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The “Safety Net”: Modern Asset Integrity Management, A Process Safety Integrated Approach

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Despite companies systematically introducing management systems to improve performance and reduce major incident risks. Gaps still remain that are linked to common challenges relating to resourcing, competency and leadership shortfalls that, when properly assessed and implemented have a significant impact on reducing incident rates in high hazard industries. The Oil & Gas Producers framework provides ten elements that form the structure and define the company purpose behind each element into a cohesive, structured system to manage risk reduction. It is the proper implementation of these elements that provides measurable risk reduction and continuous improvement. This abstract examines the relationship between the elements using safety studies to link to Process Safety Management and Physical Asset Integrity Management to effectively manage operational risks. The program called “Safety Net” physically segregates company facilities into individually managed areas or grids. The risk profile is assessed for each grid introducing safety and consequence studies to visually represent the “at risk” locations supported by technical safety studies. The benefits by overlaying contours and process boundaries as typical examples results in a simplified model allowing area owners to recognise the risks, controls and mitigations to introduce suitable risk reduction measures for safe operations.

Biography

João has completed 20 years experience in Risk consulting projects in the oil and gas, petrochemical and mining industries since 1999. His experience has largely been centered on the risk assessment of refineries, onshore process plants and offshore facilities in South America, Middle East and North Sea.