

行政院及所屬各機關出國報告

(出國類別：考察)

出席世界安全組織 (World Safety Organization: WSO) 第十七屆年會
活動及考察德州安全衛生業務報告

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出席世界安全組織 (World Safety Organization: WSO) 第十七屆年會活動及考察德州安全衛生業務報告

主辦機關:

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出國類別: 考察

出國地區: 美國

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關鍵詞: 非政府組織, 職業安全衛生管理, 教育訓練, 健康促進

內容摘要: 世界安全組織 (World Safety Organization, WSO) 為非政府且非營利民間組織, WSO 屬聯合國外圍組織, WSO 持續以非政治性的運動來推動「讓安全成爲生活的一種方式, 全球的推動:」 Making Safety A Way Of Life... Worldwide.」之理念。2003 年 11 月 3 至 5 日 WSO 於美國丹弗市 (Denver) 舉行「第十七屆國際衛生、安全大會及展覽會」(17th International Environmental Health & Safety Conference & Expo), 年度研討主題爲變遷環境中的安全衛生 (Safety & Health In The Changing Environment)。行政院勞工委員會爲促進國際專家學者相互學術交流, 邀集政府機關、民間企業及相關團體共同組團參加 WSO 年會活動, 會議結束後, 繼續考察美國德州政府機構之市政建設與營造工地安全衛生管理, 考察結果將作爲我國推動職業安全衛生政策與規劃之參考。本次出國考察獲致相關心得與建議事項如下: 一、積極參與國際組織促進國際交流。二、教育訓練實施之彈性化與現代化。三、落實職業衛生自主管理, 有效降低職業災害。四、推動工作場所之健康管理與健康促進。

本文電子檔已上傳至出國報告資訊網

摘 要

世界安全組織 (World Safety Organization, WSO) 為非政府且非營利民間組織，WSO 屬聯合國外圍組織，WSO 持續以非政治性的運動來推動「讓安全成為生活的一種方式，全球的推動：”Making Safety A Way Of Life... Worldwide.”」之理念。

2003 年 11 月 3 至 5 日 WSO 於美國丹弗市 (Denver) 舉行「第十七屆國際衛生、安全大會及展覽會」(17th International Environmental Health & Safety Conference & Expo)，年度研討主題為變遷環境中的安全衛生 (Safety & Health In The Changing Environment)。行政院勞工委員會為促進國際專家學者相互學術交流，邀集政府機關、民間企業及相關團體共同組團參加 WSO 年會活動，會議結束後，繼續考察美國德州政府機構之市政建設與營造工地安全衛生管理，考察結果將作為我國推動職業安全衛生政策與規劃之參考。

本次出國考察獲致相關心得與建議事項如下：

- 一、積極參與國際組織促進國際交流。
- 二、教育訓練實施之彈性化與現代化。
- 三、落實職業衛生自主管理，有效降低職業災害。
- 四、推動工作場所之健康管理與健康促進。

關鍵字：非政府組織、職業安全衛生管理、教育訓練、健康促進

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壹、目的

世界安全組織 (World Safety Organization, WSO) 為非政府且非營利民間組織，WSO 屬聯合國外圍組織，WSO 持續以非政治性的運動來推動「讓安全成為生活的一種方式，全球的推動：”Making Safety A Way Of Life...Worldwide.”」之理念。WSO 在 1975 年，由一千多位來自世界各國的安全專家於菲律賓馬尼拉成立，後來 WSO 為強化會務工作之推展，在 1987 年於美國密蘇理州正式成立世界管理中心⁽¹⁾。目前會員國約達 160 個。我國雖非聯合國之會員國，歷年均積極組團參與各項年度活動且該組織緊密互動，並由蘇參事擔任理事。

2003 年 11 月 3 至 5 日 WSO 於美國丹弗市 (Denver) 舉行「第十七屆國際衛生、安全大會及展覽會」(17th International Environmental Health & Safety Conference & Expo)，年度研討主題為變遷環境中的安全衛生 (Safety & Health In The Changing Environment)。行政院勞工委員會為促進國際專家學者相互學術交流，邀集政府機關、民間企業及相關團體共同組團參加 WSO 年會活動，會議結束後，繼續考察美國德州政府機構之市政建設與營造工地安全衛生管理，考察結果將作為我國推動職業安全衛生政策與規劃之參考。

貳、參與活動及考察過程

一、出國訪問組團說明

本考察活動目的在促進國際專業人員相互交流並考察美國德州政府機構之市政建設與營造工地安全衛生管理經驗。本年代表團成員由政府機關之行政院勞工委員會林副主委豐賓、蘇參事德勝與蔡技正維誼、新竹科學園區蔡科長文火、企業界之台灣塑膠工業股份有限公司林副理振榮與張專員世昌、中國鋼鐵股份有限公司蔣助理副總士宜及中華民國勞工安全衛生協會邱處長松嵐等八人共同組成代表團，並由林副主委擔任團長，前往美國科羅拉多丹弗市(Denver)參加 WSO 年會活動，促進國際安全衛生交流。WSO 大會結束後，繼續前往德州休士頓市(Houston)考察德州醫學中心(Texas Medical Center)及參訪德州市政建設與營造工地安全衛生管理經驗。

二、考察活動之行程安排

本次考察活動之行程經聯繫與協調相關單位後，行程安排如下之行程表：

日期	主要行程內容
11月1日	由台北搭機前往美國
11月2日 至 11月5日	1.由美國轉機點飛往丹弗市(Denver) 2.參加 WSO 理事會 3.參加 WSO 年會活動：進行專題報告、 研討與交流活動，會議議程如附件一。
11月6日	由丹弗市轉機前往德州休士頓
11月7日	考察德州醫學中心及職業醫學運作情形
11月8日至11月9日	星期六及星期日之休假日
11月10日	考察市政建設（營造工地安全衛生）
11月11日	由德州休士頓搭機前往美國轉機點
11月12日	由美國搭機飛返台北 (11月14日凌晨抵達)



圖片 1 我國 WSO 代表團於 WSO 開幕活動合影
參、第十七屆國際衛生安全大會及展覽會活動心得

一、參與 WSO 年度理事會議

WSO 於 11 月 2 日下午先行召開理事會議，行政院勞工委員會蘇參事為 WSO 理事，會議進行年度會務報告及相關提案之研討。WSO 在我國工研院設有國家辦公室，蘇參事也以理事身份代表我國提出年度報告（報告如附件二），供各國理事代表參考。近年來在 WSO 理事及全體會員共同努力之下，會員數及會務蓬勃發展，WSO 希望努力經營並以專業性及服務熱誠，提供世界各國專業服務，達成 WSO 以安全是一種生活方式的最終目標。



圖片 2 蘇參事與理事代表合影

二、大會開幕典禮及重要活動

1. 美國職業安全衛生署(OSHA)進行安全衛生教育訓練報告

美國 OSHA 附屬教育訓練機構之 Hank Payne 處長代表勞工部副部長兼 OSHA 署長 John Henshaw 發表專題演講，講題為職業安全衛生教育訓練之新革與展望。Payne 處長在報告中再次闡述 OSHA 為配合勞工部執行 2003 至 2008 年之策略計畫(STRATEGIC PLAN)之四大施政主軸---「有準備的勞動力(Prepared Workforce)」、「有就業安全保障的勞動力(Secure Workforce)」、「有品質之工作環境(Quality Workplaces)」及「具競爭力之勞動力(Competitive Workforce)」而努力⁽²⁾。其中第四個新增施政目標係美國因應全球化之及亞洲地區等新興經濟勢力之競爭趨勢之新目標，促使美國勞動力持續保有領先及全球化競爭優勢。OSHA 主要施政目標乃執行勞工部四大目標中之有品質之工作環境，確保美國勞工免於工作場所之災害、疾病及死亡。

OSHA 教育訓練之目的是希望藉由專業安全衛生教育訓練之實施，來達成其策略性計畫之目標，其評估指標為降低工作場所災害死亡率 15% 及職業傷害與疾病率 20%。OSHA 教育訓練計畫之名稱為 Susan Harwood 教育訓練補助計畫。Susan Harwood 女士原為 OSHA 職業衛生標準委員會之風險評估辦公室主任，她任職的 17 年間貢獻於職業衛生標準之研究與訂定，她於 1996 年過世後，OSHA 教育訓練補助計畫改以她的名字命名，以紀念其對安全衛生之貢獻。

OSHA 教育訓練之獎補助目的主要在配合施政之降低災害之目標，希望藉由教育訓練之獎補助來訓練目標群體，達成降災目的。以 2003 年為例，獎助金額約為一千一百二十萬美元，共計獎助 67 個非營利團體之教育訓練計畫，其中 50 個團體為新興團體，17 個團體為原有計畫之跨年延伸補助。獎補助分成三類型：第一類為高危險之目標行業及中小企業教育訓練；第二類為研發 OSHA 教育訓練教材與更新訓練方式；第三類為工作場所人因工程指引之教育訓練。OSHA 之教育訓練亦重視講師之訓練課程與勞動檢查員專業技能之培養與維持，藉以提升教育訓練與勞動監督檢查之成效。

OSHA 署長對於檢查員之專業教育訓練相當重視，希望檢查員以其專業能力來建立事業單位認同與專業形象，給予經費並鼓勵勞動檢查員參與專業組織並獲取的專業證照。在 2001 年起的 19 個月中，OSHA 檢查員取得專業證照者已大幅增加 60%。此外 OSHA 訓練機構對於勞動檢查員之專業能力維持亦相當重視，希望能從專業能力訓練、測驗及追蹤方面，確保勞動檢查員持續維持專業技能。

OSHA 對於非營利教育訓練機構也提供訓練教材借用服務。OSHA 與各分區大學共同成立教育訓練中心 (OSHA Training Institute 簡稱 OTI 中心)，提供 80 種領域之 160 種 OSHA 訓練課程，非營利團體亦可申請補助辦理 OTI 所進行之訓練課程。另外學生修習課程與 OTI 提供訓練課程相同時，亦可抵免教育訓練課程學分。另外各區之 OTI 中心，亦可辦理各型態之新修法規標準宣導與研討會，提供事業單位新修法規標準之宣導與指導。在創新作法方面，OSHA 對(一)發生災害事故場所之勞工加強訓練，以提升其對災害問題之警覺與認知。(二)重視個人防護具之使用訓練。(三)對緊急應變管理之訓練等新型態訓練，也持續努力。

2. 美國礦業安全衛生署 (MSHA) 進行礦業安全衛生報告

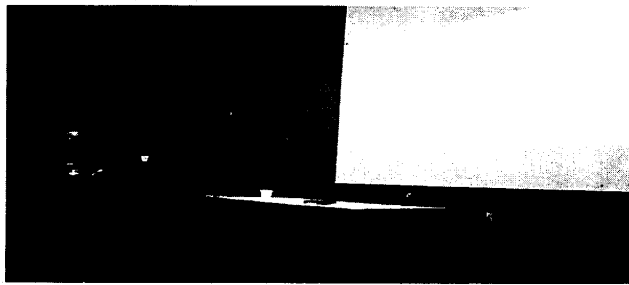
美國礦業安全衛生署 (Mine Safety and Health Administration: MSHA) 副署長 John R. Correll 代表署長 David D. Lauriski 進行礦業安全衛生現況報告，Correll 先以 2002 年 7 月 24 日賓州發生的礦場災變實例報告 (Quecreek Mine Rescue) 作為開場，該災變在三

天的努力搶救下，成功地救出九名受困的礦工，MSHA 強調礦業安全是一種價值。MSHA 成功施政以（一）加強執法、（二）教育訓練及（三）技術支援之三大方式，以確保美國礦場之安全衛生。從 2000 至 2003 年美國礦場災害死亡人數已大幅降低 47%，2002 至 2003 年失能傷害事故降低 8%。MSHA 對於各州政府訂有補助計畫，對於小型礦場亦提供安全衛生輔導與協助。在技術支援上，MSHA 進行礦場災變的緊急演練示範，對於礦坑內的粉塵與氣體之性爆炸偵測方面，亦提供個人攜帶型的即時偵測器與實驗室分析上的必要技術協助。

MSHA 在預防災變的努力上，也以主動出擊的方式來災害預防發生，因為 MSHA 認為寶貴地安全經驗，不應該只能從意外災害的經驗教訓所累積。MSHA 努力增進礦場救援技術之精進與緊急應變組織之應變能力，研發之膠囊型礦災救援設備（mine rescue capsules）並在實際運用後，成功救援出九名礦工。另外也跟美國國家安全協會（National Safety Council: 簡稱 NSC）簽訂伙伴關係之合作計畫，希望藉由民間專業團體的力量，推廣礦場災害之預防活動與技術支援。

3. 蘇參事進行我國職業安全衛生管理制度與自護制度整合之報告

WSO 大會議邀請蘇參事於 11 月 4 日下午進行我國職業安全衛生管理制度與自護制度整合之專題報告（如附件三），於報告中除介紹我國勞工安全衛生管理制度與實施成效外，更比較我國自護制度與美國制度之主要差異性，闡述我國制度比美國更為進步之處，報告後也廣泛地與世界各國代表進行實務經驗交流，成功地向世界各國介紹我國政府多年來對於職業安全衛生的施政努力與成果，該報告內容受到各國代表之重視與讚揚。



圖片 3 蘇參事進行專題演講

4.各分組重要研討內容

本次的分組研討共分成四個會議場地同時舉行，詳細分組研討內容如附件一之議程表。我國代表團成員分別就其安全衛生專業領域與個人專業領域，分別參加各分組之研討活動。本次大會安排的各種研討課程與職業安全衛生議題相關，提供起重機安全、用電安全、機器安全防護、焊接切割等安全程序、坑溝開挖作業安全、安全管理整合、危害及風險評估、SARS 議題、911 後之飛航安全、工作場所暴力、恐怖份子生化攻擊威脅、炭疽病毒處理、西班牙語系工人之安全衛生教育訓練、OSHA 職業災害紀錄之法規修正宣導及 911 世貿中心災害工地清理過程之介紹與研討，相容相當豐富。

5.展覽與展示活動

此次展覽場地之參展廠商相當踴躍，OSHA 之地方分支機構於展覽會場設有攤位來宣導美國政府法令資料及推動自護制度。展覽會場外停著一部紅色大型拖車，此車為道路安全駕駛模擬車，車上有 3D 的模擬駕駛裝置，配合腦軟體來模擬如雪地及油污路面等危險路面之情況，駕駛員可使用駕駛模擬來學習正確應變方式，參觀者可以親自坐上模擬機來學習如何進行道路安全駕駛。



圖片 4 勞工道路安全駕駛之訓練巡迴展示車

6.大會頒獎典禮

11 月 5 日晚間進行大會晚宴及頒獎典禮，本會蘇參事在我國推動職業安全衛生制度及勞工安全衛生自護制度之貢獻，深獲 WSO 之肯定與讚揚，榮獲 WSO 國際勞工安全衛生貢獻獎。另我國代表團之台灣塑膠工業股份有限公司，多年來在追求經濟成長時，仍一直堅持「安全生產」與「環保與經濟」並重的

理念，及其追求零災害目標，以確保企業永續與經營與發展，亦獲得 WSO 組織肯定，榮獲 WSO 頒發優良安全衛生公司獎。我國代表團於晚宴受獎盛況，世界各國代表對於我國安全衛生工作之成就表達讚揚與肯定，代表團亦與世界各國代表進行密切經驗交流，有效達成促進國際交流之目標。



圖片 5 蘇參事與台塑公司接受 WSO 頒獎後合影

肆、參訪德州醫學中心與考察德州市政建設心得

一、德州醫學中心及殼牌石油職業衛生服務中心參訪

1. 參觀德州醫院中心

德州醫院中心 (Texas Medical Center) 設置於休士頓市，佔地 740 英畝，醫學中心由 42 個大小醫院及研究機構共同組成，提供人類健康促進與醫療服務。該中心除了提供完善的治療專業人力與設備外，對於病患及其家屬之生活照顧亦提供住宿服務。中心之兒童醫療服務、癌症治療、器官移植，精神醫療、臨終照護及預防醫學等領域，馳名國際，深受醫學專業人士及病患之肯定與讚揚。在 2001 年時，中心提供六萬一千個專業職務，共計服務病患達五百一十萬人，其中一萬五千人為赴美國求診之外國籍病患，此外醫院亦進行醫學院學生之專業訓練及醫事人員進修與研究服務，該中心之成功營運同時帶動休士頓市的經濟成長與發展。

2. 考察殼排石油公司之健康服務中心

殼排石油公司 (Shell Oil Company) 為跨國之石油公司，美國分公司於休士頓設立美國殼排石油健康服務中心(Shell

Health service Center)，辦理健康服務與職業醫院研究。代表團於11月7日拜訪該中心，由中心負責人蔡善浦教授(Dr. S.P. Tsai)負責接待與業務簡報，該中心隸屬於人事部的獨立單位，目的在提供公司員工健康檢查服務及職業衛生研究工作。

Shell公司對於所有員工健康檢查資料皆存於電腦資料庫內，視需要可隨時取得健檢資料並與國家死亡資料庫連線，可快速取得員工及離職員工死亡資料，每年統計分析員工健康變化及死亡原因之分析，定期發行公司員工健康年報。每年的年報中，針對各種健康風險因子（例如過重、肥胖、吸煙、高血壓、高膽固醇等）進行統計分析，預估公司因此須額外付出之隱形經營成本。由於導致勞工健康傷害之危害因子（risk factors）眾多，在工作場勞工所除面臨職業性危害因子之暴露外，勞工最大的健康威脅來自於本身過度肥胖所導致的健康問題。Shell公司於2001年12月推行”Be Well At Shell (BWAS)”之健康促進活動，幫助員工對抗各種健康危險因子，並於2002年六月於人事部門推行為期七個月之挑戰健康活動，以二至三人為一組，活動結束後，依各組表現給予每個人美金100至700元不等之獎金。該次活動計有26組共76人參加，結果有33人完成所有的挑戰項目，這些員工成功的完成減重、降低血壓、降低膽固醇並將健康的行為融入日常生活中，由於實施成績斐然，其他部門於2003年夏天亦陸續推行此項活動。

Shell公司規定員工必須接受必要之濫用藥物篩檢且為公司基本政策，經營管理階層人員與重要設備操作員工必須定期接受藥物濫用篩檢之抽檢，以確保公司決策者及重要設備操作人員不會因藥物濫用而影響公司之決策與營運安全。



圖片6 參訪 Shell Oil之健康服務中心

二、Austin 考察市政建設及營造工地安全衛生參觀

1. 都市建設規劃

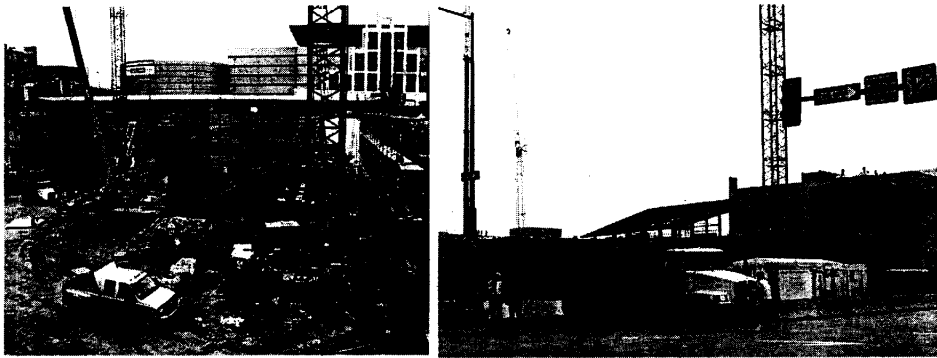
美國州政府依據聯邦法令及相關判例，立法管理土地發展事宜。在德州地方政府法令第 211.001 章指出：土地開發使用之目的在提升公共衛生、安全、道德或社會福祉，對於地方歷史文化之保存與建築同等重要。Austin 市政府根據這個法令章節，可以對於建築物高度、樓層數、建闢率、庭院大小、人口密度、使用樓層數及地區歷史文化資源列入考量。市議會訂定土地發展規則（the Land Development Code，簡稱 LDC）及建築防火規章之社區開發標準，藉此提升成市之安全及福祉，並使整個成市之發展有一定之順序。開發標準因為其用途、地區及建築方式而有所差異。市政府之組織中設有副助理市政執行官（Assistant City Manager）下設有水域及發展審議局，土地開發案經過市府審查及檢查處，遵循 1) 分區使用(Zone) 2) 土地細分(subdivision) 3) 場址計畫及 4) 建築物許可等四個主要審查步驟，方可完成整個審查工作。

2. 營造工地參觀

營造工地因其施工過程有快速變異之特性，營造工地安全衛生問題一向受到世界各國所重視，在美國也不例外，美國 OSHA 對於營造工地之安全衛生法令規範於 29CFR, PART 1926: SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION，由於營造業職業災害率較其他行業高許多，且依據多年來對於營造工地職業災害死亡案件之統計分析，因墜落(33%)、飛落物或車輛撞擊(22%)、開挖或設施塌陷掩埋(18%)及電擊意外(17%)等事故原因達整體致死原因的九成以上，為有效預防營造工地之職業災害發生，OSHA 從 1994 年 10 月起，每年都將營造業列為重點檢查行業 (Focused Inspections)。1996 年 OSHA 發現檢查員人力有限，為提升營造工地檢查率並節省檢查時間，檢查員到營造工地後，先與工地之負責人面談，以瞭解工地負責人對於施工安全衛生計畫之瞭解程度、對於工地潛在危害因素的認知程度、查閱員工教育訓練紀錄，以瞭解工地負責人對 OSHA 標準之瞭解程度。勞動檢查員如果認為這個工地管理制度完善且計畫周詳，就不實施檢查，否則勞動檢查員將對於整個工地的施工安全衛生計畫進行全面的檢查。

代表團參訪某個國際飯店之營建工地，該工地正好進行地下室開挖的工程，工地內有多座起重機同時作業，工作現

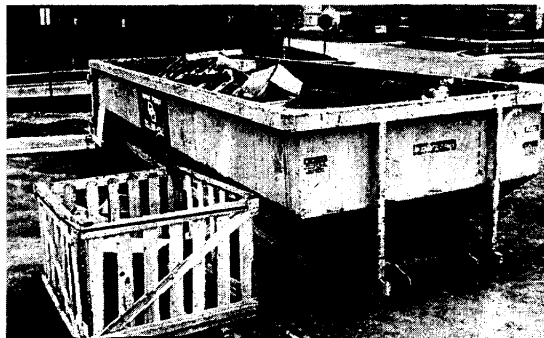
場之勞工均戴著安全帽，高處作業之勞工也依規定腰繫安全帶，工地內外均有危險標示及建廢棄物處存貯存車設置，因此各項工程顯的相當繁忙與緊湊，但在妥善的管理安排下，卻能井然有序的且安全地進行施工。參訪之營造工地外面臨市區重要道路，為維護營建車輛進出時之交通安全，工地對外之出入口，皆有專人穿著反光防護衣並舉著明顯警告標示排引導工程車輛之進出安全。



圖片 7 營造工地實際施工情況

3.廢棄物清理規劃

Austin 設有公私立掩埋場，處理各種廢棄物，掩埋場也設有其他分支機構，處理不同種類之垃圾。公立掩埋場 (The City of Austin Landfill)，市議會每年訂定廢棄收費價格，接受紙張、粉碎輪胎、樹木、家具、塑膠、橡膠、玻璃、水泥塊、岩石、泥土等廢棄物，但掩埋場址如靠近機場區域時，因含有食物之廢棄物可能引來飛鳥及野生動物之覓食，全面禁止傾倒於該掩埋場中，以免影響機場之飛航安全。



圖片 8 營造工地之營建廢棄物臨時貯存車

伍、綜合心得與建議事項

本次考察行程已達成預定目標，獲致相關建議說明如下：

一、積極參與國際組織促進國際交流

我國雖非聯合國之正式會員國，但對於相關非政府組織之參與不移餘力。本次代表團能參與 WSO 大會活動並廣泛地與各國職業安全衛生專家進行經驗分享與交流活動，受到各國與會代表之重視與大會認同，有效開拓我國參與國際性活動之空間。

由於我國代表團多年來積極參與 WSO 年會活動之努力，已深獲各國的重視與建立國際情誼，對我國提升國際地位與重視安全衛生之形象，有顯著之貢獻。建議我國未來應持續參與此類組織與活動。

二、教育訓練實施之彈性化與現代化

許多研究與災害調查報告經常指出，職業災害發生之主要原因之一，為勞資雙方對安全衛生的認知不足，缺乏有效預防災害發生的教育訓練⁽³⁻⁴⁾。現代化的教育訓練方式，宜配合事業單位之實際需求與政府機關降低職業災害之重點目標，以彈性化及效果導向之方式進行，而非僅限於傳統當面傳授之教育訓練形式。因此教育訓練可研究廣泛運用現代化輔助教材及網路 E 化學習方式，鼓勵民間機構及學校等專業團體之共同參與，配合政府重點災害降低目標及企業實際需求，運用政府補助結合民間資源，建立績效評估制度，以教育訓練手段，來達成降低職業災害之目標。

三、落實職業衛生自主管理，有效降低職業災害

在 2001 年 6 月，國際勞工組織（International Labor Organization, ILO）正式公布職業安全衛生管理系統指引（ILO/OSHMS Guideline）⁽⁵⁾，ILO 希望藉由指引發佈，提供各國、第三者組織或企業要建立職業安全衛生管理系統（OHSMS）之參考，對於各國提升職業安全衛生管理之建立與績效提升，有明顯助益。我國政府機關推動之職業安全衛生管理制度之自護制度之成果，在此次國際會議受到世界各國代表之肯定。

目前世界各國都面臨勞動檢查人力不足之問題，政府機關除有效運用勞動檢查人力實施重點監督檢查外，更應加強輔導各事業單位建立自主化職業安全衛生管理制度，引導企業將安全衛生管理整合於企業經營管理中。我國可持續推動自護制度，以使國內企業界以建立自主式安全衛生管理系統，來提昇我國職業安全衛生管理之水準及降低工作場所之職業災害發生。

四、推動工作場所之健康管理與健康促進

勞工於工作場所如暴露於相關職業危害因素並於日後可能導致相關疾病，有效持續蒐集與保存勞工暴露與健康檢查資料，有助於日後釐清相關疾病之成因。但勞工異動及工作暴露型態轉變，相關資料將隨著時間的累積而變得龐大與繁雜，經常發生資料檢索及分析應用上的困難，為解決此一問題，可藉由電腦資料庫之建立與各種資料間之電腦連線比對方式，加以克服困難。

現代化的工作場所在持續改善環境之努力下，工作場所之安全衛生危害情況已顯著降低，但勞工本身因健康生活習慣或生活方式不良所導致之高血壓及肥胖等慢性危害健康因子，卻日漸嚴重，雖然這非職業因素所導致之疾病，但勞工罹患慢性疾病卻嚴重導致勞動力與工作競爭力之喪失，同時增加雇主重新招募與訓練新員工之成本。現代工作場所，除繼續落實工作場所職業安全衛生之預防工作外，我國政府衛生機關似應推動勞工養成健康生活方式之活動，以預防勞工罹患慢性疾病而導致工作力之損失。

參考文獻

1. World Safety Organization international Membership and Accredited Certificateion Programs (WSO 國際會員及認證計畫說明手冊)
2. U.S. Department of Labor, FY 2003-2008 STRATEGIC PLAN, September 2003
3. 行政院勞工委員會，2001年7月，我國職業災害防止策略
4. 勞工安全衛生研究所，1993年7月，勞工安全衛生教育訓練之國內需求調查與各國制度比較研究
5. ILO 2001 Occupational Health and Safety Management Systems (OHSMS) guidelines

附件一

welcome
to the
17th World Safety Organization's
International Environmental Safety & Health Conference
November 3 - 5, 2003
Holiday Inn-Denver International Airport
John Q. Hammons Conference Center
Denver, Colorado

**17th World Safety Organization's International Environmental Safety & Health Conference
Monday, November 3rd, 2003, Tentative Schedule**

8:00 - 8:15 a.m.	<p align="center">Opening Ceremony & Introductions Dr. Vlado Senkovich, President Director General - World Safety Organization Director - Corporate Safety/Security/Environmental Control, B. Braun Medical, Inc.</p>			
8:15 - 9:00 a.m.	<p align="center">"Innovations and Advances In Safety & Health Training" Mr. Hank Payne, PhD, Director of the OSHA Training Institute - Des Plaines, Illinois Representing Mr. John L. Henshaw - Assistant Secretary of Labor Occupational Safety and Health Administration (OSHA)</p>			
9:00 - 9:15 a.m.	<p align="center">Break</p>			
9:15 - 10:00 a.m.	<p align="center">"Mine Safety & Health Update" Mr. John R. Correll, MA - Deputy Assistant Secretary for Mine Safety Operations Representing Mr. David D. Lauriski - Assistant Secretary of Labor Mine Safety and Health Administration (MSHA)</p>			
10:00 - 10:15 a.m.	<p align="center">Break</p>			
10:15 - 11:00 a.m.	<p align="center">World Safety Organization - 9th Global Safety Roundtable Co-Chaired by: Dr. Vlado Senkovich and Dr. Peter Leggat, MD</p>			
11:00-1:00 p.m.	<p align="center">Lunch Break and Exhibits</p>			
Time	Aspen Room	Silverton Room	Breckenridge Room	Telluride Room
1:00-1:45 p.m.	<p>"Safety Management Taking Your System To A Higher Level" by: Mr. Richard Lack Safety & Protection Services</p>	<p>"Hazards vs Risks" by: Dr. John Singley Associate Professor, Safety Technology Program Marshall University</p>	<p>"Crane Safety Overview" by: Mr. Russell Donaldson, Instructor Industrial Training International, Inc. 1:00 - 3:00 p.m.</p>	TBD
1:45 - 2:15 p.m.	<p align="center">Break</p>			
2:15-3:00 p.m.	<p>"The SARS Story So Far: Public Health and Safety Implications" by: Dr. Peter Leggat, MD, Associate Professor & Academic Advisor School of Public /Tropical Medicine James Cook University, Australia</p>	<p>"OSHA Machine Safeguarding" by: Mr. Ken Kester - Regional Manager Schmersal, Inc., Arvada, Colorado</p>	<p>"Crane Safety Overview" (Continued)</p>	TBD
3:00-3:30 p.m.	<p align="center">Break</p>			
3:30-4:15 p.m.	<p>"Federal Aviation Administration - Post 9/11" by: Dr. Michael Thomas, Washington DC & Dr. Fritz Budde, New York, New York Federal Aviation Administration</p>	<p>"Electrical Safety" by: Dr. Larry D. Perkins Vice President of ES&H, MWH, Inc. Broomfield, Colorado</p>	<p>"Crane Safety Overview" (Continued)</p>	TBD
4:15 p.m. - Close	<p align="center">Break To Exhibits & Activities & Conference Coordinator's Staff Meeting</p>			

Tuesday, November, 4, 2003

Time	Aspen Auditorium	Silverton Room	Breckenridge Room	Telluride Room
8:00-8:45 a.m.	"Workplace Violence" by: Ms. Marilyn Clark-Alston Compliance Safety & Health Officer Occupational Safety & Health Admin, Little Rock, Arkansas	"Water Borne Pathogens" by: Dr. John Singley Associate Professor Safety Technology Marshall University, Huntington, West Virginia	"Implementing A Ergonomics Program At Your Site" by: Ms. Deb Lundberg, MA Exercise Physiologist Health Solutions Monument, Colorado	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" by: Mr. Doug Perryman DP Safety Services LLC 8:00 a.m. to 5:00 p.m.
8:45-9:15 a.m.	Break			
9:15-10:00 a.m.	"Biological Terrorism: Public Health and Safety Implications" by: Dr. Peter Leggat MD, Associate Professor & Academic Advisor, School of Public/Tropical Medicine, James Cook University, Australia	"Post Anthrax Treatment & Care" by: Dr. Matthew Hine, MD Associate Medical Director United States Postal Service Denver, Colorado	"Implementing A Ergonomics Program At Your Site" <i>(Continued)</i>	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" <i>(Continued)</i>
10:00-10:30 a.m.	Break			
10:30-11:15 a.m.	"Safety During 9/11 Recovery World Trade Center" by: Mr. Greg Gothard Project Safety Manager Rocky Flats, Golden, Colorado	"Beryllium - Past, Present and Future" by: Dr. John McInerney, MD Medical Director - DynCorp, LLC Rocky Flats Closure Project Golden, Colorado	"Disabilities 101" by: Ms. Sharon Campbell Owner, SILC Communications Pueblo, Colorado	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" <i>(Continued)</i>
11:15-2:00 p.m.	Lunch Break and Exhibits			
2:00-2:45 p.m.	"Integrated Occupational Health & Safety Management and the Voluntary Protection Program in Taiwan" by: Mr. The-Sheng Su Director Dept of Labor S&H Council of Labor Affairs, Taipei, Taiwan, ROC	"Mold 101 - Mycotoxins and Their Effect On The Human Body" by: Ms. Hildegard Stanger-PhD Two Row Wampum, LLC Maitland, Florida	"The Benefits of Massage Therapy in the Care and Treatment of Work Related Injuries" by: Mr. Jack Smith, ES&H Manager Big "J" Enterprises, LLC Albuquerque, New Mexico	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" <i>(Continued)</i>
2:45-3:15 p.m.	Break			
3:15-4:00 p.m.	"Managing World Class Safety" by: Mr. Brian Haywood Manager, Industrial Safety Services PSARA Technologies Cincinnati, Ohio	"Implementing Safety & Health Training for Spanish Speaking Employees" by: Mr. Danny Garcia President, American Safety Management Waco, Texas	"Challenges In Implementing ES&H For Hazardous D&D Activities" by: Mr. James Craven, ES&H Specialist Bechtel - Jacobs K-25 Site, Oak Ridge, Tennessee	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" <i>(Continued)</i>
4:00-4:30 p.m.	Break			
4:30-5:15 p.m.	WSO General Membership Meeting	"Management Plan for Safety, Welding, Cutting & Allied Process - ANSI Z49.1" by: Mr. Jesse Grantham, PhD Consultant & Expert Witness Welding & Joining Management Group Denver, Colorado	"E-Learnings Place In Safety & Health" by: Mr. George Chesney, Vice President FirstNet Learning, Inc Denver, Colorado	"Searching For The Truth - Reduce Accident Incidence Rates 10 to 50%" <i>(Continued)</i>
5:15 - p.m.	Break and Exhibits			

Wednesday, November 5th, 2003

Time	Aspen Room	Silverton Room	Breckenridge Room	Telluride Room
8:00-8:45 a.m.	"Highway Workforce Safety Planning, Training & Recruiting" by: Dr. Michael Thomas Federal Aviation Administration Washington, DC	"Excavation, Trenching & Soil Mechanics" by: Mr. Yong McGuire Health & Safety Manager Cash Electric Inc. Wheat Ridge, Colorado	"Reading & Interpreting Standards and Regulations Made Easy" by: Mr. Tom Haller W-H Inter-science of Colorado Grand Junction, Colorado	"HAZWOPER Refresher" by: Mr. Ken Tester, CEO HazMat Plans and Programs, LLC 8:00 a.m. - 4:30 p.m.
8:45-9:15 a.m.	Break			
9:15-10:00 a.m.	"Railroads In The Middle East - The Missing Link" by: Dr. Elias Choueiri Director General, Ministry of Transportation, Beirut, Lebanon	"Excavation, Trenching & Soil Mechanics" <i>(Continued)</i>	"Sampling Techniques For Biological Analysis" by: Mr. John Irland, PhD EMSL, Analytical Laboratories, Inc Ann Arbor, Michigan	"HAZWOPER Refresher" <i>(Continued)</i>
10:00-10:30 a.m.	Break			
10:30-11:15 a.m.	"SafeStart - Reality Based Safety" by: Mr. Larry Wilson Safety Manager Electrolab/Higbee & Associates Belleville, Ontario, Canada	"Integrated Safety Management" by: Ms. Janice Nelson Subcontractor Safety Advocate U.S. Department of Energy Site Oak Ridge, Tennessee	"Multi - Employer Work Sites" by: Dr. Larry D. Perkins Vice President of E&H, MWH, Inc. Broomfield, Colorado	"HAZWOPER Refresher" <i>(Continued)</i>
11:15-1:00 p.m.	Lunch Break and Exhibits			
1:00-1:45 p.m.	"The Process of Investigation And Workplace Interviews" by: Mr. Eugene Ferraro CEO, Business Controls, Inc	"OSHA Recordkeeping Standard Updates" by: Ms. Megan Mcagher, OSHA Outreach Program Region VII Denver, Colorado	"Implementation of Safe Powered Industrial Truck (PIT) Operations" by: Mr. Art Varga Director of Training & Risk Management Material Handling Equipment, Inc. Denver, Colorado	"HAZWOPER Refresher" <i>(Continued)</i>
1:45-2:15 p.m.	Break			
2:15-3:00 p.m.	"Absorbents - I Didn't Know That!" by: Mr. Richard J. Kraemer, PhD CEO, MegaMatrix, LLC Boulder, Colorado	"OSHA Recordkeeping Standard Updates" <i>(Continued)</i>	"Implementation of Safe Powered Industrial Truck (PIT) Operations" <i>(Continued)</i>	"HAZWOPER Refresher" <i>(Continued)</i>
3:00-3:30 p.m.	Break			
3:30-4:15 p.m.	"A Framework for Hazmat Compliance Information Analysis and Fulfillment" by: Mr. Jess Kraus, President & CEO 3E Company, Inc. Diego, California	"OSHA Recordkeeping Standard Updates" <i>(Continued)</i>	"Implementation of Safe Powered Industrial Truck (PIT) Operations" <i>(Continued)</i>	"HAZWOPER Refresher" <i>(Continued)</i>
6:00-10:00 p.m.	The WSO Annual Awards Banquet - Meeting Room "B"			

Annual Report of 2003

附件二

Activity Update

World Safety Organization National Office in Taiwan

October, 2003

Major Activities of 2003

- **International Activities**

APEC Chemical Dialogue - Seminar on Globally Harmonized System

Asia Pacific Symposium on Safety

- **Professional Training**

A Practical Approach to Incident Command (speakers from U.S.A)

Safety Management System Integrity & Performance Auditing (speakers from UK)

Behavior Safety (speakers from Australia)

Major Activities of 2003

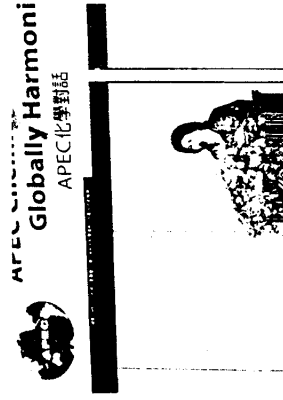
- **Domestic Activities**
 - Occupational injuries/illness reduction program**
 - Voluntary protection program**
 - Process review program for hazardous work site**
 - Type-inspection program for dangerous machinery**
 - Construction Safety Program**
 - Industrial safety and health technical assistance program**
 - OHSAS 18001 promotion program**
 - Workplace monitoring and risk assessment program**
 - Hazard Communication Program**
 - e-learning and e-expert program**

APEC Chemical Dialogue — Seminar on Globally Harmonized System

With direction from APEC Chemical Dialogue Steering Group, a three-day seminar was held in Taipei for APEC Economies to facilitate the implementation of GHS focusing on hazard identification and classification, labeling of chemicals and safety data sheets on September 22-24, 2003.



APEC Chemical Dialogue — Seminar on Globally Harmonized System Participants



- An audience of 252 representing 13 APEC Economies attended the seminar, including Australia, Canada, Hong Kong, Indonesia, Japan, Malaysia, Peru, Philippines, Singapore, Chinese Taipei, Thailand, USA and Vietnam.
- The audience consisted primarily of public sector regulators of chemicals, academia, professionals, chemical manufacturers and users in the APEC Economies.

APEC Chemical Dialogue — Seminar on Globally Harmonized System Conclusions

- Efforts may be considered to fall into five categories of activities: Networking, Information, Cooperation, Harmonization, and Education (NICHE).
- APEC Economies are encouraged to review their own regulations regarding chemical hazard classification and communication to promote integration and implementation of the GHS by domestic regulatory agencies and to harmonize internal regulatory requirements to the greatest extent possible across sectors.
- APEC CDSG is encouraged to consider establishing an APEC GHS Subcommittee. APEC Economies are encouraged to continuously exchange information on progress with implementing the GHS, and implementation practices.
- APEC members and stakeholders, are encouraged to continue to sponsor appropriate activities to exchange views and experiences to facilitate GHS implementation.

2003 Asia Pacific Symposium on Safety

(APSS 2003)

Progress Report

- The symposium will be held on November 18-20, 2003 in Chinese Taipei.
- Advance program and call for participation are in progress.



2003 Asia Pacific Symposium on Safety

(APSS 2003)

The symposium will include plenary and parallel sessions covering fundamental research, engineering applications, and challenging issues in:

- **Chemical Safety**
- **Electrical Safety**
- **Mechanical Safety**
- **Risk Assessment and Control**
- **Safety Management Systems**
- **Behavior-based Safety**
- **Ergonomics**
- **Environmental Safety**
- **Construction Safety**
- **Other Safety-related Topics**

附件三



The World Safety Organization Presents the:

17th International Environmental Health and Safety Conference and Exposition

November 3 - 5, 2003

Denver, Colorado USA

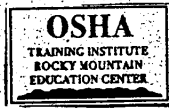
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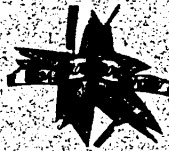
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World Safety Organization

Founded and Incorporated in 1975 in Manila Philippines

WSO Professional Certification Program opened in 1985 in the U.S.A.

Reorganized in 1987 relocated to Missouri, U.S.A.

In 1987 WSO World Management Center established in Missouri, U.S.A.

WSO was granted Consultative Status Category II (NGO) to the UN ECOSOC

WSO Publications:

World Safety Journal
ISSN 1015-5589

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Conference Proceedings
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Conference are held annually

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Integrated Occupational Health and Safety Management and Voluntary Protection Program in Taiwan

Presented by: Mr. Teh-Sheng Su

Mr. Teh-Sheng Su, is the Director of the Department of Labor Safety and Health, Council of Labor Affairs, Executive Yuan, Taipei, Taiwan, Republic of China. Mr. Su has a Masters of Engineering in Sanitary Engineering, Civil Engineering, from the National Cheng Kung University of Taiwan, and a Masters of Public Health Degree from the University of California at Berkley, USA. He is an Associate Professor at the Labor Research Institute - Chinese Culture University, and an Associate Professor at the Occupational Medical Science and Industrial Health Research Institute - Public Health College, National Taiwan University. Mr. Su has also been the Director of the Industrial and Mining Inspection Department, Taipei Municipal Government. Mr. Su is a "Member Elect" of the WSO Board of Directors for 2003 to 2005. He was awarded the WSO Safety Person Of The Year Award in 1998.



With the rapid change of manufacturing processing, introduction of new raw materials and techniques, the safety and health issues in the workplace is becoming more complex and more unpredictable than ever. For remarkable improvement for such a situation and effective reduction for illness and injury incidence rates, the Council of Labor Affairs (CLA) has encouraged industries to establish and carry out their voluntary Occupational Health and Safety Management System (OHSMS) according to the characteristics since 1994. An organization must integrate safety and health concerns into the overall business planning cycle to obtain the most benefit.

Voluntary Protection Programs (VPP) in Taiwan are the combined advantages of the US Occupational Safety and Health Administration's Voluntary Protection Programs, the South Africa National Occupational Safety Association's Five Star System and the International Safety Rating System for Loss Control. In 1994, the CLA promulgated the Enforcement Points for the enterprise to implement the Voluntary Protection Programs and authorized the non-profit institute for assisting the government in implementing this program. The government-authorized institute, accepts enterprise's applications, performs document preview and organizes the onsite review affairs. A final review committee of CLA confers a two-year certificate for approved sites. To attain the goal of continuous improvement, the VPP audit visits the approved site annually and sends the audit report with the site's correction plan to CLA within the valid period.

Labor affair related government agencies and international organizations throughout the world have made efforts for developing national occupational health and safety management systems standards or guideline (e.g., The International Labor Organization: Guidelines on Occupational Safety and Health Management Systems 2001 and the British Standards Institute: BS8800 1996). For years of implementation, enterprises urged governments to extend the compatibility to other management systems to reduce the cost to carry out this program. In response to this issue, CLA amended regulation of Enforcement Points for the enterprise to implement the Voluntary Protection Programs in 2001 to share the basic common elements of BS8800 and OHSAS 18001 into new VPP. It also provides a compatible way to transfer from VPP to OHSAS 18001 management system.

To improve the enterprise's organizational performance and effectiveness in occupational health and safety management is the ultimate goal of Voluntary Protection Programs. Under the limitations of government resources, the Council of Labor Affairs will improve his cooperative role with the employer in implementing the effective occupational safety and health management system. This program will provide the greatest benefits and incentive in improving safety and health performance and reduce the injury rate for sustainable development of the enterprises.

Keywords:

*Voluntary Protection Programs,
Occupational Health and Safety Management System,
Continuous Improvement*

Background

With the progress of technology and changes in the manufacturing process, the workers are faced with a even more complex workplaces than ever. There are many international organizations and countries trying to take practical measures to reduce the occupational accidents and diseases in the workplace. In the XIII World Congress on Occupational Safety and Health (New Delhi 1993), the issue of human right, environmental protection and occupational safety and health should be considered to the international trade agreement. For the international enterprise. They not only emphasize their business benefits but also the environmental protection and worker's right in the workplace. It's a warning for the world society to urge the enterprise in the developing countries to get rid of bad trading profit by ignoring the investment on environmental protection and sacrificing the worker's occupational safety and health right.

The current trend is to develop an effective method to protect the workers from work-related injury or illness. The International Organization for Standardization (ISO) develops its ISO 9000 series on Quality Management and ISO 14000 series on Environmental Management. In United Kingdoms, the British Standards Institute (BSI) develops HSG65, BS8800⁽¹⁾ and OHSAS 18001. In Australia, they develop the Safety Map. Finally, the International Labor Organization develops the Guideline on occupational safety and health management system: ILO-OHSMS Guidelines⁽²⁾. In many other countries, USA -OSHA carry out the Voluntary Protection Program (VPP) and the regulation of Process Safety Management⁽³⁾ because of the government playing an important role in this program. In the 2003-2005 Strategic Management Plan of Occupational Safety and Health Administration, the VPP is one of the important cooperative program to achieve the Strategic Goal and promote effective safety and health management and leverage the agency's resources⁽⁴⁾.

There are a lot of occupational safety and health (ORS) management systems with the same goal of preventing work-related injury or disease. The government plays an essential role to provide incentive for the enterprises in reducing workplace fatality rate. However, compliance to the law and regulation is the minimum requirement for the enterprise. The integration of OHS into core business for the enterprise is the key point to achieving the ultimate goal.⁽⁵⁾

The Occupation Health and Safety Challenge for Taiwan Government

In July 1986, the Department of Labor Affairs (DLA) under the Ministry of Interior was charged with the duty to do labor inspection

at the central government in Taiwan. On August 1, 1987, the personnel and duties of the DLA were merged into the new government agency: Council of Labor Affairs (CLA). In 2003, the Labor Safety and Health Law regulates 281 thousand business firms and 4.82 million workers. Due to the limited personnel resources, there were only 272 compliance officers conducting labor inspection in 2001. The annual inspection rate of the business firms was only 10% covered by governmental inspection⁽⁹⁾.

From 1987 to 2001, the workplace fatality rate has declined 51.4% after the strong enforcement by the government. However, the rate seemed to fluctuate during 1990s. With the complexity and rapid change in manufacturing process, raw materials and techniques caused some heavy industrial accidents for the enterprise. The government sought to change the way of enforcement and cooperate with enterprise to establish the voluntary management system based on the risk of their workplaces and eliminate the labor injury, illness and death.

Historical View of Taiwan Voluntary Protection Programs (VPP)

In 1994, the regulation of the Enforcement Points for the enterprise to

implement the Voluntary Protection Programs has been passed to regulate the Voluntary Protection Program in Taiwan. In the first draft of this regulation, we made reference to many Safety and Health Management system already implemented in other countries, for example, the United States: Occupational Safety and Health Administration's VPP; the South Africa: National Occupational Safety Association's Five Star System; International Safety Rating System for Loss Control and ISO 9000 series.

New VPP in 2001

After six years of VPP implementation, enterprises always carry out a lot of management systems, i.e., Quality Management (ISO 9000 series) and Environmental Management (14000 series) and OHSMS 18001 at the same time. They urged governments to extend the VPP compatibility to other management systems to reduce the cost of carrying out this program. In 2001, the regulation of VPP was revised in order to extend the compatibility to the management systems of OHSAS 18001 to reduce the management cost by sharing the basic common elements of BS8800 and OHSAS 18001 into the new VPP program, shown as the following table:

New VPP items	OHSAS clauses
1. OH&S Policy	4.2 OHS&S Policy
2. Planning and management program	4.3 Planning
3. Organization	4.4 Implementation and Operation
4. Operational Control	4.4.6 Operational Control
5. Emergency response and incidents preventive action	4.4.7 Emergency preparedness and response
6. Performance measurement and audit	4.5.2 Accidents, incidents, non-conformance and corrective and preventive action
7. Management Review	4.5.1 Performance measurement and monitoring

in other words, if the government approved the enterprise with VPP, they can also fit the minimum requirement for OHSAS 18001. The new VPP provides a ready and compatible way to transfer easily from approved VPP to OHSAS 18001. In the new VPP program, there are seven main scoring items as the following table:

Main items	Score
1. OH&S policy	10
2. Planning and management program	10
3. Organization	10
4. Operational Control	40
5. Emergency Response and incidents preventive action	10
6. Performance measurement and audit	15
7. Management Review	5
Total	100

ie enterprises with a score over 70 points by Review Committee would be certified with the sign of VPP. Those certified VPP enterprises that ve scored over 85 in the following two years would be eligible to be granted the honor to compete for the honor of excellence VPP award.

The following table compare the VPP programs of Taiwan and the U.S.

Items	Taiwan, CLA-VPP	The US, OSHA-VPP
Initial Review	Assistant Review Institute	OSHA review team
Onsite Review Team	Assistant Review Institute assign 2-3 review experts	Often an OSHA officer as team leader, a safety specialist, and industrial hygienist, (a backup team leader)
Review Process	Initial document review by non-profit institute, onsite review by experts, send the onsite review report to review committee	Initial meeting, walkthrough, document review, interview, daily close-out meeting, closing meeting
Final Review	Council of Labor Affairs Review Committee	Department of Labor, Assistant Secretary
Valid Period	2 years	1 to 5 years
Insurance Company	Ask for participation	No
Continual Audit	Every year	Star: 3 years, Merit: 1 year

It's the basic principle that the compliance program conducted by the government should be clearly independent of the consulting service or cooperative program of the government. In the VPP of Taiwan, the government authorized a non-profit institute to promote the VPP program to utilize the resource from the non-government organization to help the applicants finish all the application forms, train the VPP auditors, make arrangements of initial on-site review by the 2 to 3 VPP auditors and send the onsite review report to the VPP review committee. In contrast to OSHA VPP, the OSHA review team with safety or health specialist takes charge of the review procedure and the assistant secretary certificate the VPP sites.

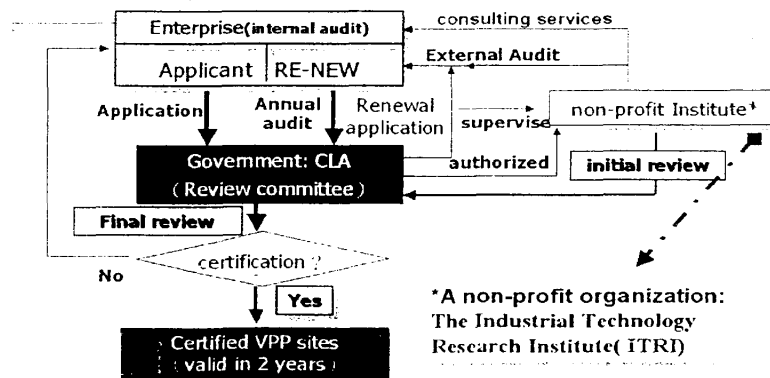
VPP Application Procedure and Continual Improvement

For the enterprise to apply for certification of VPP, they just submit all application materials to the government authorized non-profit institute to start the application procedure. The VPP re-newing applicants also

follow the similar procedure mentioned above. Nowadays the Industrial Technology Research Institute (IRI) is the non-profit organization partly subsidized by the government to help carry out this program. The ITRI will arrange all the initial procedures which are required by the VPP regulations, conducting initial onsite review and providing consulting service for the applicants. When all necessary initial review by ITRI has been finished and all audit reports have been sent to the VPP review committee composed of 11 to 21 members in the government, the committee holds a meeting to decide the VPP certification of all the new and re-new applicants. In every fiscal year, the final VPP review committees is held four times by the government agency and certify the VPP sites valid in the following two years.

The following flow chart is the brief illustration of the application procedures.

The VPP application flow chart



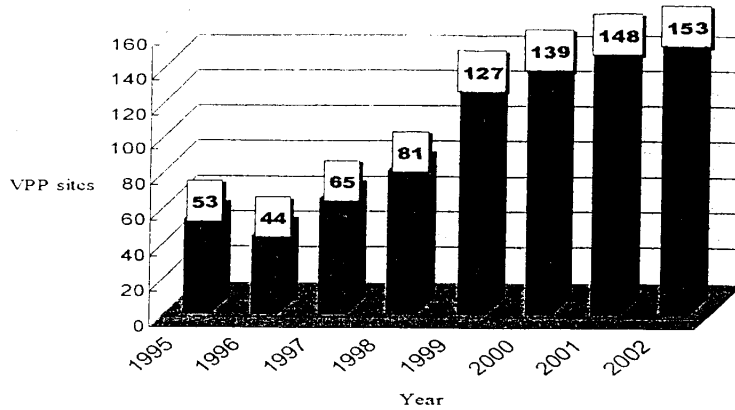
*A non-profit organization: The Industrial Technology Research Institute (ITRI)

In order to assess how effective the VPP sites have maintained their good results by effectively following the PDCA cycle to continual improvement their management system. The VPP sites were asked to make annual self-evaluation reports and the annual audit in the valid period. The VPP review committee has the right to revoke the VPP certification once the VPP sites fail to pass the annual audit.

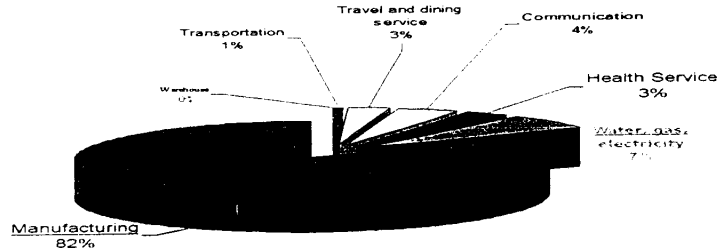
Current VPP Statistics in Taiwan

Based on current statistics from 1994 - 2002, there is a three-fold increase in the amount of approved VPP sites in Taiwan (153 in 2002). The main industries for VPP approval fall in the categories of

“Manufacturing industry” (82%), and the “electricity, gas and water” (7%) 2001. The size of VPP-approved enterprises is generally huge with 100 to 1000 employees, 77%), in contrast, only 11.4% VPP-approved sites with a staff of less than 100 employees.

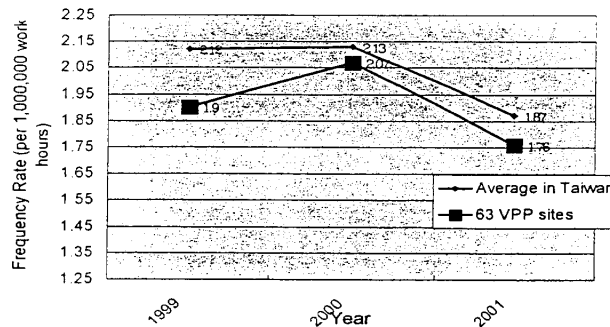


Growth of VPP sites in Taiwan Distribution of VPP Sites in 2002



With the injury rate comparison criteria of Frequency of disability rate (FR) and Severity of Disability rate (SR), the VPP-approved VPP sites have lower FR and SR than the national average and both rates decreased annually, which proved the effectiveness of VPP in reducing the injury rates.

The Frequency Rate of Occupational Injuries and Illness VPP sites vs. Non-VPP site from 1999-2001



Conclusion

With the limited government resources, the promotion of the occupational safety and health management systems for the enterprises provide a framework for developing and implementing improvements in occupational health and safety. It's also one of the attainable solutions for this limitation and leverages the limited government resources. In 1994, the Voluntary Protection Programs adopted by the Council of Labor Affairs and revised recently in 2001 have established the feasible cooperative model among government, enterprises and labor to reduce the rate of work-related injury, illness, and fatalities.

For the enterprise, the VPP help to reduce the cost of labor workday loss and the insurance rate directly. Moreover, it also improves their public images and involves them in the competition for the honor, VPP award annually. The approved VPP sites have priority to acquire compliance assistance and have access to activities held by the government.

In Taiwan, by encouraging incentives to improve safety and health and reducing the injury rate, the VPP has brought forth great fruit for both the government and the enterprises.

Reference

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5. Institute of Occupational Safety and Health, Council of Labor Affairs, Taiwan (1998). A Feasibility Study on the Implementation of British Standard BS 8800 in the Industries of R.O.C., 86-S326
6. Taiwan, Council of Labor Affairs (2002). Statistical Abstract of Labor Inspection Yearbook 2002