Relationship of safety culture and process safety

Claire Olive, T. Michael O’Connor and M. Sam Mannan

Mary Kay O’Connor Process Safety Center
Artie McFerrin Department of Chemical Engineering
Texas A&M University
College Station, Texas 77843-3122, USA

ABSTRACT

Throughout history, humans have gathered in groups for social, religious, and industrial purposes. As the conglomeration of people interact, a set of underlying values, beliefs, and principles begins to develop that serve to guide behavior within the group. These “guidelines” are commonly referred to as the group culture. Modern-day organizations, including corporations, have developed their own unique cultures derived from the diversity of the organizational interests and the background of the employees. Safety culture, a sub-set of organizational culture, has been a major focus in recent years. This is especially true in the chemical industry due to the series of preventable, safety-related disasters that occurred in the late seventies and eighties. Some of the most notable disasters, during this time period, occurred at Bhopal, Flixborough, and Seveso. However, current events, like the September 11th terrorist attacks and the disintegration of the Columbia shuttle, have caused an assessment of safety culture in a variety of other organizations.