

Effectively Utilizing Safety Datasheet Information in Developing a Risk-Based and Fit-For-Purpose Facility Design



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It is a common knowledge that chemical and petrochemical facilities handle substances which are considered hazardous. The level of harm associated with these substances varies from being lethal to harmful to personnel and environment or from being highly flammable to combustible. The facility design process can be simplified by incorporating overly conservative protection measures in the design even for hazards which are considered to pose relatively lower risk and can be effectively controlled by other means than engineered controls. Doing this does not prove to be an effective way in managing the hazards associated with the plant as it could lead to an unsafe operating practices due to the potential for focus to be diverted away from the major hazards which need more attention, time and resources.

This presentation will share best practices how safety datasheet information can be effectively utilized to provide guidance in developing a fit-for-purpose design based on numerous project experiences. It also presents how SDS can enable employing a risk-based approach in incorporating safety during the plant design process.

SDS provides recommendations for protection measures, albeit may not be all inclusive, but a good starting point. It is considered to be one of a valuable reference, especially for emerging novel technologies to support global thrust for clean energy wherein no industry guidance or codes and standards are currently available. Collectively utilizing information from hazard identification results, SDS, and risk assessments, paired with expert engineering judgement, a fit-for-purpose and safe plant design can be developed.

Biography:

Veronica has more than twenty years of industry experience. Experienced in several phases of design work and Project Management Consultancy services.

Fluor Fellow in Technical Safety and HSE Verification/Compliance, specializes in technical safety field which includes the identification, assessment, and management of HSE risk associated with the facility Fluor designs. It includes performance of risk assessments which enables the project to make the right decisions to provide a safe and fit for purpose design solutions to our clients.

Certified Functional Safety Engineer, also recognized as one of the Company's Global SME in HSE in Design and Hazard/and Risk Analysis.