ABSTRACT

This paper explores a novel approach for improving chemical safety in the United States by establishing National Process Safety Goals. Process Safety initiatives in the recent years have given rise to significant increases in process safety technical and management knowledge and promising new process safety regulatory requirements. However, serious deficiencies still exist in regard to needed tools and practices. Among the more important general areas of deficiency noted are:

1. The absence of adequate data on whether progress is being made in reducing the incidence of process accidents and the extent of their consequences. 2. Less than desired application of established principles for managing process safety in many industry facilities. 3. Gaps in process safety training, particularly in small to medium sized facilities and less than adequate levels of process safety research in areas such as inherently safer processes.

Future developments in the U. S. with regard to process safety and risk management programs may quite likely be based on risk-benefit analyses. There is also a number of efforts underway to develop stakeholder dialogue and arrive at consensus opinions regarding national safety goals and targeted improvements in safety performance. It is quite clear that the need to operate safely is recognized as a competitive advantage and a positive contributor to the bottom line. The regulatory regime and requirements will also keep changing as more information becomes available. Thus, industrial programs and practices will have to keep pace with changing climate and consensus standards and targeted safety goals. This paper presents an update on the efforts to date on a project with wide stakeholder participation. The objectives of the project include adoption of national chemical safety goals and implementation of a measurement system to measure progress towards the established national chemical safety goals.