

**Agrichemical Warehousing Standard Association**  
**WAREHOUSING STANDARDS BULLETIN**

**Updated: January 2011**

**NUMBER: 13B**

**PROTOCOL B20**  
**VENTILATION**

The flammable and combustible liquid storage areas ventilation system is designed to control explosive vapours.

The most common acceptable method of achieving this has been to control heavier than air vapours by at least one air inlet and one exhaust outlet systems within 300mm of the floor. This method of ventilation is commonly referred to as a “*Local Extraction*” system.

The American Conference of Government Industrial Hygienists also recognizes the “*General Dilution*” method as an acceptable alternative when contaminants cannot be confined to a controlled emission point. The site operator may meet protocol B-20 by ensuring a homogeneous air quality throughout the certified warehouse area. This can be accomplished by installing ceiling fan(s) with a minimum rating of 4cfm per sq. ft. of floor area in the certified warehouse area and positioning air inlets and exhaust outlets at any location within the building, without ducting to within 300mm of the floor. Ceiling fans **MUST** operate continuously when occupied.

Note: Audit Protocol B-21 – The heating system for the certified warehouse area has no open flames (i.e. pilot lights) which could come into contact with explosive vapours. This protocol (B-21) requires a ventilation system without mechanical agitation, where ceiling mounted units with open flames are installed. Therefore, the “*General Dilution*” method using ceiling fans would **not** be an acceptable alternative in this situation or where flammable or combustible liquids are being dispensed.