

CR 84-234

STATE OF WISCONSIN )  
 ) SS.  
DEPARTMENT OF AGRICULTURE, )  
TRADE & CONSUMER PROTECTION )

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, William E. Simmons, Assistant Administrator, Agricultural Resource Management Division, State of Wisconsin, Department of Agriculture, Trade and Consumer Protection, and custodian of the official records of said Division, do hereby certify that the annexed order adopting rules relating to pesticide bulk storage practices, Chapter Ag 163, Wis. Adm. Code, was duly approved and adopted by the Department on August 20, 1985.

I further certify that said copy has been compared by me with the original on file in the Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Department offices in the city of Madison, this 20th day of August, 1985.

  
William E. Simmons  
Assistant Administrator  
Agricultural Resource Management Division

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ORDER  
OF THE  
STATE OF WISCONSIN  
DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION  
ADOPTING, AMENDING OR REPEALING RULES

To create chapter Ag 163, relating to pesticide bulk storage practices.

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Analysis Prepared by the Department of Agriculture,  
Trade and Consumer Protection

Section 94.645, Stats., created by 1983 Wisconsin Act 410, directs the department of agriculture, trade and consumer protection to adopt standards for the storage of bulk pesticides, for the purpose of protecting waters of the state from harm due to pesticide contamination. Chapter Ag 163, Wis. Adm. Code, sets forth the pesticide bulk storage standards adopted by the department.

In 1970, acting under authority of s. 94.69, Stats., the department promulgated rules applying to storage of all pesticides. These rules have been amended several times since 1970, and are now found in s. Ag 29.12, Wis. Adm. Code. Chapter Ag 163, Wis. Adm. Code, is in addition to the existing pesticide storage rules, and applies specifically to the storage of pesticides in bulk quantity by persons engaged in the manufacture or distribution of pesticides.

Under the rule, storage containers and appurtenances used for storage of bulk liquid pesticides must be constructed, installed and maintained so as to prevent discharge of the pesticide. Storage containers and appurtenances must be designed to handle foreseeable operating stresses, and be constructed of materials which are resistant to corrosion, puncture or cracking. Certain types of materials are prohibited for use in construction of storage containers or appurtenances. Storage containers must be anchored, and must be equipped with a capacity gauge and a vent. Filling of storage containers must not exceed 95% of capacity, to allow for thermal expansion of the stored product. Storage containers must be located within a permanent fence or indoors, and must be secured against access by unauthorized persons or wildlife. Appurtenances must be fenced or secured to provide protection against vandalism or unauthorized access. Valves on containers must be locked or otherwise secured except during times of authorized access. Valves on rail cars, nurse tanks or other mobile storage containers must also be secured or locked if the filled containers are parked overnight at the storage facility. Certain requirements applicable to fixed storage containers are also applicable to rail cars, nurse tanks

and other mobile storage containers which are used for fixed storage for more than 15 consecutive days. Underground storage of liquid bulk pesticide is prohibited, except for pesticide rinsate or runoff from transfer or loading areas which is temporarily retained in a water-tight catch basin.

Storage containers and appurtenances must be routinely inspected and maintained to prevent risks of discharge, and valves must be inspected for leakage at least weekly. The level of pesticide in containers must be measured and recorded at least weekly. Storage containers must be equipped with a liquid level gauging device by which the level of liquid in the storage container can be readily and safely determined. External sight gauges are prohibited.

Storage containers which have been taken out of service for more than six months because of a weakness or leak, or which have been out of service for more than two years are considered abandoned. Underground abandoned containers must be thoroughly cleaned, disconnected from the storage system, and either filled with an inert solid or removed from the ground. Above-ground abandoned containers must be thoroughly cleaned and disconnected from the storage system.

Areas used for the loading and unloading of liquid pesticide to and from storage containers must be curbed and paved with asphalt, concrete, or other approved materials. The curbed and paved surface must form or drain into a liquid-tight catch basin, from which discharges incident to loading or unloading are to be recovered. Storage containers and appurtenances, including pipes, must be protected against reasonably foreseeable risks of damage by trucks and other moving vehicles engaged in the loading or unloading of bulk pesticides.

Storage containers for liquid bulk pesticide must be enclosed in a secondary containment facility which is adequate, in the event of a discharge, to prevent the movement of liquid pesticide to waters of the state including groundwater. The secondary containment must consist of a lined base and walls constructed according to specified engineering standards to assure relative impermeability, or a prefabricated system which is chemically compatible with the stored products and is constructed and installed to withstand the anticipated loading. Precipitation must not be allowed to accumulate in the secondary containment facility to the point where the accumulation may impair the effectiveness of the facility. Pesticide discharges into the facility must be promptly recovered, to the maximum extent feasible.

Dry pesticide stored in bulk quantity must be covered by a roof or tarpaulin, except during transfer operations, to keep precipitation off of the pesticide. Storage must be on pallets or on a raised and drained concrete platform to prevent accumulation of water in or under the pesticide. Dry bulk pesticide facilities must be secured against entry by unauthorized persons or wildlife.

Records of discharge of either liquid or dry bulk pesticides must be maintained by the facility. A current discharge response plan for every storage facility must be prepared and kept readily available at the storage facility, and at the nearest local office from which the facility is managed, if any. A copy of the

discharge response plan must also be given to local police and fire departments. The plan must include an identification of persons or agencies to be contacted in the event of a discharge; and identification of the pesticide stored in each container; and, for each type of pesticide, the procedure to be used in controlling, recovering, and using or disposing of a discharge. Pumps, recovery containers, absorbent materials, personal protective equipment, and persons capable of using them, must be readily available in an emergency. Employees must be trained in discharge response procedures.

For liquid bulk pesticides, inspection, maintenance, and inventory records, and records of all pesticide discharges at a storage facility, shall be kept on file at the facility, or at the nearest local office from which the facility is managed. Records of discharges of dry bulk pesticides shall be kept at the facility, or at the nearest local office from which the facility is managed. Records shall be kept for 3 years, except that discharge records shall be kept for 5 years.

Labeling of bulk storage containers is required, in accordance with existing state and federal law.

The department may grant an exemption from a rule requirement if compliance is not technically feasible, but only if the department finds that alternative measures provide substantially similar protection for waters of the state.

Except for requirements pertaining to loading areas and secondary containment facilities, the rule will take effect 90 days after publication. Requirements pertaining to loading areas and secondary containment facilities will take effect on January 1, 1988. The rules do not distinguish between new and existing facilities.

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1 Pursuant to authority vested in the state of Wisconsin  
2 department of agriculture, trade and consumer protection by  
3 s. 94.645, Stats., as created by 1983 Wisconsin Act 410, the state  
4 of Wisconsin department of agriculture, trade and consumer protec-  
5 tion hereby creates rules interpreting s. 94.645, Stats., as  
6 follows:

7 SECTION 1: Chapter Ag 163 is created to read:

8 Chapter Ag 163

9 PESTICIDE BULK STORAGE

1 NOTE: See Chapter Ag 162, Wis. Adm. Code, for rules on  
2 fertilizer bulk storage. See s. Ag 29.12, Wis. Adm. Code,  
3 for general rules on pesticide storage, including bulk  
4 pesticide storage. The U.S. Environmental Protection  
5 Agency has interpreted the Federal Insecticide, Fungicide,  
6 and Rodenticide Act (7 U.S.C. 136 et. seq.) to include  
7 certain requirements of persons who, as pesticide sellers,  
8 repackage pesticides by delivering them from bulk storage  
9 into customers' bulk containers. These requirements may  
10 include, and are not necessarily limited to: registration  
11 of the facility as a pesticide producing establishment;  
12 filing of annual pesticide production reports; maintenance  
13 of books and records; provision of labeling to pur-  
14 chasers of bulk pesticides; delivery of pesticides from  
15 a dealer's bulk storage only to bulk containers of cus-  
16 tomers; and maintaining a formal agreement with the  
17 product registrant authorizing repackaging of the regis-  
18 trant's pesticide product for sale in bulk quantity.

11 Ag 163.01 DEFINITIONS. As used in this chapter:

12 (1) "Appurtenances" means all valves, pumps, fittings,  
13 pipes, hoses, metering devices, mixing containers, and dispensing  
14 devices which are connected to a storage container, or which are  
15 used to transfer liquid bulk pesticide into or out of a storage  
16 container.

17 (2) "Bulk pesticide" means liquid pesticide in a container  
18 larger than 55 gallons (208 liters) or solid pesticide in  
19 undivided quantities greater than 100 pounds (45 kilograms).  
20 It includes mini-bulk pesticide, except as otherwise specified.

21 (3) "Discharge" means a spill, leak, accidental or inten-  
22 tional release, or other emission of bulk pesticide from a storage  
23 container, container or appurtenance, and includes a discharge  
24 into secondary containment. It does not include a fully contained  
25 transfer of bulk pesticide which is made pursuant to sale, storage  
26 or distribution.

27 (4) "Distribute" means to import, consign, sell, offer for

1 sale, solicit orders for sale or otherwise supply pesticide for  
2 sale or use in this state.

3 (5) "Dry pesticide" means pesticide which is in solid form  
4 prior to any application or mixing for application, and includes  
5 formulations such as dusts, wettable powders, dry flowable  
6 powders, and granules.

7 (6) "Groundwater" means any of the waters of the state, as  
8 defined in s. 144.01(19), Stats., occurring in a saturated sub-  
9 surface geological formation of rock or soil.

10 (7) "Inorganic soil" means a soil composed of less than 30  
11 per cent organic matter, measured as less than 15 per cent organic  
12 carbon by weight.

13 (8) "Liquid pesticide" means pesticide in liquid form, and  
14 includes solutions, emulsions, suspensions and slurries.

15 (9) "Manufacture" means to process, manufacture, formulate,  
16 prepare, compound, propagate, package, or label any pesticide.

17 (10) "Mini-bulk pesticide" means an amount of liquid pesti-  
18 cide greater than 55 gallons (208 liters) but not exceeding 400  
19 gallons (1514 liters), or an amount of solid pesticide greater  
20 than 100 pounds (45 kilograms) but not exceeding 500 pounds (225  
21 kilograms), which is held in a single container designed for ready  
22 handling and transport, has been filled by the original pesticide  
23 product manufacturer, and to which no substance has been added by  
24 any person.

25 (11) "Person" has the meaning specified under s. 144.01(9m),  
26 Stats.

27 (12) "Pesticide" has the meaning specified under

1 s. 94.67(25), Stats. For purposes of this rule, the term includes  
2 substances or mixtures of substances which are labeled as  
3 pesticides for use in further manufacture or formulation of  
4 pesticides.

5 (13) "Storage" means storage of bulk pesticide by a person  
6 who manufactures or distributes bulk pesticide.

7 (14) "Storage container" means a container used for the fixed  
8 storage of bulk pesticide; a rail car, nurse tank, or other mobile  
9 container which is used for the fixed storage of bulk pesticide  
10 for more than 15 consecutive days; or a container of mini-bulk  
11 pesticide. It does not include a container which is used solely  
12 for emergency storage of leaking pesticide containers which are 55  
13 gallons or smaller.

14 (15) "Storage facility" means a location at which bulk pesti-  
15 cide is held in storage.

16 (16) "Waters of the state" has the meaning specified under  
17 s. 144.01(19), Stats.

18 Ag 163.02 STORAGE CONTAINERS AND APPURTENANCES; LIQUID  
19 PESTICIDE. (1) GENERAL REQUIREMENTS. Storage containers and  
20 appurtenances shall be constructed, installed and maintained so as  
21 to prevent the discharge of liquid bulk pesticide. Storage con-  
22 tainers and appurtenances shall be constructed of materials which  
23 are resistant to corrosion, puncture or cracking. Materials used  
24 in the construction or repair of storage containers and appurte-  
25 nances may not be of a type which reacts chemically or electro-  
26 lytically with stored bulk pesticide in a way which may weaken the  
27 storage container or appurtenance, create a risk of discharge, or

1 adulterate the pesticide. Metals used for valves, fittings and  
2 repairs on metal containers shall be compatible with the metals  
3 used in the construction of the storage container, so that the  
4 combination of metals does not cause or increase corrosion which  
5 may weaken the storage container or its appurtenances, or create a  
6 risk of discharge. Storage containers and appurtenances shall be  
7 designed to handle all operating stresses, taking into account  
8 static head, pressure buildup from pumps and compressors, and any  
9 other mechanical stresses to which the storage containers and  
10 appurtenances may be subject in the foreseeable course of  
11 operations.

12 (2) APPURTENANCES. (a) Every storage container connection,  
13 except a safety relief connection, shall be equipped with a shut-  
14 off valve located on the storage container or at a distance from  
15 the storage container dictated by standard engineering practice.  
16 Except for a storage container of mini-bulk pesticide, all wetted  
17 parts inside shutoff valves, and all connections from the storage  
18 container to the shutoff valve, shall be made of stainless steel  
19 or other department-approved material. Valves shall be secured to  
20 protect against vandalism or accidental valve openings which may  
21 result in a discharge.

22 (b) Pipes and fittings shall be adequately supported to  
23 prevent sagging and possible breakage because of gravity and other  
24 forces which may be encountered in the ordinary course of  
25 operations.

26 (3) VENT. Each fixed storage container used for liquid bulk  
27 pesticide shall be equipped with a conservation vent which opens

1 and closes within the designed pressure limits of the container,  
2 so as to relieve excess pressure, prevent evaporative losses, and  
3 keep precipitation out of the container.

4 (4) LIQUID LEVEL GAUGING DEVICE. Every storage container  
5 shall be equipped with a liquid level gauging device by which the  
6 level of liquid in the storage container can be readily and safely  
7 determined. A liquid level gauging device is not required if the  
8 level of liquid in a storage container can be readily and reliably  
9 measured by other means. Liquid level gauging devices shall be  
10 secured, in a safe manner, to protect against breakage or vandal-  
11 ism which may result in a discharge. External sight gauges are  
12 prohibited.

13 (5) PROHIBITED MATERIALS. (a) Storage containers and  
14 appurtenances may not be made of polyvinyl chloride.

15 (b) A storage container may not be made of ferrous metals,  
16 unless:

17 1. The container is made of stainless steel; or

18 2. The container has a protective lining which inhibits cor-  
19 rosion and which does not react chemically with the stored  
20 pesticide.

21 (6) ANCHORING OF STORAGE CONTAINERS. Storage containers  
22 shall be anchored, as necessary, to prevent flotation or instabil-  
23 ity which might occur as a result of liquid accumulations within  
24 a secondary containment facility constructed under s. Ag 163.04.

25 (7) SECURITY. Outdoor storage containers shall be located  
26 within a permanently fenced area. All storage containers shall  
27 be secured against access by unauthorized persons and to provide

1 reasonable protection against access by wildlife. Appurtenances  
2 shall be fenced or otherwise secured to provide reasonable protec-  
3 tion against vandalism or unauthorized access which may result in  
4 a discharge. Valves on storage containers shall be locked or  
5 otherwise secured except when persons responsible for facility  
6 security are present at the facility. Valves on rail cars, nurse  
7 tanks, and other mobile pesticide containers parked overnight at a  
8 storage facility shall be locked or secured except when persons  
9 responsible for facility security are present at the facility.

10 (8) FILLING. Storage containers may not be filled to more  
11 than 95 per cent of capacity unless:

12 (a) The storage container construction or location provides  
13 constant temperature control; or

14 (b) The storage container is a mini-bulk pesticide  
15 container.

16 (9) INSPECTION AND MAINTENANCE. The operator of a storage  
17 facility shall routinely inspect and maintain storage facilities,  
18 storage containers and appurtenances to minimize the risk of a  
19 discharge. The operator shall inspect valves and other appurte-  
20 nances for leakage at least weekly, and inspect vents for proper  
21 operation at least monthly. The operator shall measure and record  
22 the liquid pesticide level in each storage container at least  
23 weekly, except that a container with a capacity of over 55 gal-  
24 lons (208 liters) but not exceeding 400 gallons (1514 liters)  
25 which is stored on a concrete base meeting the requirements of  
26 s. Ag 163.04(5)(b) or in a prefabricated facility meeting the  
27 requirements of s. Ag 163.04(6) may instead be visually inspected

1 for leakage weekly and the result recorded at the time of the  
2 inspection. A written record of all inspections and maintenance  
3 shall be made on the day of the inspection or maintenance and kept  
4 at the storage site, or at the nearest local office from which the  
5 storage site is administered.

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

20 NOTE: The department will maintain a list of approved  
21 paving materials for given pesticides, and provide the  
22 current list to interested persons upon request. Addi-  
23 tional materials may be approved and added to the list  
upon submission and review of chemical compatibility  
and permeability information provided to the depart-  
ment by the product manufacturer.

24 (b) If no storage container used at the storage facility has  
25 a capacity of more than 1,000 gallons (3,780 liters), and if no  
26 mobile container used to transfer liquid bulk fertilizer to or  
27 from storage containers has a capacity of more than 1,000 gallons,

1 the curbed surface and catch basin shall be of adequate size and  
2 design to contain 1.25 times the capacity of the largest storage  
3 container or mobile container used, whichever is larger.

4 (2) PROTECTION AGAINST DAMAGE BY MOVING VEHICLES. Storage  
5 containers and appurtenances, including pipes, shall be protected  
6 against reasonably foreseeable risks of damage by trucks and other  
7 moving vehicles engaged in the loading or unloading of bulk  
8 pesticide.

9 (3) RECOVERY OF DISCHARGES; LOADING AREAS. Discharges  
10 incident to loading or unloading shall be promptly recovered from  
11 the paved surface and catch basin, such that the capacity required  
12 under sub.(1) is available at all times.

13 Ag 163.04 SECONDARY CONTAINMENT; LIQUID PESTICIDE.

14 (1) GENERAL REQUIREMENTS. Except as provided in sub. (9),  
15 storage containers shall be enclosed in a secondary containment  
16 facility which is adequate, in the event of a discharge, to  
17 prevent the movement of liquid pesticides to waters of the state  
18 including groundwater. A secondary containment facility shall  
19 consist of:

20 (a) A wall and liner as provided under subs. (4) and (5); or

21 (b) A prefabricated facility as provided under sub. (6).

22 (2) CAPACITY. The capacity of a secondary containment  
23 facility shall be at least equal to the sum of all the following:

24 (a) The greatest volume of liquid which could be discharged  
25 from the largest storage container within the secondary contain-  
26 ment facility; and

27 (b) Twenty-five percent of the capacity of the largest

1 storage container located within the secondary containment  
2 facility for an outdoor storage container, or 10 per cent of the  
3 capacity of the largest storage container located within the  
4 secondary containment facility for an indoor storage container;  
5 and

6 (c) The total volume of discharged liquid which would be  
7 displaced by the submerged portions of all other storage con-  
8 tainers, fixtures and materials located within the secondary con-  
9 tainment facility, if the facility were filled to capacity with  
10 discharged liquid.

11 (3) STORAGE WITH OTHER COMMODITIES. No other commodity,  
12 except liquid pesticide, pesticide diluent, empty pesticide con-  
13 tainers, or pesticide discharges recovered under sub. (8) and  
14 s. Ag 163.03(3), may be stored within a liquid  
15 pesticide secondary containment facility. A liquid pesticide  
16 secondary containment facility may be located within, or may share  
17 a wall or portion of a wall with, a liquid fertilizer secondary  
18 containment facility constructed under s. Ag 162.04.

19 (4) WALLS. The walls of a secondary containment facility  
20 shall be constructed of earth, steel, concrete or solid masonry,  
21 and be designed to withstand a full hydrostatic head of any dis-  
22 charged liquid. Cracks and seams shall be sealed to prevent  
23 leakage. Walls constructed of earth or other permeable materials  
24 shall be lined as provided under sub. (5). Earthen walls shall  
25 have a horizontal-to-vertical slope of at least three to one,  
26 unless a steeper slope is consistent with good engineering prac-  
27 tice, and shall be protected from erosion. Walls may not exceed

1 6 feet (1.8 meters) in height above interior grade.

2 (5) LINING. (a) General requirement. The base of a sec-  
3 ondary containment facility, and any earthen walls of the facil-  
4 ity, shall be lined with asphalt, concrete, an approved synthetic  
5 liner, or a soil liner designed to limit the permeability of the  
6 base and walls. Liners shall meet the requirements of this  
7 subsection.

8 (b) Asphalt or concrete liners. Asphalt or concrete liners  
9 shall be designed according to good engineering practices to with-  
10 stand any foreseeable loading conditions, including a full hydro-  
11 static head of discharged liquid. Cracks and seams shall be  
12 sealed to prevent leakage.

13 (c) Synthetic liners. Synthetic liners shall be approved by  
14 the department. Synthetic liners shall have a minimum thickness  
15 of 30 mils (0.8 millimeters), and be chemically compatible with  
16 the materials being stored within the facility. A synthetic liner  
17 may not be approved by the department until the manufacturer of  
18 the liner provides the department with a written confirmation of  
19 compatibility, and a written estimate of the life of the liner.  
20 The synthetic liner shall be protected by a 6 inch (15 centimeter)  
21 soil layer below the liner, and a 12 inch (30-centimeter) soil  
22 layer above the liner. Both soil layers shall be free of large  
23 rocks, angular stones, sticks or other materials which may punc-  
24 ture the liner. Synthetic liners shall be installed under the  
25 supervision of a qualified representative of the manufacturer,  
26 and all field constructed seams shall be tested, and repaired if  
27 necessary, in accordance with the manufacturer's recommendations.

1 NOTE: The department will maintain a list of approved  
2 synthetic liners for given pesticides, and will provide  
3 the current list to any person upon request. Additional  
4 liners may be approved and added to the list upon sub-  
mission and review of chemical compatability information  
provided to the department by the manufacturer.

5 (d) Soil liners. 1. A liner may be constructed of natural  
6 soil, or of natural soil treated with bentonite clay, provided  
7 that the liner meets the requirements of this paragraph. The  
8 liner shall be designed and constructed according to good engi-  
9 neering practices, to achieve a coefficient of permeability not to  
10 exceed  $1 \times 10^{-6}$  cm/sec, with a thickness of not less than 6 inches  
11 (15 centimeters). The liner shall be covered by an inorganic soil  
12 layer not less than 6 inches (15 centimeters) thick, and shall be  
13 maintained, as necessary, to prevent cracking. Liners may not be  
14 constructed of frost-susceptible soils, which include silts and  
15 silty sand.

16 2. A natural soil may not be used in a soil liner if less  
17 than 50% by weight of the natural soil passes a No. 200 sieve,  
18 or if more than 5% by weight of the natural soil is retained on  
19 a No. 4 sieve. Natural soil liners shall contain less than 2%  
20 organic material and shall have a plasticity index of at least  
21 15.

22 3. Bentonite treated liners shall consist of a uniform mix-  
23 ture of natural soil and bentonite. The natural soil used in the  
24 mixture shall have a plasticity index of at least 12. At least  
25 30% by weight of the natural soil shall pass a No. 200 sieve, and  
26 less than 5% by weight of the natural soil shall be retained on a  
27 No. 4 sieve. Ninety percent of the bentonite by weight shall pass

1 a No. 80 sieve, and the soil-bentonite mixture shall contain at  
2 least 5% bentonite by weight.

3 (6) PREFABRICATED FACILITIES. A prefabricated facility  
4 shall be composed of a rigid prefabricated basin having both a  
5 base and walls constructed of steel or synthetic materials which  
6 are resistant to corrosion, puncture or cracking. Materials used  
7 in the facility shall be chemically compatible with the products  
8 being stored within the secondary containment facility. A written  
9 confirmation of compatibility from the basin manufacturer shall  
10 be kept on file at the storage facility or at the nearest local  
11 office from which the storage facility is administered. The  
12 prefabricated facility shall be designed and installed to with-  
13 stand all foreseeable loading conditions, including the tank load  
14 and a full hydrostatic head of any discharged liquid. Multiple  
15 basins connected to provide the capacity required under sub. (2)  
16 shall be connected in a manner which assures an unrestricted  
17 transfer of discharged liquid between basins.

18 (7) INSPECTION AND MAINTENANCE. (a) General. Every  
19 secondary containment facility shall be inspected at intervals of  
20 not more than 12 months, and be maintained as necessary to assure  
21 compliance with this section. A written record of all inspections  
22 and maintenance shall be made on the day of the inspection or  
23 maintenance, and kept at the storage facility, or at the nearest  
24 local office from which the storage facility is administered.

25 (b) Precipitation accumulations. Precipitation may not be  
26 permitted to accumulate in a secondary containment facility to the  
27 point where the accumulation may tend to:

1           1. Impair the adequacy of the facility for discharge con-  
2 tainment purposes;

3           2. Increase the corrosion of storage containers or appur-  
4 tenances; or

5           3. Impair the stability of storage containers.

6           (8) RECOVERY OF DISCHARGES. Discharges at a storage facil-  
7 ity shall be promptly recovered, to the maximum extent feasible.  
8 Pumps and recovery containers for this purpose shall be readily  
9 available, as provided in s. Ag 163.08(2).

10           NOTE: It is recommended that a recovered discharge not be  
11 sold. Unless it is applied in accordance with the product  
12 label directions, a recovered discharge may be a waste  
13 regulated under Ch. 144, Stats.

14           (9) EXEMPTIONS. The secondary containment requirements  
15 under this section do not apply to rail cars which are period-  
16 ically moved from the storage facility or to empty containers which  
17 have a capacity of over 55 gallons (208 liters) but not exceeding  
18 400 gallons (1514 liters).

19           Ag 163.05 UNDERGROUND LIQUID STORAGE PROHIBITED; EXEMPTION.  
20 No person may store liquid bulk pesticide in an underground  
21 storage container. This prohibition does not apply to a water-  
22 tight catch basin used for the temporary collection of runoff or  
23 rinsate from transfer and loading areas, pursuant to  
24 s. Ag 163.03.

25           Ag 163.06 ABANDONED CONTAINERS. (1) GENERAL. Storage con-  
26 tainers and other containers used at a storage facility to hold  
27 bulk pesticide or pesticide rinsate are considered abandoned con-  
tainers under this section if they have been out of service for

1 more than six months because of a weakness or leak, or have been  
2 out of service for any reason for more than two years. A second-  
3 ary containment facility is not considered abandoned merely  
4 because there have been no discharges into the secondary contain-  
5 ment facility.

6 (2) UNDERGROUND CONTAINERS OR CATCH BASINS. Abandoned  
7 underground containers, including abandoned underground catch  
8 basins under s. Ag 163.03, shall be:

9 (a) Thoroughly cleaned and removed from the ground; or

10 (b) Thoroughly cleaned and filled with an inert solid. All  
11 connections and vents shall be disconnected and sealed. A record  
12 of the catch basin size, location, and method of closing shall be  
13 maintained at the storage facility.

14 (3) ABOVE-GROUND CONTAINERS. Above-ground containers which  
15 have been abandoned shall be thoroughly cleaned. All hatches on  
16 the containers shall be left open, and all valves or connections  
17 shall be severed and sealed.

18 Ag 163.07 RECORDKEEPING; LIQUID PESTICIDE STORAGE.

19 (1) The following records shall be prepared and maintained  
20 on file at every storage facility, or at the nearest local office  
21 from which the storage facility is administered:

22 (a) A record of all discharges at the storage facility,  
23 including the date and time of discharge, the type of liquid bulk  
24 pesticide discharged, the volume of the discharge, the cause of  
25 the discharge, any action taken to control or recover the dis-  
26 charge, and the method of use or disposal of any recovered dis-  
27 charge. The discharge record shall be completed on the day the

1 discharge is discovered, and shall be promptly updated to show  
2 measures taken to control, recover, use or dispose of the  
3 discharge.

4 (b) A regular record of the liquid pesticide levels in each  
5 storage container. The level in each storage container shall be  
6 measured and recorded at least weekly, as provided in  
7 s. Ag 163.02(9).

8 (c) A monthly inventory reconciliation, showing the amount  
9 of liquid bulk pesticide from each storage container which is lost  
10 or unaccounted for at the end of each monthly period.

11 (d) Inspection and maintenance records pertaining to storage  
12 containers, appurtenances, and secondary containment facilities,  
13 as provided under ss. Ag 163.02(9) and Ag 163.04(7).

14 (e) A record of manufacturers' compatibility statements as  
15 provided under s. Ag 163.04(5) and (6).

16 (f) A record of abandoned underground containers, if any,  
17 as provided under s. Ag 163.06(2)(b).

18 (2) Records under this section shall be maintained for at  
19 least 3 years. Discharge records under sub. (1)(a) shall be main-  
20 tained for at least 5 years. Records under subs. (1)(e) and (f)  
21 shall be kept as permanent records. Records shall be available  
22 for inspection and copying by the department.

23 Ag 163.08 STORAGE OF DRY PESTICIDE IN BULK QUANTITY.

24 (1) COVERING. Except during loading or unloading, stored  
25 dry bulk pesticide shall be covered by a roof or tarpaulin which  
26 will keep precipitation off the pesticide.

27 (2) REQUIREMENTS FOR OUTDOOR STORAGE FACILITIES. Dry bulk

1 pesticide stored outdoors shall be kept in storage containers.  
2 Storage containers shall be placed on pallets or on a raised con-  
3 crete platform which is drained to prevent the accumulation of  
4 water in or under the pesticide.

5 (3) SECURITY. Storage facilities shall be secured against  
6 entry by unauthorized persons or wildlife.

7 (4) DISCHARGE RECORDS. A record shall be kept of all dis-  
8 charges of dry bulk pesticide, including the date and time of dis-  
9 charge, the type of dry bulk pesticide discharged, the volume of  
10 the discharge, the cause of the discharge, any action taken to  
11 control or recover the discharge, and the method of use or dis-  
12 posal of any recovered discharge. The discharge record shall be  
13 completed on the day of the discovery of the discharge, and shall  
14 be promptly updated to show measures taken to control, recover,  
15 use or dispose of the discharge. Records shall be maintained for  
16 at least five years, and shall be made available for inspection  
17 and copying by the department on request.

18 Ag 163.09 PREPARATIONS FOR CONTROL AND RECOVERY OF PESTICIDE  
19 DISCHARGES. (1) DISCHARGE RESPONSE PLAN. The operator of a  
20 storage facility shall prepare a written discharge response plan  
21 for the storage facility. The operator shall keep the plan cur-  
22 rent at all times. A copy of the plan shall be kept readily  
23 available at the storage facility and at the nearest local office  
24 from which the storage facility is administered, and shall be  
25 available for inspection and copying by the department. The oper-  
26 ator of the storage facility shall inform the local fire and  
27 police departments of the existence of the plan, and shall provide

1 a current copy of the plan to the local fire and police depart-  
2 ments. The plan shall include:

3 (a) The identity and telephone number of the persons or  
4 agencies who are to be contacted in the event of a discharge,  
5 including persons responsible for the stored pesticide.

6 (b) For each bulk pesticide stored at the facility, a com-  
7 plete copy of the storage container labeling required under  
8 s. Ag 163.10, and the labeling required to accompany sale of the  
9 pesticide under s. 94.70, Stats.

10 (c) An identification, by location, of every storage  
11 container located at the storage facility, and the type of bulk  
12 pesticide stored in each storage container. The plan need not  
13 include the specific location of each storage container of mini-  
14 bulk pesticide, provided that the plan includes the general loca-  
15 tion within the facility at which storage containers of mini-bulk  
16 pesticide are held.

17 (d) For each type of bulk pesticide stored at the facility,  
18 the procedures to be used in controlling and recovering, or other-  
19 wise responding to a discharge.

20 (e) Procedures to be followed in using or disposing of a  
21 recovered discharge.

22 (2) EQUIPMENT AND SUPPLIES. (a) Manufacturers and distri-  
23 butors who store bulk pesticides shall have access to pumps and  
24 recovery containers which can be used to control and recover dis-  
25 charges, and to personal protective equipment and clothing for use  
26 by persons involved in discharge control and recovery. Pumps,  
27 recovery containers, personal protective equipment and clothing,

1 and persons capable of deploying and operating them, shall be  
2 readily available in an emergency. Pumps, recovery containers,  
3 personal protective equipment and clothing required under this  
4 subsection may include those provided by a local fire department  
5 or other persons, if the use and availability of the pumps,  
6 recovery containers and personal protective equipment is arranged  
7 in advance as part of a discharge response plan. Pumps, recovery  
8 containers, personal protective equipment, and other materials  
9 used in control and recovery of discharges shall be decontaminated  
10 promptly after the discharge has been recovered, and may not be  
11 used for other purposes until they have been decontaminated.

12 (b) Absorbent materials suitable for the control and cleanup  
13 of small liquid discharges shall be kept readily available at  
14 every storage facility.

15 (3) TRAINING. Persons employed at storage facilities shall  
16 be trained in discharge response procedures, pursuant to the  
17 discharge response plan.

18 NOTE: The Department of Natural Resources must be  
19 promptly informed of the discharge of any hazardous  
20 material, pursuant to s. 144.76, Stats. Under most  
circumstances, this requirement applies to a pesticide  
discharge.

21 Ag 163.10 LABELING OF STORAGE CONTAINERS. (1) Every stor-  
22 age container shall bear a label stating, with regard to the cur-  
23 rent contents of the container:

24 (a) The product brand name.

25 (b) The registration number assigned to the product by the  
26 United States Environmental Protection Agency, if the product is a  
27 registered pesticide.

1 (c) The pesticide producing establishment number, if any,  
2 which was placed on the container by the original pesticide product  
3 manufacturer.

4 (d) An ingredient statement meeting the specifications of  
5 s. 94.67(17), Stats.

6 (e) The name and address of the person who has registered  
7 the product with the U.S. Environmental Protection Agency, if the  
8 product is a registered pesticide.

9 (f) The net contents of the storage container. For liquid  
10 bulk pesticide, the net contents shall be the net contents when  
11 the storage container is filled to the capacity specified in  
12 s. Ag 163.02(8). For a mini-bulk pesticide storage container, the  
13 statement of net contents shall be that which was placed on the  
14 storage container by the original pesticide product manufacturer.

15 (g) Storage and disposal directions, and any other precau-  
16 tionary labeling, as specified under s. 94.676, Stats., if the  
17 product is a registered pesticide.

18 (h) The appropriate toxicity signal word and directions for  
19 treatment of human exposure.

20 (2) The label required under this section shall be placed  
21 on the storage container so as to be visible from outside of the  
22 secondary containment facility. The label shall be kept in read-  
23 able condition. The type size used on the label shall be that  
24 which is specified under Title 40, Part 162, of the Code of  
25 Federal Regulations.

26 (3) A copy of the label specified in sub. (1), and any other  
27 labeling supplied with the pesticide by the pesticide product

1 registrant, shall be kept with each copy of the discharge response  
2 plan required under s. Ag 163.09(1).

3 NOTE: With every sale from a bulk pesticide storage  
4 container, the customer shall be supplied with complete  
5 labeling, as required under s. 94.70, Stats. Such  
6 labeling would include, among other required information,  
7 the seller's pesticide producing establishment number as  
8 assigned by the United States Environmental Protection  
9 Agency, and the net contents of each container sold.

7 Ag 163.11 EXEMPTIONS. The department may exempt any person  
8 from a requirement under this chapter if compliance is not tech-  
9 nically feasible, but only if the department finds that alternative  
10 measures provide substantially similar protection for the waters  
11 of the state. A person requesting an exemption shall provide the  
12 department with adequate information to show that alternative  
13 measures provide substantially similar protection for the waters  
14 of the state.

15 Ag 163.12 EFFECTIVE DATES. ~~GENERAL~~ This chapter ✓  
16 shall take effect 90 days after publication in the Wisconsin  
17 administrative register, except that ss. Ag 163.03 and Ag 163.04  
18 shall take effect on January 1, 1988.

19 SECTION 2: The rules contained in this order shall take  
20 effect 90 days after publication in the Wisconsin administrative  
21 register, as provided in s. 227.026(1) (intro), Stats., except  
22 that ss. Ag 163.03 and Ag 163.04 shall take effect on January 1,  
23 1988.

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1 Dated this 10 day of August, 1985.  
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3 STATE OF WISCONSIN  
4 DEPARTMENT OF AGRICULTURE,  
5 TRADE AND CONSUMER PROTECTION

6 By W. E. Simmons  
7 William E. Simmons  
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