Assuring Process Safety in the Transfer of Hydrogen Cyanide Manufacturing Technology

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Abstract

The manufacture of hydrogen cyanide requires that three critical characteristics be taken consideration: toxicity, flammability, and reactivity. Reactivity includes the potential for exothermic runaway reactions that may form HCN polymer and lead plugged lines, instrumentation, and safety devices. DuPont has safely manufactured hydrogen cyanide at the Memphis site for over 50 years, and has frequently and safely licensed HCN technology to other firms. This paper outlines the keys to safe and successful transfer of this manufacturing technology through the construction, and start-up phases.