

Hazards of Working with Compressed Gases

Compressed gases can be hazardous due to the nature of the chemicals and the high pressures used in cylinders and gas supply systems. In July 2017, 11 workers were conveyed to hospital after a gas leak occurred in one of the production floors of a factory. Gas leaks from the pressurized cylinders or gas supply systems can lead to rapid accumulation of hazardous gases especially in enclosed environments. Exposure to hazardous gases can lead to ill-health and may even be fatal.

WHAT SHOULD YOU DO?

The industry is reminded to ensure gas supply systems are properly designed, constructed, operated and maintained, including taking into account the properties and conditions of gas being used.

Risk Management

Risk assessments shall be conducted for all work activities and safe work procedures implemented to properly manage the risks associated with the use of pressurized gases. Companies should

- a. **Implement a comprehensive Maintenance Regime** with regular inspections and testing to ensure the integrity of the gas systems and a safe working environment for workers involved;
- b. **Establish a comprehensive Emergency Response Plan** to address all emergency situations; and
- c. **Establish a Safety Interlock System** to control and contain hazardous gases in the event of a leak or failures of the gas systems. Alarm sensors and data loggers shall be installed to detect occurrence of such leaks or failures of the gas systems.

**Written by the Ministry of Manpower*