Abstract
Human performance is a significant source of risk in any organization. The majority of accidents, both occupational and process safety, are at least in part the result of human error. Companies manage risks associated with human performance through a variety of administrative controls, including policies, procedures, work instructions, employee selection and training, auditing, etc. Incidents and accidents occur when there is a failure in one or more of these controls. The initial challenge is to know which of these controls are contributing to accidents and need improvement. However, this is only part of the solution – to improve safety performance, companies must also take deliberate action to strengthen the controls contributing to the unintended events.
This paper will provide an overview of Human Performance Reliability as a process to assess existing controls and to identify which are contributing to human error within an organization. In addition, the authors will present an example of integrating at Human Performance Reliability into a global chemical manufacturer’s process safety management program.

Keywords
Human error, human factors, management controls, process improvements, process safety, safety performance