Conducting PHAs on Combustible Dust Processes

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ABSTRACT

Process Hazard Analyses (PHAs) have been conducted on chemical processes for decades. Now PHAs are being conducted on combustible dust handling processes per NFPA 654s. Although much of the same analysis technique can be applied, conducting effective PHAs for combustible dust processes requires some differences in approach. Due to the prescriptive nature of most of the safeguards for combustible dust handling, a checklist methodology is far more suitable for these processes than a traditional hazard and operability (HAZOP) methodology. Additionally, more time may be necessary to educate the PHA team to the hazards and concerns associated with combustible dusts. This presentation will present suggestions for leading combustible dust PHAs based on our experience with a variety of industries. It will also discuss the type of information that should be gathered before the PHA team is assembled.

AUTHOR BIOGRAPHY

Ms. Molly R. Myers is a partner with ioMosaic Corporation. Ms. Myers has a Bachelor of Science in chemical engineering and a Master of Science in engineering management from Washington University. She is a licensed P.E. in Missouri and Texas and has over 20 years of industry experience in chemical and pharmaceutical processes. Molly is also a member of the American Institute of Chemical Engineers and the Society of Women Engineers.

Since joining ioMosaic in 2008, Molly has performed process safety management audits, training and associated consulting, leading process hazard analyses, combustible dust consulting, emergency relief systems designs, and facility siting studies. Her fields of expertise include combustible dusts, flammable liquids handling, equipment design, PSM compliance and ERS design.