

Industrial chemical accidents - a growing issue, and future of our SMEs.

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Sri Lanka is a country which still needs to have a rapid increase in productivity to uplift revenue to solve growing economic problems. Industrial sector needs a back up to boost their sustainability from the government, which needs industrial contribution as a major to accelerate the economy. Our agro based economy is being converted into industry based economy through the encouragement of investors of local and foreign by multifaceted ways. Still industrial sector contribution to the economy of Sri Lanka is only by nearly thirty percent. The total number of industries located in the country is around forty five thousand. At this stage industrial chemical accidents a crucial factor to be considered to secure not only industrial economy itself but environment and public health as well.

A chemical accident is an unintended single event involving one or more hazardous substances causing fire, explosions, spills, leaks or releases toxic emissions harmful to the environment, community (injury, disability illness or deaths) and properties.

Unavailability of environmentally sound disposal mode for hazardous waste is a serious problem in Sri Lanka.

Industries totally cannot avoid use

of hazardous chemicals for their productions. They are needed to use in Consumer Products (Paints and Solvents, disinfectants, surfactants etc.), Industrial Processes, Petrochemicals and Refined Products, Agriculture Chemicals - Fertilizers and Pesticides, Pharmaceuticals etc.

According to available data in past few years, Sri Lanka experienced chemical accidents such as leaking of liquefied gases like Chlorine, Ammonia and other types of solvents, spills and leaks of petrochemicals to water resources and ground water table, fires at paint and other type of industries which are using flammable solvents, leak of

chemicals from storage tanks, fires at stores and contamination of water bodies etc. Steps taken after incidents or response part by SMEs or institutes are ad hoc due to mechanism or procedure is not in place to communicate with appropriate parties, those who responsible to react.

Although the safety can be increased by providing suitable Personal Protection Equipments (PPEs) sometimes the matter is negligible by managers or workers at SMEs, and even paint industries is a common practice.

Deficiency of knowhow or available technical facilities hamper response to chemical accidents.

Chemical accidents result in hazardous wastes which need to be safely disposed of. Therefore the industrial sector should be vigilant to prevent chemical accidents while the onus is on the government to regulate them through policies, laws etc to ensure environmental and public safety.

Prevention and preparedness are very crucial to avoid major chemical disasters. Analyzing Possible every risks and applying suitable precautions is the way to prevention. Preparedness is to avoid any effect consequences to the external environs and community caused by accidental releases.

Therefore risks assessment at storing, handling, transportation and, processing is an important part of chemi-

cal industries.

Availability of unique classification and labeling system for chemicals is useful for easy management of chemicals. Engineering maintenance of equipments, proper housekeeping, and development of workers skills in every sector are dominant factors to consider avoiding accidents. Proper land use planning at initial stage of installments reduces most of the risks to the community and environment. Hospitals, local government authorities community responders, responsible authorities' with close proximity to hazardous installments should be kept aware with necessary information to be ready for proper response.

Safety culture is something SMEs in Sri Lanka should be made aware of. Control of emissions and discharges may not be effective enough for future industrial development when compare with global trends which prioritises green economy to be harmony with environment, and community health. Concept of green economy will ensure true development of the country as a whole. Thus, the attention of responsible Authorities to establish a mechanism for chemical management in Sri Lanka will secure our industries, with environment and health.



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