Monday Morning Quarterbacking -
Applying PSM Methods to Case Histories of Yesteryear

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ABSTRACT

Working within a chemical plant is one of the safer occupations. However, infrequently there have been some serious accidents. Several chemical plant incidents of varying consequences will be presented. Each of these may not have occurred if the plants had developed and utilized a viable Process Safety Management System.

A heater was accidentally started up without circulation, a tube ruptures and a destructive fire occurs. A hidden blind in a piping system contributes to the destruction of a fiber-glass acid storage tank. A large mobile sand-blast pot lid blows off due to a poor welding process. A large flammable vapor cloud erupted and a massive fire resulted when a mechanic attempted to remove a block valve actuator and mistakenly removed the block valve bonnet flange.

Adequate PSM Programs and especially mechanical integrity programs can be effective and substantially reduce the threat of many unwanted incidents with chemical plants. The sharing of case histories between corporations and the work force can only lead to a safer tomorrow.