥善維修

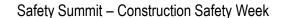
#### Safe Working Habit 安全工作習性

- Aging, new comers and skills mismatch of workforce 工人高龄化,新入職工人和技能錯配是安全隱患
- Malpractice tends to contaminate across sites with different standards due to volatility of workforce
  - 工人流動性高,各有不同施工方法,導致不良施工方法影響不同工地
- Slack safety awareness of frontline workers and site management 前線工人和工地管理人員的安全意識薄弱

#### Other Factors 其他因素

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- Risk assessment not thoroughly conducted and related to specific tasks 風險評估欠問詳,亦未充分考慮實際工作
- Safety measures not strictly observed 安全措施未有嚴格遵守
- Safety training not systematic and focused 安全培訓沒有系統和重點





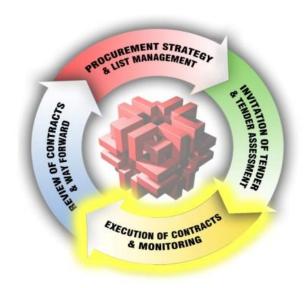
# PASS as a performance-based controlling mechanism in the Procurement Cycle since 1990

自1990年表現評分制成為採購週期裏以表現為基礎的監察工具

- Performance Monitoring 表現監察
- How to ensure contractors perform? 如何確保承建商表現達致要求水平
- What gets measured gets done! 打分數評核 達標可落實
- Objective & transparent appraisal 客觀及透明的評審機制
- Effective training tool 有效訓練工具

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- Clarification of requirements of specifications
   釐清建築規格要求
- Useful benchmarking vehicle 有效量度表現的指標



Performance Monitoring - compliance with specifications 表現監察 - 符合建築規格要求

List Management - assess the qualification and standard of contractors

名冊管理 - 評估承建商的資格及水平

Tendering Process - selection of tenderers and tender assessment

投標過程 – 選擇投標者 及 評審標書 Review – review the effectiveness of the procurement system

檢討-檢討採購系統的成效

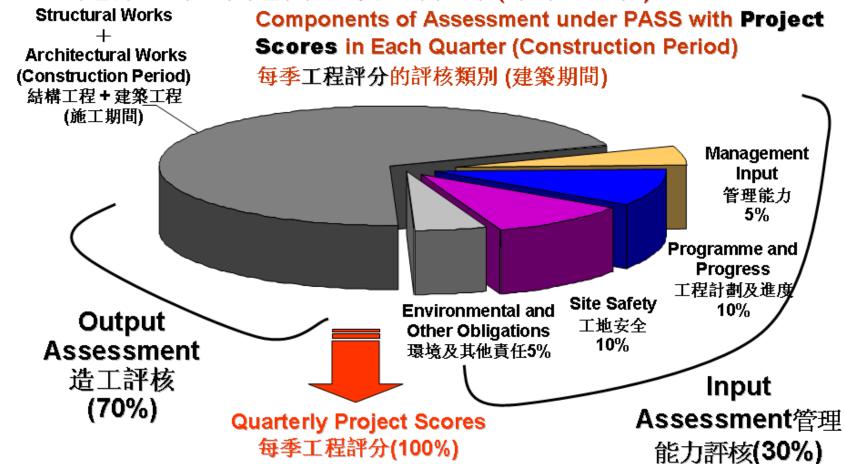
Safety Summit – Construction Safety Week



### Performance Monitoring (PASS) 承建商表現評分制

Building PASS (as an illustrative example)

建築工程承建商表現評分制 (示範例子)

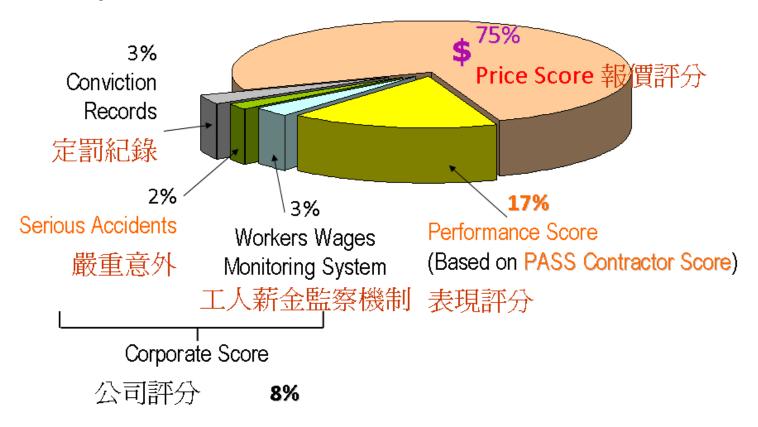




#### Performance Monitoring (PASS) 承建商表現評分制

## Evaluation of Tenders 評審標書

Preferential Tender Award System (PTAS) 評標制度 Composition of the Preferential Tender Score is as follows:







Strengthen contract requirements and administration 加強合約規定和管理 Promoting best practices, over and above minimum legal requirements 推廣高於法例最低要求的最佳安全作業模式

Improve physical conditions on site 優化工地的工作環境

Widely adopt mechanization and prefabrication

廣泛應用機械化和預製建築組件

Extensive hard paved construction 硬地施工

Video surveillance, computerized monitoring, log book, work permit for tower crane

for tower crane 加強吊運工作的安全管理:閉路 視像監察和警報裝置、工程日 誌、電腦化系統監察、工作許可 證等

Full height protective barrier to lift shaft opening 升降機井口的全身式鋼閘

Metal scaffolding in lift installation 升降機井槽鋼棚架

Non-smoking policy with prescribed conditions for designated smoking areas 推行無煙政策,規定在指定吸煙區的防火配置和清潔條款

Strengthen site and safety management 鞏固工地和安全管理

HA Safety Auditing System (also a performance monitoring to ol) 進行獨立安全稽核 (HASAS),來 評估及監察承安全表現

Pay for Safety (under Integrated Pay for Safety, Environment & Hygiene Scheme)

安全支付計劃(安全、環保及衞生綜合支付計劃)

Safe Working Cycle 安全施工程序

Restrict tiers of subcontracting of high risk trades 限制高風險工作的外判

Foster planning & design for safety through BIM

運用建築信息模擬視像化功能來 提升工地安全規劃 Enhance safety
awareness
提升行業的安全意識

Silver Card for personnel engaged in high risk trades

從事高危行業的工地人員,必須取得 銀卡訓練資格

Specified safety training of site superintendents

強制工地管理層及督導人員安全訓練 要求

Safety induction and tool box talks 開工前安全訓練與工具箱安全講座

Safety training of site staff, professional and technical grade to enhance core competency and skills

competency and skills 強制安全訓練課程,以加強署方工程 人員在工地安全管理上的核心才能、 知識及技術

Issue Safety & Health circulars 安全與健康通訊

Issue of Good Practice Promotion Kit, Handbook and Pictorial Guide, in partnership with stakeholders 與業界攜手合作,出版良好作業推廣 套件、手冊和指南



#### **Accident and incident management**

- "Prevention is better than cure"
- Be vigilant !! -- near misses may bring insights for enhancing provisions for safer operations
- Site accidents and incidents reflect the effectiveness in the implementation of safety management system on individual sites
- Foster proper accident/incident management, by triggering action parties to provide timely reporting, develop response and implement actions to ensure successful recovery from incidents - trigger reviews or interviews by Contract Manager, Contractors Review Committee (CRC) or Procurement Review & List Management Committee
- Tackle potentially high risk activities being the common causes of serious accidents – reporting of near miss / incidents on site (though not serious by immediate effect, may have potentially serious consequence, such as those involving but not limited to falling from height, falling object, being struck by moving object, tower crane lifting, public safety etc.)
- Sharing lessons learnt from incidents, together with the development and implementation of appropriate corrective actions directed to preventing or mitigating the risk of similar occurrences in the future

#### 意外和事故管理機制

- 預防勝於治療
- 提高警覺,切勿輕視險失 事故
- 工地意外和事故反映工地 推行安全管理系統的成效 欠佳
- 建立意外和事故管理制度, 訂定相關人士準時報告意 外或事故的機制 --啟動合 約經理、承辦商檢討小組 委員會 (CRC) 或 採購檢討 及名冊管理委員會 (PRLMB)檢討意外和事故、 約見承建商
- 處理可能導致嚴重意外的 高危工種或險失事故報告 (例如:人體或物件從高處 下墮、被移動物件撞倒、 天秤吊運、公眾安全等)
- 從意外和事故中學習,並 採取措施避免意外和事故 再度發生







#### **Safety leadership awards (Client – Developer Category)**

proactively committing to the highest standards of health and safety on our projects, and actively leading our project teams and contractors to achieve them with a very practical approach

安全領導典範大獎 (發展機構組別)

積極帶領項目團隊和承建商,以切實可行的方法,

達到最高的安健水準





CONSTRUCTION INDUSTRY COUNCI

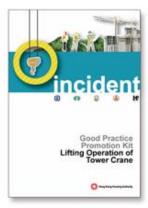


Golden Helmet Award 金冠獎



#### Initiatives and way forward 未來路向





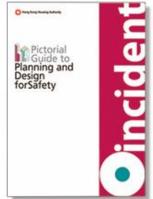


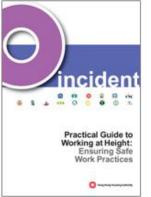
# Engaging stakeholders to promote best practices 與持份者攜手合作 提倡優良作業模式

#### **Site Safety Website**

建立工地安全網站 以傳達工地安全資訊







ncident





Safety Summit - Construction Safety Week



## Ongoing safety targets and performance goals 持續安全目標與成效指標

- Target for zero fatal accident, with a performance target for no more than 12 accidents per 1,000 workers 目標為零致命意外,表現指標為每千名工人不多於12宗意外
- Monitor the effectiveness of our initiatives with a view to further progressively improving safety standards, enhancing risk management and achieving continuous performance improvements 監察房委會措施的成效,以期逐步提高安全標準、加強風險管理和持續改善表現

## **Upcoming safety initiatives**

#### 安全優化措施

- Further enhance Integrated Pay for Safety, Environment & Hygiene Scheme (directions): resource, safety management, KPI, safety awareness, innovative measures 綜合安全、環境、衞生支付計劃優化重點:資源投放、安全管理、成效指標、安全意識、創意措施
- Further enhance HA Safety Auditing System (HASAS) towards a safe system of work approach 以安全工作系統優化安全稽核制度
- Launch safety auditing system for lift works (HALENSAS) with focus on high risk operations 推出升降機及扶手電梯安全稽核制度,針對高危工作
- Launch Surprise Safety Inspection Programme (SSIP)
   推出突擊安全巡查計劃
- Strengthen safety of heavy plant / machinery 加強重型機械安全





- Vision and policy 宏觀策略
  - ★ Safety is CARING 「關懷」就是安全之本
- O Problems and analysis 問題剖析
  - ★ Employers to ensure safety of the workplace 僱主必須確保工作環境安全
  - ★ Implement safe working methods cultivate safe working HABITS 訂立和執行安全施工方法 培養安全的工作習慣
  - ★ Strengthen team work and communication supervision of high risk operations

全面鞏固整體團隊溝通 ● 加強監管高危作業

- O Successful measures 成功措施
  - ★ Success is no accident -- Safety is not an act but a habit 成功非僥倖 -- 安全不應只被視作為「行為」 而應該被培育而成為「習慣」
- Initiatives and way forward 未來路向
  - ★ Let's join hand in hand going extra mile! 大家一起攜手,多走一步,精益求精!



