

Integral Safety Needs Analysis towards Optimizing Safety Performance in Malaysian-Based Multinational Pipe-Coating Industry

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Abstract—In examining the literature on occupational safety and health management systems (OSHMS), this paper asserts that there is a need to consider the human interface when attempting to deal with a step change in safety at the workplace. The general absence of study in the integration of systems and subjective side of occupational safety has prompted this conceptual development, empirical study and theoretical reflection. The survey population was made up of on-line survey and paper questionnaire among 282 respondents. The demographics of the sample were representative of the typical mid-sized pipe-coating industry with 12% management respondent, 16% supervisory respondent, 70% shop floor respondents and the remaining 2% subcontractor respondents. There were also follow-up one-on-one interviews with 25 organization members. It can be concluded from this sample that in excess of 60% of the survey respondents expressed desire to build on the reacting, conforming and achieving stages towards achieving an integral performance level when given an option to do so. These preliminary results of initial perception survey forms the foundation for the scope of study in the form of intervention and gap closure to be addressed in future researches for further promoting the integration of psychology, sociology, industrial relations and management studies to supplement existing system approaches in OSHMS.

Index terms: Integral safety, human interface in OSHMS, adaptive leadership

I. INTRODUCTION

A Malaysian-based multinational pipe-coating organization (which has elected to remain anonymous) has allowed the researcher to work in partnership towards building and sustaining an incident-free workplace. Understanding the current perceptions and attitudes of the organization towards safety is a critical starting point in discovering what will be required to shape a future that delivers on what may seem impossible to many, which is the elimination of all worker injury. The integral safety assessment is a tool which reveals organization members perceptions about key drivers of safety performance. Central to the researcher's approach and to this assessment is the perspective that the ultimate source of behavior and safety results is how people perceive their world. Through the use of surveys and interviews the researcher has taken a broad and deep sounding of how the organization sees itself now, and where it wants to be in the future with regards to operating as an incident-free organization.

Lutchman et.al [1] stressed that the current focus on safety is on cooperation, collaboration and generating and sharing new knowledge to enhance workplace safety. The concept of "you do not know what you do not know" rings true when the evolution of safety is reviewed and the roles, responsibilities and accountabilities of leaders and safety practitioners are attempted to be defined. Leadership in safety cannot be treated any differently than leadership in any other areas of business. A key challenge for business leaders today is the ability to manage cost, production (quality) and safety in tandem. This is mainly because the stakeholders (in various forms) are often overly focused on short-term gains or cost efficiency.

Geller [2] postulates that the human dynamics enable profound understanding of the psychology of safety. It is no longer adequate to merely have a solid safety and health management system in place and hope for, or expect the best outcome in term of safety performance. Supporting evidence to this statement would be the major disasters in recent years- Texas City Refinery explosion, Deepwater Horizon and Longford gas plant explosion to cite a few high-profile incidents.