



WORKPLACE SAFETY & HEALTH PROFILE 2014



SINGAPORE

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1. Workplace Safety and Health Framework

Singapore's workplace safety and health (WSH) framework guides the management of WSH by all stakeholders – the government, industry, employers as well as employees. The framework was designed to engender a paradigm shift and ingrain good WSH habits in all individuals at the workplace. This is enshrined in the three key principles of the framework, with risk management being the cornerstone.

The **first underpinning principle** under the new framework is to eliminate or mitigate risks before they are created and not to merely accept or endure existing risks. All stakeholders in workplaces thus need to conduct risk assessments to help identify the risks and their sources, measures that should be taken to eliminate or reduce the risks and parties responsible for doing so.

3 Key Principles	Desired Mindset Change	
	From	To
Reduced risk at source by requiring all stakeholders to eliminate or minimise the risks they create	Managing risks	Identifying and eliminating risks before they are created
Greater industry ownership of WSH outcomes	Compliance with “letter of the law”	Proactive planning to achieve a safe & healthy workplace
Prevent accidents through higher penalties for poor safety and health management	Accidents are costly	Poor safety & health management is costlier

In line with this principle, the parties that create risks would be held accountable for eliminating or reducing those risks. This includes occupiers, employers, suppliers, manufacturers, designers and persons at work. For instance, employers have the responsibility to put in place effective WSH management systems. Top management are expected to appoint personnel with the right skills and experience to manage WSH as well as provide them with adequate resources, training and powers to carry out their duties effectively. Architects and engineers are responsible for designing structures and buildings in construction projects that are safe to build and maintain. Manufacturers and suppliers are responsible for ensuring that the machinery they supply or maintain is safe for use in all workplaces. Workers have a responsibility to adhere to safe work practices. Every person at work has to accept responsibility for his own safety and health and for those under his charge or affected by his work.

The **second principle** of the new framework calls for greater industry ownership of WSH outcome. Industry must take greater ownership of WSH standards and outcomes to effect a cultural change in WSH from reactive to proactive in accident prevention at the

workplace. Government cannot mandate improvement in safety and health. Industry must take responsibility for raising WSH standards at a practical and reasonable pace. For example, the former legislation was more prescriptive, with WSH requirements spelt out in detail. This encouraged a mindset amongst the management and its employees to simply follow the “letter of the law” and not address issues that fell beyond the legislation. Given the fast pace of technological change and differing work processes across industries, legislation would inevitably lag behind the emergence of new WSH risks. This was an unsatisfactory situation.

Under the new framework, the legislation and enforcement moved from a prescriptive orientation to a performance-based one. Nonetheless, some prescriptive measures for hazardous sectors and activities are retained. In general, the new framework will make it the responsibility of managers and workers to develop work and WSH procedures suited to their particular situations in order to achieve the desired WSH outcomes.

Under the former legislative regime, WSH lapses resulting in deaths and serious injuries were severely penalised but the penalties for offences were much lower in the absence of such mishaps.¹ Such a regime tends to encourage the industry to tolerate sub-optimal WSH practices until accidents occur. Hence, **the third principle** under the new WSH framework seeks to effect greater financial disincentives and penalties on workplaces with unsafe practices and systems, even if accidents did not occur. This is to create an environment where all workplaces find it more cost effective to improve their WSH management systems.

A Target for Workplace Safety and Health

The WSH framework is an outcome of a reform undertaken by the government in 2005 to achieve quantum improvements in the safety and health of our workers. The accident frequency rate (AFR), which measures how often work incidents occur, remained constant at 1.7 incidents per million man-hours worked in 2013. With our accident rates averaging at 1.8 industrial accidents per million man-hours worked from 2007-2013, we are striving to make incremental changes to the framework to improve our performance (Table 1).

Table 1: Accident Frequency Rate 2007 – 2013 (per million man-hours)

	2007	2008	2009	2010	2011	2012	2013
Accident Frequency Rate (AFR)	1.9	1.9	1.8	1.7	1.6	1.7	1.7

In terms of accident statistics, Singapore ranks below leading countries in WSH and most of the countries in the European Union. The target is to have less than 1.8 by 2018, and attain standards of the top ten developed countries with good WSH records.

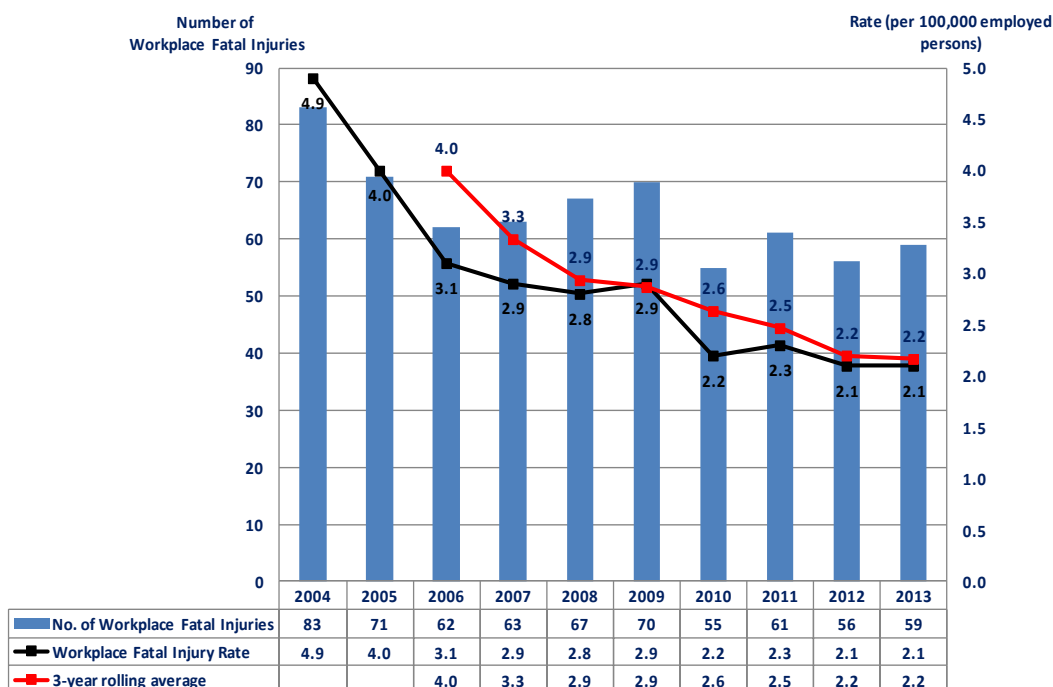
¹ The former legislative regime comprised a stepped penalty regime where the maximum punishment would increase with the harm done (the penalty ranged from a \$2,000 fine where no injury was caused, to a \$200,000 fine with 12 months’ imprisonment where the accident resulted in 2 or more fatalities).

2. Workplace Safety and Health Statistics

2.1 Workplace Fatalities, 2004 – 2013

Since the launch of the new framework in 2005, we have made good progress towards lowering our workplace fatality rate. It has dropped from 4.9 in 2004 to 2.1 in 2013. The number of workplace fatalities reduced from 83 in 2004 to 59 in 2013 (Chart 1).

Chart 1: Workplace Fatalities, 2004 – 2013 (Number and Rate per 100,000 employed persons)



Source: Ministry of Manpower, Singapore.

Note:

The WSH (Incident Reporting Regulations) was enacted in 2006. Prior to 2006, the Factories Act was in force and covered only industrial accidents. For comparison purposes, statistics pertaining to workplace fatalities before 2006 were estimated using work injury compensation data.

The construction sector continued to register the highest number of workplace fatalities, with 33 fatal injuries, up from 26 in 2012. The marine sector reported decreased fatalities in 2013, down to 3 from 6 in 2012. For manufacturing, fatality numbers decreased to 6 in 2013, down from 12 in 2012. Generally, all other sectors saw a decline in their fatalities.

Table 2: Number of Workplace Fatalities by Industry and Incident Types, 2012 and 2013

Industry	All	Construction	Marine	Manufacturing	Agriculture & Related Services Activities	Water Supply, Sewerage & Waste Management	Wholesale Trade	Transportation & Storage	Logistics & Transport
Total	59(56)	33(26)	3(6)	6(12)	1(0)	0(1)	1(0)	6(7)	4(7)
Falls	17(17)	11(10)	0(2)	0(1)	1(0)	0(0)	1(0)	0(1)	0(1)
<i>Falls from Heights</i>	<i>14(14)</i>	<i>11(9)</i>	<i>0(1)</i>	<i>0(0)</i>	<i>1(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(1)</i>	<i>0(1)</i>
<i>Slips, Trips & Falls</i>	<i>3(3)</i>	<i>0(1)</i>	<i>0(1)</i>	<i>0(1)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>1(0)</i>	<i>0(0)</i>	<i>0(0)</i>
Collapse/ Failure of Structure & Equipment	10(4)	7(1)	1(0)	1(1)	0(0)	0(0)	0(0)	1(2)	1(2)
Struck by Moving Objects	9(6)	6(3)	1(0)	0(2)	0(0)	0(1)	0(0)	1(0)	1(0)
Electrocution	5(2)	1(1)	1(0)	0(0)	0(0)	0(0)	0(0)	1(1)	0(1)
Caught in/between objects	5(6)	2(1)	0(1)	1(4)	0(0)	0(0)	0(0)	1(0)	1(0)
Crane-related	4(5)	4(3)	0(0)	0(1)	0(0)	0(0)	0(0)	0(1)	0(1)
<i>Collapse of Crane</i>	<i>3(1)</i>	<i>3(1)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>
Fires & Explosion	2(3)	1(0)	0(0)	1(2)	0(0)	0(0)	0(0)	0(0)	0(0)
Struck by Falling Objects from Heights	1(3)	0(2)	0(0)	0(0)	0(0)	0(0)	0(0)	1(1)	1(1)
Drowning	1(3)	0(0)	0(3)	0(0)	0(0)	0(0)	0(0)	1(0)	0(0)
Suffocation	1(0)	0(0)	0(0)	1(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Exposure to/contact with biological materials	1(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Cave-in of Excavation, Tunnel, etc	0(2)	0(2)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Collapse of Formwork/ Failure of its Supports	0(3)	0(3)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Strike Against Objects	0(1)	0(0)	0(0)	0(1)	0(0)	0(0)	0(0)	0(0)	0(0)
Other Incident Types	3(1)	1(0)	0(0)	2(0)	0(0)	0(0)	0(0)	0(1)	0(1)

Notes:

Figures in parenthesis pertain to 2012 figures.

Logistics & Transport is a sub sector of Transportation & Storage.

Industry	Food & Beverage Service Activities	Telecommunications	Real Estate Activities	Architect-ural & Engineer-ing Services	Adver-tising	Rental & Leasing Activities	Business Support Activities	Cleaning & Landscape Maintenance Activities	Gambling & Betting Activities	Repair & Maintenance of Vehicles
Total	0(1)	0(1)	2(0)	1(0)	0(1)	1(0)	0(1)	2(0)	1(0)	2(0)
Falls	0(0)	0(1)	2(0)	0(0)	0(1)	0(0)	0(1)	1(0)	1(0)	0(0)
<i>Falls from Heights</i>	<i>0(0)</i>	<i>0(1)</i>	<i>1(0)</i>	<i>0(0)</i>	<i>0(1)</i>	<i>0(0)</i>	<i>0(1)</i>	<i>1(0)</i>	<i>0(0)</i>	<i>0(0)</i>
<i>Slips, Trips & Falls</i>	<i>0(0)</i>	<i>0(0)</i>	<i>1(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>1(0)</i>	<i>0(0)</i>
Collapse/ Failure of Structure & Equipment	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Struck by Moving Objects	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)
Electrocution	0(0)	0(0)	0(0)	1(0)	0(0)	1(0)	0(0)	0(0)	0(0)	0(0)
Caught in/between objects	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)
Crane-related	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
<i>Collapse of Crane</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>	<i>0(0)</i>
Fires & Explosion	0(1)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Struck by Falling Objects from Heights	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Drowning	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Suffocation	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Exposure to/contact with biological materials	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)	0(0)	0(0)
Cave-in of Excavation , Tunnel, etc	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Collapse of Formwork/ Failure of its Supports	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Strike Against Objects	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Other Incident Types	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Notes:

Figures in parenthesis pertain to 2012 figures.

Logistics & Transport is a sub sector of Transportation & Storage.

2.2 Occupational Diseases, 2004 – 2013

For Occupational Diseases (OD), the number of cases confirmed saw a fluctuating trend during the period between 2004 and 2013 (Chart 2). In 2013, 673 cases of OD were confirmed. The overall OD incidence stood at 23.7 confirmed cases per 100,000 employed persons in 2013, down from 36.2 a year ago.

Chart 2: Number of Confirmed OD Cases, 2004 – 2013
(OD incidence per 100,000 employed persons)



Figures in parentheses include back injury cases due to ergonomic risks. Data are not strictly comparable with 2012 data.

Source: Ministry of Manpower, Singapore.

Noise Induced Deafness (NID) continued to be the leading type of OD. In 2013, NID accounted for 64% of all confirmed OD cases.

Table 3: Number of Confirmed ODs by Type, 2012 and 2013

	2013 ^p	2012
Total	673 (887)	987
Noise Induced Deafness	564	869
NID (E) – Early	544	855
NID (A) – Advanced	20	14
Work-related Musculoskeletal Disorders	23 (237)	18
Tendinitis	11	8
Nerve Disorder such as Carpal Tunnel Syndrome, Cubital Tunnel Syndrome	2	4
Trigger Finger/Thumb	2	3
Cervical Spondylosis	1	0

Musculoskeletal Disorder of the Back	3	1
Back injuries due to ergonomic risks	(214)	n.a.
Others	4	2
Occupational Skin Disease	56	57
Eczema	52	53
Others	4	4
Compressed Air Illness	5	12
CAI Type 1	5	10
CAI Type 2	0	2
Barotrauma	7	10
Aural	3	7
Sinus	4	3
Cancers	2	7
Mesothelioma	2	7
Occupational Lung Disease	9	5
Occupational Asthma	8	4
Tuberculosis (pulmonary)	1	1
Excessive Absorption of Chemicals	4	4
Perchloroethylene (PCE)	0	2
Trichloroethylene (TCE)	0	1
Cadmium	0	1
Lead	4	0
Infectious Disease	0	2
Chemical Poisoning	3	0
Others	0	3
Upper Respiratory Tract Irritation	0	1
Heat Stroke	0	1
Heat Cramps	0	1

Figures in parentheses include WRMSDs-back injury cases due to ergonomic risks. Data are not strictly comparable with 2012 data.

2.3 Work Injury Compensation, 2013

13,582 work injury claims were awarded compensation in 2013. More than two-third of the claims were made up of temporary incapacity cases (Table 4). The total amount of compensation awarded in 2013 was S\$75.38.

Table 4: Number of Work Injury Compensation Claims and Amount Awarded by Degree of Incapacity, 2013

	Total	Temporary Incapacity^{1,2}	Permanent Incapacity^{1,3}	Fatal
Number of Cases Awarded Compensation	13,582	9,039	4,428	115
Amount of Compensation Awarded (S\$m)	\$75.38	\$5.62	\$60.70	\$14.68

Source: Ministry of Manpower, Singapore

Note: MC wages indicated in table above may not reflect the full amount paid out to workers as these are computed based on the no. of days of MC/hospitalisation leave declared to MOM.

Note:

- ¹ Includes Occupational Diseases.
- ² Refers to injury where the incapacity is of temporary nature. Such incapacity reduces the earnings of the employee in any employment in which he was engaged at the time of his accident resulting in his temporary incapacity. The compensation covers medical costs and medical leave wages.
- ³ Refers to injury where the incapacity is of permanent nature and includes cases where it incapacitates an employee for all work which he was capable of undertaking at the time of the accident resulting in such total incapacity. Such incapacity reduces the earnings of the employee in every employment which he was able to undertake at the time of his accident. The compensation covers medical costs, medical leave wages and percentage of permanent incapacity.

3. Workplace Safety and Health Legal Framework

This section outlines the various legal instruments governing WSH in Singapore.

3.1 Workplace Safety and Health Act

In Singapore, the key legislation on WSH is provided for by the WSH Act which is administered by the Commissioner for WSH, Ministry of Manpower. Replacing the former Factories Act, the WSH Act came into effect on 1 Mar 2006 as the key legal instrument to effect the new WSH framework.



The Act is designed to protect employees as well as any other persons who may be affected by the work carried out at all workplaces. In its first phase of implementation, coverage of the Act was limited to high-risk workplaces such as construction worksites, shipyards and other factories i.e. those formerly covered under the former Factories Act. The WSH Act has been extended to cover six new sectors² since 1 Mar 2008 and was expanded to cover all workplaces in Sep 2011.

The Act departs from taking a prescriptive stance under the former legislation and introduces a performance-based regime. It emphasizes the importance of managing WSH proactively by requiring stakeholders to take *reasonably practicable measures* to ensure the safety and health of workers and other persons that may be affected by the work being carried out. The WSH Act also assigns liability to those who create and have management and control over WSH risks. The stakeholders include the occupiers, employers, principals, employees, manufacturers and suppliers as well as persons who erect, install or maintain equipment and machinery.

3.2 Workplace Safety and Health Subsidiary Legislation

Under the WSH Act, there are a total of 25 subsidiary legislations. 22 of them were Regulations made under the new Act. The remaining 3 subsidiary legislation made under the former Factories Act continue to be in force. Together, they constitute the legislative framework for the management of WSH in Singapore. The subsidiary legislation made under the Factories Act will be reviewed and updated before being re-enacted under the WSH Act. This is to ensure that they are in-line with the new WSH framework. The subsidiary legislation are listed and summarised in **Annex A**.

One of the key subsidiary legislation is the WSH (Risk Management) Regulations, which require employers to conduct risk assessment on the work they are undertaking and take steps to eliminate or reduce the risks that workers are exposed to. The intention of the legislation is to enshrine risk assessment as an integral part of business operations so that WSH risks are proactively reduced.

² Healthcare Activities, Hotels and Restaurants, Landscape Care and Maintenance Service Activities, Services Allied to Transportation of Goods, Veterinary Activities, as well as Water Supply, Sewerage and Waste Management.

3.3 Other Relevant Legislation

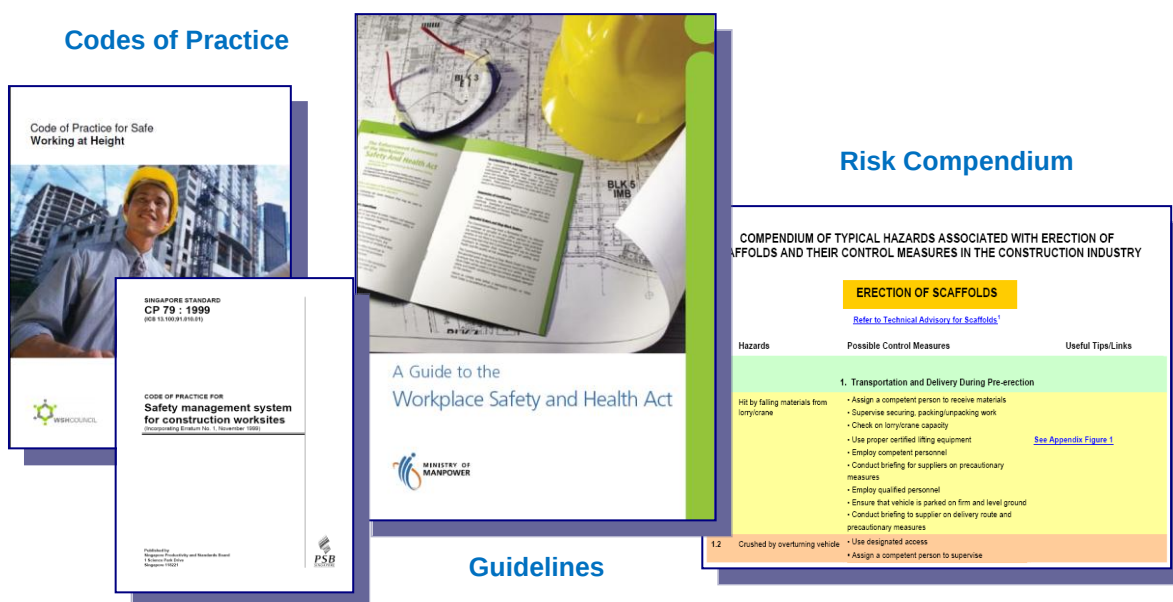
Other relevant legislations that have an impact on WSH include the Environmental Protection and Management Act, Environmental Public Health Act, Radiation Protection Act and Fire Safety Act. These are administered by other government agencies. The purposes of these legislations are described in **Annex B**.

3.4 Codes of Practice & Other Guidelines

Besides legislation, Codes of Practice provide practical safety and health guidance for specific work areas. These are jointly developed by the industry and regulatory agencies under the auspices of the Standards, Productivity and Innovation Board (SPRING Singapore).

When the WSH Act came into effect on 1 Mar 2006, the Commissioner for WSH was authorised to approve Codes of Practice for the purpose of providing the industry with practical guidance with regard to the upkeep of safety and health standards at the workplace. With the formation of the WSH Council on 1 Apr 2008, the WSH Act was amended to transfer the power to issue, approve, amend, or revoke Codes of Practice to the WSH Council. The WSH Council works in close collaboration with the industry to identify areas where practical guidance is required to address improvements in WSH standards. The WSH Council will then set industry standards for these areas, which may include standards for WSH management systems, specific trades and operation of specific equipment.

The Ministry of Manpower and the WSH Council also issue guidelines on specific subject matters such as handling and removal of asbestos to complement regulations on the subject. A list containing the Approved Codes of Practices (ACOP) as well as other relevant legislation and guidelines pertaining to WSH can be found in **Annex B**.



3.5 International Labour Organizations Conventions

As a member state of the International Labour Organisation (ILO), Singapore is committed to aligning our WSH framework with internationally recognised core labour standards. Periodic reviews of our workplace policies and laws are done to ensure alignment with observed international standards.



International Labour Organization
Promoting Decent Work for All

3.6 Work Injury Compensation Act

The government also regulates the right of employees to compensation in the event of work-related injury, death or occupational disease under the Work Injury Compensation (WIC) Act. The WIC Act took effect in 2008 and was amended in 2012 to enhance the WICA framework. The key principles underlining the amendments are as follow:

- a. Ensuring that the WICA framework, as a no-fault regime, continues to strike a fair balance between compensation for employees and the obligations placed on employers.
- b. Ensuring that the WICA framework remains expeditious, so that employees and employers can settle compensation claims without unnecessary delays.
- c. Ensuring the clarity of insurance requirements under WICA.

The WIC Act provides injured employees with a low-cost and expeditious alternative to common law to settle compensation claims. An employee claiming under the WIC Act only needs to prove that he was injured in a work accident or suffered an occupational disease due to his work. The injured employee can claim from his employer medical leave wages, medical expenses incurred within one year from the date of the accident or up to a cap of \$30,000³, whichever is lower, and a lump-sum payment for any permanent incapacity, sustained⁴. A lump-sum payment is also payable to the dependants of an employee who met with a fatal accident at work⁵.

The work injury compensation insurance is provided by the private sector and the premiums are market-driven. It is mandatory for employers to purchase work injury compensation insurance for employees who work in sectors that face higher workplace risks. For the remainder, employers have the option of buying insurance or being self-insured. Employers will be required to pay compensation in the event of a valid claim, if they do not have insurance.

³ For accidents that happened on and after 1 Jun 2012

⁴ The compensation amount payable is subjected to a maximum and minimum limit as follows: Maximum limit = \$218,000 x [% loss of earning capacity]; and Minimum limit = \$73,000 x [% loss of earning capacity].

⁵ The compensation amount payable to the dependents of a deceased employee is subjected to a maximum limit of \$170,000 and minimum limit of \$57,000.

4. Authorities or Bodies Responsible for Workplace Safety and Health

This section describes the regulatory agencies and industry bodies that are responsible for WSH in Singapore.

4.1 Ministry of Manpower

Legislation relating to WSH is administered by the Commissioner for Workplace Safety and Health under the Ministry of Manpower (MOM). MOM's mission is to work with employers and employees to achieve a globally competitive workforce and great workplace, for a cohesive society and a secure economic future for all Singaporeans. Ensuring that our workplaces are safe and healthy for the workforce contributes to the overall mission of creating a great workplace.

The Occupational Safety & Health Division (OSHD) is the division within MOM primarily responsible for ensuring the safety, health and welfare of the workforce.

Occupational Safety & Health Division



The Division promotes WSH at the national level. It works with employers, employees and all other stakeholders including the Workplace Safety and Health Council to identify, assess, and manage WSH risks so as to eliminate death, injury and ill health.

The Division is headed by the Commissioner for WSH and is staffed by approximately 270 officers with about 160 gazetted inspectors across four departments performing various functions.



- **OSH Inspectorate**

The Inspectorate focuses on reducing safety and health risks at workplaces by conducting inspections and surveillance of workplace and enforcing the law when necessary, to ensure that workplaces maintain an acceptable level of safety and health standard. The inspectorate also investigates accidents and shares the lessons learnt from these accidents with the industry.

- **OSH Policy, Information and Corporate Services Department**

The Department drives the divisional efforts through sound policies & strategic planning while striving for organization excellence, and analyses and identifies emerging WSH trends and risks by leveraging on effective information systems, quality resources and astute business intelligence. The Department also supports the Division in the areas of financial management, registry and day-to-day office administration as well as ensures continuous improvement in customer responsiveness through monitoring of customer service standards.

- **OSH Specialists Department**

The Department provides specialist support in the development of WSH standards and best practices, as well as the investigation into complex accidents and occupational diseases. The Department conducts technical and scientific research, develops and implements strategies and targeted programmes for specific WSH hazards and industries. The Department also collaborates with international organisations and national institutes in projects, information exchange, visits and training.

- **Work Injury Compensation Department**

This Department administers the Work Injury Compensation system to assist injured employees and dependants of deceased employees in claiming work injury compensation. It also administers the Incident Reporting system for workplace accident, dangerous occurrence and occupational disease.

4.2 Workplace Safety and Health Council

To drive strong industry ownership of WSH outcomes, the WSH Advisory Committee (WSHAC) was formed in Sep 2005, comprising 14 eminent individuals, with wide industry representation, appointed by the Minister for Manpower. The role of the WSHAC was to advise MOM on WSH standards, promotion and training, as well as address the unique challenges of key industry sectors. In Nov 2006, the International Advisory Panel on WSH recommended an expanded scope for the WSHAC. To do this, the WSHAC would have to be evolved into a full-fledged Council with executive functions. MOM accepted the recommendation and announced in Oct 2007 that the WSH Council would be formed by Apr 2008.



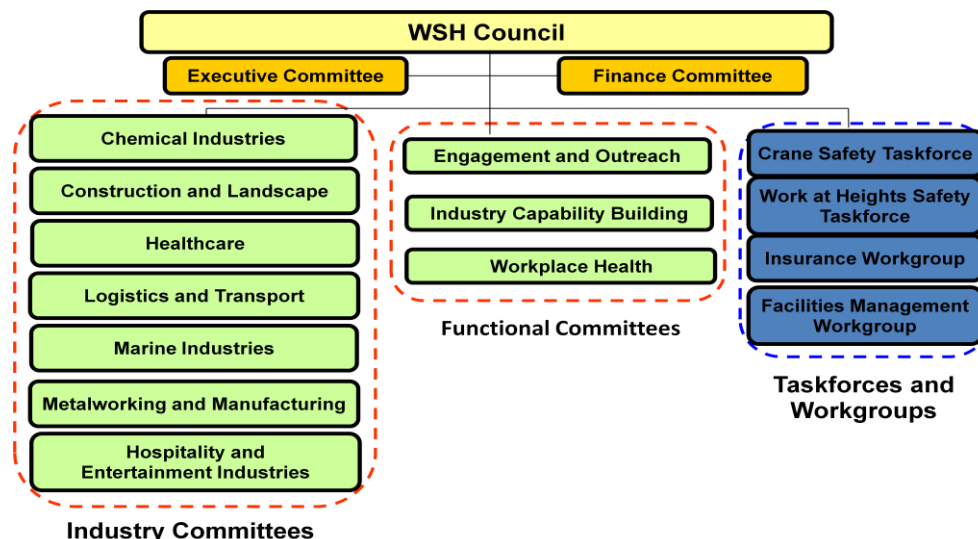
On 1 Apr 2008, the WSH Council was formed to take on executive powers to spearhead WSH initiatives, through the enactment of the WSH (Amendment) Act 2008. The WSH Council comprises 18 leaders from the key industry sectors (such as construction, marine, manufacturing, petrochemical, and logistics), the Government, unions and professionals from the legal, insurance and academic fields.

The WSH Council's main functions are to:

- Build the capabilities of industry to better manage WSH
- Promote safety and health at work and recognise companies with good WSH records
- Set acceptable WSH practices

More information on the WSH Council can be found at wshc.gov.sg.

Table 5: Seven Industry, Three Functional Committees and Four Taskforces Formed Under the WSH Council



4.3 Workplace Safety and Health Institute

The WSH Institute was set up in Apr 2011 as part of Singapore's WSH 2018 strategy to strengthen Singapore's capabilities in safeguarding the safety and health of persons at work, and put us on par with global leaders. The WSH Institute will help MOM and WSH Council recalibrate and ensure policies and programmes continue to stay relevant and effective.

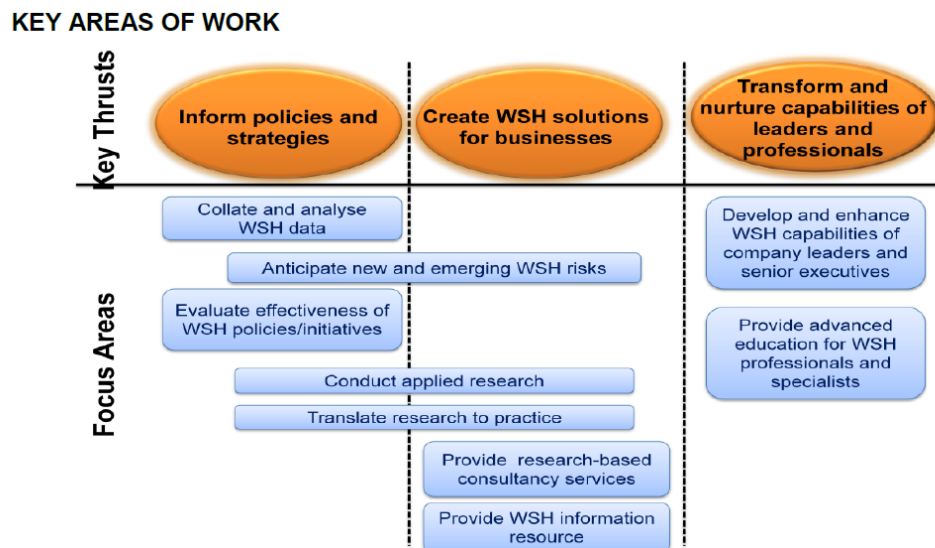


Businesses in Singapore can look to the WSH Institute for strategies and solutions to help them address WSH issues. In addition, the Institute will also work with the WSH Council to equip business leaders and WSH professionals with the competencies to better manage safety and health at their workplaces.

To realise our vision of a leading institute for WSH Knowledge and innovation and achieve the corresponding strategic outcomes, the Institute will adopt the following three key strategies:

- 1) Informing WSH policies and strategies;
- 2) Creating WSH solutions for businesses, and
- 3) Transforming and nurturing capabilities for leaders and professionals

Table 6: WSH Institute's Key Areas of Work



With effect from Apr 2012, WSH Institute came under the purview of the WSH Council. A nine member Governing Board, appointed by the WSH Council, was formed to provide governance to the WSH Institute. It consists of members from the industry, the labour movement, government and institutions of higher learning. The board will ensure that the Institute's work is relevant to the industry, government and workers, tapping on expertise distributed across organisations with the capabilities in research, education and training. The institute also taps on the advice of MOM's International Advisory Panel (IAP), which

comprises WSH experts from countries with similar but more mature set-ups. These include Germany, Korea, the United Kingdom and the United States.

4.4 Industry Associations and Professional Bodies

Besides the tripartite partners, various industry associations and professional bodies are regularly consulted in the formulation of policies or legislation. All proposed legislations are also posted on the internet via an e-consultation portal to solicit industry and public feedback.

These associations and professional bodies are also regularly involved in co-organising various outreach programmes, seminars and workshops for the industry.

4.5 Tripartite Coordination and Collaboration



A unique, co-operative tripartite mechanism amongst workers, employers and the government is long practised in Singapore. This approach has been successful in cultivating constructive workplace relations in Singapore. It has helped companies and the economy to grow, as well as create jobs for the workforce.

This mechanism has also proven useful in advancing WSH in Singapore. The tripartite partnership between MOM, together with Singapore National Employers Federation (SNEF) and National Trades Union Congress (NTUC), has been instrumental in bringing about close consultation and communication avenues between the government and representatives of employers and workforce on WSH issues. The formation of the WSH Council is expected to foster even greater coordination and collaboration between the regulator and the industry stakeholders.

5. Implementation of Workplace Safety and Health Strategy 2018: Means and Tools

To guide the future development of programmes and initiatives, the WSH 2018 Strategy: A Strategy for Workplace Safety and Health in Singapore replaced WSH2015 – A Strategy for WSH. WSH 2018 was crafted after extensive consultation undertaken by the MOM, the former WSHAC and other industry partners.

To realise our goals of having one of the best safety records in the world, the right mindset and attitude are needed at the workplace to reinforce the importance of WSH. WSH 2018 makes explicit the need to establish a progressive and pervasive safety and health culture as one of the four Strategic Outcomes. These outcomes set out our national targets for a world-class regime in WSH, articulate the characteristics that Singapore must demonstrate to become a Centre of Excellence for WSH and describe the behaviour that stakeholders must possess for a vibrant WSH culture to be integrated as a way of life.

The WSH 2018 Strategic Map

A National Strategy – WSH2018



A National Strategy For WSH In Singapore

Vision

A Safe and Healthy Workplace for Everyone
and a Country Renowned for Best Practices
in Workplace Safety and Health



Strategic Outcome 1
Reduction in Workplace
Fatality and
Injury Rates



Strategic Outcome 2
WSH is an
Integral Part of
Business



Strategic Outcome 3
Singapore is Renowned
as a Centre of Excellence
for WSH



Strategic Outcome 4
A Progressive and
Pervasive
WSH Culture



Strategy 1
Build
Strong Capabilities
to Manage WSH



Strategy 2
Implement
an Effective
Regulatory Framework



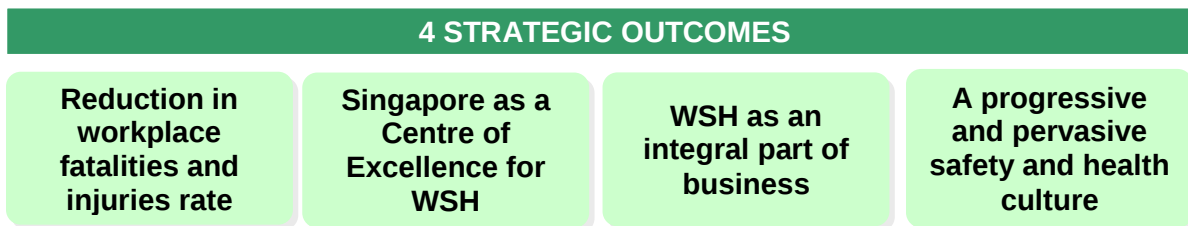
Strategy 3
Promote
Benefits of WSH
and Recognise
Best Practices



Strategy 4
Develop
Strong Partnerships
Locally and
Internationally

A Progressive WSH Culture to Sustain Improvements

Industry's heightened state of awareness and alertness towards WSH has resulted in better WSH performance since 2005. To sustain WSH improvements, the right mindset and attitude is needed at workplaces to reinforce the importance and emphasis on WSH. This will prevent complacency from setting in to the gains that have been achieved. Accordingly, in WSH 2018, the desired outcome of having a progressive and pervasive safety and health culture has been made explicit and added to the three strategic outcomes.



Strategies and Areas of Work

The strategies developed in WSH 2015 remain sound and further developed for WSH 2018. For greater effectiveness and efficiency, the detailed areas of work and initiatives would be enhanced to take into account the insights that have been gleaned during the implementation process. In addition, new areas of work have been added to better enable Singapore to realise the national vision and four strategic outcomes.

- a. Adopt differentiated approaches. Firstly, as each industry sector has its own landscape and unique WSH needs and challenges, it is crucial that MOM and WSHC deepen their understanding of the different sectors. This allows programmes to be specific and targeted, and ensures that interventions are deployed through the right channels. Secondly, the management of workplace health differs from that of safety because, unlike fatalities and injuries, the onset of an occupational disease may occur long after exposure to the hazard has ceased. The causes of ill health are also multi-factorial and can include exposures to health hazards outside the work environment. This poses difficulties in assessing whether the illnesses are work-related and whether reasonably practicable measures were taken to mitigate the risks to workers.
- b. Raise the stature and professionalism of WSH. WSH professionals help to manage safety and health at the workplace, and the demands placed upon them are increasing. Improving the stature and professionalism of WSH would attract the right talent to this field and enable them to better manage WSH. Management staff would also be equipped with the appropriate skills to lead WSH efforts in their organisations, so that businesses commit greater resources to safety and health.
- c. Make safety and health a way of life. This area of work directly impacts the strategic outcome of establishing a progressive and pervasive safety and health culture. We need to strengthen personal individual responsibilities such that every worker displays the right attitude and behaviour in WSH. This involves inculcating safety and health as a common value in all levels of the workforce, so that all

workers freely and routinely act safely on and off the job, without the need for external influences e.g. supervision or fear of being penalised.

d. Supplement enforcement efforts. More can be achieved by extending our efforts to all workplaces, especially the smaller ones. For example, we could harness external resources beyond those of MOM and WSHC by appointing third-party organisations to extend MOM's regulatory reach and WSHC's engagement efforts. To complement enforcement efforts, programmes to achieve sustained improvements would also be developed and greater on-site assistance would be offered to companies.

Further details of the initiatives can be found in the WSH 2018 Strategy.

This section outlines the implementation of the various means and tools to enforce, engage, promote as well as build capability to achieve safe and healthy workplaces. Further details are in the *WSH 2018 Strategy* document.

Strategy 1: Building Strong Capabilities to Better Manage Workplace Safety and Health

5.1 Risk Management

Risk Management is an area where we have made good progress in recent years. Organisations committed to managing risk in their business are better equipped to respond and recover from unplanned events that may have a serious impact on the business. The competency of Workplace Safety and Health Officers (WSHO) to help identify and assess risks, and prevent losses, provides for a resilient and competent organisation.

Risk Management (RM) Competency Requirement

The Risk Management competency of Workplace Safety and Health Officers (WSHO) was reviewed and arising from this, all registered WSHOs without a Specialist Diploma in WSH are required to pass a Risk Management test before securing a renewal of their WSHO registration. The requirement was designed to ensure the competence of WSHOs in RM and RM regulations.

To prepare WSHOs for the test, a 2-day refresher "RM Course for WSH Officers" was developed and offered at Ngee Ann Polytechnic and Singapore Polytechnic.

5.2 WSH Culture



CultureSAFE Programme

Developed by the WSH council in Sep 2012, the CultureSAFE programme guides companies to develop a progressive and pervasive WSH culture at their workplaces. The programme comprises a unique WSH culture model and index system complete with methodical diagnostic instruments to gauge an

organisation's WSH culture. Participating organisations could then formulate appropriate plans and implement suitable initiatives to enhance their WSH culture's attributes and dimensions based on their CultureSAFE's diagnostic results. By end 2013, about 150 companies have signed up for the programme.

- **Culture Fund:** An \$8 million WSH Culture Fund was set up to help SMEs implement the CultureSAFE programme. On 1 Oct 2013, the proportion of costs that SMEs can claim from the fund to implement CultureSAFE was revised from 70% to 90%, with the cap limit remaining at \$30,000 for each SME. SMEs can use the fund to cover both consultancy and implementation costs.
- **Breakfast Dialogues:** To promote the adoption of CultureSAFE programme, three Breakfast Dialogues have been organized for companies from the Chemical, Construction and Manufacturing sector in Mar, Jul and Oct 2013 respectively. Reputable industry leaders were invited as guest speakers to share the challenges and benefits of their WSH culture building journey.

Moving forward, we will see more organisations embark on WSH culture building as WSH Performance Award applicants come onboard the CultureSAFE programme. This is in line with a growing focus on WSH culture as it will form part of the evaluation criteria in naming the coveted WSH Performance Award Winners.

5.3 Competency Development

In tandem with the WSH Professionals Workforce Skills Qualification (WSQ) framework to raise the level of WSH practice in Singapore, various enhancements to the industry curriculum were introduced to enhance the WSH capability, stature and professionalism.

Enhancing Competencies and Capabilities for Work at Heights Safety

To help the industry ensure that their personnel are adequately trained with the skills and knowledge needed to be competent to work safely at heights, the following initiatives were ushered in 2013:

- **Launch of Work at Heights (WAH) Courses**

A total of four Work-at-Height courses were launched in 2013. They were the WAH Course for Workers, Supervisors, Assessors and Managers. Besides imparting technical knowledge and skills, these courses also expound on the role played by each level of personnel in the organisation in ensuring the effective implementation of appropriate and suitable measures to prevent any person from falling from heights while at work.

- **Train the Trainer (TTT) Course for WAH**

A "Train the Trainer" course that was specially developed to prepare all accredited trainers of WAH courses was launched in Mar 2013. The TTT WAH course aimed to equip all trainers with a comprehensive suite of practical fall prevention and protection measures including the use of the latest personal fall arrest system. It also served to ensure consistency of standard among the trainers when delivering WAH training for the benefit of the industry.

- **Launch of the 2-day CSOC incorporating WAH Elements**

Falling from heights raked the highest number of fatalities in the Construction Industry in 2012. The enhanced Construction Safety Orientation Course (CSOC) was targeted to help bring about the change by including WAH elements in its course curriculum such as practical training for working on sloping roof and the proper application of proper Personal Protective Equipment. With the enhancement, the CSOC was increased from a 1-day course to a 2-day course with effect from 1 May 2013. The aim was to provide the necessary safety training to all construction workers and to inculcate good and safe work practices in them.

Enhancing Competencies and Capabilities for Crane Safety

To help the industry ensure that their personnel are adequately trained with the skills and knowledge needed to be competent to operate cranes safely, the following initiatives were ushered in 2013:

- **Training Course for Appointed Persons for Lifting Operations**

Singapore Standard SS 559:2010, Code of Practice on Safe Use of Tower Cranes, stipulates requirement for an Appointed Person (AP) to establish and implement a program for the safe installation, dismantling and use of the Tower Crane. The Workplace Safety and Health Council's Code of Practice on Safe Lifting Operations in the Workplaces also stipulates the inclusion of an AP for complex lifting operations. As a capability building initiative for Appointed Persons, the National Crane Safety Taskforce, in collaboration with MOM and WSHC and working with the UK's Lifting Equipment Engineers Association (LEEAA), IES and BCA Academy launched a pilot 5-Day training course on Appointed Persons for Lifting Operations in May 2013.

- **Practical Workshop for Lifting Personnel**

A hands-on pilot Practical Workshop for Lifting Personnel was launched at the Inaugural Crane Carnival Singapore 2013 on 17 Nov 2013. The workshop, held at BCA Academy, was intended to provide practical lessons and demonstration on good lifting practices in an interactive and engaging setting. The workshop intends to provide a platform for continual learning for lifting teams.

bizSAFE Programme

In Singapore, small and medium enterprises (SMEs) with annual sales turnover of not more than S\$100 million or less than 200 employees account for about 99% of the total enterprises. In view of this, the WSH Council launched the bizSAFE programme in 2007 to guide participating SMEs through a five-step approach to raise their WSH management capabilities.

Larger organisations with strong WSH capability and leadership were enlisted as mentors and partners. bizSAFE Partners help to raise overall industry WSH standards by encouraging their contractors and vendors to participate in bizSAFE while bizSAFE Mentors share their best practices and systems to guide participating bizSAFE enterprises on their WSH journey. Today, many large companies have since imputed WSH criteria into their procurement exercise to ensure that their projects and production could be better managed with less unnecessary downtime due to incidents.

As of 31 Dec 2013, there are 16,940 bizSAFE Enterprises, 309 bizSAFE Partners and 17 bizSAFE Mentors participating in the bizSAFE programme.

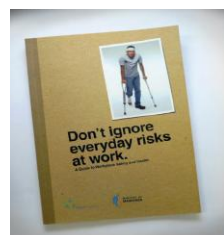
Risk Management Assistance Fund (RMAF)

MOM introduced the RMAF in Apr 2006. The RMAF was intended to help SMEs defray the cost of engaging consultants to conduct risk assessments and to build in-house capability in risk management. Every SME that had benefitted from RMAF have implemented acceptable Risk Management and have since progressed to bizSAFE level 3 or higher.

As of 31 Dec 2013, the RMAF has disbursed \$22.05 million to 4,310 SMEs, with an additional \$1.34 million already committed to help another 429 SMEs.

5.4 Practical Assistance

To help industry keep up-to-date with the latest WSH initiatives and best practices, a wide array of resources including technical advisories, videos, guidebooks and special kits, are made available to businesses. Some of the guidance materials are the result of a collaborative effort amongst the stakeholders, industry associations and regulatory agencies.



The table below shows a list of publications published in the past year by the WSH Council for the various industries. These materials are often a result of collaborative effort with key industry players.

Title of Publication
Code of Practice for Working Safely at Heights (Second Revision)
Code of Practice for Safe Lifting Operations in the Workplaces (Second Revision)
Workplace Safety and Health Guidelines - Investigating Workplace Incidents for SMEs
Chemical Industry Case Studies
WSH Guidelines on Hospitality and Entertainment Industries
WSH Guidelines on Workplace Traffic Safety Management
Forklift Safety Pack
Kitchen Safety and Health Pack
Activity-Based Checklists
Tentage Safety Industry-Based Checklist

All of these resources are available for download at the following Link:
<https://www.wshc.sg/wps/portal/resources?action=infoStopHome>

5.5 Competency Delivery

Working hand-in-hand with our WSH training service providers, we ensure the effective delivery of WSH training and competency courses on a curriculum that is validated against best industry practices. This will help to add and maintain the competency of employees' host of skills and knowledge as they are expected to perform to an industry standard on a regular basis.

- **Requirement of full Advanced Certificate in Training and Assessment (ACTA) for all Trainers**

As part of the ongoing efforts to up skill and improve the quality of accredited trainers, MOM and WSHC have mandated the pre-requisite for all trainers to complete and attain the full 6 Competency Units of WSQ ACTA by 2014.



Audit of Accredited Training Providers (ATP)

A total of more than 40 ATP audits were carried out throughout 2013. It also included audits on new ATPs embarking on the new 2-days Construction Safety Orientation Course which encompass the Work-At-Height components. More than 40% of the total audits conducted were attributed by investigation cases arising from complaints, whistle blowers and feedback from trainees. The audits outcome resulted in 9 ATPs issued with warning notifications, 3 ATPs issued with suspension ranging from 2 to 4 weeks while 2 ATPs had their ATP status cancelled due to integrity and fraud. Some of the common findings include failure to adhere to the stipulated training hours, providing answers to trainees and using of unapproved trainers to conduct MOM accredited courses

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 Jul 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.

5.6 Broadened Base of WSH Statistics

We have also made good progress in broadening the base of our WSH statistics in recent years. In 2006, the WSH (Incident Reporting) Regulations were introduced, extending the requirement to report workplace fatalities, injuries, occupational diseases and dangerous to all workplaces.

Under-reporting is an issue confronting many countries, including Singapore. Moving forward, we will explore mechanisms to enhance reporting rates. This will ensure that reported statistics reflect the actual situation and risks on the ground and ensure the effectiveness of our interventions. We will also work to broaden the base of WSH statistic further, particularly in terms of leading indicators for WSH such as exposure data and near misses.

5.7 Incident Investigation

MOM investigates into fatal workplace accidents, and other serious accidents such as dangerous occurrences and workplace accidents resulting in permanent disabilities. The investigations uncover the root cause(s) of accidents including systemic lapses. The investigation outcomes can guide the development and implementation of effective control measures and systemic interventions to prevent recurrences.

Critical findings and lessons learnt from accident investigation are disseminated to various industry stakeholders. MOM works closely with the WSH Council to come up with publications in the form of downloadable documents, travel-sized booklets and videos which are made readily available to the industry.

5.8 WSH Institute

As part of our endeavour to establish Singapore as a Centre of Excellence for WSH, we have developed an institute dedicated to WSH that will provide advanced education, knowledge, solutions and consultancy services, and conduct applied research. This includes research on new and emerging WSH hazards unique to Asia, as well as the adaptation of international best practices on WSH to the Asian context. The institute will tap on the expertise of other local organisations and international WSH institutions to achieve its objectives.

Strategy 2: Implementing an Effective Regulatory Framework

5.9 Legislative Review

It is our prerogative to keep up with industry development and remain relevant to its practices. Hence, the government will continue to review legislation from time to time to bring industries to better focus and implementation on standards of health and safety.

Active Review and Industry Consultation

With the enactment of the WSH Act on 1 Mar 2006, subsidiary legislation made under the previous Factories Act continues to remain in force. This is by virtue of the transitional provision prescribed in section 66(14) of the WSH Act. In consultation with the industry, MOM has been actively reviewing the remaining subsidiary legislation in 2013.

- **WSH (Medical Examinations) Regulations**

In the past, persons employed in the vector control industry were required to undergo medical examinations under NEA's Control of Vectors and Pesticides (Regulations, Licensing and Certification) Regulations.

With the extension of the WSH Act to all workplaces in 2011, the medical examination of persons in the vector control industry need to be regulated by MOM. This is being done with the amendment to the WSH (Medical Examinations) Regulations. The amended regulations were gazetted and came into operation on 1 Jan 2013.

- **Work Injury Compensation (Workers' Fund) Regulations**

Under the Work Injury Compensation Act (WICA), a worker who contracted an occupational disease (OD) would be eligible for WICA compensation so long as the worker:

- (a) had been engaged in the occupational activity specified in the Second Schedule of WICA; and
- (b) had been diagnosed with the OD during his employment in this activity or with the time-bars specified in the Schedule.

However, there are some ODs with long latency periods such as asbestosis, mesothelioma, and silicosis, etc. which would exceed their time-bars, resulting in the injured worker not being able to receive compensation under WICA.

To provide financial aid to worker contracted with long-latency ODs, the WIC (Workers' Fund) Regulations were amended to allow the use of the Fund's monies to assist the worker or, in the event of his death, any of his dependants, to defray medical expenses incurred by or on the behalf of the worker. The amendment took effect from 1 Jul 2013.

- **Workplace Safety and Health (Incident Reporting) Regulations and Work Injury Compensation Regulations**

Previously, errant employers had been gaming the accident reporting system by asking doctors to split up the medical leave of injured employees such that it does not exceed 3 consecutive days. Such errant practices not only affected the injured employee's recovery process, but also the integrity of the incident-reporting framework.

From 6 Jan 2014, the WSH (Incident Reporting) Regulations and the Work Injury Compensation Regulations were amended to require employers to report all accidents to the Ministry of Manpower which render their employees unfit for work for more than 3 days, even if these are not on consecutive days.

Additionally, employers must also report work-related traffic accidents involving their employees. This would send a clear signal to employers that they need to better manage traffic safety and also allows for MOM to better track work-related traffic accidents.

- **WSH (Asbestos) Regulations**

The WSH (Asbestos) Regulations were drafted to replace the Factories (Asbestos) Regulations. The Factories (Asbestos) Regulations was enacted in 1980 to protect workers from exposure to asbestos in factories which use or manufacture asbestos products. The law requires persons undertaking any process involving asbestos in a factory to notify the Chief Inspector of Factories (now Commissioner for Workplace Safety and Health) before the commencement of work. It also specifies measures to reduce asbestos exposure. The Factories (Asbestos) Regulations were last amended in 1989 to require contractors, employers and occupiers to take reasonable steps, which include analyzing the materials, to ascertain whether any process in the factory involves asbestos.

- **Revocation of Factories (Person-In-Charge) Regulations & Factories (Certificate of Competency – Examinations) Regulations**

Advancement of technology in automatic control and monitoring devices enhances the safety of internal combustion engines (ICE) and steam boilers by ensuring that they operate within safe limits. In view of this technological advancement and to align with the overarching WSH legislative framework, OSHD conducted a review of the regulatory framework for the operators under the Factories (Persons in Charge) Regulations and Factories (Certificate of Competency-Examinations) Regulations. The review led to the revocation of these Regulations in which MOM ceased to license the operators by transiting from a licensing to a competency-based regime.

New WSH Subsidiary Legislation

- **WSH (Work at Heights) Regulations**

Fatalities while working at heights, especially due to falling from heights have been the top contributors of workplace fatalities and have accounted for more than one-third of all workplace fatalities over the past years. Therefore, work at heights safety is a critical area that we must focus on in our efforts to reduce workplace fatalities.

In Apr and May 2012, OSHD engaged the members of the National Work at Heights Safety Taskforce and the Industry Committees of the Workplace Safety & Health Council to tap on their industry experience and gather feedback and suggestions on the legislative requirements for WAH. A public consultation exercise on the proposed WSH (Work at Heights) Regulations was undertaken. For key industry stakeholders, a Focus Group Discussion (FGD) was also held to allow interactive engagement and deliberation on the proposed regulations.

The Regulations put in place a systematic and rigorous regulatory structure to ensure proper execution of control measures and safe work procedures for WAH. The key features include establishment of a fall prevention plan, implementation of a permit-to-work system for WAH and legislative requirements governing the use of industrial rope access system. The Regulations were gazetted and came into operation on 1 May 2013.

5.10 Strategic Intervention

To prioritise efforts and focus on areas that matter most, resources have to be deployed strategically. Targeted interventions such as the Programme-Based Engagement (ProBE) initiative and the Business Under Surveillance (BUS) Programme ensure that priority areas are addressed.

Targeted Enforcement Operations

- **Operation Skylark 2013**

Crane Safety continued to be an enforcement priority for OSHD in 2013. A specialized enforcement operation “Operation Skylark” was launched by the Engineering Safety Branch. The island-wide blitz commenced from Jul to Sep 2013, covering 90 worksites and focusing on lifting operation of mobile cranes, overhead travelling cranes and gantry cranes. Errant companies were subjected to stringent legal actions for contravention of the various regulations. Key findings of the enforcement operation were shared with the Industry at the Crane Symposium held on 29 Oct 2013.



- **Operation Peregrine**

Operation Peregrine, a series of intensified Workplace Safety and Health (WSH) inspections which targeted safety lapses in the construction industry, was conducted from mid Aug to Sep 2013. Unsecured openings without barricades, unsafe scaffolds, and poor housekeeping conditions continued to be the main

areas of construction work that were found to have safety lapses from Operation Peregrine inspections.

A total of 191 inspections were conducted, resulting in 15 Stop-Work Orders and over 700 fines and Notices of Non-Compliances issued to errant companies.



- **Operation Flamingo**

Following Operation Peregrine, another series of intensified Workplace Safety and Health (WSH) inspections named Operation Flamingo, was also conducted over a period of two weeks in Oct 2013. This operation focused on scaffold safety, formwork safety, excavation and work at heights in the construction industry.

A total of 268 inspections were conducted, resulting in 5 Stop-Work Orders and over 300 fines and Notices of Non-Compliances issued.



Regular Inspections and Audit Checks for Work Injury Compensation (WIC) Insurance Compliance

WIC Act requires all employers to maintain adequate WIC insurance for (i) all employees doing manual work, regardless of salary level; and (ii) non-manual employees earning \$1,600 or less a month. This insurance requirement is to help employers meet their WIC Act liabilities in the event of an accident, so that injured employees who are in this more vulnerable group are assured of compensation.

For other employees doing non-manual work with monthly earnings of above \$1,600, employers can decide whether or not to buy insurance for them. In the event of a valid claim, the employer will still be required to pay the compensation even if there is no Insurance coverage for this group of employees.

The Ministry conducts regular inspections and audit checks to ensure that proper WIC insurance coverage is maintained. WICD has engaged AEA Inspectors to check on valid WIC insurance coverage provided by companies for its employees as part of their

workplace inspections. The purpose was to augment WICD's reach for inspecting companies to ensure adequate insurance coverage is maintained. It is a good platform for WICD to ensure employers' compliance of the WIC requirement and raise the awareness of maintaining proper WICA insurance coverage for their employees.

Tightening WIC Investigations and Enforcement Actions

On top of regular Inspections and audit checks to encourage WIC Insurance Compliance, WICD is also tightening its investigative efforts and carrying out stronger enforcement actions against errant employers and employees who flout the law or game the overall WIC system so as to provide adequate deterrence.

This would include blacklisting/debarring employers from hiring foreign workers for various offences such as employer wilfully giving false statement to jeopardise his injured worker's claim, failure to pay injured worker's compensation, non-reporting of workplace accidents and/or failure to maintain proper insurance coverage.

Cluster Operations

Cluster Operations (COPS) is an inspection programme where specific clusters are selected based on ground intelligence and inspected over a specified period of time. It is based on the approach where we leverage on the media to achieve a multiplier effect for our enforcement efforts thereby optimizing enforcement resources. Under this programme, information on the selected sector, nature of work or geographical locations targeted for inspections are announced prior to the actual inspections. The media may be invited to participate in some of these inspections. After the inspection blitz, typically lasting for about a month, findings from the operations are publicised and shared with the industry, as well as with other stakeholders, such as developers or industry associations.

Demerit Point System

The Demerit Point System (DPS) was introduced in 2000 to encourage construction contractors with poor WSH records to improve on their performance. They will receive a warning if they accrue more than 18 demerit points across all their worksites in a 12 month rolling period. If any of their worksites accrue a further 18 points, the worksite will be barred from hiring foreign workers.



Business under Surveillance

The Business under Surveillance (BUS) programme is a targeted enforcement programme that targets poor performing companies for close surveillance. Companies on the BUS programme would have typically recorded serious accidents, attracted numerous enforcement actions such as Stop Work Orders, or were warned under the Demerit Point

Scheme. The programme is designed to help these companies raise their WSH standards to a sustainable level so that they can effectively manage the risks associated with their work activities.

In 2013, BUS helped to address the systemic weakness of more than 55 companies.

Accident Investigations

Accident investigations are another key pillar in OSHD's regulatory framework. OSHD strongly believes that learning from past accidents and mistakes is critical in driving WSH improvements. We will carry out investigations of serious workplace incidents, such as fatalities and dangerous occurrences. The investigations aim to uncover the root cause(s) of the incidents so as to guide the development and implementation of effective control measures and systemic interventions to prevent recurrence.

Licensing

OSHD leverages on licensing as an enforcement tool to control access to activities deemed to have a significant impact on WSH in Singapore. Licences fall into five broad categories:

- Factory Notification & Registration;
- Licensing for Equipment;
- Licensing for Equipment Operators;
- Licensing for Safety Professionals; and
- Licensing for Service Providers.

Under our licensing framework, stakeholders must demonstrate sufficient levels of competency before they are allowed to perform the controlled activities. They are also expected to maintain their competency levels through participating in activities like attending courses or engaging firms to conduct independent audits of their WSH Management Systems at regular intervals. Licensing criteria and conditions are reviewed regularly to ensure their relevance to industry WSH developments, and the licensed organisations and persons continue to possess knowledge and skills that meet industry needs. For example, amendments were made to the Accredited Training Provider Terms and Conditions to strengthen assessment systems and processes, improve accountability and clarify ambiguities.

Competent organisations and persons that do not comply with WSH legislations or terms and conditions of registration may have their licenses suspended or cancelled. In 2013, 20 competent organisations or persons received various forms of penalties, including official warnings, suspensions or cancellations for non-compliance.

5.11 Enhancing Self Regulation

In a climate of self-regulation, organisations need to integrate and internalise health and safety measures into their business activities. We endorse the support of industry and trade associations to help increase self-monitoring and ownership of processes and procedures that lead to better health and safety at the workplace.

5.12 Differentiated Regulatory Approach for Workplace Health

The Workplace Health (WH) strategy aims at helping stakeholders recognise the importance of a healthy workplace and proactive measures to improve their management of WH hazards.

Noise Induced Deafness Prevention Programme

Noise-induced deafness (NID) has been the most prevalent occupational disease in Singapore, accounting for about 80% of occupational diseases. The Noise-Induced Deafness Prevention Programme (NIDPP) was launched in 2007 aiming to manage workplace noise hazard, and reduce NID incidence. Since then, more than 500 workplaces have been identified to have excessive noise and placed under the programme. These identified workplaces are required to put in place an in-plant hearing conservation programme (HCP) to conserve the hearing of persons who are exposed to excessive noise. The HCP has five key elements viz noise monitoring, noise control, hazard communication, medical surveillance and hearing protection. A set of HCP Guidelines has been developed to provide guidance on HCP implementation. As a result of targeted interventions, many workplaces have eliminated or controlled noise hazard. To date about 370 workplaces remains in the programme,

With the enactment of the WSH (Noise) Regulations 2011, the HCP Guidelines were revised in 2013 to provide updated information on noise monitoring, noise exposure assessment, noise report submission, and duties of persons conducting noise monitoring.

Management of Hazardous Chemicals Programme

Launched in 2011, the Management of Hazardous Chemical Programme (MHCP) aims to prevent and control chemical hazards, and to protect persons at work against such hazards. The ultimate objective is to prevent illnesses, diseases and injuries resulting from exposure to hazardous chemicals. One of the targeted outcomes of MHCP is 95% of workplaces inspected have implemented an in-plant hazardous chemical management programme by 2018. The key elements of the programme are: hazard communication (labelling and safety data sheet), hazard assessment and control (in respect of storage, handling and disposal of chemicals), training and education, workplace monitoring and medical surveillance, personal protection and emergency response.

Implementation of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is a hazard communication system of chemical through standardised classification of chemicals, labelling of containers and preparation of safety data sheets. The implementation of GHS in Singapore is coordinated by a multi-agency GHS Task Force comprising representatives from nine relevant regulators (MOM, MTI, NEA, SCDF, SPF, MPA, AVA, CAAS and HSA), two industry councils (WSHC and SCIC) and SISO. Co-chaired by MOM and SCIC, the Task Force held regular meetings to deliberate on GHS implementation through five key strategies (viz promoting GHS, building industry capability, engaging stakeholders, establishing regulatory framework, developing strong partnerships).

National Asbestos Control Programme

Asbestos is a hazardous substance of worldwide concern. The National Asbestos Control Programme was initiated with an objective to protect persons against asbestos and

eliminate asbestos-related diseases. In Singapore, the import and use of asbestos in buildings was banned in the late 1980s. However, asbestos-containing materials still exist in old buildings and structures. Notification of work involving asbestos materials is mandatory under the Factories (Asbestos) Regulations. In 2013, 251 notifications were received by MOM and strict control measures were imposed for asbestos removal work. 15 non-notification cases were investigated with 10 composition fines issued for non-compliance with the regulations.

The Factories (Asbestos) Regulations was being reviewed (with extensive consultation with industry and stakeholders) to enhance protection of persons against asbestos. The new set of regulations which will be gazetted as the Workplace Safety and Health (Asbestos) Regulations, will take effect on 1 May 2014.



Confined Space Management Programme

The Confined Space Management Programme (CSMP) aims to prevent deaths and injuries in confined spaces from gas poisoning, asphyxiation, fire and explosion through enhanced confined space hazard management in targeted workplaces. Under the WSH (Confined Spaces) Regulations 2009, gas testing of the atmosphere of a confined space must be carried out by a competent person (designated as confined space safety assessor) and the confined space must be certified safe before entry into the space is allowed. A confined space safety assessor must have sufficient training and experience to perform the work required to be carried out under the law. Similarly person entering or working in a confined space must have first received adequate safety and health training before such entry or work.

5.13 Extended Enforcement Reach

To ensure that MOM's enforcement resources are utilised strategically, we can explore other avenues to complement our enforcement efforts. This can include the active engagement of the public to spot and report unsafe acts and conditions.

Auxiliary Enforcement Agency (AEA)

The utilisation of AEA's services complements OSHD's enforcement efforts and extends its reach to low risk sectors that are not covered by our own inspectors at OSHD. AEA inspectors are trained to perform inspections of low risk workplaces and hence allowing OSHD to optimise resources by deploying its own inspectors strategically, focusing enforcement efforts on the higher risk and more critical sectors.

Since the engagement of AEA from May 2011, OSHD observed good compliance rates in the workplaces visited. The visits conducted by AEA helped to foster an increased awareness of OSHD's enforcement presence in the industry and inculcate mindsets towards safer and healthier workplaces.



Joint Inspections

OSHD also conducts workplace inspections together with other divisions within the Ministry of Manpower and with external agencies such as Energy Market Authority and Housing Development Board. These joint inspections form a basis for leveraging on the knowledge and experiences of the entities involved, and allow for information sharing and better understanding of the requirements of different departments and agencies. Joint inspections also ensure that the safety and health standards required by each agency are aligned such that the required benchmark on safety and health is achieved.



5.14 Resolution of Systemic Lapses

We need to move beyond rectifying physical risks or violations to identifying systemic lapses that can potentially cause more accidents in the future at both the industry and company level. Through the continual and active sharing of such information, business exposed to similar risks will be aware of the dangers and can adopt precautionary measures.

Strategy 3: Promote Benefits of WSH & Recognise Best Practices

5.15 Recognition

We will continue to refine the WSH recognition framework to encourage widespread participation and improvement in WSH standards. This framework must be attractive to SMEs, and ensure that their efforts and improvements in WSH are not overshadowed by bigger and better-resourced companies. Early adopters and individuals with significant WSH contributions should also be recognised for their safe behaviours and related efforts.

Workplace Safety and Health (WSH) Awards 2013

The WSH Awards celebrate and recognise companies and individuals on a national level for excellence in WSH. Jointly organised by the WSH Council and the Ministry of Manpower (MOM), the Awards ceremony was held on 30 Jul 2013 at Marina Bay Sands. 192 award winners were honoured at the ceremony. Guest of Honour Dr Amy Khor, Senior Minister of State for Health and Manpower, congratulated the winners and highlighted the need for change to raise WSH standards. She noted that it was time to put equal emphasis on workplace health as workplace safety to better protect the ageing workforce.



bizSAFE Convention 2013

The bizSAFE Convention 2013 was held on 22 Feb 2013 at the Grand Copthorne Waterfront Hotel. Themed “Invest in WSH for Business Success,” the Convention provided opportunities to Small and Medium size enterprises (SME) to learn from the bizSAFE community about their successful WSH journeys.

The Convention opened with a plenary session with Mr Tan Chuan-Jin, Acting Minister for Manpower and Senior Minister of State for National Development as the Guest-of-Honour. While explaining how safety can contribute to business success through productivity, operational efficiency and reputation, he urged business leaders and supervisors to focus on safety because every worker has the right to go home safely and it is the right thing to do.

bizSAFE Awards 2013 were presented to 11 bizSAFE companies to recognise their commitment and effort in creating a safe and healthy environment at their workplaces through sound and effective management of WSH risks. Close to 800 participants attended the Convention, of whom more than 50% were non bizSAFE members. This was testament to the industries’ continuous commitment to WSH and the growing WSH awareness among newer industries.



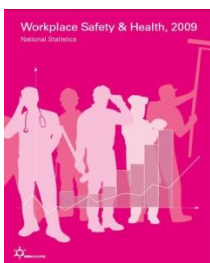
5.16 Information Dissemination & Hazards Communication

The WSH Council has created a variety of platforms and tools to date to alert and inform industry of key WSH issues of interest such as accident statistics and trends at the national and industry levels, and WSH best practices locally and abroad.

Annual National Workplace Safety and Health Campaign

The annual National Workplace Safety and Health (NWSH) Campaign is the signature WSH event which seeks to promote the WSH culture in all Singaporeans. Currently in its ninth year, the three-month event is akin to a period of sustained festivities and carnivals, with companies holding in-house activities (often with business stakeholders) to celebrate annual WSH performance and milestones, as well as to renew their pledge for WSH. These events also provide an opportunity for companies to raise awareness of both broad and specific WSH issues.

The WSH Council leads the campaign every year by bringing together the tripartite leaders to renew their pledge at each campaign launch. Each NWSH Campaign would also feature a chosen theme with activities which were then cascaded to industry-wide participation.



WSH reports, statistical findings, guidelines, case studies and other relevant documents are jointly published by the WSH Council and MOM. The WSH Council also leveraged on a variety of platforms and tools to provide industry stakeholders with an overview of the WSH

performance at the industry and company levels, as well as for the purpose of disseminating and promoting WSH awareness.



iWSH Portal

The corporate website of the WSH Council serves both as a one-stop resource for WSH-related publications and news, as well as a platform for the delivery of services, such as for registration for events and assistance programmes. The WSH Council also maintains an email advisory service to provide specialist and customised WSH solutions and advice to address concerns raised by stakeholders and public.

WSH Bulletin

The WSH Council also disseminates the “WSH Bulletin” - a free email newsletter to broadcast WSH-related messages and generate awareness of WSH issues. Sent on average two or three times weekly, the WSH Bulletin provides an important channel in keeping the 15,000 subscribers informed of learning points from accident case studies, legislative and policy changes, and WSH conferences, seminars and courses.

WSH reports, statistical findings, guidelines, case studies and other relevant documents are jointly published by the WSH Council and MOM to provide the public with an overview of the WSH performance at the industry and company levels, as well as for the purpose of disseminating and promoting WSH awareness.

5.17 Grading of Safety and Health Management Systems

As more organisations are obliged to implement and maintain a safety and health management system, our various grading schemes in place will help the firms assess the effectiveness of their systems and to improve their WSH management.

Enhancing Standards of WSH Auditors

WSH auditors play a key role in improving WSH standards and hence it is important to maintain a pool of auditors with high standard of competency. OSHD has revised the requirements for approval of WSH auditors and is working towards a single category scheme of WSH auditors instead of the current “Open category” and “Restricted category”. Existing “Restricted category” WSH auditors would be required to complete the WSQ Framework Level D and undergo observation audit assessment by OSHD before they would be considered for approval as WSH auditors under the impending single category WSH Auditor Scheme.

5.18 Outreach and Education

In recent years, we have made great strides in taking the WSH message beyond traditional audiences such as workers in riskier industries, and bringing it to the general workforce and the public.

Promote Awareness and Adoption of Design for Safety (DfS)

Design for Safety is a holistic and multi-disciplinary approach to integrate safe construction, safe maintenance and safe demolition at the start of the project from conceptual design stage onwards. 2013 saw a number of joint industry events to promote awareness and adoption of ‘Design for Safety’ so that risks identified from the design stage and during construction are recorded and transparent to all relevant parties involved in the project. Two key industry events included:

(i) International Conference on WSH for Construction Industry

The 2nd International Conference on Workplace Safety and Health (WSH) for the Construction Industry was held at BCA Academy on 13 and 14 Aug 2013. This conference was organized by IOSH (Singapore) in collaboration with BCA Academy and WSHC, with DfS as one of the main themes.

(ii) WSH Workshop on Design for Safety of Skyrise Greenery

The WSH Workshop on Design for Safety of Skyrise Greenery was well attended by more than 200 stakeholders from the building, facilities management and landscape sectors. Organised by WSHC and NParks, the event was part of the International Skyrise Greenery Conference 2013, which was held on the Nov 7-9 2013 alongside GreenUrbanScape Asia. A local project, Treehouse, was featured followed by a workshop conducted by Dr Michael Behm, Associate Professor, Occupational Safety, East Carolina University.

Programme-Based Engagement (ProBE) Plus 2013



“Targeting where in matters” is a key driver for developing the programs and initiatives. The national ProBE Plus framework aims to reduce the key contributors of workplace fatalities and injuries, which is validated through calibrated enforcement and engagement with industry.

The ProBE Plus framework consists of 3 key phases mainly the industry Intel phase, the engagement and communication phase and finally the monitoring and enforcement phase. For 2013, ProBE Plus has identified Work-at-Heights (WAH) and Crane Safety as its key focus areas based on key accident trends in the previous year. Under WAH, ProBE Plus focused on a) Falls from Roofs, b) Falls from Structures, c) Falls from Mobile Elevated Work Platforms and Scaffolds and d) Falls from Ladders.

Safety Compliance Assistance Visits (SCAV)



The Safety Compliance Assistance Visits (SCAV) programme is a key initiative under the National WAH safety taskforce, which involved appointed WSH professionals to visit and provide onsite compliance assistance to small worksites.

800 SCAV visits have been conducted in 2013. So far, a total of more than 3,000 SCAV visits have so far been conducted and more than 10,000 supervisors and workers onsite have been engaged through SCAV since inception.

Fostering a Trusted Work Injury Compensation (WIC) System

One other focus for the year for WICD was to correct misconceptions and foster trust in the WIC system. For instance, one misconception is that some workers perceive that a lawyer is required in order to claim work injury compensation, while some are not clear on the assistance that the Ministry provides to file an injury claim under WICA Act (WICA). To strengthen the understanding of WICA, various education and outreach programmes were rolled out to reach out to workers and their employers on WICA rights and obligations, and that they should approach MOM on their WIC issues.

- **WIC Guidebooks for Employees in 7 languages**

In particular for the segment of foreign workers who may not be conversant in English, WICD has translated its WICA materials into various native languages. In addition to the English version, the employees' guide has been translated into 7 languages common among the foreign community within Singapore. They include Chinese, Malay, Tamil, Bengali, Hindi, Myanmar and Thai.

- **Dedicated Interpreters**

Dedicated interpreters are also provided onsite so that any issue that the foreign worker may face can be better understood for resolution.

- **Comic Strip**

MOM has produced comic strips to illustrate in a light-hearted way to convey the message that MOM is there to help with employees' work injury compensation claims for free.

- **Monthly WSH Bulletins**

WICD also publishes monthly WSH bulletins to educate employers on their work injury compensation issues. Presented in a condensed, easy-to-understand manner, the bulletins cover a wide range of issues including employer's obligations to ensure the safety and well-being of their employees, claim process and case studies of prosecution under the WICA.

WSH Bulletin is a free electronic newsletter published by the Workplace Safety and Health (WSH) Council. Emailed to subscribers 2 to 3 times weekly, the WSH Bulletin keeps WSH professional and interested stakeholders updated on local and international WSH-related matters and developments.
To subscribe visit: <https://www.wshc.sg/>

WSH Institute Forum on "The Next WSH Frontier"

More than 300 professionals attended the forum at the Furama City Centre Hotel on 11 Sep 2013 to hear 7 international WSH thought leaders and experts speak on their insights and their respective countries' experiences and challenges in the growing international movement of 'Vision Zero' to drive improvements in WSH outcomes.

Dr Walter Eichendorf, Deputy Director General of German Social Accident Insurance presented "Vision Zero – A strategy for safety and health at work and on the road" while

Mr Kevin Myers, Acting Chief Executive, Health and Safety Executive (HSE) from United Kingdom presented "Building the London Olympics 2012 – How this was achieved with an exemplary OSH performance including zero fatalities."

5.19 Driving Improvements through Large Organisations

Large companies can make a big impact in creating a strong safety and health culture in the industry sectors they are in. Such companies can serve as role models and mentor other companies in implementing best WSH practices and systems. They can also use their commercial influence to shape the WSH culture of their suppliers and sub-contractors along the value chain. This will create strong business incentives for the smaller companies to raise their WSH standards.

5.20 Business Case and Accident Cost Measurement

Being able to understand the business case for WSH and estimate the true cost of accidents will better motivate employers to achieve good WSH outcomes. We will continue to conduct research on accident costs and establish tools to measure such costs. Such tools can be used to help companies assess the usefulness of WSH control measures and allow them to make better informed business decisions. We will also continue to explore means of strengthening the business case for WSH, such as creating a stronger linkage between insurance premiums and WSH performance.

Economic Cost of Work-related Injuries and ill-health in Singapore

The WSH Institute initiated a study in Nov 2012 to better understand the economic impact of work-related injuries and ill-health on employers, employees and the community for the year 2011 to provide additional impetus for all stakeholders to reduce work injuries and ill-health.

Findings revealed that the estimated total economic cost was S\$10.45 billion which is equivalent to 3.2% of Singapore's GDP for 2011. The costs borne by different economic agents were: S\$2.31 billion (22.1%) by employers; S\$5.28 billion (50.5%) by workers, and S\$2.87 billion (27.4%) by the community.

This study re-affirmed WSH Institute's role as the think-tank for the WSH landscape in Singapore by providing research-based evidence to support the review of WSH policies and strategies. The success of this first local study was made possible by the contributions of officers from MOM, as well as other governmental agencies which helped in fine-tuning the model used to derive the cost estimates.

Strategy 4: Developing Strong Partnerships Locally and Internationally

5.21 Inter-agency and Inter-industry Collaboration

Improving WSH Standards and developing a vibrant WSH culture is not something that neither the Government nor the WSH Council, can achieve by itself. It requires the collective effort and cooperation of all key stakeholders. Close working relationships among the various stakeholders are useful as they can leverage on one another's strengths to refine and implement the WSH framework.

Close collaborations among key stakeholders continue to advance the WSH agenda in Singapore. Leveraging on existing partnerships and forming new ones between the Government, unions, trade associations, developers, insurance companies, financial institutions media and the community work to achieve better WSH strategic outcomes.

On the local front, there were many opportunities for the government to collaborate and synergise with key stakeholder groups in various sectors to drive workplace safety and health (WSH) improvement.

Marine Industries CEO Roundtable 2013

On 13 Aug 2013, 20 Pledge-for-Zero CEOs participated in the Marine Industries CEO Roundtable 2013. This year, they have taken a step forward by inviting 31 of their business partners to signify their commitment to achieve zero injury in a ceremonial pledge. Through signing the same pledge that these shipyards' CEOs signed 4 years ago, their business partners committed to improve WSH in partnership with the yards. Participating business leaders also shared keen insights in a closed-door discussion and learned about culture-driven leadership.

Construction CEO Roundtable 2013

Themed "Leadership in WSH", this year's CEO Roundtable on 30 Aug explored a new format whereby a Pledge for Zero (PfZ) organisation hosted the Roundtable and showcased its approach based on the theme. Following a site visit to Lend Lease's NOVARTIS BioPharmaOps Project, Lend Lease also shared its initiatives to inculcate positive WSH values in its leaders and staff. These included its "uncompromising leadership" workshops and the integration of WSH into job description, evaluation and training for all staff across all businesses from construction to asset management.

Collaboration with Migrant Workers Centre to provide Temporary Job Scheme

This pilot started in Feb 2013 and is essentially a temporary job scheme (TJS) that aims to provide WIC Special Pass (SP) holders a source of income and keep them employed while pending the resolution of their claims.

Upon successful matching with prospective TJS employers, the injured workers will be granted 6 months of WIC TJS Work Permit. Once their claims have been concluded, they shall be repatriated regardless of the validity of Work Permit. In the event that the TJS employer decides to keep the worker in employment after his case with MOM has been resolved, we shall allow a maximum of 6 month period (till Work Permit's expiry) provided that the TJS employer must undertake to repatriate the worker after that.

MOM is partnering with Migrant Workers Centre to promote this pilot TJS program to companies and match SP holders with jobs.

Collaboration with 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. Instead of simply placing flyers and handbooks on the brochure racks in hospitals, WICD constantly educate 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 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 various stages of the WICA process and where to seek help; The employer gets a similar advisory note and a handbook from MOM summing up what his obligations are as well as the steps in the WICA compensation process.

Members of Spring's Technical Committees and Workgroups on WSH Standard Development

Specialist staff from OSHD participated in various SPRING Singapore Technical Workgroups to develop and review WSH-related Singapore Standards (SS). These Standards serve as benchmarks to assess whether reasonable practicable measures have been taken with regards to maintaining WSH standards at workplaces. On the completion and launch of the Standards, speakers from MOM would share on relevant safety topics related to the specific standards at the launching seminar organized by SPRING Singapore.

5.22 Regional and International Collaboration

One of the strategic outcomes for Singapore is to be renowned as a Centre of Excellence for WSH. MOM builds and maintains network and collaboration with key international and regional WSH organizations in the areas of information sharing, standards development, research and training.

Collaboration with International Powered Access Federation (IPAF)

IPAF launched Singapore's first industry-led safety campaign for Mobile Elevating Work Platforms (MEWPs) at Raffles Country Club on 19 Dec 2013. The event was supported by MOM and WSHC. Representatives from Singapore Institution of Safety Officer, Institute of Engineers Singapore, The Institution of Occupational Safety and Health (Singapore Branch), Trade Link Media Pte Ltd (South East Asia Construction Magazine) and members of IPAF attended the launch. This industry-led MEWP safety campaign had attendees signing on the pledge for the launch of "Clunk Clunk" Campaign in Singapore.

7th Asia Pacific IIW International Congress on 8 Jul 2013

The International Institute of Welding (IIW), in collaboration with the Singapore Welding Society (SWS), organized the 7th Asia Pacific IIW International Congress in Singapore this year, from 8 Jul 2013 to 10 Jul 2013 with a theme of "Recent Developments in Welding

and Joining Technologies”. The objective of the Congress was to bring together experts to discuss the state-of-art of welding and joining technologies, as well as to present new research findings and perspectives of future developments in this domain. It was an important forum for the exchange of knowledge and it provided opportunities for fellow industrialists and researchers to network with experts in the field of welding. WSH Commissioner, Er. Ho Siong Hin graced the event and delivered the esteemed Jaeger Lecture.



The ASEAN-OSHNET Plus Three Workshop on Development of ASEAN-OSHNET Scorecard and Information Strategies for Occupational Safety and Health, 22-23 Jan 2013

The ASEAN-OSHNET Plus Three workshop on development of ASEAN-OSHNET Scorecard and Information Strategies for Occupational Safety and Health, 22-23 Jan 2013, Bangkok, Thailand. This workshop was organised by the Occupational Safety and Health Bureau, Department of Labour Protection and Welfare, Ministry of Labour, Thailand. Over 30 OSH experts from 13 countries and organisations – Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam as well as representatives from Republic of Korea, ASEAN-OSHNET Secretariat and the International Labour Organization (ILO) – participated in this dialogue. MOM was represented by Dr Jukka Takala, Executive Director, Workplace Safety and Health Institute and Dr Lee Hock Siang, Director for OSH Specialist at the workshop.

ASEAN OSHNET Coordinating Board Meeting, 8-9 Apr 2013

The ASEAN-OSHNET Coordinating Board Meeting is an annual meeting between the ASEAN-OSHNET representatives to update and discuss the OSH developments in their country, as well as to share best practices with the interest of improving the OSH standards in the region. The 14th ASEAN-OSHNET Coordinating Board Meeting (CBM14) was held on 8-9 Apr 2013 in Nay Pyi Taw, Myanmar. MOM was represented by Dr Lee Hock Siang, Director for OSH Specialists and Ms Audrina Chua, Head (International Collaboration) at the meeting. MOM updated our initiatives in the programme area of strengthening OSH inspection in ASEAN and the latest OSH developments in Singapore.



Workshop on Strengthening National Occupational Safety and Health System in Hazardous Work, 14-15 Mar 2013, Hanoi, Vietnam

MOM participated in the Workshop on Strengthening National OSH System in Hazardous Work on 14-15 Mar 2013 at Hanoi, Vietnam. The workshop was jointly organised by the Bureau for Safe Work, Ministry of Labour, Invalids and Social Affairs, Vietnam, the International Labour Organization (ILO) and the International Social Security Association (ISSA) Mining. The aim of the workshop was to promote the sharing of information and experiences strengthening national OSH system in hazardous work among ASEAN countries. The workshop was attended by representatives from ASEAN members, India and technical experts from ILO, ISSA mining, DKE German Commission for Electrical, Electronic & Information Technologies of DIN and VDE, RAG Mining Solutions and Mutual Asesorias (Chile).

GHS Training Workshop for OSH and GHS Review Conference for South-East Asia, 20-23 May 2013, Kuala Lumpur

The GHS Training Workshop was held back to back with GHS Review Conference for Southeast Asia on 20 – 23 May 2013 at Kuala Lumpur, Malaysia. The workshop was jointly organized through the collaboration of the Ministry of International Trade and Industry of the Government of Malaysia, University of Kebangsaan Malaysia, UNITAR, and ILO.

3rd ASEAN Labour Inspection Conference, 2-4 Jul 2013

The 3rd Conference of the ASEAN Labour Inspection Conference organised by the Ministry of Manpower and Transmigration of Indonesia was held on 2-4 Jul 2013 at Bali, Indonesia. MOM was represented by Er. Ho Siong Hin, Commissioner for Workplace Safety and Health. The conference reaffirmed the continuation of ASEAN cooperation programmes on labour inspection, taking into account Dong Nai Action Plan and Ha Long. They also agreed to continue sharing information and exchange of views at the regional level to foster labour inspection function in promoting safe, fair, healthy, and productive workplace condition in ASEAN and plus 3 countries, possibly with the involvement of trade union, employers organization and relevance stakeholders, where appropriate.

16th National Conference and Exhibition on Occupational Safety and Health (COSH 2013) 25-27 Aug, 2013, Kuala Lumpur, Malaysia

Dr. Gan Siok Lin, Executive Director (Workplace Safety and Health Institute) was invited to deliver present on the topic “The Prevention of Occupational Diseases” on 26 Aug 2013 at the 16th National Conference and Exhibition on Occupational Safety and Health at Kuala Lumpur. The conference theme was “Prevention of Workplace Injuries and Diseases” who calls for employers who are responsible for the safety and health at the workplace to provide occupational health services for their employees. Dr. Gan shared Singapore’s strategies as well as experiences in this area.

National Safety and Health Conference in Sri Lanka, 9 Oct 2013

Er. Mohd Ismadi, Director (Policy, Information and Corporate Services), was invited to deliver the keynote address at the National Safety and Health Conference by the Ministry of Labour & Labour Relations, Sri Lanka. The theme of the conference was aligned to the ILO 2013 theme on Occupational Safety and health, “Prevention of Occupational Diseases”. Er. Ismadi shared on Singapore WSH framework as well as our WSH2018 strategies. There were over 300 conference participants ranging from senior executives, HR managers in the government, semi-government and private sector enterprises who are responsible for managing workplace safety and health in their organisations.

ILO Safety and Health Conference 5-6 Nov 2013, Düsseldorf, Germany

The 2013 ILO International Safety and Health Conference took place in Düsseldorf, Germany on 6th and 7th of Nov 2013, during A+A Safety, Security and Health at Work International Trade Fair with Congress, in collaboration with the German Federal Association for OSH (Basi), Messe Düsseldorf, the Federal Ministry of Labour and Social Affairs of Germany, the International Social Security Association (ISSA), the International Association of Labour Inspection (IALI) and the World Health Organization (WHO). The theme of the conference was “Make it visible: Occupational Disease – Recognition, compensation and prevention” and provided a platform for the different stakeholders from government officials to occupational safety and health (OSH) professionals to share their experiences. They also learnt how to put in practice, developing and implementing national policies and strategies directed at preventing occupational and work-related diseases.

Mr. Hawazi Daipi, Senior Parliamentary Secretary for Education and Manpower, who led the MOM delegation, chaired the keynote session involving speakers from the International Labour Organisation (ILO), World Health Organisation (WHO), International Organisation for Employers (IOE) and the International Trades Union Confederation (ITUC).



ASEAN-OSHNET Publications

The International Collaboration Branch works closely with our ASEAN counterparts to develop guidelines. Last year, 2 documents were published, namely the ASEAN-OSHNET Code of Integrity for Occupational Safety and Health Inspections and ASEAN-OSHNET Occupational Safety and Health (OSHMS) Initiatives 2011/2012. The former aims to assist OSH Inspectors in ASEAN understand the roles, responsibilities and authorities as public officials and to ensure that the minimum standards of conduct expected are met. This Code also establishes the commitment required by OSH agencies to facilitate an environment for OSH inspectors to fulfill the values prescribe in the Code. The latter shares the OSHMS and other on-going initiatives presented during the 5th ASEAN-OSHNET Plus Three OSHMS Policy Dialogue held in Singapore from 29 Feb to 1 Mar 2012.

Our Visitors

OSHD played host to a total of 11 overseas visits in 2013 which encompassed distinguished visitors both from private and government sectors. A wide spectrum of OSH issues were discussed during these visits and the fruitful exchanges were valuable for both the host and visiting countries.

Date	Visitor
22 Jan 2013	Delegates from Temasek Foundation–Tan Tock Seng Hospital Nursing (Specific Disciplines) Specialists Programme, Thailand
22-24 Jan 2013	Delegates from Employees' Compensation Division, Labour Department, Hong Kong SAR Government
22 Mar 2013	Mr. Paul O'Connor, CEO, Comcare, Australia
29 Mar 2013	Delegates from Taipei City Labour Inspection Office, Department of Labour, Taipei, Taiwan
1 Apr 2013	Mrs Padmini Ratnyake, Former Additional Secretary and Co-ordinating Secretary, Ministry of Labour and Labour Relations, Sri Lanka
22 Apr 2013	Delegates from China Safety Delegation, China
26 Apr 2013	Delegates from Ministry of Labour, Thailand
17-19 Sep 2013	Delegates from Department of Occupational Safety and Health, Ministry of Human Resources, Malaysia
4-5 Nov 2013	Delegates from Sectoral Activities Department, International Labour Organisation
17 Dec 2013	Delegates from Korea Occupational Safety and Health Organisation
20 Dec 2013	Delegates from Department of Labour Protection and Welfare, Thailand

5.21 International Advisory Panel

We will continue to convene regular meetings of the Panel to learn from the experiences of the international community and tap on the expertise of the panel of WSH advisors to critique our strategies.



6. The Way Forward

Since the introduction of WSH 2018 in Singapore, we have achieved significant milestones each year through the implementation of various programmes and initiatives under the strategic plan.



A New Target, A New Goal

**To reduce workplace fatality rate to 1.8
(per 100,000 employed persons) by 2018**

To have one of the best WSH records in the world

To ensure that we are on-track to achieve the more ambitious target set by Singapore's Prime Minister of 1.8 fatalities per 100,000 employed persons by 2018, the Ministry of Manpower and WSH Council are working together with the industry to implement WSH 2018 initiatives. By building on our past successes and driving new initiatives, Singapore hopes to achieve our aim of a safe and healthy workplace for everyone and making Singapore a country renowned for WSH best practices.

With a tight labour market coupled with a strong demand for infrastructure projects, the pursuit of WSH excellence is not without challenges but it is one which we will strive towards with relentless passion and commitment. In the coming year, OSHD will continue to work together with its industry partners and stakeholders to spur further improvements in WSH standards.

ProBE Plus 2014

Based on accident trends in 2013 and early 2014, the Ministry of Manpower and the Workplace Safety and Health Council has identified Formwork Safety, Work at Heights and Crane Safety as priority focus areas for 2014 ProBE Plus 2014, where year-long efforts to raise awareness and build industry capabilities will be systemically followed by targeted enforcement operations based on these focus areas.

Review of Work Injury Compensation Framework

A good work injury compensation (WIC) system for Singapore has to go beyond injury compensation to one that places greater emphasis on the injured workers in their rehabilitation and return back to work. In this new WIC landscape, it is envisaged that the various stakeholders will play a proactive role in shaping a progressive WIC system for the injured workers. In doing so, it will also have a positive bearing on the WSH outcomes where every injury, fatality, occupational disease should be prevented as much as possible in the first place.

To achieve this, the review will broadly cover areas such as

- ✓ ensuring WIC remains relevant and fair
- ✓ ensuring WIC system remains expeditious
- ✓ enhancing WIC to better address the needs of injured workers

- ✓ enhancing WIC system through reviewing roles of the stakeholders

The review will take place in the next two years and we will be working closely with the stakeholders on the various proposals.

Workplace Safety and Health (WSH) Database

Complementing the WIC review, the Workplace Safety and Health (WSH) Council is working with MOM, WSHI and insurers to develop a database that provides a consolidated view of a company's Work Injury Compensation (WIC) claims history and WSH performance information to subscribed users. The database leverages on the power of information sharing to achieve fairer WIC insurance premiums that then help drive companies towards better WSH management. This will enable companies to recognise the cost benefit of good WSH management and eventually, leading to safer and healthier workplaces for employees. This initiative is in line with the WSH 2018 strategy of being an enabler to improve industry WSH standards in the medium to long term. The database will be piloted in May 2014 and is intended to be ready for launch by end of 2014.

Risk Management 2.0

OSHD is taking a fresh look at the current RM framework to enhance its coverage and effectiveness. Risk Management 2.0 (RM 2.0) is intended to achieve these three outcomes:

1. A holistic framework that goes beyond workplace safety hazards and considers personal risk factors that can compromise WSH. These factors include poorly managed health conditions and work fatigue.
2. A pragmatic approach that moves away from documentation checks and focuses on on-site implementation of effective control measures.
3. An emphasis that shifts downstream risk mitigation measures (such as personal protective equipment), to upstream control measures such as elimination, substitution and engineering controls.

OSHD will be revising the Approved Code of Practice on WSH RM to include the consideration of personal risk factors that can compromise WSH, and to emphasise the implementation of upstream risk control measures.

To aid industry in moving from the current RM framework to RM 2.0, more guides will be developed and industry best practices will be shared with the industry. These include more RM Compendia for common work activities; RM guides for workers and small businesses; and case studies illustrating how companies have gained a business edge through the implementation of upstream risk controls.

Total WSH

As part of the strategy to meet Workplace Health challenges arising from an ageing workforce, the rise in the numbers of workers with chronic diseases, and emerging WSH risks, the concept of 'Total WSH' was developed as an approach to managing safety and health in the workplace holistically. It is a comprehensive and integrated approach to managing WSH risks to provide and maintain a safe and healthy working environment to all employees by identifying and addressing all WSH risks in a proactive and integrated way.

An implementation guideline prepared in collaboration with the Health Promotion Board, has been developed to assist companies in their journey towards Total WSH. To signal the importance of the workplace in protecting and promoting workers' health and safety,

announcements would be made at strategic platforms on the concept of Total WSH as a new paradigm for workers' health, safety and well-being. The Singapore WSH Conference 2014 will have as its theme, 'Integrating Safety and Health: Towards a Holistic Approach'.

Greater Deterrence and Quality Outcomes through Enforcement

While we continue to develop WSH capability in the industry and promote the benefits of WSH, enforcement will remain the backbone of OSHD's WSH framework.

In 2014, OSHD will strengthen and step up its enforcement efforts to ensure the compliance of basic safety standards especially in the areas where work injuries and fatalities are more prevalent. MOM will continue to work closely with the industry to raise WSH standards but we will also take stern action against errant stakeholders.

7. Annexes

ANNEX A

List of WSH Subsidiary Legislation

	Title of Legislation	Brief Description
1.	WSH (Abrasive Blasting) Regulations 2008	Legislation that regulates safety and health with regard to the use of abrasive blasting
2.	WSH (Composition of Offences) Regulations (Cap 354A, Rg 6)	Legislation to allow the Commissioner to compound an offence in lieu of prosecution
3.	WSH (Confined Spaces) Regulations 2009	Legislation that regulates work in confined spaces
4.	WSH (Construction) Regulations 2007	Legislation that regulates safety and health within construction sites
5.	WSH (Exemption) Order (Cap 354A, O 1)	Legislation that exempts the Singapore Armed Forces from the provision of the Act
6.	WSH (Explosive Powered Tools) Regulations 2009	Legislation that regulates safety and health with regard to the use of explosive powered tools
7.	WSH (First-Aid) Regulations (Cap 354A, Rg 4)	Legislation that mandates the need for selected workplaces to provide first-aid facilities and to appoint first-aiders
8.	WSH (General Provisions) Regulations (Cap 354A, Rg 1)	Legislation governing basic safety and health requirements within factories
9.	WSH (Incident Reporting) Regulations (Cap 354A, Rg 3)	Legislation that mandates the need for employers, occupiers and medical practitioners to report workplace incidents to the Ministry
10.	WSH(Medical Examinations) Regulations 2011	Legislation that mandates medical examination for persons employed in hazardous occupations
11.	WSH (Noise) Regulations 2011	Legislation that regulates safety and health with regard to exposure to excessive noise
12.	WSH (Offences and Penalties) (Subsidiary Legislation under Section 67(14)) Regulations (Cap 354A, Rg 5)	Legislation that allows contravention of any subsidiary legislation made under the repealed Factories Act which is still in force in factories to be fined under the penalties stated in the said legislation.
13.	WSH (Operation Of Cranes) Regulations 2011	Legislation that regulates the safe use of cranes, including mobile and tower cranes and the need for qualified operators, riggers, signalmen and lifting supervisors
14.	WSH (Registration of Factories) Regulations 2008	Legislation that mandates the requirement for factories (including construction sites and shipyards) to be registered or submit a notification with the Ministry

	Title of Legislation	Brief Description
15.	WSH (Risk Management) Regulations (Cap 354A, Rg 8)	Legislation that mandates the need for employer, self-employed person and principal to conduct risk assessment and to take steps to mitigate the risk
16.	WSH (Safety & Health Management System and Auditing) Regulations 2009	Legislation that mandates the requirement for workplaces to implement safety & health management system and to conduct audit
17.	WSH (Scaffolds) Regulations 2011	Legislation that regulates safety and health with regard to the installation, dismantling and use of scaffolds
18.	WSH (Shipbuilding And Ship-Repairing) Regulations 2008	Legislation that regulates safety and health within shipyards and onboard ships in the harbour
19.	WSH (Transitional Provision) Regulations (Cap 354A, Rg 7)	Legislation that allows certain sections of the repealed Factories Act to continue to be in force
20.	WSH (Work at Heights) Regulations 2013	Legislation that regulates work at heights
21.	WSH (Workplace Safety and Health Committees) Regulations 2008	Legislation that mandates the need for occupier of factories to form a WSH committee
22.	WSH (Workplace Safety and Health Officers) Regulations (Cap 354A, Rg 9)	Legislation that regulates the qualifications, training, registration, duties of a WSH Officer as well as mandatory appointment of WSH Officers
23.	Factories (Asbestos) Regulations <i>[currently under review and a new WSH (Asbestos) Regulations will be enacted in 2014 to replace the current Regulations]</i>	Legislation that regulates safety and health with regard to exposure to asbestos
24.	Factories (Registration and Other Services - Fees and Forms) Regulations <i>[currently under review and a new WSH (Fees and Forms) Regulations will be enacted in 2014 to replace the current Regulations]</i>	Legislation that regulates fees to be charged for pressure vessel inspections and approval of third party inspection agency, scaffold contractor, crane contractor and authorised examiner.
25.	Factories (Safety Training Courses) Order	Legislation that mandates safety and health training courses to be undertaken by specific personnel.

ANNEX B

Other Legislations, Codes of Practices and Guidelines Relevant to WSH

(1) APPROVED CODES OF PRACTICE

<i>Approved Codes of Practice</i>	<i>Year Published</i>
1. Code of Practice for Working Safely at Heights	2013
2. Code of Practice on WSH Risk Management	2012
3. Code of Practice on Safe Lifting Operations in the Workplaces	2011
4. SS 98: Specification for Industrial safety helmets	2005
5. SS 280: Specification for Metal scaffoldings Part 1: Frame scaffoldings	2006
6. SS 280: Specification for Metal scaffoldings Part 2: Modular scaffoldings	2009
7. SS 311: Specification for Steel tubes and fittings used in tubular scaffolding	2005
8. SS 473: Specification for Personal eye-protectors Part 1: General requirements	2011
9. SS 473: Specification for Personal eye-protectors Part 2: Selection, use and maintenance	2011
10. SS 497: Code of Practice for Design, safe use and maintenance of gantry cranes, overhead travelling cranes and monorail hoists	2011
11. SS 506: Occupational safety and health (OSH) management system Part 1: Requirements	2009
12. SS 506: Occupational safety and health (OSH) management system Part 2: Guidelines for the implementation of SS 506: Part 1: 2009	2009
13. SS 506: Occupational safety and health (OSH) management system Part 3: Requirements for the chemical industry	2006
14. SS 508: Specification for Graphical symbols — Safety colours and safety signs Part 1: Design principles for safety signs in workplaces and public areas	2004
15. SS 508: Specification for Graphical symbols — Safety colours and safety signs Part 2: Design principles for product safety labels	2008
16. SS 508: Specification for Graphical symbols — Safety colours and safety signs Part 3: Safety signs used in workplaces and public areas	2004
17. SS 508: Specification for Graphical symbols — Safety colours and safety signs Part 4: Design principles for graphical symbols for use in safety signs	2008
18. SS 510: Code of Practice for Safety in welding and cutting (and other operations involving the use of heat) (Formerly CP 50)	2005

19. SS 511: Code of Practice for Diving at work	2010
20. SS 513: Specification for Personal protective equipment — Footwear Part 1: Safety footwear	2005
21. SS 513: Specification for Personal protective equipment — Footwear Part 2: Test methods for footwear	2005
22. SS 514: Code of Practice for Office ergonomics	2005
23. SS 528: Specification for Personal fall-arrest systems Part 1: Full-body harnesses	2006
24. SS 528: Specification for Personal fall-arrest systems Part 2: Lanyards and energy absorbers	2006
25. SS 528: Specification for Personal fall-arrest systems Part 3: Self-retracting lifelines	2006
26. SS 528: Specification for Personal fall-arrest systems Part 4: Vertical rails and vertical lifelines incorporating a sliding-type fall arrester	2006
27. SS 528: Specification for Personal fall-arrest systems Part 5: Connectors with self-closing and self-locking gates	2006
28. SS 528: Specification for Personal fall-arrest systems Part 6: System performance tests	2006
29. SS 531: Code of Practice for Lighting of work places Part 1: Indoor	2006
30. SS 531: Code of Practice for Lighting of work places Part 2: Outdoor	2008
31. SS 531: Code of Practice for Lighting of work places Part 3: Lighting requirements for safety and security of outdoor work places	2008
32. SS532: Code of Practice for The storage of flammable liquids	2007
33. SS 536: Code of Practice for The safe use of mobile cranes (Formerly CP 37)	2008
34. SS 537: Code of Practice for Safe use of machinery Part 1: General requirements	2008
35. SS 537: Code of Practice for Safe use of machinery Part 2: Woodworking machinery	2009
36. SS 541: Restraint belts Amendment 1 (2012)	2008
37. SS 548: Code of Practice for Selection, use, and maintenance of respiratory protective devices (Formerly CP 74)	2009
38. SS 549: Code of Practice for Selection, use, care and maintenance of hearing protectors (Formerly CP 76)	2009
39. SS 550: Code of Practice for Installation, operation and maintenance of electric	2009

passenger and goods lifts (Formerly CP 2)	
40. SS 553: Code of Practice for Air-conditioning and mechanical ventilation in buildings (Formerly CP 13)	2009
41. SS 554: Code of Practice for Indoor air quality for air-conditioned buildings	2009
42. SS 557: Code of Practice for Demolition (Formerly CP 11)	2010
43. SS 559: Code of Practice for Safe use of tower cranes (Formerly CP 62)	2010
44. SS 562: Code of Practice for Safety in trenches, pits and other excavated areas	2010
45. SS 567: 2011 Code of Practice for Factory layout — Safety, health and welfare considerations (Formerly CP 27)	2011
46. SS 568: 2011 Code of Practice for Confined spaces (Formerly CP 84)	2011
47. SS 569: Code of Practice for Manual handling (Formerly CP 92)	2011
48. SS 570: Specification for Personal protective equipment for protection against falls from a height — Single point anchor devices and flexible horizontal lifeline systems	2011
49. SS 571: Code of Practice for Energy lockout and tagout (Formerly CP 91)	2011
50. SS 573: Code of Practice for The safe use of powered counterbalanced forklifts (Formerly CP 101)	2012
51. SS580: Code of Practice for Formwork (Formerly CP 23)	2012
53. SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 2: Globally harmonised system of classification and labelling of chemicals — Singapore's adaptations	2008
54. SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 3: Preparation of safety data sheets (SDS)	2008
55. CP 5: Code of Practice for Electrical installations Amendment 1 (2008)	1998
56. CP 14: Code of Practice for Scaffolds	1996
57. CP 20: Code of Practice for Suspended scaffolds	1999
58. CP 63: Code of Practice for The lifting of persons in work platforms suspended from cranes	1996 (2005)
59. CP 79: Code of Practice for Safety management system for construction worksites	1999
60. CP 88: Code of Practice for Temporary electrical installations Part 1: Construction and building sites	2001
61. CP 88: Code of Practice for Temporary electrical installations Part 2: Festive lighting, trade-fairs, mini-fairs and exhibition sites	2001

62. CP 88: Code of Practice for Temporary electrical installations Part 3: Shipbuilding and ship-repairing yards	2004
63. CP 99: Code of Practice for Industrial noise control	2003

Note: CP - Code of Practice, SS – Singapore Standards

(2) LEGISLATION, CODES OF PRACTICES AND GUIDELINES FOR SPECIFIC WSH ISSUES

	Scope of Coverage	Legislation	Codes of Practice / Guidelines (not exhaustive)
1.	Asbestos	- Environmental Protection and Management Act (Chapter 94A)¹⁰ - WSH (Asbestos) Regulations	- Guidelines on the Removal of Asbestos Materials in Buildings - Guidelines on the Handling of Asbestos Materials - WSH Guidelines on Management and Removal of Asbestos
2.	Chemical Hazards	- WSH (General Provisions) Regulations - Environmental Protection and Management Act (Chapter 94A)¹	- Worker's Safety Handbook- Working with Hazardous Materials - Guidelines on Management of Hazardous Chemicals Programme - CP 61 - CP for Packaging and Containers for Hazardous Substances - SS 286 - SS on Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods - SS 586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 1: Transport and storage of dangerous goods - SS586: Specification for Hazard communication for hazardous chemicals and dangerous goods Part 2: Globally harmonised system of classification and labelling of chemicals — Singapore's adaptations - SS 586: Specification for Hazard communication for

	Scope of Coverage	Legislation	Codes of Practice / Guidelines (not exhaustive)
			hazardous chemicals and dangerous goods Part 3: Preparation of safety data sheets (SDS)
3.	Confined Space Safety	WSH (Confined Space) Regulations	- SS 568: 2011 Code of Practice for Confined spaces (Formerly CP 84) - Technical Advisory for Working Safely in Confined Spaces - Confined Space Safety Guidebook for Supervisors & Workers
4.	Construction Safety	WSH (Construction) Regulations	- CP 11 - CP for Demolition *CP 14 - CP for Scaffolds *CP 20 - CP for Suspended Scaffolds *CP 23 - CP for Formwork - SS 536 - CP for the Safe Use of Mobile Cranes - SS 515 - CP for Supervision of Structural Works - CP 62 - CP for the Safe Use of Tower Cranes *CP 63 - CP for the Lifting of Persons in Work Platforms Suspended from Cranes *CP 88-1 - CP for Temporary Electrical Installations - Construction and Building Sites *CP 88-3 - CP for Temporary Electrical Installations - Shipbuilding and Ship-repairing Yards - Guidelines on Design for Safety in Buildings and Structures
5.	Diving	-	SS 511 - CP for Diving at Work
6.	Environmental Health and Pollution	- Environmental Protection and Management Act (Chapter 94A)¹ - Environmental Public Health Act (Chapter 95)⁷ - Radiation Protection Act (Chapter 262)⁸	- CP 100 - CP for Hazardous Waste Management - WSH Guidelines on Toxic Industrial Waste Treatment

	Scope of Coverage	Legislation	Codes of Practice / Guidelines (not exhaustive)
7.	Ergonomics and Lighting	-	• SS 514 - CP for Office Ergonomics • CP 99 - CP for Manual Handling • SS 531- 1: CP for Lighting of Work Places, Indoor • *SS531-2 : CP for Lighting of Work Places, Outdoor • *SS531-3 : CP for Lighting of Work Places, Lighting requirements for safety and security of outdoor work places • WSH Guidelines on Improving Ergonomics in the Workplace
8.	Fire Safety	• Fire Safety Act (Chapter 109A)⁹ • WSH (General Provisions) Regulations	-
9.	First Aid	• WSH (First Aid) Regulations	• Guidelines on First Aid Requirements
10.	Machinery Safety	• WSH (General Provisions) Regulations	• CP 42 - CP for Guarding and Safe Use of Woodworking Machinery • *CP 91 - CP for Lockout Procedure • *SS 536 - CP for Safe Use of Mobile Cranes • *CP 62 - CP for Safe Use of Tower Cranes • CP 53 - CP for Safe Use of Industrial Robots • *CP 101 - CP for Safe Use of Powered Counterbalanced Forklifts • Worker's Safety Handbook for Crane Operator • Guidebook for Lifting Supervisors • WSH Guidelines on Safe Operation of Forklift Trucks
11.	Medical Examinations	• WSH (Medical Examinations) Regulations	• WSH Guidelines on Management of Hazardous Chemicals Programme • WSH Guidelines on Diagnosis and Management

	Scope of Coverage	Legislation	Codes of Practice / Guidelines (not exhaustive)
			of Occupational Diseases
12.	Noise and Vibration	• WSH (Noise) Regulations	• WSH Guidelines on Hearing Conservation Programme • Worker's Safety Handbook- Working in Noisy Environment • SS549 - CP for the Selection, Use, Care and Maintenance of Hearing Protectors • CP 99 - CP for Industrial Noise Control
13.	WSH Management Systems	-	• SS506 – 1: Occupational Safety and Health Management System – Specifications • SS506 – 2: Occupational Safety and Health Management System – General guidelines for the implementation of OSH management system • SS506 – 3: Occupational Safety and Health Management System – Requirements for the chemical industry • *CP 79 - CP for Safety Management System for Construction Worksites
14.	Work At Heights	WSH (Work At Heights) Regulations	• Code of Practice for Working Safely at Height • Code of Practice on WSH Risk Management • WSH Guidelines on Working Safely on Roofs • WSH Guidelines on Personal Protective Equipment for Work At Heights • WSH Guidelines on Anchorage, Lifelines and Temporary Edge Protection Systems • Ladder Safety Guide • Work at Heights Supervisor's Guidebook for the Marine Industries

Notes:

* refers to Approved Codes of Practice

¹ An Act to consolidate the laws relating to environmental pollution control, to provide for the protection and management of the environment and resource conservation, and for purposes connected therewith. (Administered by the National Environment Agency)

² An Act relating to quarantine and the prevention of infectious diseases. (Administered by the Ministry of Health)

³ An Act to provide for the control, licensing and inspection of private hospitals, medical clinics, clinical laboratories and healthcare establishments, and for purposes connected therewith. (Administered by the Ministry of Health)

⁴ An Act to prohibit or otherwise regulate the possession, use, import, transshipment, transfer and transportation of biological agents, inactivated biological agents and toxins, to provide for safe practices in the handling of such biological agents and toxins. (Administered by the Ministry of Health)

⁵ By the Genetic Modification Advisory Committee, Ministry of Trade and Industry.

⁶ By the Ministry of Education.

⁷ An Act to consolidate the law relating to environmental public health and to provide for matters connected therewith. (Administered by the National Environment Agency, Ministry of the Environment and Water Resources)

⁸ An Act to control and regulate the import, export, manufacture, sale, disposal, transport, storage, possession and use of radioactive materials and irradiating apparatus, to make provision in relation to the non-proliferation of nuclear weapons and to establish a system for the imposition and maintenance of nuclear safeguards, and to provide for matters connected therewith. (Administered by the National Environment Agency, Ministry of the Environment and Water Resources)

⁹ An Act to make provisions for fire safety and for matters connected therewith. (Administered by Civil Defence Force, Ministry of Home Affairs)