Refrigeration System exHAZOP

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ABSTRACT

Ammonia refrigeration sites with threshold amounts of ammonia (currently 10,000 lbs) are required to adhere to federal process safety management (PSM) practices. Hazard analysis is a critical part of the PSM program and is intended as a proactive technique for identifying and correcting hazards before a loss occurs. Although critical to preventing losses, the hazard analysis is often treated as merely a paperwork requirement.

This paper illustrates the development of an expert HAZOP (exHAZOP) database for ammonia refrigeration users. The exHAZOP is a database of experience based hazards and refrigeration issues that may lead to losses if uncorrected. The database included herein is a small sample; however, it forms the beginning of a program that could easily grow and remain evergreen through continued population of operating experiences.