

Chapter ATCP 33

FERTILIZER AND PESTICIDE BULK STORAGE

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Note: Chapter 33 as it existed on October 31, 2006, was repealed and a new chapter 33 was created effective November 1, 2006.

Note: Chapter ATCP 29 contains general rules related to the manufacture, storage, labeling, distribution and use of pesticides. Persons who manufacture, label, distribute or commercially apply pesticides must be licensed by the department.

Chapter ATCP 40 contains general rules related to the manufacture, labeling and distribution of fertilizer. Persons who manufacture, label or distribute fertilizer must be licensed by the department.

The department of agriculture, trade and consumer protection may investigate violations of this chapter, and may take enforcement action as necessary. See, for example, ss. 93.06 (7) to (10), 93.08, 93.14 to 93.16, 94.645 (4) and (5), and 94.77, Stats. See also s. 94.64, Stats. (fertilizer) and ss. 94.67 to 94.71, Stats. (pesticides).

Under ch. ATCP 35, the department may reimburse certain agricultural chemical contamination cleanup costs. Failure to comply with this chapter may affect an operator's eligibility for reimbursement under ch. ATCP 35.

Under the Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et. seq.), pesticide sellers who repackaging pesticides by delivering them from bulk storage to customers must do the following things, among others:

- Register the seller's facility as a pesticide producing establishment.
- File annual pesticide production reports.
- Maintain books and records.
- Provide labeling to purchasers of bulk pesticides.
- Deliver pesticides from bulk storage only to customers.
- Maintain a formal repackaging agreement with the pesticide product registrant.

Subchapter I — Definitions and General Provisions

ATCP 33.01 Definitions. In this chapter:

(1) "API 650" means the American Petroleum Institute standard 650, *Welded Steel Tanks for Oil Storage*, 10th edition.

Note: Copies of API 650 are on file with the department and the legislative reference bureau. Copies may be purchased from the American Petroleum Institute at 1220 L Street NW, Washington DC 20005–4070, telephone (202) 682–8000.

(2) "API 653" means the American Petroleum Institute standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*, 3rd edition.

Note: Copies of API 653 are on file with the department and the legislative reference bureau. Copies may be purchased from the American Petroleum Institute at 1220 L Street NW, Washington DC 20005–4070, telephone (202) 682–8000.

(3) "API 653–certified inspector" means an inspector certified by the American Petroleum Institute, according to API 653, to inspect facilities for compliance with API 653.

(4) "Appurtenances" means all valves, pumps, fittings, pipes, hoses, gauges, metering devices, mixing containers, and dispensing devices that are connected to a storage container, or through which liquid bulk fertilizer or liquid bulk pesticide is transferred into or out of a storage container.

(5) "Bedrock" means the solid rock underlying any loose surficial material such as soil, alluvium or glacial drift. Bedrock

includes but is not limited to limestone, dolomite, sandstone, shale and igneous and metamorphic rock.

(6) "Bladder tank" means a covered liquid–tight steel tank containing a flexible liquid–tight bladder that holds the contents of the tank.

Note: A "bladder tank" is both a "secondary containment structure" as defined in sub. (29) and a "storage container" as defined in sub. (31).

(7) "Bulk fertilizer" means fertilizer in a container larger than 55 gallons (208 liters), or dry fertilizer in undivided quantities greater than 100 pounds (45 kilograms).

(8) "Bulk pesticide" means liquid pesticide in a container larger than 55 gallons (208 liters), or dry pesticide in undivided quantities greater than 100 pounds (45 kilograms).

(9) "Department" means the Wisconsin department of agriculture, trade and consumer protection.

(10) "Discharge" means a spill, leak or other release of bulk fertilizer, bulk pesticide or rinsate. "Discharge" includes a spill, leak or other release that is contained within a mixing and loading pad, sump or secondary containment structure. "Discharge" does not include the legal use or disposal, according to this chapter, of material recovered from a mixing and loading pad, sump or secondary containment structure.

(11) "Distribute" means to import, consign, sell, offer for sale, solicit orders for sale, or otherwise supply fertilizer or pesticide for sale or use in this state.

(12) "Dry fertilizer" means fertilizer in solid form.

(13) "Dry pesticide" means pesticide in solid form, pesticide–impregnated fertilizer, and includes pesticides formulated as dusts, wettable powders, dry flowable powders or granules.

(14) "Fertilizer" has the meaning given in s. 94.64 (1) (e), Stats., except that it does not include manipulated manure or anhydrous ammonia.

Note: Under s. 94.64 (1) (e), Stats., "fertilizer" means any substance, containing one or more plant nutrients, which is used for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth, except unmanipulated animal or vegetable manures, marl, liming material, sewage sludge other than finished sewage sludge products, and wood ashes. "Fertilizer" includes fertilizer materials, mixed fertilizers, custom mixed fertilizers, nonagricultural fertilizers and all other fertilizers or mixtures of fertilizers, regardless of type or form.

(15) "Groundwater" means any waters of the state occurring in a saturated subsurface geological formation of rock or soil.

(16) "Handling" means the transfer, loading, unloading, mixing or repackaging of bulk fertilizer or bulk pesticide, or the cleaning of containers or equipment to remove fertilizer or pesticide

residues. "Handling" includes transferring water into a container that contains pesticide or fertilizer residues.

(17) "Inorganic soil" means a soil composed of less than 30% organic matter, measured as less than 15% organic carbon by weight.

(18) "Liquid fertilizer" means fertilizer in liquid form. "Liquid fertilizer" includes fertilizer solutions, fertilizer suspensions, fertilizer slurries and dilute fertilizers intended for distribution as fertilizer.

(19) "Liquid pesticide" means pesticide in liquid form. "Liquid pesticide" includes pesticide solutions, pesticide emulsions, pesticide suspensions, pesticide slurries and dilute pesticides intended for distribution as pesticides.

(20) "Manufacture" means to do any of the following, as applicable:

(a) Process, granulate, compound, produce, mix, blend or alter the composition of fertilizer.

(b) Process, formulate, prepare, compound, propagate, package or label any pesticide.

(21) "Mini-bulk container" means any of the following:

(a) A storage container, designed for ready handling and transport, which holds more than 55 gallons (208 liters) but not more than 350 gallons (1,325 liters) of liquid fertilizer or liquid pesticide.

(b) A container that holds more than 100 pounds (45 kilograms) but not more than 2,500 pounds (1,136 kilograms) of dry fertilizer.

(c) A container that holds more than 100 pounds (45 kilograms) but not more than 1,000 pounds (454 kilograms) of dry pesticide.

(22) "Mixing and loading pad" means a surface that complies with subchapter IV.

(23) "Mobile container" means a bulk fertilizer or bulk pesticide storage container that is anchored to a vehicle, trailer or axles, and that can be readily transported when full. "Mobile container" includes a rail car, a nurse tank, or a supply container on application equipment.

(24) "Operator" means a person who owns, operates or legally controls a storage facility, either directly or through an employee or agent, and includes employees and agents of an operator.

(25) "Person" means an individual, corporation, partnership, cooperative, limited liability company, trust or other legal entity.

(26) "Pesticide" has the meaning given in s. 94.67 (25), Stats. "Pesticide" includes all of the following:

(a) A fertilizer-pesticide mixture.

(b) A substance that is labeled as a pesticide for use in further manufacture or formulation of pesticides.

Note: Under s. 94.67 (25), Stats., "pesticide" means any substance or mixture of substances labeled or designed or intended for use in preventing, destroying, repelling or mitigating any pest, or as a plant regulator, defoliant or desiccant.

(27) "Professional engineer" means an individual licensed as a professional engineer by the Wisconsin department of safety and professional services.

(28) "Rinsate" means water or other liquid containing fertilizer or pesticide residue. "Rinsate" includes liquid produced by the rinsing of fertilizer or pesticide containers.

(29) "Secondary containment structure" means a structure that is designed to contain a discharge from a storage container or appurtenance.

(30) "Storage bin" means a stationary receptacle used to store an undivided quantity of dry bulk fertilizer or dry bulk pesticide.

(31) "Storage container" means a container used to store liquid bulk fertilizer or liquid bulk pesticide at a storage facility. "Storage container" includes a mobile container.

(32) "Storage facility" means a place where bulk fertilizer or bulk pesticide is or has been stored for distribution, or for the manufacture of fertilizer or pesticide. "Storage facility" does not include a place where a mobile container is parked for unloading if all of the following apply:

(a) No person who owns or controls the parking location, or receives the unloaded fertilizer or pesticide, is engaged in the manufacture or distribution of fertilizer or pesticide.

(b) The fertilizer or pesticide is unloaded with the consent of a person who owns or controls the parking location.

(c) The fertilizer or pesticide is unloaded at the parking location for no more than 3 other persons, for application to a total of no more than 500 acres, in any calendar year.

(d) The mobile container, if unloaded for any person other than the person who owns or controls the parking location, has a capacity of no more than 500 gallons.

(e) The mobile container is parked at the location for no longer than 7 days.

(33) "Structure" means a storage building, storage container, mixing and loading pad, sump, secondary containment structure, or rail car unloading area.

(34) "Substantially alter" means to reconstruct, replace, structurally modify or change the capacity of a structure, or make any other change that may affect the containment of bulk fertilizer or bulk pesticide or the containment or recovery of discharges. "Substantially alter" does not include routine repair or maintenance, or routine replacement of parts with like parts.

(35) "Sump" means a pit or receptacle that receives and collects liquid runoff from a mixing and loading pad or secondary containment structure.

(36) "Tank-in-tank" means a steel storage container enclosed within a liquid-tight steel tank with which it shares a common roof but no common walls or floor. "Tank-in-tank" does not include a storage container with a double bottom.

Note: A "tank-in-tank" is both a "secondary containment structure" under sub. (29) and a "storage container" under sub. (31).

(37) "Waters of the state" means those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06; correction in (27) made under s. 13.92 (4) (b) 6., Stats., Register January 2012 No. 673.

ATCP 33.02 Variances. (1) VARIANCE REQUEST. An operator may request a variance from a standard or requirement under this chapter. The operator shall make the request in writing, and may include the request as part of a filing under s. ATCP 33.10 (1). A request shall include all of the following:

(a) A clear description of the proposed nonconforming feature for which the operator seeks the variance.

(b) A statement describing how the proposed nonconforming feature will provide equivalent protection for waters of the state.

(c) A statement by a professional engineer, certifying that the proposed nonconforming feature will provide equivalent protection for waters of the state, if the proposed feature affects any of the following:

1. The containment of bulk fertilizer or bulk pesticide.
2. The containment or recovery of discharges.

(2) ACTION ON VARIANCE REQUEST. The department may grant a variance request under sub. (1) if the department finds that the proposed nonconforming feature will provide equivalent protection for waters of the state. The department shall grant or deny a request within 30 days after the department receives a complete request, except that the department may for good cause extend the action deadline if the department gives written notice of the exten-

sion within the initial 30–day period. The extension notice shall include the extended deadline.

History: CR 05–108: cr. Register October 2006 No. 610, eff. 11–1–06.

Subchapter II — Construction Plans and Siting

ATCP 33.10 Construction plans. (1) FILING REQUIRED.

At least 21 days before an operator constructs or substantially alters a structure at a storage facility, the operator shall file all of the following with the department:

- (a) Design specifications for the construction or alteration.
- (b) A signed written statement by a professional engineer, certifying that the design specifications comply with applicable requirements under this chapter.
- (c) The approximate date on which the operator plans to start the construction or alteration. The operator may not start the construction or alteration before that date unless the operator gives the department prior notice of the new start date. The department may request additional schedule information, as necessary, in order to schedule an inspection under sub. (3).

Note: Subsection (1) does not apply to the routine repair or maintenance of an existing structure. See s. ATCP 33.01 (34). This chapter does not require an operator to take soil samples before the operator constructs or substantially alters a structure. However, an operator may wish to do so in order to maintain cost reimbursement eligibility under s. ATCP 35.04.

(2) **DISCRETIONARY REVIEW.** The department may review and comment on the design specifications filed under sub. (1). The department is not required to review, approve or comment on the design specifications. A failure to comment does not signify approval. An operator is not required to obtain the department's approval for a proposed construction or alteration, but is required to comply with this chapter.

(3) **DISCRETIONARY INSPECTION.** The department may inspect a construction or alteration under sub. (1).

(4) **CONSTRUCTION CONFORMING TO PLAN.** An operator may not, without prior written notice to the department, deviate from design specifications filed under sub. (1).

History: CR 05–108: cr. Register October 2006 No. 610, eff. 11–1–06.

ATCP 33.12 Storage facility siting. (1) REQUIREMENTS. Except as provided in sub. (2), the base of each mixing and loading pad, the base of each secondary containment structure, and the floor of each building used to store bulk fertilizer or bulk pesticide shall be all of the following:

- (a) At least 5 feet above bedrock.
- (b) At least 5 feet above the seasonal high groundwater level. A determination of seasonal high groundwater level, by an independent soils tester licensed by the Wisconsin department of safety and professional services, is presumptively valid for purposes of this paragraph.
- (c) At least 1,000 feet from the ordinary high water mark of any navigable lake and 300 feet from the ordinary high water mark of any navigable stream.
- (d) Located outside of any 100–year flood plain.

(2) **EXEMPTION.** Subsection (1) does not apply to the reconstruction, expansion or alteration of a mixing and loading pad, secondary containment structure or storage building that was in use prior to November 1, 2006.

Note: The exemption under sub. (2) applies only to sub. (1). It does not exempt a storage facility from any other federal, state or local regulations that may apply.

History: CR 05–108: cr. Register October 2006 No. 610, eff. 11–1–06; **correction in (1) (b) made under s. 13.92 (4) (b) 6., Stats., Register January 2012 No. 673.**

ATCP 33.14 Water supply protection. (1) GENERAL. Wells at a storage facility shall comply with applicable requirements in chs. NR 811 and 812.

Note: Chapters NR 811 and 812 comprise the state well code.

(2) **BACKFLOW PREVENTION.** (a) All water supply outlets at the storage facility shall be protected against backflow caused by

backpressure or backsiphonage. Protection may include any of the following:

1. A vertical air gap between each water supply outlet and any container or equipment filled from that outlet. The air gap distance shall be at least one inch, or twice the effective opening of the supply outlet, whichever is greater.

2. A backflow prevention device that complies with s. SPS 382.41.

Note: SPS 382 is part of the state plumbing code.

(b) An operator shall notify the department at least 7 business days prior to installing or modifying a backflow protection device or system, unless the operator is merely re–installing backflow prevention devices that the operator has temporarily removed to protect them from frost damage.

History: CR 05–108: cr. Register October 2006 No. 610, eff. 11–1–06; **correction in (2) (a) 2. made under s. 13.92 (4) (b) 7., Stats., Register January 2012 No. 673.**

Subchapter III — Storage Containers and Related Structures

ATCP 33.20 Liquid fertilizer and pesticide storage containers. (1) GENERAL REQUIREMENTS.

(a) Storage containers and appurtenances shall be designed, constructed, inspected and maintained to operate effectively and to prevent discharges under all reasonably foreseeable use conditions. Storage containers and appurtenances shall comply with this section, and shall be located within a secondary containment structure if required under s. ATCP 33.40.

(b) Storage containers and appurtenances shall be designed, constructed, inspected and maintained to resist corrosion, puncture and cracking.

(c) Materials used to construct or repair storage containers and appurtenances may not react chemically or electrolytically with stored fertilizer or pesticide in a way that may weaken the storage container or appurtenance, create a risk of discharge, or adulterate the fertilizer or pesticide.

(d) Metals used for storage container valves, fittings or repairs shall be compatible with other metals in the storage container, so that the combination of metals does not cause corrosion or electrolytic reactions that may weaken the storage container or its appurtenances, or create a risk of discharge.

(e) Storage containers and appurtenances shall be designed, constructed and maintained to hold fertilizer or pesticide of the highest specific gravity that may be stored in the containers.

(f) Bladder tanks, tank–in–tanks and field–erected storage containers shall be all of the following:

1. Designed and constructed according to API 650, and certified for compliance by the manufacturer, if the structure is installed, constructed or substantially altered after November 1, 2006. API 650 calculations shall be based on the highest specific gravity of fertilizer or pesticide that may be stored in the container.

2. Inspected before use, and at least once every 5 years during use, by an API 653–certified inspector for compliance with API 653. The storage container shall be inspected more frequently if recommended by an API 653–certified inspector. API 653 calculations shall be based on the highest specific gravity of fertilizer or pesticide that may be stored in the container.

3. Repaired, when necessary, according to API 653 and the recommendations of an API 653–certified inspector.

Note: Copies of API 650 and 653 are on file with the department and the legislative reference bureau. Copies may be purchased from the American Petroleum Institute at 1220 L Street NW, Washington DC 20005–4070, telephone (202) 682–8000, or the following web address: www.api.org.

(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 by standard engineering practice.

(b) On pesticide storage containers other than mini–bulk containers or containers used to store sodium hypochlorite, all wetted

parts inside shutoff valves and all connections between storage containers and shutoff valves shall be made of stainless steel.

Note: The department may grant a variance authorizing alternative materials that provide equivalent protection for waters of the state. See s. ATCP 33.02.

(c) Pipes, fittings and other appurtenances shall be permanently supported to prevent sagging and breakage that may be caused by gravity, vibration or other forces that may be encountered in the ordinary course of operations. To prevent sagging and breakage, piping and its supports shall be able to support 250 pounds.

(d) An operator shall do all of the following at least annually:

1. Inspect and pressure test appurtenances installed below ground, within or beneath a mixing and loading pad, or within or beneath a secondary containment structure. The operator shall maintain the appurtenances as necessary, to keep them pressure-tight, and shall keep a written record of the pressure test results.

2. Inspect and test, for liquid-tightness, every joint through which a pipe extends through a secondary containment structure.

(e) An appurtenance may not be installed below ground, within or beneath a mixing and loading pad, within or beneath a secondary containment structure, or through any wall or floor of a secondary containment structure, on or after November 1, 2006.

(f) Piping connections shall be one of the following:

1. Threaded, welded, fused or permanently band-clamped.

2. Located over a mixing and loading pad that complies with s. ATCP 33.30.

3. Located within a secondary containment structure that complies with s. ATCP 33.42.

(3) LIQUID LEVEL GAUGING DEVICES. (a) If a storage container is equipped with a liquid level gauging device, the device shall be designed for safe and reliable use.

(b) An external sight gauge may not be used on a pesticide storage container, other than on a mobile container mounted on pesticide application equipment.

(c) If an external sight gauge is used on a fertilizer storage container, the sight gauge shall comply with all of the following:

1. The sight gauge shall be equipped with a valve that can stop the flow of liquid fertilizer from the storage container to the sight gauge. The valve shall be closed when the sight gauge is not in use.

2. The sight gauge tube shall be secured to the storage container at intervals of no more than 10 feet.

(4) PROHIBITED MATERIALS; FERTILIZER STORAGE CONTAINERS. Fertilizer storage containers shall comply with all of the following:

(a) Storage containers and appurtenances used to store nitrogen solutions may not be constructed of copper, brass, zinc, or copper base alloys.

(b) Storage containers and appurtenances used to store liquid fertilizers containing phosphates or chlorides may not be constructed of aluminum or aluminum alloys.

(c) Storage containers and appurtenances used to store low pH liquid fertilizers may not be constructed of ferrous materials other than stainless steel, unless the materials are coated or treated with protective substances that effectively inhibit corrosion.

(d) Storage containers and appurtenances used to store phosphoric acid may not be constructed of ferrous materials other than 316 or 317 stainless steel unless the container is lined with a substance to prevent corrosion.

(e) Storage containers and appurtenances used to store liquid fertilizers containing potassium chloride (potash) may not be constructed of ferrous materials other than stainless steel unless one of the following applies:

1. The storage containers and appurtenances are lined, coated or treated with protective substances that effectively inhibit corrosion.

2. The storage containers and appurtenances are used for storage periods of not more than 6 months each, and are completely emptied, cleaned and inspected for leaks and corrosion before being refilled for any subsequent storage period.

(5) PROHIBITED MATERIALS; PESTICIDE STORAGE CONTAINERS.

(a) Pesticide storage containers and appurtenances may not be made of polyvinyl chloride unless they are used only to store sodium hypochlorite.

(b) Pesticide storage containers and appurtenances may not be made of ferrous metals unless one of the following applies:

1. The storage containers and appurtenances are made of stainless steel.

2. The storage containers and appurtenances have a protective lining that prevents corrosion and does not react chemically with the stored pesticide.

3. The storage containers and appurtenances are used only to store non-corrosive wood preservatives.

(6) ANCHORING STORAGE CONTAINERS. (a) Except as provided in par. (b), storage containers shall be anchored to prevent flotation or instability that may result from liquid accumulation within a secondary containment structure. Anchors shall be independent of secondary containment structures and mixing and loading pads, except that anchor plates may be embedded in portland cement concrete floors of secondary containment structures if the anchor plates and the concrete floors are designed to withstand the flotation and wind stresses placed on them.

Note: Anchors located in soil *outside* the secondary containment structure do not place any added stress on the structure or its construction. It is possible to design anchor plates for the floors of a portland cement concrete secondary containment structure to withstand anchor stresses, but similar designs for walls are usually inadequate or cost-prohibitive.

(b) Paragraph (a) does not apply to any of the following:

1. A storage container located in a secondary containment structure that complies with s. ATCP 33.42, if it is the only storage container located in that secondary containment structure.

2. A tank-in-tank that complies with s. ATCP 33.44 (9) or a bladder tank that complies with s. ATCP 33.44 (10), unless located in a secondary containment structure with other storage containers.

(7) SECURITY. (a) Except as provided in par. (b), an operator shall secure each storage container and its appurtenances by doing at least one of the following:

1. Keeping the storage container and appurtenances in a locked building.

2. Locking all valves on the storage container and appurtenances.

3. Keeping the storage container and appurtenances in a locked outdoor enclosure that complies with par. (c).

(b) Paragraph (a) does not apply if any of the following apply:

1. The operator or employees are present at the storage facility.

2. The storage container and its appurtenances are empty and thoroughly cleaned. Thorough cleaning, in the case of a pesticide storage container and its appurtenances, means removal of pesticide residues from exterior surfaces and triple rinsing of interior surfaces. Triple rinsing of interior surfaces is not required if a manufacturer-installed device prevents the container from being opened.

(c) An enclosure under par. (a) 3. shall consist of a secure wall or fence that is at least 5 feet tall at every point, and free of gaps that could allow unauthorized persons to enter. Security fencing installed on a concrete secondary containment structure wall shall comply with chapter 2 of the *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*, if the secondary containment structure is constructed after November 1, 2006.

Note: The *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*, written by Professor David W. Kammel, department of

biological systems engineering, University of Wisconsin-Extension, is on file with the department and the legislative reference bureau. Copies are available from the department, free of charge, at the following address:

Department of Agriculture, Trade and Consumer Protection
Agricultural Resource Management Division
P.O. Box 8911
Madison, WI 53708-8911
Phone: (608) 224-4500
Web: <http://www.datcp.state.wi.us>

(8) STORAGE CONTAINERS PROTECTED FROM MOVING VEHICLES. An operator shall protect storage containers and appurtenances against damage that may be caused by moving vehicles.

(9) FILLING STORAGE CONTAINERS. An operator may not fill a storage container to more than 95% of capacity unless the storage container is one of the following:

(a) Kept at a constant temperature.

(b) A mini-bulk container that is not filled beyond the maximum capacity shown on the container.

(10) LABELING STORAGE CONTAINERS. (a) An operator shall label each fertilizer storage container, other than a mobile container, with the name or grade of fertilizer that it contains. Label contents shall be visible from outside the secondary containment structure in which the storage container is located.

(b) An operator shall label each pesticide storage container in compliance with the federal insecticide, fungicide and rodenticide act as amended (7 USC 136 to 136y) and regulations issued under that act. Label contents shall be visible from outside the secondary containment structure in which the storage container is located. The label on each pesticide storage container shall include the federal pesticide producing establishment number of the establishment that produced the pesticide. The label on a pesticide bulk sale container shall show the net contents of the container.

Note: A storage facility at which an operator repackages pesticide from a storage container to mini-bulk or other containers is considered a "pesticide producing establishment" under the federal act. The operator of that storage facility must obtain a pesticide producing establishment number from the federal environmental protection agency, and must include that establishment number on every mini-bulk or other container filled at that storage facility. Mini-bulk containers must be properly labeled, regardless of whether they are mobile containers.

Whenever an operator sells pesticide from a storage container, the operator must supply the purchaser with the pesticide labeling required under ss. 94.676 and 94.70, Stats.

(11) VENTING PESTICIDE STORAGE CONTAINERS. Every pesticide storage container, other than a mobile container or a container used only to store wood preservative, shall have a conservation vent that opens and closes within the designed pressure limits of the container to relieve excess pressure, prevent evaporative losses, and keep precipitation out of the container.

(12) UNDERGROUND STORAGE PROHIBITED. No person may store bulk liquid fertilizer, bulk liquid pesticide, or any material recovered under s. ATCP 33.52, below ground level, except in a storage container that is located in a secondary containment structure.

(13) INSPECTING AND MAINTAINING STORAGE CONTAINERS. An operator shall, at least semi-annually, inspect and maintain each storage container and its appurtenances to minimize the risk of a discharge. Whenever an operator repairs a storage container, the operator shall make the repair according to good engineering practice and manufacturer specifications. An operator shall remove a storage container from service if it cannot be adequately maintained.

(14) ABANDONING STORAGE CONTAINERS. (a) An operator shall do all of the following to an abandoned storage container:

1. Thoroughly clean and rinse the storage container.
2. Remove any storage container appurtenances.

3. Remove the storage container if the storage container is an underground storage container. A sump that has a capacity of more than 50 gallons is considered an underground storage container for this purpose. The operator shall notify the department at least 3 business days before the operator removes an under-

ground storage container, and shall permit the department to take soil samples upon request.

(b) An operator shall comply with par. (a) within 2 years after a storage container is abandoned, except that:

1. If the storage container was abandoned prior to November 1, 2006, the operator shall comply with par. (a) within 2 years of November 1, 2006.

2. If the storage container is abandoned under par. (c) 4., the operator shall comply with par. (a) before the closing date for the sale of the storage container site unless the purchaser agrees to comply with par. (a) within 2 years after the abandonment date under par. (c) 4.

(c) A storage container is abandoned, for purposes of this subsection, if any of the following apply:

1. The operator removes the storage container from service, with the intent of doing so permanently.

2. The storage container is out of service for more than 6 months because of a weakness or leak.

3. The storage container is out of service for more than 2 years for any reason.

4. The operator contracts to sell the storage container site to a person who is not an operator.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.22 Dry fertilizer or pesticide storage structures. **(1) GENERAL.** Structures used to store dry bulk fertilizer or dry bulk pesticide shall be designed, constructed, inspected and maintained to withstand the pressure of stored product, to prevent discharges, and to prevent precipitation from contacting stored product.

(2) INDOOR STORAGE REQUIRED. An operator shall store dry bulk fertilizer and dry bulk pesticide on a portland cement concrete surface in a fully enclosed building, except that the operator may store the following products outdoors:

(a) Products that are fully enclosed in durable sealed weather-proof packages or containers.

(b) Potassium chloride, or another fertilizer product specifically authorized in writing by the department, if all of the following apply:

1. The product is stored on an asphalt concrete or portland cement concrete surface that will contain any precipitation runoff that may come in contact with the stored product.

2. The product is fully covered by a waterproof cover that prevents exposure to precipitation.

(3) REMOVING PRODUCT FROM STORAGE STRUCTURE. An operator shall remove all bulk fertilizer and bulk pesticide from a dry bulk fertilizer or dry bulk pesticide storage structure if any of the following apply:

(a) The structure is no longer used to store dry bulk fertilizer or dry bulk pesticide.

(b) The operator transfers ownership of the structure to a person who is not an operator.

(c) The department orders the removal or demolition of the storage structure, as part of a discharge cleanup under ch. ATCP 35.

(d) The operator fails to maintain the structure according to sub. (1).

(4) SECURITY. Structures used to store dry bulk fertilizer or dry bulk pesticide shall be secured against access by unauthorized persons when the operator is not present at the storage facility.

(5) LABELING STORAGE BINS AND CONTAINERS. (a) An operator shall label every storage bin and container used to store dry bulk fertilizer or dry bulk pesticide.

(b) A fertilizer label under par. (a) shall include the name or grade of the fertilizer, as required by s. 94.64 (2) (d), Stats.

(c) A pesticide label under par. (a) shall comply with the federal insecticide, fungicide and rodenticide act as amended (7 USC 136 to 136y) and regulations issued under that act. The label shall include the identification number of the pesticide producing establishment from which the pesticide originated.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter IV — Mixing and Loading Pads

ATCP 33.30 Mixing and loading pads required.

(1) Except as provided in s. ATCP 33.32 (8) or (9) or s. ATCP 33.34 (6), all handling of bulk fertilizer or bulk pesticide at a storage facility shall be conducted over a mixing and loading pad.

(2) A mixing and loading pad shall be constructed and maintained to catch, contain and allow recovery of reasonably foreseeable discharges that may result from the handling of the bulk fertilizer or pesticide.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.32 Mixing and loading pad for liquid products. Except as provided in sub. (8) or (9), a mixing and loading pad used for liquid fertilizer or pesticide shall comply with all of the following:

(1) **PUMP CONTAINMENT.** A mixing and loading pad shall extend beneath any pump that the operator uses to transfer liquid fertilizer or pesticide, unless the pump is located within a secondary containment structure that complies with s. ATCP 33.42.

(2) **APPURTENANCE CONTAINMENT.** A mixing and loading pad shall extend beneath any appurtenance or plumbing connection through which the operator transfers liquid fertilizer or pesticide, unless one of the following applies:

(a) The appurtenance or connection is located within a secondary containment structure that complies with s. ATCP 33.42.

(b) The appurtenance or connection is threaded, welded or permanently band-clamped.

(3) **DESIGN, CONSTRUCTION AND MAINTENANCE; GENERAL.** A mixing and loading pad shall comply with all of the following requirements:

(a) It shall be liquid-tight.

(b) It shall have the capacity required in sub. (4).

(c) It shall be constructed of materials specified in sub. (5).

(d) It shall be served by a pump and storage container that comply with s. ATCP 33.50.

(e) If it drains to a sump, the sump shall comply with s. ATCP 33.36.

(f) It shall be designed, constructed and maintained to withstand all foreseeable load conditions, including the filled weight of all vehicles, storage containers, appurtenances, pumps and equipment that may be used or located within it.

(g) It shall be protected against precipitation runoff from surrounding surfaces.

(h) It may not have any precipitation drain through which spilled fertilizer or pesticide could be discharged. Any precipitation drain that exists on November 1, 2006 shall be permanently sealed within 6 months after that date.

(i) It shall be inspected and maintained as provided in subs. (6) and (7).

(4) **CAPACITY.** The capacity of a mixing and loading pad under this section, including the capacity of any sump to which the mixing and loading pad drains, shall be at least 1,000 gallons or 125 percent of the capacity of the largest storage container loaded or unloaded at the storage facility, whichever is less. This subsection does not apply to a mixing and loading pad that was in use prior to November 1, 2006 and complies with capacity requirements that were in effect at that time, unless the operator substantially alters the mixing and loading pad.

(5) **CONSTRUCTION MATERIALS.** (a) Except as provided in par. (b), a mixing and loading pad shall be constructed of portland cement concrete. A portland cement concrete mixing and loading pad constructed on or after November 1, 2006 shall meet the standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*.

Note: The *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)* were written by Professor David W. Kammel of the department of biological systems engineering, University of Wisconsin-Extension. Copies are on file with the department and the legislative reference bureau. Copies are available from the department, at no charge, at the following address:

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(b) A mixing and loading pad that was in use prior to November 1, 2006 may be constructed of asphalt concrete, provided that it is not used after December 31, 2009.

(6) **CONSTRUCTION INSPECTION.** If a concrete mixing and loading pad is constructed on or after November 1, 2006, the operator or a person chosen by the operator shall inspect the construction for conformity to the design specifications filed with the department under s. ATCP 33.10 (1). The person conducting the inspection shall inspect and approve the construction of the soil sub-base, the laying of structural steel, and the laying of waterstop materials and devices before concrete is poured. The operator shall provide a copy of the inspection report and approval to the department.

Note: The department recommends that construction inspection be performed by a qualified person experienced in reading plans and inspecting construction.

(7) **INSPECTION AND MAINTENANCE.** (a) An operator shall inspect a mixing and loading pad at least semi-annually, and shall maintain the mixing and loading pad as necessary, to ensure compliance with this section.

(b) Whenever an operator repairs a mixing and loading pad, the operator shall make the repair according to good engineering practice and manufacturer specifications, using materials approved by the department.

(c) An operator shall remove a mixing and loading pad if the operator cannot maintain it in compliance with this section, or if corrective action is needed to remove contamination from beneath the pad. An operator shall remove a leaking mixing and loading pad unless the pad is repaired and remains liquid-tight for at least 2 years after the date of repair.

(8) **PUMPING LIQUID PRODUCTS FROM RAIL CARS.** Section ATCP 33.30 and subs. (1) through (7) do not apply to the pumping of liquid bulk fertilizer or liquid bulk pesticide from a rail car to a storage container, provided that all of the following apply:

(a) The hose or pipeline from the rail car outlet valve to the pump is equipped with a shut-off valve, unless the pump can draw from no other hose or pipeline.

(b) The hose or pipeline from the pump to the storage container is equipped with an automatic check valve to prevent back flow. The check valve shall be located as close to the pump effluent port as possible, consistent with good engineering practice.

(c) All of the following are located over one or more spill containment basins that comply with par. (d):

1. The rail car outlet valve.

2. The pump.

3. Every valve or plumbing connection that is located between the rail car outlet valve and the storage container, unless the valve or plumbing connection is threaded, welded, fused or permanently band-clamped.

(d) Every containment basin under par. (c) is liquid-tight, and is constructed of durable rigid material that is chemically compatible with any liquid that may be discharged to it. The basin shall have a capacity of at least 75 gallons, or a capacity at least equal

to the capacity of the appurtenances that may discharge to it, whichever is greater. A containment basin may be permanent or portable. The operator shall routinely inspect and maintain the basin to ensure compliance with this paragraph.

(e) If the operator pumps the fertilizer or pesticide from the rail car to another mobile container, the other mobile container is parked on a mixing and loading pad that complies with this section.

(9) **LOADING LIQUID BULK PESTICIDE INTO ANHYDROUS AMMONIA NURSE TANK.** Section ATCP 33.30 and subs. (1) through (7) do not apply to the loading of liquid bulk pesticide into an anhydrous ammonia nurse tank if all of the following apply:

(a) The operator loads the bulk pesticide from a storage container that is located over a mixing and loading pad that complies with this section, or over a secondary containment structure that complies with s. ATCP 33.42.

(b) The operator uses a positive displacement pump to transfer the pesticide to the anhydrous ammonia nurse tank. The pump shall be located over a mixing and loading pad that complies with this section, or over a secondary containment structure that complies with s. ATCP 33.42. The pump shall be rated to deliver no more than 3 gallons per minute at a pressure of no more than 250 psi. The pump shall be equipped for manual shutdown, in addition to automatic shutdown under par. (c) 2.

(c) The pump under par. (b) is equipped with electronic controls that do all of the following:

1. Prevent pump operation until the operator manually pre-sets the pumping volume and engages a separate manual starter switch.

2. Automatically stop the pump when the pre-set volume has been pumped.

(d) The hose from the pump to the anhydrous ammonia nurse tank meets all of the following requirements:

1. It is no longer than 12 feet and has an inside diameter of not more than 1/2 inch.

2. It has a rated operating pressure of at least 1,200 psi with a burst strength of at least 5,000 psi.

3. It has a check valve near its nurse tank end, and a manually operated valve and coupling to connect it to the nurse tank.

(e) The operator tests the connection between the hose and nurse tank before loading pesticide into the nurse tank, to ensure that the connection does not leak.

Note: The most common pesticide products loaded into anhydrous ammonia are nitrapyrin based products.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.34 Mixing and loading pad for dry products. Except as provided in sub. (6), a mixing and loading pad used for dry fertilizer or pesticide shall comply with all of the following:

(1) **CONVEYOR CONTAINMENT.** A mixing and loading pad shall extend beneath any conveyor used to load or unload dry bulk fertilizer or dry bulk pesticide, unless the conveyor is fully enclosed within a housing that contains all spillage from the conveyor.

Note: Section ATCP 33.62 requires that the unloading chute or conveyor be equipped with a dust control system or device to further minimize the risk of discharge.

(2) **PORTLAND CEMENT OR ASPHALT CONCRETE CONSTRUCTION.** A mixing and loading pad shall be constructed of portland cement or asphalt concrete.

(3) **STRUCTURAL CAPABILITY.** A mixing and loading pad shall be designed, constructed and maintained to withstand all foreseeable load conditions, including the filled weight of all vehicles, application equipment or and other equipment that may be used or located on it.

(4) **MIXING AND LOADING PAD INSPECTION AND MAINTENANCE.** An operator shall inspect a mixing and loading pad at least semi-annually, and shall maintain the mixing and loading pad as neces-

sary, to ensure compliance with this section. Whenever an operator repairs a mixing and loading pad, the operator shall make the repair according to good engineering practice and manufacturer specifications.

(5) **MIXING AND LOADING PAD REMOVAL.** An operator shall remove a mixing and loading pad if the operator cannot maintain it in compliance with this section, or if corrective action is needed to remove contamination from beneath the pad.

(6) **UNLOADING DRY FERTILIZER FROM RAIL CARS.** Section ATCP 33.30 and subs. (1) through (5) do not apply to the unloading of dry bulk fertilizer from bottom-unloading rail cars, provided that the operator unloads the fertilizer over one of the following:

(a) A fixed or portable containment basin or a portland cement or asphalt concrete pad. The containment basin shall be made of durable rigid material, and shall effectively contain any dry fertilizer that may be discharged during the unloading process. The operator shall routinely inspect and maintain the containment basin or pad to ensure compliance with this paragraph.

(b) A well-maintained tarpaulin, if the fertilizer is unloaded prior to December 31, 2009 and the facility utilized a well-maintained tarpaulin for dry fertilizer or pesticide unloading from railcars prior to November 1, 2006.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter V — Sumps

ATCP 33.36 Sumps; general. If a mixing and loading pad or secondary containment structure drains to a sump, the sump shall be all of the following:

(1) Designed, constructed and maintained to contain liquid that drains to the sump.

(2) Liquid-tight.

(3) Constructed according to s. ATCP 33.38.

(4) Served by a pump and storage container that comply with s. ATCP 33.50.

(5) Inspected and approved at the time of construction, in the same manner as a mixing and loading pad inspected under s. ATCP 33.32 (6), if the sump is constructed of portland cement concrete on or after November 1, 2006. The operator shall provide DATCP with a copy of the inspection report and approval.

(6) Routinely inspected and maintained to ensure compliance with this section.

(7) Repaired, when necessary, according to good engineering practice and manufacturer specifications.

(8) Removed if it cannot be maintained in compliance with this section, or if corrective action is needed to remove contamination from beneath the sump. An operator shall remove a leaking sump unless the sump is repaired and remains liquid-tight for at least 2 years after the date of repair.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.38 Sump construction. (1) GENERAL. Except as provided in sub. (2):

(a) A sump that is part of a mixing and loading pad, or part of a portland cement concrete secondary containment structure, shall be constructed of portland cement concrete and shall meet the standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*.

Note: The *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*, written by Professor David W. Kammel, department of biological systems engineering, University of Wisconsin-Extension, is on file with the department and the legislative reference bureau. Copies are available from the department, free of charge, at the following address:

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- (b) A sump shall have a capacity of not more [than] 50 gallons.
- (c) A sump may not be more than 2 feet deep, or have a depth that exceeds its shortest width.

(d) The walls and floors of a sump shall be at least as thick, at every point, as the mixing and loading pad or secondary containment structure floor that drains to the sump.

(e) A sump that is part of a mixing or loading pad shall form part of a continuous surface, having an area of at least 15 feet by 15 feet and a capacity of at least 250 gallons, which is free of construction and control joints.

(f) If a sump is constructed as part of a concrete mixing and loading pad or concrete secondary containment structure, it shall be constructed in a continuous concrete pour with that pad or structure.

(g) No pipes or openings may extend through a sump. This does not prohibit a surface trough or rim indentation needed to accommodate a pipe or hose connection required under s. ATCP 33.50.

(h) A sump shall be readily accessible for inspection. Pumps, collection basins or other equipment placed in the sump shall be readily removable, so that all surfaces of the sump can be easily inspected.

(2) EXEMPTION. Subsection (1) does not apply to a sump that was in service prior to November 1, 2006 if all of the following apply:

- (a) The sump is not substantially altered on or after November 1, 2006.
- (b) The sump does not receive runoff from any mixing and loading pad or secondary containment structure that is constructed or substantially altered on or after November 1, 2006.
- (c) The sump meets construction standards that applied at the time of its construction.
- (d) The operator pressure tests any underground piping or conduit connected to the sump to ensure that the piping or conduit is liquid-tight. The operator shall perform a pressure test at least annually and shall keep a written record of the pressure test results.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter VI — Secondary Containment Structures

ATCP 33.40 Secondary containment required.

(1) GENERAL. Except as provided in sub. (2), all of the following shall be located within a secondary containment structure that complies with s. ATCP 33.42:

- (a) Storage containers.
- (b) Storage container shut-off valves under s. ATCP 33.20 (2) (a).
- (c) Liquid level gauging devices under s. ATCP 33.20 (3).

(2) EXEMPT STORAGE CONTAINERS. No secondary containment is required under sub. (1) for any of the following:

(a) An empty storage container that has been thoroughly cleaned and rinsed. A pesticide container is thoroughly cleaned and rinsed if all exterior surfaces of the container are free of pesticide residues and all inside surfaces are triple rinsed.

(b) A mobile container kept at a storage facility for fewer than 7 days if all of the following apply:

- 1. Loading and unloading of the mobile container complies with ss. ATCP 33.30 and 33.32.
- 2. The storage facility has at least one storage container that has unused capacity greater than the total capacity of the mobile container.

(c) A mini-bulk container if the exterior surfaces of the mini-bulk container are clean and one of the following applies:

- 1. The mini-bulk container is triple rinsed.

2. The mini-bulk container is equipped with a device to prevent the container from being triple rinsed.

(d) An abandoned storage container if the operator complies with s. ATCP 33.20 (14).

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.42 Secondary containment structures; standards. A secondary containment structure required under s. ATCP 33.40 (1) shall comply with all of the following requirements:

(1) CONSTRUCTION STANDARDS; GENERAL. (a) A secondary containment structure shall take one of the forms authorized in s. ATCP 33.44.

(b) A secondary containment structure shall be designed, constructed and maintained to contain potential discharges of liquid fertilizer or pesticide from storage containers and appurtenances located within the structure.

(c) A secondary containment structure shall have the capacity required in sub. (2). An operator shall notify the department at least 7 business days before installing an additional storage container in a secondary containment structure, or replacing an existing storage container in a secondary containment structure with a larger storage container.

(d) A secondary containment structure shall comply with applicable wall height requirements in sub. (3).

(e) A secondary containment structure shall be designed, constructed and maintained to do all of the following:

1. Withstand the full hydrostatic head of any liquid discharged within the structure.

2. Prevent liquid in the structure from moving to groundwater or other waters of the state.

(f) A secondary containment structure shall have a coefficient of permeability of not more than 1×10^{-6} cm/sec.

(g) A secondary containment structure shall be designed to withstand the filled weight of all storage containers, appurtenances, pumps and equipment that may be used or located within it.

(h) A secondary containment structure may not have any opening through which precipitation or other liquids may drain from the structure. This paragraph does not apply to any of the following:

- 1. A tank-in-tank that complies with s. ATCP 33.44 (9).
- 2. A bladder tank that complies with s. ATCP 33.44 (10).
- 3. An opening for a pipe that extends through the wall of a secondary containment structure constructed prior to November 1, 2006, provided that the operator complies with s. ATCP 33.20 (2) (d) 2. or the secondary containment structure has adequate containment capacity as required under sub. (2) below the level of the opening.

(2) CAPACITY. (a) The capacity of a secondary containment structure, including all portions of the structure to which a liquid may freely flow, shall be at least equal to the sum of all the following:

1. One hundred and twenty five percent of the capacity of the largest storage container in the secondary containment structure if the secondary containment structure is not fully enclosed in a building, or 110% of the capacity of the largest storage container in the secondary containment structure if the secondary containment structure is enclosed in a building.

2. The total volume of discharged liquid that would be displaced by the submerged portions of all other storage containers, fixtures and materials located within the secondary containment structure, if the structure were filled to capacity with discharged liquid.

(b) Paragraph (a) does not apply to a bladder tank that complies with s. ATCP 33.44 (10).

(3) WALL HEIGHT. (a) Except as provided in pars. (b) to (d), a secondary containment structure shall have walls at least 4 inches high but not more than 4 feet high, measured from the interior floor of the secondary containment structure.

(b) Paragraph (a) does not apply to an earthen-lined structure that complies with s. ATCP 33.44 (6), a tank-in-tank that complies with s. ATCP 33.44 (9), or a bladder tank that complies with s. ATCP 33.44 (10).

(c) A secondary containment structure that was in use prior to November 1, 2006 may have walls more than 4 feet high if the structure provides safe access to storage containers and appurtenances, and a safe exit in the event of a discharge.

(d) A secondary containment structure that was in use prior to November 1, 2006 may have walls less than 4 inches high, provided that the structure meets the capacity requirements in sub. (2).

(4) STORAGE CONTAINER LOCATION. (a) Except as provided in par. (b), all storage containers in a secondary containment structure shall be located at least 24 inches from the walls of the structure and at least 24 inches from each other.

(b) Paragraph (a) does not apply to any of the following:

1. Storage containers installed in a secondary containment structure constructed prior to November 1, 2006.

2. Bladder tanks.

3. Mini-bulk containers.

(5) INSPECTION AND MAINTENANCE. An operator shall do all of the following:

(a) Routinely inspect and maintain a secondary containment structure to ensure compliance with this subchapter.

(b) Repair a secondary containment structure, when necessary, according to good engineering practice and manufacturer specifications.

(c) Remove a secondary containment structure if the operator cannot maintain it in compliance with this subchapter, or if corrective action is needed to remove contamination from beneath the structure. An operator shall remove a leaking secondary containment structure unless the structure is repaired and remains liquid-tight for at least 2 years after the date of repair.

(6) LIQUID PESTICIDE STORED WITH OTHER MATERIALS. (a) Except as provided in par. (b), only the following materials may be stored in the same secondary containment structure with liquid bulk pesticide:

1. Other liquid pesticides.

2. Pesticide diluting agents.

3. Pesticide rinsate.

4. Empty pesticide containers.

5. Recovered pesticide discharges.

(b) Liquid bulk pesticide may be stored in the same secondary containment structure with bulk fertilizer or dry bulk pesticide if either of the following applies:

1. The secondary containment structure contains only mini-bulk or mobile storage containers, or both.

2. The secondary containment structure is located within a fully enclosed building.

History: CR 05-108; cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.44 Secondary containment structures; forms of construction. A secondary containment structure shall take one of the forms authorized in this section.

(1) CONCRETE STRUCTURES. (a) A secondary containment structure may be constructed of concrete.

(b) A concrete secondary containment structure constructed on or after November 1, 2006 shall be constructed of portland cement concrete and shall comply with standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*.

Note: The *Wisconsin minimum design standards for concrete agrichemical containment (February, 2005)*, written by professor David W. Kammel, department of biological systems engineering, University of Wisconsin-Extension, is on file with the department and the legislative reference bureau. Copies are available free of charge from the department at the following address:

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(c) If a concrete secondary containment structure is constructed on or after November 1, 2006, the operator or a person chosen by the operator shall inspect the construction for conformity to the design specifications filed with the department under s. ATCP 33.10 (1). The person conducting the inspection shall inspect and approve the construction of the soil sub-base, the laying of structural steel, and the laying of waterstop materials and devices before concrete is poured. The operator shall provide a copy of the inspection report and approval to the department.

Note: The department recommends that construction inspection be performed by a qualified person experienced in reading plans and inspection construction.

(2) CONCRETE BLOCK STRUCTURES. A secondary containment structure may have walls constructed of prefabricated portland cement concrete blocks if all of the following apply:

(a) Spaces within the blocks are filled with portland cement concrete and the blocks are joined with mortar.

(b) The floor of the structure is made of poured portland cement concrete.

(c) The structure was constructed prior to November 1, 2006.

(d) The structure is not used after November 1, 2007.

(3) STRUCTURES WITH SYNTHETIC LINERS. A secondary containment structure may be constructed of earth or other materials if the structure is fully lined with a synthetic liner and all of the following apply:

(a) The operator installs the liner and tests liner seams according to manufacturer specifications. A qualified representative of the liner manufacturer shall perform or supervise the installation and testing.

(b) The liner is at least 30 mils (0.8 millimeter) thick.

(c) The manufacturer certifies in writing that the liner is chemically compatible with all fertilizers or pesticides that the operator may store within the secondary containment structure. The operator may not store, within the liner, any fertilizer, pesticide or chemical for which the liner is not certified.

(d) The liner manufacturer guarantees liner effectiveness until a date specified by the manufacturer. The operator may not use the liner beyond that date unless the operator conducts an inspection of the liner within the first year after that date, and at least once every 5 years thereafter. Each inspection shall comply with all of the following requirements:

1. The operator shall remove all gravel and geotextile from those portions of the liner that are not covered by storage containers, and shall inspect those portions of the liner.

2. The operator shall remove a storage container, and inspect those portions of the liner that were covered by the storage container, if an inspection under subd. 1. discloses a problem that extends under the storage container.

3. A department inspector shall attend the inspection.

(e) The operator repairs and maintains the liner and seams, as necessary, to ensure that the liner complies with this subsection and remains effective. The operator shall perform repairs according to manufacturer specifications. A qualified representative of the liner manufacturer shall perform or personally supervise each repair.

(f) The liner rests on one of the following bases, installed according to good engineering practice to provide stable support for the liner:

1. A synthetic geotextile.

2. A layer of soil, sand or smooth gravel at least 6 inches (15.24 centimeters) thick. The layer shall consist of particles less than 1/2 inch in diameter, and shall be free of sharp objects that may penetrate the liner.

(g) The liner is separated, by both of the following, from every storage container whose weight bears on the liner:

1. A synthetic geotextile that rests on the liner.

2. A layer of soil, sand or smooth gravel at least 3 inches (7.62 centimeters) thick that rests on the synthetic geotextile. If the soil, sand or gravel is held in place by a steel, synthetic or other structure, the geotextile liner under subd. 1. shall extend beneath that structure.

(h) The liner is protected, as necessary, against damage from human and motor vehicle traffic.

(i) The liner is protected against damage from sunlight and other sources, as necessary, according to manufacturer recommendations.

(4) PREFABRICATED STRUCTURES. A secondary containment structure may consist of one or more basins pre-fabricated of steel or rigid synthetic material if all of the following apply:

(a) The steel or synthetic material resists corrosion, puncture and cracking. Prefabricated steel structures shall be at least 1/8 inch thick at every point.

(b) The steel or synthetic material is chemically compatible with all fertilizers or pesticides that may be stored within the basin. The basin manufacturer shall certify chemical compatibility in writing, and the operator shall submit a copy of the certification to the department.

(c) If 2 or more basins are connected to form the secondary containment structure, the connection permits free movement of any discharged liquid between the basins.

(5) STEEL STRUCTURES CONSTRUCTED IN PLACE. A secondary containment structure may be constructed of steel, if it is constructed in place. A steel secondary containment structure constructed on or after November 1, 2006 shall be at least 1/8 inch thick at every point.

(6) STRUCTURES WITH EARTHEN LINERS. (a) A secondary containment structure may be constructed of earth or other materials if one of the following applies and the structure has an earthen liner that complies with par. (b):

1. The structure was in use prior to November 1, 2006.

2. The structure contains only fertilizer storage containers that were constructed on site.

(b) An earthen liner under par. (a) shall comply with all of the following:

1. The liner shall be designed and constructed, according to good engineering practice, to achieve a coefficient of permeability of not more than 1×10^{-6} cm/sec.

2. The liner shall be at least 6 inches (15 centimeters) thick.

3. The liner shall be covered by an inorganic soil layer not less than 6 inches (15 centimeters) thick.

4. The liner shall be maintained to prevent cracking.

5. The liner may not be constructed of silt, silty sand or other frost-susceptible soils.

6. If the liner is made of natural soil, not less than 50% by weight of the natural soil shall pass through a number 200 soil sieve and not less than 95% by weight of the natural soil shall pass through a number 4 sieve. A natural soil liner shall contain not more than 2% organic material and shall have a plasticity index of at least 15.

7. The liner, if treated with bentonite, shall have a uniform mixture of natural soil and bentonite. The natural soil shall have a plasticity index of at least 12. Not less than 30% by weight of the natural soil shall pass through a number 200 soil sieve, and not less than 95% by weight of the natural soil shall pass through a

number 4 soil sieve. Not less than 90% by weight of the bentonite shall pass through a number 80 soil sieve, and the soil-bentonite mixture shall contain at least 5% bentonite by weight.

8. The liner shall be reconstructed at least once every 15 years.

9. The operator shall remove storage containers from the secondary containment structure before reconstructing or recompacting the liner, except that the operator is not required to remove a storage container that has a capacity of 50,000 gallons or more.

10. Before the operator reconstructs or recompacts the liner, the operator shall analyze the liner material for compliance with subds. 6. and 7., and to determine whether corrective action is required under ch. ATCP 35.

(7) BUILDING FLOOR; MINI-BULK AND MOBILE CONTAINERS. A warehouse or other building may be used as a secondary containment structure for all of the following if the building complies with this section and can contain a discharge of liquid fertilizer or pesticide:

(a) Mini-bulk containers of fertilizer or pesticide.

(b) Mobile containers kept in the building for not more than 7 days.

(8) MIXING AND LOADING PADS USED FOR SECONDARY CONTAINMENT. An operator may use a mixing and loading pad as a secondary containment structure if the mixing and loading pad complies with s. ATCP 33.32 and this section.

(9) TANK-IN-TANK. An operator may use a tank-in-tank, without any other secondary containment structure, if all of the following apply:

(a) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide into the inner tank when the inner tank is filled to the maximum level allowed under s. ATCP 33.20 (9).

(b) The tank-in-tank is equipped to ensure safe and effective detection and recovery of liquid leaked from the inner tank to the outer tank.

(c) The operator inspects the tank-in-tank and leak detection system at least monthly.

(d) The operator does all of the following in response to a leak:

1. Promptly reports the leak to the department.

2. Empties the tank-in-tank no later than a date specified by the department in writing.

3. Thoroughly cleans the tank-in-tank, and has it repaired by a person certified to perform repairs under API 653, before restoring the tank-in-tank to service.

(10) BLADDER TANK. An operator may use a bladder tank, without any other secondary containment structure, if all of the following apply:

(a) The outer steel part of the bladder tank complies with s. ATCP 33.20.

(b) The bladder within the tank is at least 40 mils thick.

(c) The manufacturer certifies that the bladder is chemically compatible with all materials that may be stored in it, and will withstand normal operational stresses without failing.

(d) A qualified installer installs the bladder tank and its appurtenances.

(e) All appurtenances that extend through both the bladder and the tank have shut-off valves. The shut-off valves shall be enclosed within a structural steel box that can withstand the maximum hydrostatic head pressure of liquid within the bladder tank. The box shall be readily accessible to the operator, but secured against unauthorized access.

(f) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide into the bladder when the bladder is filled to the maximum level allowed under s. ATCP 33.20 (9).

(g) There is room for a person to enter the space between the bladder and tank when the bladder is empty.

(h) The tank has a soft liner to protect the bladder from contact with the steel interior surface of the tank.

(i) The tank is equipped to ensure safe and effective detection and recovery of liquid leaked from the bladder to the tank.

(j) The operator inspects the tank and leak detection system at least monthly.

(k) The operator does all of the following in response to a leak:

1. Promptly reports the leak to the department.
2. Empties the bladder and tank no later than a date specified by the department in writing.

3. Has the bladder repaired by a qualified person before restoring the bladder tank to service.

4. Cleans affected portions of the bladder, soft liner and interior tank surface before restoring the bladder tank to service.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter VII — Discharges and Precipitation

ATCP 33.50 Available pump and storage container.

An operator shall have, readily available at a storage facility, one or more functional pumps that the operator can use to remove liquid from every mixing and loading pad, sump or secondary containment structure at the storage facility. Each pump shall be plumbed or have a readily available hose connection to a storage container that complies with s. ATCP 33.20, so that recovered liquid can be pumped to the storage container. The pump shall self-activate, or shall be susceptible to immediate activation by the operator, whenever needed. The storage container shall have, at all times, an unused capacity of at least 200 gallons.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.52 Discharges and precipitation. (1) DISCHARGE RESPONSE; GENERAL. The operator of a storage facility shall do all of the following whenever there is a discharge:

(a) Take immediate and appropriate action to mitigate any risks that the discharge may pose to public health and the environment.

Note: A release of rinsate is considered a discharge. See s. ATCP 33.01 (10) and (28).

(b) Report the discharge to the Wisconsin department of natural resources if a report is required under ch. NR 706.

Note: If a discharge is fully contained in a mixing and loading pad, sump or secondary containment structure, a discharge report is not required under ch. NR 706 unless the discharge poses an immediate threat to human health.

(2) CONTAINED DISCHARGE OR PRECIPITATION. Except as provided in sub. (3), an operator shall recover any unfrozen discharge or unfrozen precipitation that collects in a mixing and loading pad, sump or secondary containment structure. The operator shall recover the unfrozen discharge or precipitation by the end of the first business day in which the collected discharge or precipitation is present in the mixing and loading pad, sump or secondary containment structure. The operator shall take earlier action to recover the collected discharge or precipitation if earlier action is necessary to do any of the following:

(a) Maintain the effective discharge containment capacity of a mixing and loading pad, sump or secondary containment structure.

(b) Prevent instability of storage containers.

(c) Minimize the risk of a discharge to the environment.

(d) Prevent vehicles from driving through discharges, rinsate or collected precipitation on the mixing and loading pad.

(3) PRECIPITATION CONTAINED IN FERTILIZER SECONDARY CONTAINMENT STRUCTURE. Subsection (2) does not apply to precipitation that has collected in a fertilizer secondary containment structure, provided that the operator uses at least one of the following methods to manage that collected precipitation:

(a) The operator may recover all of the collected precipitation, and transfer it to a storage container in the secondary containment structure by the end of the first business day in which the collected precipitation is present in the secondary containment structure.

(b) The operator may store the collected precipitation in the fertilizer secondary containment structure until the precipitation can be properly used according to s. ATCP 33.56 or until it evaporates, provided that the operator complies with sub. (4).

(c) The operator may apply the collected precipitation to a vegetative filter strip at or adjacent to the storage facility, provided that all of the following apply:

1. The operator applies the collected precipitation according to a written plan approved by the department. The plan shall consider the volume of liquid to be applied, the nutrient content of the liquid, the nutrient utilization capacity of the filter strip, and seasonal conditions that may affect that utilization capacity.

2. The operator maintains living vegetation on the entire filter strip.

3. The operator complies with sub. (4).

(d) The operator may discharge the collected precipitation to areas of the storage facility from which there is no potential for direct runoff to waters of the state, provided that all of the following apply:

1. The operator complies with sub. (4).

2. None of the samples analyzed under sub. (4) (b) contains more than 20 milligrams of total nitrogen per liter.

(e) An operator may discharge the collected precipitation to a public wastewater treatment system, provided the operator has written permission from the authority that operates the system.

(f) An operator may discharge the collected precipitation to surface water, via a storm sewer or other conduit, if the operator has written permission from the Wisconsin department of natural resources.

(4) SAMPLE TESTING AND FOLLOW-UP. An operator who uses any of the management methods under sub. (3) (b) to (d) shall do all of the following:

(a) Obtain at least one sample of collected precipitation in each of the months of April, June, August and October.

(b) Have the samples under par. (a) analyzed, at a laboratory certified by the Wisconsin department of natural resources under ch. NR 149, for nitrate/nitrite-nitrogen and ammonia/ammonium-nitrogen.

(c) If any sample analyzed under par. (b) contains more than 200 milligrams of total nitrogen under par. (b) per liter, notify the department and implement a department-approved plan to manage collected precipitation containing more than 200 milligrams of total nitrogen per liter.

(d) Keep accurate records of all analytical results under par. (b).

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06; CR 08-075: am. (4) (a) Register April 2009 No. 640, eff. 5-1-09.

ATCP 33.54 Managing recovered discharges, rinsate and collected precipitation. (1) Liquid recovered

under s. ATCP 33.52, if held by the operator pending use or disposal, shall be held in a storage container that complies with s. ATCP 33.20 and is located in a secondary containment structure that complies with s. ATCP 33.42.

(2) Dry fertilizer or pesticide recovered under s. ATCP 33.52, if held by the operator pending use or disposal, shall be handled in a manner that complies with s. ATCP 33.22.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.56 Use and disposal of recovered material.

(1) SAFE USE OR DISPOSAL. An operator shall safely use or dispose of material recovered under s. ATCP 33.52. Use and disposal shall comply with applicable federal, state and local regulations.

(2) PESTICIDES. An operator may not sell, distribute or apply any material recovered under s. ATCP 33.52 as a pesticide unless that sale or distribution complies with ch. ATCP 29.

Note: An operator must obtain a permit under s. ATCP 35.03 before landspreading material recovered from the environment as part of an environmental remediation under ch. ATCP 35.

(3) FERTILIZERS. (a) Except as provided in par. (b), an operator may not sell or distribute any material recovered under s. ATCP 33.52 as a fertilizer or soil or plant additive unless that sale or distribution complies with ch. ATCP 40.

(b) Notwithstanding ch. ATCP 40, an operator may apply to land free of charge, or distribute free of charge to a landowner for application to that person's land, rinsate recovered under s. ATCP 33.52 if the operator discloses to the landowner the types of fertilizer or soil or plant additives contained in that rinsate.

Note: If rinsate contains pesticide, an operator must also comply with sub. (2). An operator must obtain a permit under s. ATCP 35.03 before landspreading material recovered from the environment as part of an environmental remediation under ch. ATCP 35.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.58 Discharge response preparedness.

(1) DISCHARGE RESPONSE PLAN REQUIRED. (a) The operator of a storage facility shall have a written discharge response plan for all of the following:

1. Discharges at the storage facility.
2. Discharges, at locations outside the storage facility, from mobile containers shipped from the storage facility.

(b) An operator shall do all of the following, with respect to a discharge response plan under par. (a):

1. Review and amend the plan, as necessary, at least once each year.
2. Keep a copy of the plan readily available at the storage facility and at the nearest local office from which the operator administers the storage facility.
3. Make the plan available to the department for inspection and copying upon request.
4. Notify the local fire department, police department and emergency planning committee of the plan and any plan revisions, and provide them with copies upon request.

Note: Federal law under 42 USC 11002 and 11003 requires response plans for certain chemicals. A single response plan may satisfy requirements under sub. (1) and federal law.

(2) PLAN CONTENTS. A discharge response plan under sub. (1) shall include all of the following:

- (a) The identity, address and telephone number of the individual who is responsible for managing the storage facility.
- (b) The spill reporting telephone number (1-800-943-0003) maintained by the department of natural resources and department of military affairs emergency management division.
- (c) The telephone number of the department's agricultural resource management division (608-224-4500), or the identity and telephone number of the division's local environmental enforcement specialist.

(d) The names and telephone numbers of 2 local excavation contractors and 2 local earth hauling contractors.

(e) A map or diagram of the storage facility. The map or diagram shall include all of the following:

1. The location of each fertilizer storage container or bin, and the name or grade of fertilizer stored in that container or bin.
2. The location of each pesticide storage container or bin, other than a mini-bulk container, and the name of the pesticide product stored in that container or bin.
3. The location of each mini-bulk container storage area.

(f) Procedures for responding to discharges at the storage facility.

(g) Procedures for responding to discharges from mobile storage containers shipped from the storage facility.

(h) Procedures for using or disposing of recovered discharges.

(3) EQUIPMENT, SUPPLIES AND TRAINED PERSONNEL. (a) Pumps, recovery containers, personal protective equipment, and other necessary equipment and supplies shall be readily available for any discharge response that may reasonably be needed.

(b) Persons employed at a storage facility shall be trained in discharge response procedures. Trained personnel shall be readily available to implement a discharge response.

(c) An operator may arrange with a local fire department or other persons to provide equipment, supplies and personnel required under pars. (a) and (b) if the operator makes those arrangements in advance as part of the operator's discharge response plan.

(d) An operator shall have available, at the storage facility, absorbent materials that may be used to control and clean up small liquid discharges.

(e) An operator shall decontaminate equipment and supplies, as necessary, after using them to control and recover a discharge.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter VIII — Transportation and Handling Practices

ATCP 33.60 Transporting bulk fertilizer and bulk pesticide. **(1) GENERAL.** An operator shall transport bulk fertilizer and bulk pesticide in a manner that prevents reasonably foreseeable and preventable hazards to persons, property and the environment.

(2) TRANSPORT VEHICLES. Containers and appurtenances used to transport bulk fertilizer or bulk pesticide shall be securely anchored to transport vehicles so that stresses from normal vehicle operation will not cause a discharge and will not cause the containers and appurtenances to move independently of the vehicle. Equipment, tools and other items carried on transport vehicles shall be secured against damaging contact with containers or appurtenances.

(3) PROTECTION AGAINST DAMAGE OR ACCESS. Containers and appurtenances used to transport bulk fertilizer or bulk pesticide shall be protected from damage or destruction, and shall be secured against access by the general public and animals.

(4) DEFECTIVE CONTAINERS. An operator may not transport bulk fertilizer or bulk pesticide in a visibly broken, defective or improperly sealed container unless that container is enclosed in another container that effectively prevents the discharge of fertilizer or pesticide.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.62 Dust control in dry product loading. An operator shall use a loading chute or other dust control device to unload dry bulk fertilizer or dry bulk pesticide from storage containers to transport vehicles or application equipment, so that the air gap between the load-out equipment and the top rim of the transport vehicle or application equipment being filled does not exceed 2 feet.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter IX — Environmental Assessments

ATCP 33.70 Environmental assessments. **(1) ASSESSMENT REQUIRED.** An operator shall conduct an assessment under sub. (2) whenever any of the following structures used for liquid bulk fertilizer or liquid bulk pesticide leaks, is removed, or remains out of use for more than 5 years:

- (a) A mixing and loading pad.
- (b) A sump.
- (c) A secondary containment structure.

(2) NATURE AND SCOPE OF ASSESSMENT. (a) An assessment under sub. (1) shall assess all of the following:

1. Whether there have been any discharges to the environment.

2. The extent and severity of any environmental contamination caused by the discharges under subd. 1.

(b) The assessment under sub. (1) shall include sampling and analysis of soils, groundwater and other media, as necessary.

(3) RECORD AND REPORT. An operator shall file with the department a written report of each assessment under this section. The record and report shall indicate the nature, scope and findings of the assessment.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

Subchapter X — Records and Reports

ATCP 33.80 Records. (1) RECORDS REQUIRED. An operator shall make and keep all of the following records:

(a) Records of API 653 inspections required under s. ATCP 33.20 (1) (f) 2.

(b) Records of inspection and maintenance required under ss. ATCP 33.20 (13), 33.32 (7), 33.36 (6) and 33.42 (5).

(c) Records of pressure tests required under ss. ATCP 33.20 (2) (d) 1. and 33.38 (2) (d).

(d) Precipitation sample test records required under s. ATCP 33.52 (4).

(2) RECORD RETENTION. An operator shall retain the records under sub. (1) (a) for as long as the operator owns, operates or controls the storage facility . An operator shall retain the records under sub. (1) (b) to (d) for at least 3 years.

(3) RECORD LOCATION; INSPECTION AND COPYING. An operator shall retain the records under sub. (1) at the storage facility, or at the nearest local office from which the operator administers that storage facility. The operator shall make the records available to the department for inspection and copying upon request.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.

ATCP 33.82 Real estate sale or lease; disclosure.

An operator shall do all of the following before the operator sells or leases, for another use, real estate that has been used for a storage facility:

(1) Notify the department of the sale or lease.

(2) Disclose to the purchaser or lessee that the real estate has been used as a storage facility.

Note: Section ATCP 33.82 does not relieve the operator of other disclosure requirements that may apply under other law.

History: CR 05-108: cr. Register October 2006 No. 610, eff. 11-1-06.