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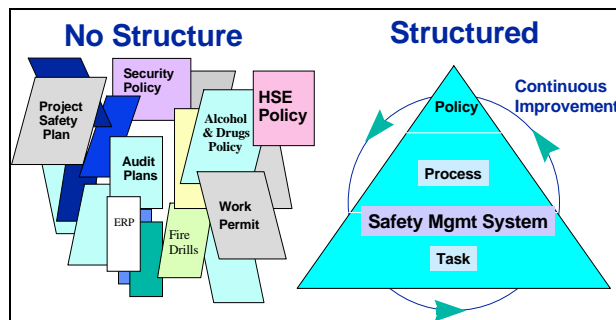


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SAFETY (HSE) MANAGEMENT SYSTEM

Accidents at work happen almost every day. Despite of the many programs and initiatives introduced by both the regulatory and professional institution, the accident trend is still quite alarming.

Among the other prevailing factors, the decline was brought about by the many safety initiatives and programmes put in place to minimise or eliminate the accident rate amongst industries. Though some of these initiatives contributed to the reduction in accident rates, these are however very focused specifically towards the operational and employee levels such as the Job Safety Analysis (JSA), Permit to Work (PTW) System, Standard Operating Practices (SOP), etc. A better and coherent approach involving the management is required to further improve the accident rates. The graphical representation of the argument is presented below.



Compared to those operational level initiatives and programmes, a more systematic and holistic approach would be to involve the employee and the whole organisation in a common business management system. In other word, most safety problems and accident are indirectly management problems.

Safety Management System provides the framework in which all safety related initiatives are combined to form a solid integrated approach. It clearly defines the responsibility, accountability and performance with line management and enables the workforce to perform work in a safety environmentally sound manner.

The overall objective of the safety management system is to prevent and control workplace hazards and ensure an ongoing improvement process to reduce hazards. Fulfilment of the requirement could assist businesses to self-manage, prevent and to control their workplace-related hazards.

The **requirement** of a safety management system for Malaysia is defined in OSHA Section 16 as well as in the Control of Industrial Major Accident Hazards (CIMAHA) regulation 1996, a subsidiary Regulation under the OSHA under sub regulation 5(1)(c). The respective excerpts are reproduced below.

services



products

Technical HSE

- HSE Case
- Quantitative Risk Assessment (QRA)
- Fire & Explosion Modelling (**SAFER®**)
- Ventilation & Dispersion Modelling (**SAFER®**)
- Hazard & Operability Studies (HAZOP), Hazard Identification (HAZID)
- Fire Risk Assessment

Legislative Compliance HSE

- Control of Industrial Major Accident Hazard (CIMAH) Reports
- Chemical Health Risk Assessment (CHRA)
- Demonstration of Safe Operations (DOSO)

HSE Management

- HSE Management System
- HSE Procedures & Documentation
- HSE Audit
- Hazard Assessment & Risk Management (HARM)

Emergency Management

- Emergency Response Plan (ERP)
- Incident Command System (ICS)
- Hazardous Material (HAZMAT) - Mercury
- Major Emergency Management using Simulator

HSE IT Solutions

- Consequence & Risk Assessment Modelling (**SAFER®**)
- Malaysian HSE Legal Register
- Competency Based Training (any topics)
- Personnel Tracking System (biometric technology)
- HSE Online Documentation System
- Accident Investigation Reporting System

Other Specialised Solutions

- Behaviour Based Safety (BBS)
- Food Safety, Hygiene & Quality
- Defensive Driving

Inspection & Monitoring Services

- Radiation Leak Test
- Exposure Monitoring (BTEX, Mercury, TENORM)
- Drilling Rig Pre-Hire Survey
- Well Services & Equipment
- Infrared Thermography

Innovative Technology

- Structural Seismic Isolator (SSI)
- Waterproof & Explosionproof Connectors (**New Macey®**)
- Underground Utility Locator
- FoamFatale Tank Extinguishment System (**TFEX®**)
- Infrared Thermography Camera

'Except in such cases as may be prescribed, it shall be the duty of every employer and every self-employed person to prepare and as often as may be appropriate revise a written statement of his general policy with respect to the safety and health at work of his employees and the organisation and arrangements for the time being in force for carrying out that policy, and to bring the statement and any revision of it to the notice of all his employees.'

'Every manufacturer who undertakes an industrial activity shall establish and maintain a good management system for controlling any major accident...'

Other requirements under section 16 include that employee should inform all employees of their written safety and health, review and revise the policy as appropriate from time to time and inform employees of any revision to the policy.

The OSHA 1994 which promotes a self-regulation concept represents the best approach for management system development. It allows for the industries with the flexibility of choosing the types of system appropriate to their operations, hazards and work environment. It is recognized that given the varied operational circumstances, no single method of management system can fit all.

The 'management system' in ISO standards, such as the quality management system (ISO 9000) and the environment management system (ISO 14000) had been accepted as tool for doing business in the global economy. Companies that could design their management system not only to meet these standards, but to also develop it to meet the OHSAS 18000, the Malaysian standard for the Occupational Health and Safety.

Among the **benefits** that a company could derive from the implementation of a holistic safety management system are the improvements in safety performance, effective resource management recognition by industry as safety leaders, bottom line monetary benefits and others.

Given the global economy phenomena and the public pressure on the protection to human lives and the environment an integrated approach to health, safety and environment (HSE) management is now a necessity for industries as compared to focus on safety issues alone. Due to the close relationship between occupational health, safety and the environment, the latest **trend** is towards having an integrated HSE management system where still three elements are addressed together. Safety is now seen as inseparable from the aspects of occupational health and environment.

It was clear that most proactive companies already have the necessary elements in place such as the safety practices, procedures and programmes. There are formalised into an integrated management system. Most of these companies have incorporated the health, safety and environment into a coherent HSE Management System.