Agrichemical Warehousing Standard Association WAREHOUSING STANDARDS BULLETIN

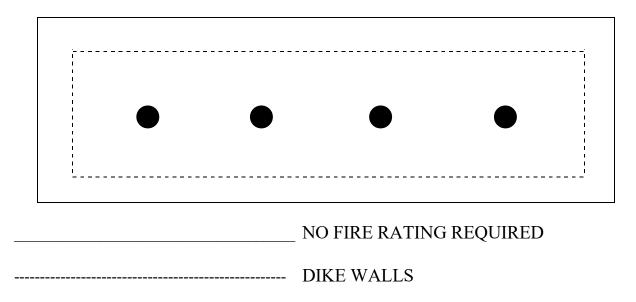
Updated: July 1996 NUMBER: 12

BULK INSTALLATIONS LIQUID AND DRY

An installation is considered bulk when products are stored in fixed containers.

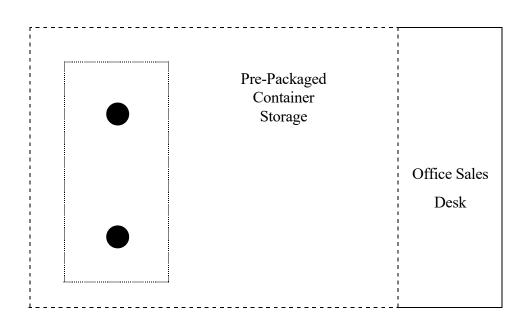
- Q1. To meet the AWSA audit protocols, must my bulk installations be located in a building?
- **A1**. No.
- **Q2.** If however, my bulk installation is located within a building, do I require a one hour fire resistance rating on the exterior walls of the building to meet protocol B1?
- **A2.** When the bulk tank installation is located within a stand alone tank facility, that is, the tanks are located in a building and no other function is performed within the building, then the building does not have to meet protocol B1 and protocol B19.

Stand Alone Tank Facility



- Q3. When my bulk installation is located within the same building as my pre-packaged products storage, how must the exterior walls be rated to meet the AWSA audit protocol B1?
- **A3.** The exterior walls of the building must meet the 1 hour rating or be of non-combustible construction to meet protocol B1.

Bulk Facility In Warehouse



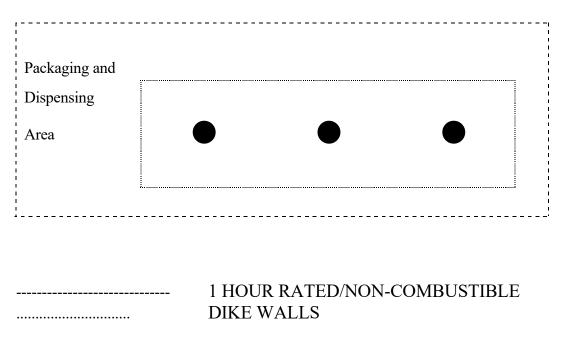
 HOUR RATED/NON-COMBUSTIBLE
 NO FIRE RATING REQUIRED
 DIKE WALLS

In the event you are dispensing flammable or combustibles liquids in this warehouse, you should first consult with your local design engineer to ensure your drawings and specifications will comply with local provincial and municipal codes.

Some questions to ask:

- 1) Is a fire separation wall required?
- 2) Should the electrical installation be rated?
- 3) Will I need localized ventilation at the dispensing station?
- **Q4.** If I have a stand alone bulk facility where I also do packaging and dispensing within the building, how must it be rated to meet protocol B1?

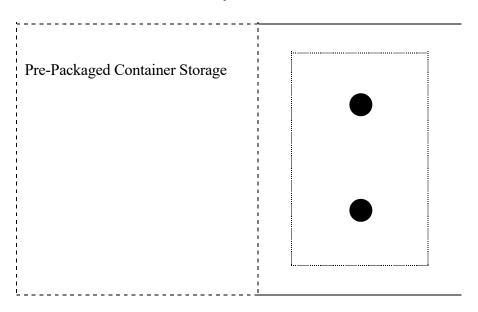
Stand Alone Bulk Facility With Packaging/Filling Work Area



A4. This scenario is the same as a warehouse with a bulk installation, with dispensing and storage, and would require the 1 hour rating or non-combustible construction with appropriate dikes.

Q5. If my bulk installation is located at the end of my storage area in a weather shelter, how must it be rated to pass audit protocol B1?

External Bulk Facility Attached to Warehouse

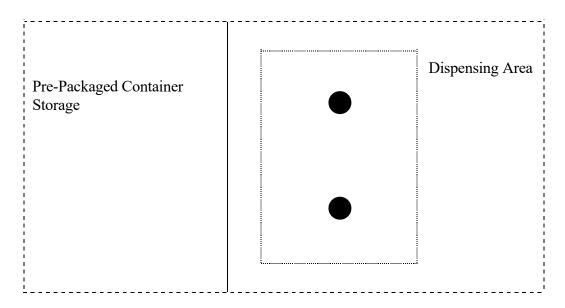


 1 HOUR RATED/NON-COMBUSTIBLE
 NO FIRE RATING REQUIRED
DIKEWALLS

A5. Because the bulk installation is technically not in a building (one side not enclosed) the sides of the weather shelter need not be rated. However, the common wall between the prepackaged Container Storage and the bulk installation must be rated.

Q6. If my bulk installation is located at the end of my storage area in a building where I dispense, how must this building be rated to pass audit protocol B1?

Bulk Facility Attached to Warehouse



...... 1 HOUR RATED/NON-COMBUSTIBLE

_____ NO FIRE RATING REQUIRED

_____ DIKE WALLS

A6. Provided there is no dispensing of flammable or combustible liquids, the common wall between the two areas need not be rated. However, the complete exterior walls for the warehouse must be 1 hour fire resistance rated or be of non-combustible construction.