

Valves
Page 2

Attachment

FOR RELEASE: MONDAY, OCTOBER 20, 1997

EPA AND OSHA ISSUE JOINT SAFETY ALERT

EPA and OSHA released a Joint Safety Alert to warn many industries, including refineries, petrochemical plants, chemical plants, power generation facilities and others about problems with certain types of check and butterfly valves. Certain types of check and butterfly valves can undergo shaft-disk separation and fail catastrophically or "blow-out," causing toxic and/or flammable gas releases, fires and vapor cloud explosions. Such failures can occur even when the valves are operated within their design limits of pressure and temperature. In a 1997 accident, several workers sustained minor injuries and millions of dollars worth of equipment was damaged when a shaft blow-out occurred in these types of valves. The valve's failure caused the rapid release of large amounts of hydrocarbon gases, which subsequently ignited, resulting in a large vapor cloud explosion and fire. Most modern valve designs incorporate features that reduce or eliminate the possibility of shaft blow-out. However, older design check and butterfly valves with external appendages such as pneumatic-cylinders, counterweights, manual operators or dashpots may be subject to this hazard. Facilities should review their process systems to determine if they have valves installed that may be subject to this hazard.

If so, facilities should conduct a detailed hazard analysis to determine the risk of valve failure and consider replacing high-risk valves. For more information, visit the EPA CEPPPO home page at <http://www.epa.gov/swercepp/> or contact the Emergency Planning and Community Right-to-Know Hotline at 1-800-424-9346 or 703-412-9810.