

# 21st CONFERENCE AND EXHIBITION ON OCCUPATIONAL SAFETY AND HEALTH (COSH) Putrajaya International Convention Center (PICC) 24th – 25th September 2018

#### SPEAKER'S PROFILE AND ABSTRACT

## Plenary Paper 2 ISO Mr.

#### ISO 45000 – The New Standard Transition from OHSAS 18001



#### Mr. Charles Corrie

Business Programme Manager British Standards Institution (BSI)

#### Profile:

Mr. Charles Corrie is the Business Programme Manager with the British Standards Institution (BSI). He is the Secretary to the OHSAS Project Group (responsible for the publication of the OHSAS 18001 standard) and the Secretary to ISO's Project Committee no. 283 (responsible for the development of international standard ISO 45001).

#### Abstract:

The presentation will describe:

- The benefits of using a formal management system for OH&S
- Some of the main issued addressed during the development of ISO 45001
- Some of the key changes between the OHSAS 18001 standard and the new International Standard ISO 45001

#### **Plenary Paper 5**

#### **Enforcement of OSH in the Digital Era**



Ir Hj Saiful Azhar bin Mohd Said

Department of Occupational Safety and Health (DOSH), Malaysia

#### Profile:

Ir. Saiful Azhar Mohd Said is a professional Engineer by profession and a true believer in Occupational Safety and Health. Currently, he is the Director of Department of Occupational Safety and Health (DOSH), Johor State of Malaysia and had spent 29 years of his life on improving the level of OSH in the country. He started his career as a Factory and Machinery Inspector in 1988 but as time goes by, he became the resource person in giving expert opinion improvements of public delivery system on things related to OSH. In his capacity of Senior Inspector and also the director of DOSH, he was given a task to formulate the OSH Master Plan 2010 -2015 of Malaysia and also put his effort together for Malaysia to ratify C187 Promotional Framework on OSH by ILO in 2012.

He was appointed to represent Malaysia in the ASEAN OSHNet meeting and conferences from 2004 to 2012, a regional grouping 10 ASEAN member countries in OSH reporting to ASEAN Labor Minister Grouping and ASEAN Secretariat. Responsible for developing and promoting special guideline on OSH MS for SME in the ASEAN member countries.

He was entrusted to assist in developing Blueprint on Establishment, Themes and Program of OIC OSHNet which is a Transnational Network project under OIC-VET. The Blueprint propose and highlight the approach in formatting the OIC OSHNet, this includes

Term of Reference (ToR), modus operandi, roles and responsibilities of all parties, financial model and also the plan of action for the year 2014 -2018.

Currently, he is a chairman for Standard Writing Organisation which is appointed by Department of Standard Malaysia to develop standards related to safe systems of work and practices in occupational setting such as Malaysia Standard on OSH MS 1722 and also the new formulated ISO 45001 standard.

#### Abstract:

The economic growth of a country is dependent on its development through modernisation and industrialisation. The integration of computation, networking and physical processes that characterise the 4th Industrial Revolution (IR4.0) will also pose new challenges to occupational safety and health (OSH). In line with the Digital Era, enforcement of OSH needs to be strengthened to meet current demands. In this presentation, the key points to be highlighted is what DOSH has done and what can be improved for the future. In recent years, DOSH has empowered E-Services system by introducing DOSH Online Service System (MyKKP), Notification of Occupational Poisoning & Disease (e-JKKP7), Chemical Information Management System (CIMS) and OSH Accident Cost Calculator (OSHACC). As for the demands in changes of OSH approach with new emphasis to be given on information, knowledge and skills, DOSH has utilized its web system for the purpose of distributing all OSH related information. Consistent with the strategies and programmes under OSHMP 2020, DOSH is committed in inculcating a preventive culture through a variety of effective approaches including social media, videos, posters and articles. With transparency in the enforcement of OSH legislation, DOSH implements Enforcement Uniformity Model Online (EUM SAT) in order to make sure all the officers to act fairly, are consistent in actions taken and give priority based on the risk situation. For better OSH in the future, there are a few things that can be improved such as digitalized training and education system and also improved OSH enforcement and monitoring system by using any related technologies (for instance drones and CCTV).

#### **Plenary Paper 6**

#### Enhancing OSH through Digital Transformation – Singapore's Journey



Mr. Chan Yew Kwong Director (Special Duties) Occupational Safety and Health Division (OSHD), Ministry of Manpower, Singapore

#### Profile:

Mr Yew Kwong is the Deputy Commissioner for Workplace Safety and Health in the Ministry of Manpower, Singapore. He is currently the Director (Special Duties) in the Ministry's Occupational Safety & Health Division (OSHD). He has been with the Ministry of Manpower for about 34 years, serving in various management roles.

He was Director of OSH Inspectorate where he oversaw the development and execution of enforcement strategies and programmes for regulatory compliance and surveillance across all industries, and ensured the effective implementation of OSH standards at the workplaces.

He was also Director of Industry Capability Building in the WSH Council where he was responsible for the national WSH competency framework and capability building efforts in organisations and individuals. He oversaw the roll-out and implementation of the Council's first WSH culture building programme.

#### Abstract:

The integration of computation, networking and physical processes that characterises the 4<sup>th</sup> Industrial Revolution (or Industry 4.0) brings new challenges to workplace safety and health (WSH). Industry 4.0 introduces rapid technological changes, creating "Digital Transformation" (DT) within workplaces which is displacing traditional processes, disciplines, and ways of working across all industries. DT can involve many different new technologies such as cloud computing, IoTs, Big Data and Artificial Intelligence (AI)

and can lead to new and emerging WSH risks in the workplace. These same advanced technologies, however, also create opportunity for enhancements to the WSH monitoring and surveillance systems that will contribute to better management and more effective control of WSH risks. Hence, we should leverage on these technologies to build smart and safer workplaces of the future.

This presentation will share Singapore's experience in its ongoing journey to enhance WSH by leveraging on the various advanced technologies of Industry 4.0.

#### Concurrent 1.1

#### IWK's OSH Challenges in the New Digital Era



Ms. Ayu Suriawaty @ Siti Aisyah bt Bahkia Corporate Health and Safety Manager, IWK

#### Profile:

Ms. Ayu was previously with Corporate Occupational Safety and Health in Malaysia Airlines System and in 2016 she joined Corporate Health and Safety in Indah Water Konsortium (IWK) Sdn. Bhd. She has a Master of Science in OSH Management and currently pursuing PhD in OSH at Cyberjaya University College of Medical Sciences

#### Abstract:

The Internet of Things (IOT) is everyone's future and most people are already spending a lot of time with their digital devices. Likewise in the field of 'Health and Safety', the adaptation of 'internet of things' in this new digital era can no longer be ignored or avoided. All things remain equal, the use of digital technology in reporting, monitoring, control, analysis and continual improvements are areas for consideration in the 'Health and Safety' environment. Indah Water Konsortium Sdn. Bhd. (IWK) is a National Sewerage Utility company established way back in 1994. Currently the company provides sewerage services to over 25 million population equivalent, covering 88 Local Authority operational areas cutting across 10 States and 3 Federal Territories. IWK has close to 3500 employees, stationed at 25 operating unit offices and 59 reporting centres. It operates 6681 sewage treatment plants, 1128 network pumping stations, 19500km of sewers, apart from randomly providing desludging services to 1.3 million individual septic tanks. IWK also utilizes 594 operational vehicles, close to 100,000 mechanical equipments, 5 accredited central laboratories, one research centre, a dedicated specialized training centre and almost 500 outsource contractors to execute its mammoth task of providing an effective and efficient sewerage services for the Nation. Apart from that, IWK is also responsible for the approval of new sewerage works nationwide and also project manage some of the capital works projects.

All the above activities attract lots of Health & Safety challenges for IWK to manage in its course of providing excellent utility services. Over the years, IWK had established many Health & Safety procedures including clear policy, practices, guidelines, monitoring and controls. IWK abides by all the strict regulatory requirements set by the various parties including the Department of Occupational Safety and Health (DOSH). IWK received Malaysian Standard (MS) 1722 certification on March 2013 and in the month of May within the same year, IWK also received its Occupational Health and Safety Assessment (OHSAS) 18001 certification. In the year 2018, IWK is in the process of transition from OHSAS 18001:2007 to International Standard Organization (ISO) 45001:2018 for Occupational Health and Safety Management System. It also combine all related components of ISO14001:2015 Environmental Management System into one system. All the initiatives implemented by IWK is to ensure the Health & Safety related to company activities, employees and the general public is well taken care. Now in the New Digital Era, IWK is well poised to face the existing challenge of innovating, automating and using IOTs to improve all internal and external processes for the ease of use and time in the most optional manner. For this, IWK had in year 2017 established our very own customized Health and Safety Management System (HSMS) with the key objective of improving Health and Safety management in every aspect of IWK's activities and operations. The main HSMS function is to assist in reducing administrative work and create transparency, making safety managers responsible for change management, and easier to track leading indicators. IWK is targeted to become the world's leading Wastewater Company by 2020. Hence, IWK would take the global step when talent development, technology automation and innovation were fully realized. This paper is intended to share the development and progress of IWK's HSMS for improvised management and controls in the sewerage utility sector. It also discusses the challenges faced and the plans ahead to make IWK's HSMS a very important digital tool which could be replicated by other sectors and classes of work in relation to holistic Health & Safety management.

#### **Concurrent 1.2**

#### The Role and Task of Safety Practitioner – Are We Ready for IR4.0?



Tn. Hj. Shahronizam Nordin Manager OSD,CRD NIOSH Malaysia

#### Profile:

- 1. NIOSH Consultant, Trainer, Researcher and technical expert on safety fields.
- 2. He has a Master Degree in Industrial Safety Management, Universiti Kebangsaan Malaysia (UKM) with other professional certification includes certified Authorised Gas Tester (AGT), Safety and Health Officer (SHO) and OSHMS Lead Auditor. With vast experiences in training, consultation and research for more than 16 years in various industries such as petrochemical, oil and gas industries, manufacturing, utilities and civil engineering.
- 3. Lead Researcher for study on the industry's need for competent person (CP) in enhancing occupational safety and health (OSH) towards a developed country status, 2016 to 2017 funded by the Government of Malaysia under Rancangan Malaysia ke-11 (RMK-11).
- 4. Lead Researcher for study on regulatory impact assessment of statutory inspection for certificated machinery by third party, 2014 to 2015 funded by the Government of Malaysia under Rancangan Malaysia ke-10 (RMK-10).
- 5. Plenary/Invited Lecture for Asia Pacific Symposium on Safety, 2017 (APSS) Japan The Role and Tasks of OSH Competent Person: A comparison study, Malaysia and Developed Country.
- 6. Panel of the independent committee of inquiry to investigate the fire tragedy at the Sultanah Aminah Hospital, Johor Bharu, 2016-2018
- 7. Module Developer for Confined Space Trainer Program and Authorised Gas Tester Program, 2002 -2017.
- 8. President of Malaysia Authorised Gas Tester Association (MAGTA), 2016 2018
- 9. Trainer/ Assessor for Safety and Health Officer Course, Authorised Gas Tester Course, Site Safety Supervisor and others related occupational safety program.

#### Abstract:

A Competent Person (CP) is an individual appointed by an employer and recognised by the authority body. CPs must be well trained, knowledgeable, well-experienced, skillful and complies to the laws of safety and health in order to perform the duties specifically. CPs are responsible under the Occupational Safety and Health Act 1994 as well as the Factories and Machinery Act 1967. They had undergone the required competency training, passed the examination and registered by the Director of Occupational Safety and Health Department (DOSH). The objective of this study is to analyse role and tasks of Safety and Health Officer (SHO) in Malaysia in comparison to those in other developed countries with the intention to achieve the status of a developed nation. This study is a cross-sectional study. The methodology is by using a quantitative approach.

The questionnaires used were adapted from European Network of Safety and Health Professional Organizations (ENSHPO). There were 292 samples collected in this study from SHO. Results from the study showed the role and tasks of SHO contributed to 13% of the problem identification and analysis, 15% in the developing and implementing of solutions, 16% on training, information and communication, 15% on inspection and research, 12% on emergency procedures and settlement of damage, 4% on regulatory tasks, 12% on knowledge management and 13% on management and financial. Thus, the industries and government need to play their role in fulfilling the need of SHO towards achieving a developed country status.



#### Challenge on Public Infrastructure – OSH Perspective

#### Mr. Mazlan bin Ahmad Prasarana Malaysia Berhad

#### Profile:

Mr. Mazlan bin Ahmad is the Head of Safety, Health and Environment Department, Prasarana Rail and Infrastructure Services Sdn. Bhd. He has a Master of Science (Occupational Safety and Health Management) and have been with Prasarana Malaysia Berhad since 2008 and previously with SUNRISE Berhad since 2005.

#### Abstract:

In order to construct and completed any public infrastructure project there are lots of thing to be considered and plan. These are consisting on the utility services, traffic management, manpower planning and also machinery planning. As per what we know that, constructing public infrastructure services will may have long stretch of work that may goes until 30 to 50 kilometres depend on type and mode of constructions.

#### Concurrent 1.4

#### Occupational Health Issues in Construction Industries



#### Dr. Anza Elias Sunway Medical Center

#### Profile:

Dr. Anza Elias is a Public Health Physician (Occupational Health) in Sunway Medical Centre. She completed a Master degree in Community Medicine, specializing in occupational health from Universiti Kebangsaan Malaysia in 2007 and holds a Membership in Faculty of Occupational Medicine (MFOM) from Royal College of Physician Ireland. She trained in medicine from the University of Tasmania, Australia. She began her career with the Ministry of Health Malaysia and her last post was a Public Health Physician. Dr. Anza later worked at the United Arab Emirates (UAE) University and was involved in several occupational health projects under the WHO Occupational Health Collaborating Centre for Middle East countries. Dr. Anza has participated in the development of several national public health and occupational health guidelines and continues to lecture at postgraduate and professional levels. She has also published several papers both nationally and internationally. Dr. Anza is actively involved in occupational health services and programs, in particular, management of occupational diseases and injuries, fitness for work assessment, return to work program, health surveillance, chemical safety, and emergency response plan.

Dr Anza Elias

MBBS (Aust), M Community Medicine (Occupational Health) (UKM), MFOM (RCPI)

Public Health Physician (Occupational Health)

MMC Full Registration: 34885 National Specialist Registry: 127770 DOSH registration: HQ/08/DOC/00/683

#### Abstract:

**Introduction:** Occupational safety and health issues remain critical to the construction industry due to its working environment and the complexity of working practices. In Malaysia, there have been big improvements in safety and health initiatives to reduce the rate of injuries among construction workers. Despite this, construction remains a high-risk industry and accounts for a high percentage injuries and health conditions related to work.

**Methods:** A comprehensive systematic search was conducted on the scientific literature, national legislations and guidelines related to the work-related diseases, occupational health risk management and health status of workers in in construction industry.

**Results:** The occupational health hazards in construction industry include exposure to dusts, chemicals, sunlight, diesel engine exhaust emissions, loud noise, vibration, frequent or excessive manual handling of loads, stress and fatigue. Another important aspect of occupational health in construction industry is to ensure the workers are fit to safely carry out the tasks required of them. Occupational health services available to ensure the workers are safe to carry out specific job tasks include forklift, commercial drivers health assessment, drug and alcohol testing and prevention strategies to reduce musculoskeletal injuries. There are national legislations that regulate the occupational health and safety aspect of the construction industry. However, the provided guidelines may not be sufficient to address specific occupational health issues among these workers.

**Discussion:** The findings of this review offer some important insights into the importance of developing an awareness programme for employers and employees in construction industry. Prevention of work-related diseases and other diseases should be a high priority to protect the workers.

#### Concurrent 1.5

#### The Role and Application of Information Technology in Enhancing OSH



#### Dr. Lim Chee Siang Niwota Solution PLT

#### Profile:

Dr. Lim Chee Siang has a PhD in OSH and is the Principal OSH Consultant of Niwota Solution PLT (Ergonomic). He has vast experience in conducting Ergonomics Risk Assessment, noise monitoring and audiometric testing. He is also the trainer for Ergonomics Training and Hearing Conservation Program. Co-author of Book "Practical Guide to Hazard Identification, Risk Assessment and Risk Control" by NIOSH Publisher. Co-researcher for various projects by SOCSO and DOSH such as accident cost calculator, cost estimation of commuting accident, relationship between shift work and commuting accident etc. Dr. Lim is also the principal researcher for research entitled "Effectiveness of Participatory Ergonomics Intervention on Musculoskeletal Health and Psychosocial Factors among Selected Manufacturing Industry Workers in Selangor".

#### Abstract:

Over the years, technological advancement has gradually changed and transformed our life to its best. Introduction of messaging platform like whatsapp, Skype, WeChat etc has been widely used by people, and increasingly becoming part of the shadow IT in business operation and marketing, including management of OSH in an organisation. While the advantages of these platforms are well-versed, they have significant weaknesses with regards to uses cases, security, compliance, administration, business productivity and management of OSH. In view of this, "GoSafe" was recently developed and introduced to integrate and enhance current OSH system in an organisation. GoSafe is a solution domain that empowers users to report and manage incidents efficiently using mobile apps and web portal. With the features and functional capabilities offered, GoSafe could increase awareness and standards towards OSH across the organisation.

#### Concurrent 1.6

#### Dynamism of Risk Assessment Through Learning From Incident



Ir. Hj. Mohd Khalil Ishak Khalil Safety Consultant Sdn. Bhd.

#### Profile:

#### **Work Experience:**

Have had more than 25 years of work experience in maintenance of Petronas plants such as Refinery, Gas Processing, Fertilizer plants, etc. Also involved in plant construction and design of plant equipment such as heat exchangers, pressure vessels, reactors, furnaces and managed plant Turnaround in the early 80's until year 2004. Last assignment with OGP Tech. Services – Plant Turnaround Division

#### **Qualification:**

- Bachelor in Mechanical Engineering from Swinburne University of Technology, Melbourne, Australia
- Obtained Master in Industrial Safety Management from Universiti Kebangsaan Malaysia (UKM)

#### Affiliation:

- Registered member with IEM and Professional Engineer with BEM
- Certified Lead Auditor for ISO 9001 & 14001 & OHSAS 18001 from SIRIM and IRCA.
- Member with NIOSH and MSOSH.
- Certified trainer and consultant from CGE Risk Management from The Netherlands in conducting Risk Assessment using BowTieXP software and Incident Analysis using Root Cause & Tripod Beta Analysis using Investigator 3 software.
- Accredited Tripod practitioner (GOLD) from Tripod Foundation from The Netherlands and Energy Institute from UK.

#### Involvement / Services:

- Involved in performing Risk Assessment using the BowTie methodology for O&G, Construction and manufacturing companies. Report outcome are translated into tabulation and final reports presented to client.
- Engaged by victim's family member to carry out incident investigation and file in civil court under 'Tort' law for purpose of compensation

#### Abstract:

The implementation of Process Safety Management (PSM), Behavior Based Safety (BBS), HIRARC and other safety program have been well accepted not only in the high-risk industry namely Oil & Gas and Aviation but in recent years has slowly been accepted in the construction, maritime, manufacturing, etc.

Unfortunately, the implementation of HIRARC in Malaysia is still using the conventional tabulation (spreadsheet) method while incident analysis is still using the method of Fault Tree Analysis (FTA), Fish-Bone and Cause & Effect Diagram, Root Cause Analysis, etc.

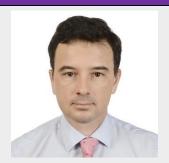
As we are all aware, learning from incidents and accidents is imperative for improving all business processes and performance including those from quality productivity, economic and health, safety and environment (HSSE). However, all too often the incident investigation are not only being done in silos (standalone) which do not go far enough to determine the human factors contribution to an incident and sadly did not un-cover the underlying organizational weaknesses that allowed the incident to happen.

Unlike in most developed countries, the used of BowTie methodology in Risk Assessment and Tripod Beta methodology in incident analysis have been well accepted and realized for a long time not only in Oil & Gas and Energy organizations but across a variety of business sectors. They not only provides a readily understandable visualization of the relationships between the causes of business upsets and the controls of preventing the event from occurring but also capable of linking the lessons learned from incidents into the Risk Assessment analysis diagram. This evolution and transformation from the conventional method to the latest

methodology of implementing HIRARC and Incident Analysis is crucial in incident and accident prevention throughout the country. Hence, the integration of Risk Assessment and HSE Auditing and Incident analysis in a single diagram will further enhance the barriers which will prevent the recurrence of an incident. This is where the dynamism of Risk Assessment is all about and may play a role in expediting the process of self-regulation in all organizations

#### Concurrent 1.7

#### OSH and the Future of Work



Dr. Francisco Santos OÇonnor Senior Specialist in OSH, ILO Thailand

#### Profile:

Francisco Santos-O'Connor, graduated as medical doctor in Madrid, Spain, in 1997. He practised as hospital clinician in the United Kingdom and Spain before joining the Maritime Health Institute of the Spanish Ministry of Labour in 2004, where he was in charge of an occupational health service. In 2008 he moved to the European Centre for Disease Prevention and Control in Stockholm, Sweden, where he worked as epidemiologist and expert in public health preparedness. In 2012 he joined the International Labour Organization (ILO) as Specialist in Occupational Safety and Health (OSH) at the Labour Administration, Labour Inspection, Occupational Safety and Health (LABADMIN/OSH) Branch, based in the ILO headquarters in Geneva, Switzerland.

Finally, since February 2017 he is the Senior Specialist on OSH of the ILO Decent Work Technical Support Team for East Asia, Southeast Asia and the Pacific, supporting member States of the region to develop and implement their National OSH Policies and Programmes. Dr Santos-O'Connor holds Master degrees in Maritime and Occupational Health, and HIV/AIDS, medical specialization in Clinical Microbiology, as well as Diplomas in Hygiene and Biostatistics. He has contributed to many ILO and European Union publications and has authored more than 20 articles in peer-reviewed journals and books. He has also been senior lecturer in universities, training supervisor for medical and administrative staff, and organizer of courses for diverse audiences, including workers, employers and government officials.

#### Abstract:

Digitalisation, robotization, migration, climatic and demographic changes, and the evolving nature of work with a growing trend in in non-standard forms of employment and an ever prevalent informal economy, are raising major questions for governments, employers and workers. In order to understand and to respond effectively to these new challenges the International Labour Organization (ILO) has launched a "Future of Work initiative" to advance its mandate for social justice. While traditional risks continue to take a heavy toll on workers' health, these drivers of change threaten the workforce with new emerging risks and trends in OSH which challenge traditional approaches, policies and programmes on occupational safety and health (OSH) at enterprise, national, regional and global level.

ILO tripartite constituents have agreed on the need to tackle these new emerging risks with concrete measures and tripartite commitment. This includes a renewed focus on standards, and in particular the adoption or revision of standards in response to newly arising needs and circumstances, but also the application of the management systems approach to OSH at enterprise and national level to effectively assess and manage these risks, calling on governments to establish, in consultation with the social partners, national OSH policies, systems and programmes following the approach in ILO Conventions Nos. 155 and 187.

### Concurrent 2.1

#### Practical Safety Training Center @ Construction Site



Mr. Matthias Krope Global Head of Solutions EHS&QM (EMD), Siemens AG, Power & Gas, Korea

#### Profile:

#### **Academic Qualifications:**

- Dipl.-Ing. Chemical Engineering / International Welding Engineer
- NEBOSH Certificate for Health & Safety
- WSH Workplace, Safety and Health NTUC LearningHub®, Singapore
- Risk Management Implementation Plan NTUC LearningHub®, Singapore
- Safety Certificate Contractors (SCC), TUEV Sued
- ICAM Incident Investigation and Root Cause Training, SafetyWise
- Leading in Safety / Leadership Behaviour, Explorator UK
- Human Performance Training for Safety, Siemens Ltd. Middle East

#### OSH Experience:

- Safety Construction Sites, worldwide support on OHS at Powerplants
- Responsible for 5 locations worldwide / ~50 construction sites for EHS
- Egypt, Megaproject 14.4GW / 3 construction sites with 18.000 workers permanent assigned
- Setting up Safe Start Program for Contractors as benchmark in Siemens
- Speaker at VDMA / VDI for operational safety
- Incident Investigation Lead for couple of severe incidents

#### Abstract:

In Egypt we were challenged by an extreme situation of 8000 workers in average on each of the 3 construction sites, mostly local workers with low educational background, illiteracy and limited safety awareness. Language barriers, cultural differences and low level of safety awareness led to some severe accidents in 2016. Our standard ways of theoretical induction by using PowerPoint to introduce our safety procedures failed completely.

To focus on the local environment, learning about people behaviour and understood what they need, was the key to success. We delivered a unique practical training safety park to each construction site with new Safety modules which are completely different to our common methods. We delivered a physical experience for the workers with fun (safety helmet simulator, fall from height Simulator, confined space simulator, electrical board simulator and many more).

The experience feedback, the success with practical safety training modules and the opportunities for customers in similar environment, is what we want to share with you.



Mr Aliasman Morshidi MSOSH

#### Profile:

Extensive engineering and supervision experience in factory set-up, the operation, facility and maintenance of process and equipment in multinational industry. Also experienced in Civil Works construction company Class A, specializing in Quality, Audits and Health, Safety and Environment (HSE) management. With Bachelor of Engineering (Mechanical) from University of Queensland Australia and Master in Business Administration (MBA) from Mara Technology University (UiTM), he is specializing in HSE management in manufacturing, construction and oil & gas industries for the past 19 years. He was certified as Safety & Health Officer (SHO #: JKKP IS 127/438/2/2990) and Radiation Protection Officer (RPO #: 3677). Certified ISO9001:2008, ISO14001:2004, OHSAS18001:2007 and ISO45001:2018 auditor, Traffic Management Officer (TMO), HRDF Train The Trainer (TTT #: 3982) and NEBOSH International General Certificate in Occupational Safety and Health (OSH).

With his vast experience working in MNC in front end electronic industry, he has been extensively involved and had acquired indepth hands-on various areas and aspects in hazardous materials (HAZMAT), radiation and project management. He was sent for technology transfer and training in Japan, chemical distribution system training in Arizona, U.S and also facility set-up and radiation technology transfer in Austria. He also exposed with Factory Mutual (FM) audits as part of the organization's risk management. He also trained in Authorized Gas Tester (AGT), Radiation Protection Program, Facility and Equipment Safety Set-up, Traffic Safety Management in Construction, Emergency Response Plan, Fire Safety, Waste Management (including Scheduled Wastes) and First Aid (including AED).

In construction industry, he has been involved few important construction projects in Sarawak. Some of the projects are Dewan Undangan Negeri (DUN) Sarawak, Tanjung Kidurong-Suai-Bakam (TKSB) Road and Assar Senari Independent Oil Terminal (IOT). He in-charge on the overall QHSE performance and improvement of the organization such as subcontractor's performance evaluation, the integration and improvement of QHSE processes, participation in National QHSE awards and CSR activities. In Oil & Gas industry, he assist the organization to establish HSE Culture framework and how the organization can link the "hardware" of HSE Management System and "software" HSE issues related to management and workers.

In last previous employment, he worked at CTRM Sdn Bhd as Senior Manager, Head of HSE Department. He oversees the overall HSE issues pertaining HSE Management System, Culture, construction of new extension building and Energy Management at the workplace. Established HSE Management System framework, inculcate HSE Culture and cost saving project in the organization through consultation and engagement with all level of employees.

Currently, a freelance HSE professional and practitioner. Involved actively in HSE training, consultation, NGOs and also writing in OSH discipline. Presented papers at local and International Conference of OSH (COSH, BOSH, FMM, NRG-SHE, GLOW2012 and XXI World Congress on Safety & Health 2017, NIOSH and MSOSH) and Seminar. Currently the management committee of MSOSH (No: 1848), NRG-SHE member (No: F0002), Technical IOSH member (No.: 167131), ASSE member (No.: 010069079) and Specialist IIRSM member (No.: 306544).

#### Abstract:

Malaysian Society of Occupational Safety and Health (MSOSH) OH practice arose from the social changes of the industrial revolution and, in some cases, is now seen as an integral component of a successful business. OH management still work in silo and actions only be taken through reactive approach. A new paradigm for OH has emerged that extends the classical focus on what might be termed "health risk management"—that is, the focus on workplace hazards and risk to health—to include the medical aspect of sickness absence and rehabilitation, the support and management of chronic non-communicable diseases, and workplace health promotion.

The fourth industrial revolution brought a number of potential problems in occupational health area which will be evaluated in continuation such as mental workload to train qualified workforce, unemployment problem and cyber security. In this session, the author will share his idea and concern on how OH issues is managed under conventional approach. The author recommends on the importance to manage OH risks as a whole spectrum under holistic OSH risks management. It should also include the current public health issues such as health related absenteeism, fitness and return to work program, mental health management.

#### Concurrent 2.3

Managing Significant Risks at Construction Project Sites Related to Traffic Management Safety



Major Abd. Razak bin Abdul Majid (Rtd.)
Safety and Health Manager, HSSE Engineering Sdn. Bhd.

#### Profile:

Major Abd Razak bin Abdul Majid ato RMAF (Retired) is now working with HSS Engineering Sdn Bhd, since June 2017. He had a vast working experience in safety, health and environment for more than 20 years in Defence Industries (Malaysian Armed Forces) since June 1979, in related to Armament and Explosives Engineering. He had served various industries after his retirement from the Malaysian Armed Forces since January 2000, in construction projects (inclusive Marine Construction), manufacturing, High Rise Building Maintenance (Twin Tower Petronas), consultancy and training sectors (NIOSH and CIDB).

Competent Safety & Health Manager, registered with DOSH Malaysia and graduated with Executive Master in Safety, Health and Environment (BRIC-UNISEL) on November 2016 and still pursuing his higher education for Doctorate in Business Administration (Specialization) with The International Business School of Scandinavia, IBSS, Denmark. He was also appointed by CIDB Malaysia as one of an expert panel, developing accredited Construction Traffic Management Officer (CTMO) in related to Construction Industry Competency Standard (CICS) and also the Trainer and Accessor for Traffic Management Officer (TMO) Course.

#### Abstract:

**Introduction:** As required under Factories and Machinery (Building Operations and Works of Engineering Construction) (Safety) Regulations 1986, sub regulation 18. Public Vehicular Traffic, (1) whenever any work is being performed over, on or in close proximity to a highway or any other place where public vehicular traffic may cause danger to men at work, the working area shall be so barricaded and suitable warning signs and warning lights shall be set up to direct traffic away from it, and when necessary, the traffic shall be specially controlled by designated persons. Further to that, under the Occupational Safety and Health Act 1994 (Act 514), Part IV - General Duties of Employers and Self-employed Persons, are relevant to ensure the need for traffic management safety at work zones.

OSH Challenges and Public Safety: Handling traffic in work zones is challenging because the work activities present abnormal and often disruptive environment to public traffic/motorists and other parties. Motorists accustomed to a clear, unobstructed roadway are required to recognize and avoid closed lane, workers in or near the roadway and a variety of fixed object hazards. Pedestrians expecting a clear, direct walking path can be faced with closed sidewalks and open trenches closer to the moving traffic. The construction activities may also present a distracting view to many motorists that can divert their attention from the driving task. Work zones are often dynamics and the layout of the traffic control is changed as the works progress. As such, the motorists and the pedestrians are constantly being confronted with new challenges and disruptive elements on their travel path. There are many instances where this has led to a serious incidents/accidents and some including fatalities.

**Objectives:** The objectives of the proposed presentation paper are to provide update knowledge and sharing experience, which cover the following topics:

- Introduction to Principles of Traffic Management at Work Zones.
- Strategies For Effective Implementation of Construction Traffic Management at Work Zones, Managing Significant Risks at Construction Project Sites Related to Traffic Management Safety.