



Information Bulletin No. IB09-007

August 7, 2009

ALERT H₂S Removal at Well Site Non-Pressure Vessels Must Not be Pressurized

Pressure vessels are specifically designed and constructed **in accordance with the CSA B51 Code** to contain fluid under pressure. When air and other compressible fluids are being pressurized, there exists a large amount of energy and a sudden release of this energy will have potentially catastrophic consequences. Containers must not be pressurized if they are not designed as pressure vessels. The use of pressure vessels must be by properly trained competent personnel. A recent incident emphasizes the danger.

Workers at a well site were in the process of abandoning a sour gas well. This involved flowing the gas through a non-code H₂S scrubber vessel. This scrubber has a combination of internals with chemicals to remove the H₂S component from the gas prior to its release to the atmosphere through a removable vent stack. Since this unit is open to atmosphere, a pressure relief device was not installed. We understand that this is a fairly common process of H₂S removal in gas well field operations.

In this instance, when this scrubber was set up, the shipping cap was not removed and the vent stack was not installed. This created a closed system. The gas began to flow such that it created a significant pressure inside the unit. When the pressure became high enough, the scrubber ruptured causing the flat head to blow off and travel approximately 200 feet. Fortunately, no one was hurt in this incident.

This incident is a reminder that safety is important no matter what you are doing. Someone could have been severely injured or killed. It is necessary that proper precautions be taken to ensure personnel are trained properly and procedures are in place to ensure a safe working environment.

K. T. Lau, Ph.D., P.Eng. Chief Inspector and Administrator Pressure Equipment Safety Province of Alberta

{ABSA: D0155444.DOC .3}