Agrichemical Warehousing Standard Association WAREHOUSING STANDARDS BULLETIN

Updated: January 2006

NUMBER: 26

Storage of TDG Class 2.1 Flammable Gas

The storage of TDG Class 2.1 Flammable Gas within a certified warehouse area is not recommended by AWSA unless the eight requirements listed below are met. Some products with this classification are

- 1. Propane (except tanks mounted on forklifts).
- 2. Ethylene gas.

Audit protocol C19, which is valued at 20 points, states, "There are no spare flammable compressed liquified storage cylinders inside the warehouse..."

If site operators store these products within a certified warehouse area, the following audit protocols are relevant:

B20–mandatory B21–mandatory C4–20 pts. C5–20 pts. C6–20 pts. C17–20 pts. C19–20 pts. E5– mandatory.

Indoor storage of TDG Class 2.1 Flammable Gases shall be stored as follows:

- 1. in a room or building dedicated only to class 2.1 flammable gas;
- 2. if in a room within a building, the room is to be constructed as gas-tight and have a fire separation having a fire-resistance rating of at least 2 hours;
- 3. the room to be located on an exterior wall of the building;
- 4. the room can be entered from the exterior and any doors into the interior of the building shall be i) equipped with self-closing devices, and
 - ii) constructed so as to prevent migration of gases from the room into other parts of the building;
- 5. the structure is designed to prevent critical structural and mechanical damage from an internal explosion;
- 6. is provided with natural or mechanical ventilation;
- 7. does not contain fuel-fired appliances or high temperature heating elements;
- 8. is used for no other purpose than the storage of TDG class 2 gases.

The small quantity exemption for TDG Class 2.1 Flammable Gas is 25 kg.

AWSA and the CropLife Canada, their employees, members or agents have neither made, nor do not hereby make, any representation, warranty or covenant with respect to the specifications, information and recommendations in this bulletin, or the results generated by their use, nor will they be liable for any damage, losses or claims, including those of an incidental or consequential nature, arising out of the use or inability to use this bulletin. Use of trade name implies neither endorsement of products, nor criticism of similar ones not mentioned.