## Chapter Ag 163

## PESTICIDE BULK STORAGE

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Note: See Chapter Ag 162 for rules on fertilizer bulk storage. See s. Ag 29.12 for general rules on pesticide storage, including bulk pesticide storage. The U.S. Environmental Protection Agency has interpreted the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et. seq.) to include certain requirements of persons who, as pesticide sellers, repackage pesticides by delivering them from bulk storage into customers' bulk containers. These requirements may include, and are not necessarily limited to: registration of the facility as a pesticide producing establishment; filing of annual pesticide production reports; maintenance of books and records; provision of labeling to purchasers of bulk pesticides; delivery of pesticides from a dealer's bulk storage only to bulk containers of customers; and maintaining a formal agreement with the product registrant authorizing repackaging of the registrant's pesticide product for sale in bulk quantity.

## Ag 163.01 Definitions. As used in this chapter:

- (1) "Appurtenances" means all valves, pumps, fittings, pipes, hoses, metering devices, mixing containers, and dispensing devices which are connected to a storage container, or which are used to transfer liquid bulk pesticide into or out of a storage container.
- '(2) "Bulk pesticide" means liquid pesticide in a container larger than 55 gallons (208 liters) or a solid pesticide in undivided quantities greater than 100 pounds (45 kilograms). It includes mini-bulk pesticide, except as otherwise specified.
- (3) "Discharge" means a spill, leak, accidental or intentional release, or other emission of bulk pesticide from a storage container, container or appurtenance, and includes a discharge into secondary containment. It does not include a fully contained transfer of bulk pesticide which is made pursuant to sale, storage or distribution.
- (4) "Distribute" means to import, consign, sell, offer for sale, solicit orders for sale or otherwise supply pesticide for sale or use in this state.
- (5) "Dry pesticide" means pesticide which is in solid form prior to any application or mixing for application, and includes formulations such as dusts, wettable powders, dry flowable powders, and granules.
- (6) "Groundwater" means any of the waters of the state, as defined in s. 144.01 (19), Stats., occurring in a saturated subsurface geological formation of rock or soil.
- (7) "Inorganic soil" means a soil composed of less than 30% organic matter, measured as less than 15% organic carbon by weight.
- (8) "Liquid pesticide" means pesticide in liquid form, and includes solutions, emulsions, suspensions and slurries.

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- (9) "Manufacture" means to process, manufacture, formulate, prepare, compound, propagate, package, or label any pesticide.
- (10) "Mini-bulk pesticide" means an amount of liquid pesticide greater than 55 gallons (208 liters) but not exceeding 400 gallons (1,514 liters), or an amount of solid pesticide greater than 100 pounds (45 kilograms) but not exceeding 500 pounds (225 kilograms), which is held in a single container designed for ready handling and transport, has been filled by the original pesticide product manufacturer, and to which no substance has been added by any person.
  - (11) "Person" has the meaning specified under s. 144.01 (9m), Stats.
- (12) "Pesticide" has the meaning specified under s. 94.67 (25), Stats. For purposes of this rule, the term includes substances or mixtures of substances which are labeled as pesticides for use in further manufacture or formulation of pesticides,
- (13) "Storage" means storage of bulk pesticide by a person who manufactures or distributes bulk pesticide.
- (14) "Storage container" means a container used for the fixed storage of bulk pesticide; a rail car, nurse tank, or other mobile container which is used for the fixed storage of bulk pesticide for more than 15 consecutive days; or a container of mini-bulk pesticide. It does not include a container which is used solely for emergency storage of leaking pesticide containers which are 55 gallons or smaller.
- (15) "Storage facility" means a location at which bulk pesticide is held in storage.
- (16) "Waters of the state" has the meaning specified under s. 144.01 (19), Stats.

History: Cr. Register, September, 1985, No. 357, eff. 12-29-85.

- Ag 163.02 Storage containers and appurtenances; liquid pesticide. (1) GENERAL REQUIREMENTS. Storage containers and appurtenances shall be constructed, installed and maintained so as to prevent the discharge of liquid bulk pesticide. Storage containers and appurtenances shall be constructed of materials which are resistant to corrosion, puncture or cracking. Materials used in the construction or repair of storage containers and appurtenances may not be of a type which reacts chemically or electrolytically with stored bulk pesticide in a way which may weaken the storage container or appurtenance, create a risk of discharge, or adulterate the pesticide. Metals used for valves, fittings and repairs on metal containers shall be compatible with the metals used in the construction of the storage container, so that the combination of metals does not cause or increase corrosion which may weaken the storage container or its appurtenances, or create a risk of discharge. Storage containers and appurtenances shall be designed to handle all operating stresses, taking into account static head, pressure buildup from pumps and compressors, and any other mechanical stresses to which the storage containers and appurtenances may be subject in the foreseeable course of operations.
- (2) APPURTENANCES. (a) Every storage container connection, except a safety relief connection, shall be equipped with a shutoff valve located on the storage container or at a distance from the storage container dictated

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by standard engineering practice. Except for a storage container of minibulk pesticide, all wetted parts inside shutoff valves, and all connections from the storage container to the shutoff valve, shall be made of stainless steel or other department-approved material. Valves shall be secured to protect against vandalism or accidenta' valve openings which may result in a discharge.

- (b) Pipes and fittings shall be adequately supported to prevent sagging and possible breakage because of gravity and other forces which may be encountered in the ordinary course of operations.
- (3) Vent. Each fixed storage container used for liquid bulk pesticide shall be equipped with a conservation vent which opens and closes within the designed pressure limits of the container, so as to relieve excess pressure, prevent evaporative losses, and keep precipitation out of the container.
- (4) LIQUID LEVEL GAUGING DEVICE. Every storage container shall be equipped with a liquid level gauging device by which the level of liquid in the storage container can be readily and safely determined. A liquid level gauging device is not required if the level of liquid in a storage container can be readily and reliably measured by other means. Liquid level gauging devices shall be secured, in a safe manner, to protect against breakage or vandalism which may result in a discharge. External sight gauges are prohibited.
- (5) Prohibited materials. (a) Storage containers and appurtenances may not be made of polyvinyl chloride.
  - (b) A storage container may not be made of ferrous metals, unless:
  - 1. The container is made of stainless steel: or
- 2. The container has a protective lining which inhibits corrosion and which does not react chemically with the stored pesticide.
- (6) Anchoring of storage containers shall be anchored, as necessary, to prevent flotation or instability which might occur as a result of liquid accumulations within a secondary containment facility constructed under s. Ag 163.04.
- (7) Security. Outdoor storage containers shall be located within a permanently fenced area. All storage containers shall be secured against access by unauthorized persons and to provide reasonable protection against access by wildlife. Appurtenances shall be fenced or otherwise secured to provide reasonable protection against vandalism or unauthorized access which may result in a discharge. Valves on storage containers shall be locked or otherwise secured except when persons responsible for facility security are present at the facility. Valves on rail cars, nurse tanks, and other mobile pesticide containers parked overnight at a storage facility shall be locked or secured except when persons responsible for facility security are present at the facility.
- (8) FILLING. Storage containers may not be filled to more than 95% of capacity unless:
- (a) The storage container construction or location provides constant temperature control; or
  - (b) The storage container is a mini-bulk pesticide container.

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(9) INSPECTION AND MAINTENANCE. The operator of a storage facility shall routinely inspect and maintain storage facilities, storage containers and appurtenances to minimize the risk of a discharge. The operator shall inspect valves and other appurtenances for leakage at least weekly, and inspect vents for proper operation at least monthly. The operator shall measure and record the liquid pesticide level in each storage container at least weekly, except that a container with a capacity of over 55 gallons (208 liters) but not exceeding 400 gallons (1,514 liters) which is stored on a concrete base meeting the requirements of s. Ag 163.04 (5) (b) or in a prefabricated facility meeting the requirements of s. Ag 163.04 (6) may instead be visually inspected for leakage weekly and the result recorded at the time of the inspection. A written record of all inspections and maintenance shall be made on the day of the inspection or maintenance and kept at the storage site, or at the nearest local office from which the storage site is administered.

History: Cr. Register, September, 1985, No. 357, eff. 12-29-85.

Ag 163.03 Loading areas; liquid pesticide. (1) CURBED AND PAVED SURFACE; CATCH BASIN. (a) Areas used for the loading of liquid bulk pesticide into storage containers, or for unloading liquid bulk pesticide from storage containers into mobile containers shall be curbed and paved with asphalt, concrete or other department approved material. The curbed and paved surface shall form or drain into a liquid-tight catch basin. If the curbed and paved surface drains to a sump, the catch basin may include the sump and an above-ground container, provided a pump is installed which automatically transfers the contents of the sump into an above-ground container. Except as provided in par. (b), curbed surfaces and catch basins shall be of adequate size and design to contain a combined total of at least 1,500 gallons (5,680 liters) of discharged liquid.

Note: The department will maintain a list of approved paving materials for given pesticides, and provide the current list to interested persons upon request. Additional materials may be approved and added to the list upon submission and review of chemical compatibility and permeability information provided to the department by the product manufacturer.

- (b) If no storage container used at the storage facility has a capacity of more than 1,000 gallons (3,780 liters), and if no mobile container used to transfer liquid bulk fertilizer to or from storage containers has a capacity of more than 1,000 gallons, the curbed surface and catch basin shall be of adequate size and design to contain 1.25 times the capacity of the largest storage container or mobile container used, whichever is larger.
- (2) PROTECTION AGAINST DAMAGE BY MOVING VEHICLES. Storage containers and appurtenances, including pipes, shall be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles engaged in the loading or unloading of bulk pesticide.
- (3) RECOVERY OF DISCHARGES; LOADING AREAS. Discharges incident to loading or unloading shall be promptly recovered from the paved surface and catch basin, such that the capacity required under sub. (1) is available at all times.

History: Cr. Register, September, 1985, No. 357, eff. 1-1-88.

Ag 163.04 Secondary containment; liquid pesticide. (1) GENERAL RE-QUIREMENTS. Except as provided in sub. (9), storage containers shall be enclosed in a secondary containment facility which is adequate, in the

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