STRATEGY 1
Build Strong Capabilities to Better Manage WSH
BUILDING WORKPLACE SAFETY AND HEALTH (WSH) CAPABILITIES IN THE WORKFORCE

Good WSH outcomes can only come about through conscious effort by all workers in managing safety and health at the workplace, it is critical that we equip all workers with the necessary skills to do so.

Towards this end, the Occupational Safety and Health Division (OSHD) devised a comprehensive strategy under our WSH 2018 master plan to build WSH competencies in the workforce. Key outcomes we hope to achieve are:

- To grow the local pool of WSH professionals from 5,500 in February 2009 to 19,000 by 2018; and
- To equip WSH professionals and other stakeholders (e.g. senior management, line supervisors and workers) with WSH skills in tune with latest developments at the workplace.

Specific efforts to build WSH competencies include collaborating with the industry to develop WSH training programmes, as well as to regulate Accredited Training Providers (ATPs) in the delivery of these programmes. Competency frameworks are also developed for WSH professionals to help equip them with the necessary WSH expertise as well as to provide them with a flexible and clear career progression pathway.

Occupational Hygiene Professionals WSQ Framework

The Occupational Hygiene Professionals Singapore Workforce Skills Qualifications (WSQ) framework was jointly developed by the Singapore Workforce Development Agency (WDA), the Workplace Safety & Health Council (WSH Council), and the Ministry of Manpower (MOM). The main objectives of this framework are to assist stakeholders to improve workplace health management and raise workplace health standards.

Under this framework, a WSQ Specialist Diploma in Occupational Hygiene has been developed to train prospective Occupational Hygiene Officers, who can assist employers, occupiers and other stakeholders in the anticipation, recognition; and the evaluation and control of workplace health hazards.

A pioneering batch of 22 Occupational Hygiene Officers graduated from a pilot run of the WSQ Specialist Diploma in Occupational Hygiene course in April 2012. The first runs of the course will be carried out in first quarter of 2013, administered by WDA’s appointed continuous education and training centres.

Safety Compliance Assistance Visit (SCAV)

The SCAV is a new, innovative capability building and intervention tool initiated by the National Work-at-Heights (WAH) Taskforce. It involves safety professionals who visit smaller workplaces across the island to reach out, engage and educate industry players on WAH issues. Such workplaces will benefit most from practical assistance to build capabilities for better WAH management and for the implementation of the Fall Prevention Plan. Workplaces found to have WAH concerns will be given time to make improvements before a second visit by MOM inspectors. The main objectives of SCAV are to:

- Provide on-site safety educational training for supervisors and workers;
- Create awareness of WAH safety by disseminating educational materials, and site demonstrations;
- Enhance the standards of WAH related safety conditions and practices by identifying safety lapses and offering professional advice.

BUILDING WSH CAPABILITIES IN THE INDUSTRY

Developing WSH capabilities in the industry is another key aspect of OSHD’s work. Towards this end, practical assistance on WSH management is provided to the industry in the form of resources such as technical advisories, videos, guidebooks, special assistance kits and online WSH e-toolkits. OSHD also implements programmes to develop progressive and pervasive WSH culture in the industry - a key outcome under our WSH 2018 master plan.

bizSAFE

Risk assessment is the cornerstone of any WSH management system and it is critical that businesses are equipped with the capability to conduct risk assessment effectively. Recognising that not all companies have the resources or know-how to build risk management capabilities, OSHD, in conjunction with the WSH Council, launched the bizSAFE programme in 2007.

The bizSAFE programme is a structured five-step programme to help SMEs build risk management capabilities and provide endorsement of their progress in this area. Large organisations with strong WSH capability and leadership
are enlisted as bizSAFE Mentors to guide small and medium enterprises (SMEs). Similarly, organisations that contract the services of SMEs are invited to participate in the programme as bizSAFE Partners help shape the behaviour of SMEs by encouraging them to participate in bizSAFE, and to progress through the five-step recognition process.

As of 31 December 2012, close to 14,000 companies have signed up as bizSAFE Enterprises. 296 companies have participated in the bizSAFE programme as bizSAFE Partners, while 17 companies have participated in it as bizSAFE Mentors.

Risk Management Assistance Fund

With effect from January 2011, the Risk Management Assistance Fund (RMAF) deliverables have been enhanced to ensure that recipients meet the requirements of bizSAFE Level 3. With the enhanced scope, the audit fee claimable under RMAF has been increased from $400 to $600 and all successful RMAF recipients will be granted bizSAFE Level 3 status automatically.

The RMAF has also been topped up with an additional $11 million, resulting in a total of $24 million from the RMAF to be disbursed over the next 3 years up till 2014. As at end 2012, $18.5 million of RMAF has been disbursed.

COMPETENCY DEVELOPMENT

Various enhancements to WSH curriculum were introduced in 2012 to enhance the WSH capability of workers in Singapore.

Enhanced Training Curriculum for Crane Operators

In any lifting operation, Crane Operators play a vital role as they are in direct control of the crane’s operation. In view of further enhancing their capability, MOM and WSH Council in collaboration with the National Crane Safety Taskforce, had worked together with the Building Control Authority Academy (BCAA) to enhance the Training Curriculum for the Crane Operators to raise their competency. The Enhanced Training Curriculum for the Crane Operators incorporated key aspects such as simulation training as well as the new requirements stipulated in the WSH (Operation of Cranes) Regulations 2011 which has since been enacted in September 2011. The use of crane simulators as part of the practical sessions allow the trainees to experience how to operate the various types of cranes realistically in different sites, and under severe site conditions such as heavy rain and uneven ground. The enhanced Training Curriculum was successfully launched in July 2012.

Lorry Crane Operator Course and Lorry Crane Operator Competency Test Transited to WDA WSQ Course

In December 2011, MOM issued a media release on the new legislative requirement pertaining to the training of Lorry Crane Operators as required under the new WSH (Operation of Cranes) Regulation 2011. To give the industry lead time to send their operators for training, the effective date for this requirement takes effect in September 2013. WSH Council and industry stakeholders developed the Curriculum Development Advisory (CDA) comprising Lorry Crane Operator Course and Lorry Crane Operator Competency Test for lorry crane training beginning in January 2012. By the end of 2012, more than 2100 lorry crane operators were trained by MOM’s Accredited Training Providers (ATPs) with effect from 1 October 2012, the lorry crane training transited to the Singapore Workforce Development Agency (WDA) under the Workforce Skills Qualifications (WSQ) system and renamed as “WSQ Operate Lorry Crane Course”.

New Training Course for Overhead Travelling Cranes and Gantry Cranes

Presently, training for the operation of Overhead Travelling and Gantry Cranes (OGCs) are unstructured and conducted in-house for new operators as there is no specialised course available in the industry. To address this and to standardise the training for OGC Operators, the National Crane Safety Taskforce in collaboration with MOM and WSH Council is working with the WDA to explore the development of the course under the WSQ Framework administered by WDA.

Training Matrix for Industry-Specific Sectors

The Council developed an industry-specific training matrix to enable employers to identify appropriate WSH training courses that are relevant to their industry and nature of work.

The matrix which is available online will help raise the industry’s WSH capabilities as more employees are appropriately trained to better comprehend, control and manage WSH risks relevant to their work.

Migration of Courses to WSQ Framework

As part of continuous efforts to enhance workforce skills and competencies, the Council, together with MOM and the WDA have collaborated to move several MOM ATP courses to WDA’s WSQ system.

With effect from 1 January 2013, bizSAFE Levels 2 and 4 courses will be aligned to the WSQ framework to make bizSAFE training
programmes more accessible to businesses and workers. Employees and workers can benefit from the greater availability of funding and the national recognition granted to all WSQ training under Singapore’s Continuing Education and Training (CET) system.

**Enhanced Construction Safety Orientation Course**

To raise safety standards in the construction industry, the WSH Council revamped the training curriculum for the Construction Safety Orientation Course. Key enhancements include extending the 1-day course to 2 days, practical training and assessment to familiarise workers with practical skills on fire safety, working at heights and working in confined spaces.

The Construction Safety Orientation Course will also be offered at Overseas Testing Centres (OTCs) administered by the Building and Construction Authority (BCA). With training carried out at source countries, employers will be able to deploy their workers immediately upon their arrival in Singapore. The course is expected to be launched in the 2nd quarter of 2013.

**National Asbestos Control Training Course**

A training course (jointly developed by MOM and NEA) on Asbestos Removal and Management for supervisors was introduced in 2004. In 2012, three runs for the course were conducted and 34 persons attended and passed the course.

**Management of Hazardous Substances Course**

OSHD continued its efforts to build industry capability on chemical safety management and hygiene monitoring. In 2012, 285 participants attended the Management of Hazardous Substances Course; and 15 participants attended the Sampling and Monitoring of Airborne Contaminants Course. These courses were jointly developed by MOM and the National Environment Agency (NEA).

**GHS Awareness Seminars and Courses**

Three National Globally Harmonised System of Classification and Labelling of Chemicals (GHS) awareness seminars were conducted in 2012 to raise awareness of GHS hazard communication among chemical suppliers and users of hazardous chemicals. The half-day seminars attracted more than 500 participants from various industries. 11 runs of the GHS Chemical Users Course were conducted to train persons in GHS labelling and Safety Data Sheet (SDS) preparation. A new course on GHS Single Substance Classification was developed and two runs were conducted to build industry capability on GHS classification of single substances.

**WSH Train-the-Trainers (T³) Programme**

In our efforts to facilitate WSH trainers to be well-equipped in technical and soft skills to ensure effective delivery and communication of up-to-date WSH knowledge to the workforce, the WSH Institute, in collaboration with key stakeholders, including Ngee Ann Polytechnic, initiated a continuing education and training programme known as the WSH Train-the-Trainers (T³) Programme. T³ is targeted at WSH training providers, trainers and curriculum developers. In 2012, close to 430 participants from around 240 companies participated in the T³ programme seminars and workshops which covered the following topics:

- Managing WAH
- Managing Confined Space Work
- Managing Chemicals and Hazardous Substances
- Fall Prevention Plan for WAH Safely

A WSH T³ Advisory committee was also appointed by the WSH Institute in July 2012. The committee comprises key stakeholders who represent WSH training providers, WSH trainers, professional bodies and organisations that include the WDA, Institute for Adult Learning (IAL), and WSH Council.

**PRACTICAL ASSISTANCE**

To help industries keep up-to-date with the latest WSH initiatives and best practices, OSHD in conjunction with the WSH Council provides a wide array of resources including technical advisories, videos, guidebooks and special kits, to stakeholders. These guidance materials are often a result of collaborative effort with industry players.

**Updating of Approved Codes of Practice**

The issuance of Approved Codes of Practice (ACOPs) is to educate and provide industry guidance on safe work practices. WSH Council updated the list of ACOPs by issuing 17 new ACOPs in November 2012. This brings the ACOP list to 56 to date.
NEW WSH Guidelines

**Working Safely During Modernisation, Installation or Dismantling of Electric Passenger and Goods Lifts**

This set of guidelines provides information and guidance in all workplaces where the modernisation, installation or dismantling (MID) of permanently installed electric passenger and goods lifts are required. It serves to equip stakeholders in the lift industry with useful practical knowledge and good practices on MID of such lifts.

**Anchorage, Lifelines and Temporary Edge Protection Systems**

This set of guidelines was developed to assist employers and workers who are involved in working at heights to better understand the application of anchorage, lifelines and temporary edge protection as a means of fall prevention. It is relevant for work at heights activities and contains salient points on proper application of temporary edge protection to prevent a fall; and correct anchorages and lifelines to arrest a fall during an accident.

**Personal Protective Equipment for Work at Heights**

The Guidelines on Personal Protective Equipment for Work at Heights was developed to assist contractors and workers in the application of personal protective equipment (PPE) such as full body harnesses, energy absorbers, connectors and lanyards while working at heights. It contains salient points on the proper usage and application of PPE to provide additional protection against fall hazards.

**Landscape and Horticulture Management**

This easy-to-follow guide provides information and guidance on common workplace hazards which workers involved in landscaping and garden maintenance activities may face, and their preventive measures. It is illustrated with photographs and graphics, and the hazards are grouped in accordance with various operations such as tree management and horticulture management.

**Safe Operation of Forklift Trucks**

The Guidelines on Safe Operation of Forklift Trucks was revamped to provide guidance on the management, safe operation and maintenance of forklift trucks at workplaces. It contains possible hazards associated with the use of forklifts and the recommended control measures to be implemented.

**Managing Safety and Health for SMEs in the Metalworking Industry**

Introduced in October 2012, these Guidelines were developed to assist companies in the metalworking industry, especially SMEs, to build and enhance their capabilities in managing WSH at the workplace. It provides information and guidance to business owners, senior management, and key stakeholders who are involved in business operations to ensure that safety and health is managed as an integral part of the business.

**Risk Management (RM) Audit – Guidelines for MOM-Approved WSH Auditors**

The RM Audit Guidelines were developed based on the WSH (Risk Management) Regulations and the Approved Code of Practice on Risk Management. Launched on 29 March 2012, it sets out the RM Audit requirements and serves as a guide for auditors when they carry out the RM Audit. For instance, WSH Auditors are expected to verify that the company’s WSH policy is endorsed by top management.

**Supplementary Guidelines for WSH Auditors Conducting Risk Management Audit under RMAF**

These supplementary guidelines are aligned with the RM Audit Guidelines for MOM-Approved WSH Auditors and enhanced with the additional scope of work of WSH Auditors for the purpose of the RMAF. It aims to ensure that the applicant company has achieved satisfactory safety outcomes and guides the auditor in verifying that the proposed risk control measures have been put in place.

**Step-by-Step Risk Management Guide for the Logistics and Transport Sector**

This Guide provides WSH stakeholders with information and guidance in implementing risk management at workplaces, specifically for the logistics and transport (L&T) sector. The step-by-step methodology for risk management helps stakeholders identify potential hazards in their work processes and put in place effective risk control measures.
Worker’s Safety Handbook for Lorry Crane Operators

The Worker’s Safety Handbook for Lorry Crane Operators was launched at the Crane Safety Symposium 2012 on 24 September 2012 by Mr Hawazi Daipi, Senior Parliamentary Secretary for Manpower and Education. WSH Council, MOM and the National Crane Safety Taskforce developed this pictorial handbook so that the information can be easily understood by the Lorry Crane Operators. It clearly depicted important ‘DOs’ and ‘DON’Ts’ while operating Lorry Cranes. A sample of a daily pre-operation checklist was included as reference. These handbooks were given to the participants of the Symposium. They were also sent to Crane Operators through their respective crane owners and suppliers.

Development of Process Safety Guidelines

In the past year, two guides on Process Safety were published in collaboration with the industry. They are the Process Safety Performance Indicator Guideline and the Singapore Chemical Industry Council (SCIC) Guidebook for Process Safety respectively. These two guidelines provide the industry with an awareness and understanding of Process Safety Performance Indicators for the Process Industry.

The Process Safety Performance Indicators Guidelines was developed by the WSH Council with the aim of introducing the concept of process safety performance indicators, with a greater focus on leading indicators in performance monitoring for process safety management. This guide is intended to assist the middle-to-senior management and WSH personnel of companies in the process industry, including the SMEs and plants of smaller operation scales.

In collaboration with SCIC, the Guidebook for Process Safety was developed. This guidebook provides the industry with guidance on the implementation and improvement of the corporate process safety framework, including the establishment and review of Process Safety Performance Indicators. The Guidebook helps to increase awareness and importance for Process Safety. It also provides case studies on significant process safety incidents and advice on the process safety framework, program implementation, learning from incidents and other relevant topics related to Process Safety.

A seminar was also held in conjunction with the launch of SCIC guidebook for process safety. Deputy Director for OSH Specialist, Mr Go Heng Huat, gave an opening address on the importance of process safety and its development over time in Singapore.
Refreshed WICA Flyer and Handbook

The Work Injury Compensation Department (WICD) has a new set of collaterals which contains information of the Work Injury Compensation (WIC) process:

+ A flyer catered to employees with summarised information about their entitlements under the WICA and the claim process.
+ A handbook catered to employers with more detailed information about the rights and responsibilities under WICA and the claim process.

WICD has revamped the collaterals with the intent to repackage and organise the information in a way that is easy-to-read and tailored to the target audience. The flyers, in particular, were enhanced to include more comic-style cartoons so that the messages posited could be easily understood by all workers. These handbooks and flyers were also updated with the latest information on the changes to the WICA. These changes were specifically highlighted in the handbook so that employers are able to identify these changes at a glance. In addition to the English version, the employees’ flyer has been translated into 7 languages common among the foreign community within Singapore, while the employers’ handbook is also available in 3 other main local languages.

Engagement with the A&E Departments of Hospitals to Proactively Give Out Collaterals to Injured Workers and Employers

Hospitals have always been an important touch-point through which we educate workers and their employers on their entitlements and responsibilities under the WICA. However, instead of simply placing flyers and handbooks on the brochure racks in hospitals, WICD embarked on a new initiative to engage the hospitals to better understand the needs of the injured workers and their employers so as to provide more effective outreach to them. We have partnered with A&E teams from Tan Tock Seng Hospital, Singapore General Hospital and Khoo Teck Puat Hospital to distribute collateral packs to injured workers and subsequently their employers they have been tended to at the hospitals. The collateral set contains information targeted at the injured employee as well as the employer. The employee gets an advisory note and a flyer from MOM summing up what his rights are, the WICA process on what to do next and where to seek help; The employer gets a similar advisory note and a handbook from MOM summing up what his obligations are and the steps in the WICA compensation process. In the following year, WICD will also get the rest of the restructured hospitals onboard the programme and help ensure that workers are adequately informed of their rights to claim compensation when accidents do happen.

Consultation of WSH Leadership Framework

As part of the WSH Institute’s efforts in raising WSH leadership in Singapore, it initiated a consultation process with top business leaders and line management to gather their feedback on a proposed WSH leadership framework. Through the consultation process, WSH Institute was also able to gain insights on current and potential future challenges faced by business leaders in managing WSH issues as well as gaps in existing WSH leadership programs and initiatives.

Development of WSH Leadership Guide

Based on the findings from the consultation, the Institute compiled a WSH leadership guide for business leaders and senior executives. Titled “Towards Vision Zero: A Guide for Business Leaders towards a Safer and Healthier Workplace”, it encourages business leaders to take the lead in striving towards zero work injury, ill health, disability and death in their workplaces. Developed to be a key reference for business leaders and senior executives on effective leadership in safety and health at their workplace, the guide featured a 4 step Plan-Do-Check-Action guide for leaders to demonstrate their commitment towards WSH.
Case Studies Documentation of Exemplary WSH Leadership

To encourage business leaders to share their personal journeys in WSH leadership and inspire greater commitment among each other, WSH Institute compiled a series of 6 business case studies featuring business leaders who led their companies towards WSH excellence. The case studies also showcased innovative programmes and initiatives that these business leaders had successfully implemented to achieve better WSH outcomes.

WSH Institute Mobile Apps

Launched at the Singapore WSH Conference 2012, ergo@WSH is the first mobile application developed for phones and tablets. ergo@WSH is intended for both WSH professionals as well as the general public. WSH professionals can use it to identify, evaluate and monitor ergonomic hazards in the workplace, and provide recommendations to prevent musculoskeletal complaints. Its highly interactive design sparked user interest and raised general awareness of adopting good postures. More than 5000 downloads had been registered since ergo@WSH was launched. Moving forward, the Institute will continue to enhance ergo@WSH while also exploring the development of other mobile apps.

WSH Institute Collection

In collaboration with the National Library Board (NLB), WSH Institute has set up a WSH Institute Collection at public libraries to promote greater WSH awareness and broader outreach. It allows easy access to a variety of safety and health-related resources for a wide range of stakeholders, including employees, employers, WSH professionals, as well as members of the public. The collection includes technical WSH books, case studies on major accidents, WSH management books, ergonomic-related books. For children, there are also books with safety messages to inculcate a safety mindset from young.

OWLLinks - Knowledge and Innovations in WSH

WSH Institute’s monthly e-Newsletter “OWLLinks - Knowledge and Innovations in WSH” was launched on 8 August 2012. The e-newsletter reviews and recommends articles on safety and health issues from around the world, with coverage that goes beyond what is covered in the local media and print, into a single online platform for easy reference. Through these articles, readers could gather insights on new WSH ideas and solutions, emerging issues and potential changes in our future landscape.

Enhancement to National WSH Statistics

WSH Institute published the national mid-year and annual WSH Statistics Report in 2012. The publication was enhanced to provide differentiated analysis between major injuries (injuries with severe consequences) and minor injuries, providing also the overall trend. Through understanding these trends, the industry can better anticipate potential problems and address them before they escalate into real accidents.

Dedicated Crane Safety Portal

To set acceptable practices, the National Crane Safety Taskforce in collaboration with WSHC and MOM developed a dedicated one-stop Crane Safety Portal on iWSH Portal where the public can conveniently access all crane-related safety information, references, guidelines, requirements and case studies.