ABSTRACT

The techniques of Process Safety Management (PSM) are now an integral part of the operations of process plants in the United States. As the name implies, Process Safety Management is fundamentally a management standard; it provides a framework which plant management can use to minimize the number of uncontrolled deviations from design or operating intent. As a management standard, PSM tends to be most effective in areas involving the performance of human beings and organizations, for example, operating procedures, training and the control of contract workers.

However this management focus of PSM, along with the non-prescriptive nature of the regulations in this area, means that process safety decisions tend to be based on the judgement and experience of the people working at a site or on a project. These decisions may lack quantitative, engineering rigor.

This paper suggests that the integration of engineering standards from organizations such as ASME, NFPA and API can help improve the quality of process safety analyses. Similarly, the use or process safety techniques will help design engineers utilize those same standards more effectively during the design process, particularly when a variance is being called for. The paper will discuss how Process Safety Management and Engineering Standards can be linked to one another to create a powerful, practical and useful synergy.