Benchmarking Safety Culture Survey Practices in the Chemical Process Industry

Stephanie C. Payne* and Yimin He

Department of Psychology and Mary Kay O’Connor Process Safety Center
Texas A&M University
College Station, Texas 77843-4235

*Presenter E-mail: scp@tamu.edu

Abstract

Safety culture surveys assess employees’ shared perceptions of the policies, procedures, and practices concerning safety. Benchmarking is the process of comparing one’s business processes and performance metrics to industry bests or best practices from other companies. In this study, we were interested in benchmarking the practice of conducting safety culture surveys and various details about these practices. Some specific research questions we were interested in answering were (1) Which organizations conduct safety culture surveys and how frequently do they do so? (2) What kinds of questions are asked (process safety, personal safety)? (3) Who completes the survey? (managers, internal/external contractors) (4) How are the survey results used and do they help? In this study, we focus on 41 survey responses from 41 unique operating companies in the oil and gas and chemical processing industries. A majority of the respondents reported conducting a safety culture survey and with some frequency (e.g., annually). Respondents indicated that surveys were conducted both internally as well as by external vendors. A wide array of reasons were given for conducting the most recent safety culture survey including new safety initiatives, new leadership, and the desire to continuously improve. Data were also gathered on concerns or obstacles raised by individuals about the survey, who completed the most recent survey, response rates, employee reactions to the survey, languages the survey was administered in, who the results were disseminated to, and post-survey actions. Respondents estimated that approximately 25% of the survey questions concerned process safety and about 51% of the survey questions concerned personal safety. This study provides some initial information about safety culture survey practices which can inform and facilitate the benchmarking of safety culture survey scores across organizations.

1 Safety Culture is defined shared assumptions, values, and beliefs about safety that characterize an organization. As psychologists, we believe that surveys are more likely to capture “safety climate,” (employees perceptions about safety policies, practices, and procedures) but we recognize the chemical process industry tends to use the phrase “safety culture” more frequently, thus we use that phrase in this paper and the survey. It should be noted that “safety climate” surveys have been conducted by industrial/organizational psychologists since at least 1980 (Zohar, 1980).