Guidelines for Implementing Process Safety Management Systems
The Center for Chemical Process Safety (CCPS) has recognized since its inception that enhancements in chemical process technologies, taken alone, are not sufficient to prevent catastrophic events such as the Bhopal disaster. It is obvious that successful chemical process management technologies need the commitment and participation of top management. Therefore, with support from its advisory and managing boards, CCPS established a multifaceted program to address the need for technical management commitment and technical management systems to reduce the potential for exposures to the public and to the environment.

The first document produced under the CCPS program was a brochure entitled “A Challenge to Commitment,” which was mailed to the CEOs of more than 1500 companies. It provides an overview and an outline of a comprehensive model for the technical management of chemical process safety, characterized by twelve distinct and essential elements.

The second publication was a book entitled Guidelines for Technical Management of Chemical Process Safety. It expands on the twelve elements of the CCPS model and provides both the framework and detailed components for a chemical process safety management system, and offers various alternatives for implementation of each of the elements and components of the model. To further supplement and “customize” the model, American Institute of Chemical Engineers (AIChE) conducts training programs based on the book, to teach the use of the CCPS process safety management program.

A third publication, Plant Guidelines for Technical Management of Chemical Process Safety, contains highly detailed instructions and example materials suitable for direct implementation at plants. Most of the example materials are taken from written procedures currently in place at some of the most prestigious U.S. plants. The guidelines are directed toward all those individuals with responsibility for initiating and/or maintaining any of the elements detailed in Guidelines for Technical Management of Chemical Process Safety. Video training programs based on these two books have also been produced to help companies present the principles of process safety management to employees. Other CCPS guidelines address individual elements—such as Auditing, Incident Investigation, and Documentation—in greater detail.

This book complements previous work by CCPS in describing how to undertake the design, development, and installation of process safety management systems.
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