A Methodology for Identifying and Addressing Dead-Legs and Corrosion Issues in a Process Hazard Analysis (PHA)

Rene’ Murata and Janet Benaquisto
Risk Integrity Safety Knowledge, Inc.
Houston, TX
Janet.Benaquisto@psmrisk.com, 510-828-7228

Abstract

Identifying dead-legs and related corrosion issues continues to be a challenge in the process industry. Pipeline corrosion has been a factor in several recent incidents involving releases and fires. A review of incident reports and citations over the past ten years indicates that Process Hazard Analysis (PHA) revalidations have been noted for not addressing the hazards of a process including corrosion mechanisms and dead-legs. In order for the hazards to be addressed, they must first be accurately identified in a PHA and documented along with any recommended actions for preventive maintenance. This paper describes a methodology for identifying and addressing dead-legs and related corrosion issues within a PHA that can be used to update corporate PHA procedures to be more robust in preventing corrosion related incidents.