

**ORDER OF THE STATE OF WISCONSIN
DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION
ADOPTING, REPEALING AND REPEALING AND RECREATING RULES**

- 1 The Wisconsin department of agriculture, trade and consumer protection adopts the following
- 2 order to repeal ch. ATCP 32 and to repeal and recreate ch. ATCP 33; relating to fertilizer and
- 3 pesticide bulk storage and affecting small business.

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

The Department of Agriculture, Trade and Consumer Protection (“DATCP”) currently regulates fertilizer and pesticide bulk storage facilities. DATCP regulates to ensure safe storage of fertilizer and pesticides, and to prevent spills that may harm persons, property and the environment.

This rule consolidates, reorganizes and modifies current rules. This rule regulates the construction, operation and maintenance of fertilizer and pesticide bulk storage facilities. This rule requires operators to file construction plans with DATCP before constructing certain bulk storage structures. This rule also creates new construction standards for some facilities.

Statutory Authority

Statutory Authority: ss. 93.07(1) and 94.645(3), Stats.
Statute Interpreted: s. 94.645, Stats.

DATCP has broad authority, under s. 93.07(1), Stats., to adopt rules to implement laws under its jurisdiction. DATCP has specific authority to regulate fertilizer and pesticide bulk storage under s. 94.645, Stats., and has rule making authority for that purpose under s. 94.645(3), Stats.

Rule Coverage

This rule applies to commercial facilities that store unpackaged *bulk* fertilizer or pesticides. This rule does *not* apply to any of the following:

- Manure storage.
- On-farm storage, mixing or loading of fertilizer or pesticides for on-farm use (not for sale or distribution).
- Facilities that store only packaged fertilizer or pesticides.

Rule Consolidation

DATCP currently administers separate bulk storage rules for fertilizer and pesticides. Since many facilities store fertilizer *and* pesticides, this rule consolidates fertilizer and pesticide bulk storage rules in a single rule chapter. This consolidation will make it easier for storage facility operators to understand and comply with the rules.

Effect on Existing Facilities

This rule establishes some new construction standards for fertilizer and pesticide storage facilities. But the new standards apply only to structures that are constructed *or substantially altered* on or after the effective date of this rule. Routine maintenance and repair is not considered a *substantial alteration*.

Spill Prevention and Cleanup Costs

DATCP currently administers an agricultural chemical cleanup program, funded by fertilizer and pesticide license fees. Under that program, DATCP compensates facility operators for fertilizer and pesticide spill cleanup costs. Proper construction and maintenance of storage facilities can reduce spills and spill cleanup costs.

This rule does not change the agricultural chemical cleanup program. But by improving storage facility construction and maintenance, this rule will help minimize spills and spill cleanup costs. That will help to control costs under the agricultural chemical cleanup program.

Rule Contents

Construction Plans

Under current rules, fertilizer and pesticide bulk storage facilities must be constructed to certain standards. A professional engineer is often involved. However, current rules do not *require* plan review by DATCP or a professional engineer.

Under this rule, at least 21 days before an operator constructs or substantially alters a storage facility, the operator must file all of the following with DATCP:

- Plans for the construction or alteration (design specifications).
- A signed written statement by a professional engineer, certifying that the plans comply with this rule.
- The approximate date on which the operator plans to start construction.

DATCP may review and comment on plans filed under this rule, but is not required to do so. A failure to comment does not signify approval. An operator is not required to obtain DATCP approval, but construction must conform to this rule and to the plans filed with DATCP.

An operator may not deviate from the plans without prior written notice to DATCP. DATCP may, in its discretion, inspect the construction (DATCP is not required to inspect). The operator or a person chosen by the operator must inspect the construction of new concrete structures to ensure that the construction conforms to plans filed with DATCP. The operator must file a copy of the inspection report with DATCP.

Under this rule, as under current rules, DATCP may grant a variance from applicable requirements if DATCP finds that a nonconforming feature will provide substantially equivalent protection for waters of the state. This rule clarifies that an operator must submit a variance request in writing. The request must clearly identify the proposed nonconforming feature. If the nonconforming feature affects a secondary containment structure or a mixing and loading pad, a professional engineer must certify that it will provide substantially equivalent protection for waters of the state. DATCP must grant or deny the request within 30 days, but may extend the response deadline for good cause.

Storage Facility Siting

Under this rule, as under current rules, storage and handling operations must be conducted over a mixing and loading pad or secondary containment structure designed to contain spills. Under this rule, new mixing and loading pads, secondary containment structures and bulk dry fertilizer buildings must be located at least 5 feet above bedrock and groundwater, at least 1,000 feet from any navigable lake, at least 300 feet from any navigable stream, and outside any 100-year floodplain. These siting limitations do 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 the effective date of this rule.

Water Supply Protection

Under this rule, storage facilities must comply with well setback requirements contained in chs. NR 811 and 812, Wis. Adm. Code (the state well code). All water supplies to a storage facility must be protected against back flow. Protection may include an air gap at each water supply outlet, or a back flow protection device that complies with ch. Comm 82, Wis. Adm. Code (the state plumbing code).

Storage Containers for Liquid Fertilizer or Pesticide

Under this rule, as under current rules, storage containers must be designed and constructed to prevent discharges, and must be located within a secondary containment structure. Storage containers must resist corrosion, puncture and cracking, and must be constructed of materials that do not react with stored products. Storage containers must be strong enough to hold the largest volume of product that may be stored in them.

This rule establishes new requirements related to bladder tanks, tank-in-tanks and field-erected storage containers constructed or substantially altered after the effective date of this rule. The storage containers must comply with construction standards in American Petroleum Institute standard API 650. An inspector certified under American Petroleum Institute Standard API 653 must inspect the storage containers at least once every 5 years, using inspection procedures specified by API 653.

This rule, like the current rules, requires an operator to anchor storage containers. Under this rule, anchor plates may not be embedded in the floor of a secondary containment structure unless the structure is specifically designed to handle the resulting stresses. Anchor plates may not be embedded in walls of a secondary containment structure.

Storage Container Appurtenances

This rule, like the current rule, establishes standards for storage container appurtenances such as valves, pipes, pumps, fittings, hoses and metering devices. Under this rule, as under the current rule, storage container connections must be equipped with shutoff valves. Appurtenances must be made of suitable materials, and must be designed to prevent discharges. Pipes and other appurtenances must be properly supported to prevent sagging and breakage.

Under current rules, storage containers must have gauging devices that show the volume of liquid in the containers. Liquid level gauging devices are no longer required under this rule. But *if* a storage container has a liquid level gauging device, the device must meet standards under this rule (the standards are similar to current rules). Under this rule, if a storage container has an external sight gauge, the site gauge must be anchored to the container at intervals of no more than 10 feet. This rule, like the current rules, prohibits external sight gauges on pesticide containers.

This rule establishes some new standards for appurtenances. Under this rule:

- Piping connections must be threaded, welded, fused, permanently band-clamped, or located over a mixing and loading pad or secondary containment structure (to prevent uncontained discharges from insecure connections).
- Piping or appurtenances constructed or substantially altered after the effective date of this rule may not be placed below ground, in concrete, or through any mixing and loading pad or secondary containment structure.
- An operator must annually inspect and pressure test any pipe or appurtenance installed below ground, in concrete (to ensure that there is no hidden discharge to the environment).
- An operator must annually inspect and test the joint between an appurtenance and any containment structure wall through which the appurtenance extends.

Storage Container Security

Under this rule, as under current rules, an operator must keep storage containers individually locked, or in a secure building or outdoor enclosure. Unlike current rules, this rule does not require individual locking of pesticide storage containers kept in a secure outdoor enclosure. This rule clarifies fencing requirements for outdoor enclosures.

Filling, Labeling and Venting Storage Containers

Current rules prohibit an operator from filling a storage container beyond capacity. This rule prohibits an operator from filling a storage container beyond 95% of capacity (except mini-bulk containers or containers kept at constant temperature). This rule, like current rules, requires proper labeling and venting of storage containers.

Underground Storage Prohibited

This rule, like current rules, prohibits underground storage of bulk liquid fertilizer, bulk liquid pesticide, or recovered discharges. Sumps constructed after the effective date of this rule may not be more than 2 feet deep, and may not have a capacity of more than 50 gallons (see below).

Storage Containers; Inspection and Maintenance

Current rules require weekly inspections of liquid levels and appurtenances, and monthly inspections of vents. Under this rule, an operator is no longer required to make these specific inspections (or keep records of them), but must inspect and maintain storage containers to minimize discharge risks.

Abandoned Storage Containers

Under this rule, as under the current rules, an operator must clean and rinse any abandoned storage container, and remove all appurtenances from the abandoned container. The operator must remove any underground storage container (including any sump that has a capacity of more than 50 gallons) that is abandoned.

Storage Structures; Dry Fertilizer or Pesticide

This rule expands and clarifies current requirements related to storage of dry bulk fertilizer or pesticide. Under this rule, dry bulk products must be stored in a fully enclosed building. However, an operator may store the following products outdoors:

- Packaged products that are fully enclosed in durable weatherproof packages or containers.
- Potassium chloride, or other products specifically approved by DATCP, if covered by a waterproof cover and kept on an asphalt concrete or portland cement concrete surface.

Storage structures must be constructed, inspected and maintained to withstand the pressure of stored products, to prevent discharges, and to prevent precipitation from contacting stored product. Stored product must be removed from abandoned storage facilities, and from facilities that fail to meet standards under this rule. Storage bins must be properly labeled to show fertilizer or pesticide contents.

Mixing and Loading Pads; General

Under this rule, as under current rules, fertilizer and pesticide mixing and loading must be done over a mixing and loading pad designed to catch and contain spills. This rule expands and clarifies current requirements for mixing and loading pads. Under this rule, a mixing and loading pad used for mixing and loading liquid products must comply with all of the following requirements (less rigorous requirements apply if the pad is used only for dry products):

- It must be liquid-tight.
- If constructed after the effective date of this rule, it must have a capacity of 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.
- It must be constructed of concrete, according to standards specified in this rule. A mixing and loading pad that was in use prior to the effective date of this rule may be constructed of asphalt concrete, but it must be replaced by a portland cement concrete pad on or before December 31, 2009.
- It must be served by a pump and storage container that can be used to recover and store spilled liquid. The pump must be self-activating or easily activated in response to a spill. The storage container must have an *available* capacity of at least 200 gallons at all times.
- It must be designed and constructed to withstand foreseeable load conditions.
- It must be protected from precipitation runoff from surrounding surfaces.
- It may not have a precipitation drain (existing drains must be permanently plugged within 6 months after the effective date of this rule).
- It must be inspected at the time of construction (if constructed on or after the effective date of this rule), to ensure that construction conforms to plans filed with DATCP.
- It must be inspected and maintained on an ongoing basis. An operator must remove a leaking mixing and loading pad unless the pad is repaired and remains liquid-tight for at least 2 years after the repair.

A mixing and loading pad is not required for rail car unloading, or for loading fertilizer or pesticide into anhydrous ammonia nurse tanks, provided that those operations comply with alternative requirements under this rule.

Sumps

This rule expands and clarifies current rules related to sumps. Under this rule, if a mixing and loading pad or secondary containment structure drains to a sump, the sump must be all of the following:

- Liquid-tight.
- Served by a pump and storage container that can be used to recover and store spilled liquid. The pump must be self-activating or easily activated. The storage container must have an *available* capacity of at least 200 gallons at all times.
- Inspected at the time of construction (if constructed on or after the effective date of this rule), to ensure that construction conforms to plans filed with DATCP.
- Inspected and maintained on an ongoing basis. An operator must remove a leaking sump unless the sump is repaired and remains liquid-tight.

A sump constructed after the effective date of this rule must:

- Be constructed of concrete, if constructed as part of a mixing and loading pad or a concrete secondary containment structure.
- Have a capacity of not more than 50 gallons.
- Be no more than 2 feet deep. The sump depth may not exceed the shortest sump width.
- Have walls and floor at least as thick, at every point, as the mixing and loading pad or secondary containment structure floor that drains to the sump.
- Form part of a continuous surface, having an area of at least 15 ft. by 15 ft. and a capacity of 250 gallons, which is free of construction and control joints. If a sump is constructed as part of a concrete mixing and loading pad or secondary containment structure, it must be constructed in a continuous concrete pour with that pad or structure.

Secondary Containment Structures; General

Under this rule, as under current rules, liquid fertilizer and pesticide storage containers must be located within a secondary containment structure. There are limited exemptions for mobile, mini-bulk and empty storage containers. This rule does not exempt ordinary double-bottom storage containers.

Under this rule, as under current rules, a secondary containment structure must be designed, constructed and maintained to contain potential discharges of liquid fertilizer or pesticide from storage containers. Under this rule, as under current rules, the capacity of the secondary containment structure must be at least equal to the sum of the following:

- 125% of the capacity of the largest storage container located within the structure, or 110% if the structure is fully covered by a roof.
- The total volume of discharged liquid that would be displaced by the submerged portions of all other storage containers, equipment or fixtures located within the structure if the structure were filled to capacity with discharged liquid.

Under this rule, a secondary containment structure must be designed to withstand the full hydrostatic head of any liquid that may be discharged to the structure. The structure must have a coefficient of permeability of not more than 1×10^{-6} cm/sec. Structure walls may not be taller than 4 feet (there are limited exceptions).

This rule, like current rules, prohibits liquid bulk pesticide storage in an outdoor secondary containment structure that also holds bulk fertilizer. Under this rule, all storage containers must be located at least 24 inches from the walls of the secondary containment structure and at least 24 inches from each other (there are some limited exceptions).

Secondary Containment Structures; Construction Alternatives

This rule expands and clarifies construction standards for secondary containment structures. Under this rule, a secondary containment structure may consist of one of the following:

- **Portland cement concrete structure.** A secondary containment structure may be made of portland cement concrete. A portland cement concrete structure constructed after the effective date of this rule must be constructed according to standards specified in this rule. The operator or a person chosen by the operator must inspect the construction to ensure that construction conforms to plans filed with DATCP.
- **Block wall structure.** A secondary containment structure may have concrete block walls if all of the following apply:
 - The floor is made of poured portland cement concrete.
 - The wall blocks are filled with portland cement concrete and joined with mortar.
 - The structure was in use prior to the effective date of this rule.
 - The structure is not used for more than one year after the effective date of this rule.
- **Synthetic liner.** A secondary containment structure may be constructed of earth or other materials, and lined with a synthetic liner, if all of the following apply:
 - The liner meets standards specified in this rule, and is installed to manufacturer specifications. A manufacturer's representative must supervise the installation.

- The liner manufacturer certifies that the liner is chemically compatible with all products stored within the structure, and guarantees liner effectiveness until a specified date. The operator must remove and inspect the liner by that date, and at least once every 5 years thereafter.
 - The operator repairs and maintains the liner as necessary, according to manufacturer specifications.
 - The liner rests on a proper base and is protected from potential damage above and below, as prescribed by this rule.
- ***Prefabricated basin.*** A secondary containment structure may consist of one or more prefabricated basins constructed of steel or rigid synthetic material if the basins meet standards specified in this rule.
- ***Steel structure constructed in place.*** A secondary containment structure may be constructed of steel if the structure meets standards specified in this rule. Structures built after the effective date of this rule must be at least 1/8 inch thick at every point.
- ***Earthen structure with earthen liner.*** A secondary containment structure may consist of an earthen structure with an earthen liner if all of the following apply:
 - The liner contains only fertilizer (not pesticide) storage containers and, if the structure is built after the effective date of this rule, all of the storage containers were constructed on-site.
 - The liner meets specific rule requirements. The liner must be constructed of specified materials, must be at least 6 inches thick, must have a coefficient of permeability of not more than 1×10^{-6} cm/sec., and must be covered by an inorganic soil layer at least 6 inches thick. It must be maintained to prevent cracking and must be reconstructed at least once every 15 years.
- ***Building floor; mobile and mini-bulk containers.*** A building floor may serve as a secondary containment structure for mini-bulk containers, and for mobile containers stored on the floor for less than 7 days, if the building is capable of containing a discharge from those containers.
- ***Mixing and loading pad.*** A mixing and loading pad may serve as a secondary containment structure if it meets all of the requirements under this rule for a mixing and loading pad and secondary containment structure.
- ***Tank-in-tank.*** A tank-in-tank system may serve as a secondary containment structure if all of the following apply:
 - The tanks are designed to meet the API 650 standards.
 - A liquid level monitoring device is installed to prevent overfilling.
 - The tank-in-tank is equipped with an effective leak detection system.
 - The leak detection system is inspected at least monthly.

- If a leak were to occur, the leak must be reported to the department, and the tank be emptied and cleaned in agreement with the department conditions and inspected and repaired in compliance with API 653.
- **Bladder Tank.** A bladder tank system may serve as a secondary containment structure if all of the following apply:
 - The tank is designed to meet the API 650 standard
 - The bladder within the tank is at least 40 mils thick and chemically compatible with the products it is used to store.
 - A qualified installer installs the bladder tank.
 - A specially-designed shut-off valve and system is used.
 - A liquid level monitoring device is installed to prevent overfilling.
 - The bladder is protected with a soft liner.
 - The tank-in-tank is equipped with an effective leak detection system.
 - The leak detection system is inspected at least monthly.
 - If a leak occurs in the bladder, the leak is reported to the department, the tank is emptied and cleaned in agreement with the department conditions and the bladder repaired by a qualified person.

Secondary Containment Structures; Inspection and Maintenance

Under this rule, an operator must routinely inspect and maintain each secondary containment structure to ensure that the structure complies with this rule and does not leak. An operator must remove a leaking secondary containment structure unless the structure is repaired and remains liquid-tight.

Discharge Response

Under this rule, an operator must do all of the following whenever there is a discharge of fertilizer or pesticide at a storage facility:

- Take immediate and appropriate action to contain and recover the discharge, and to mitigate risks to public health and the environment.
- Report the discharge to the department of natural resources if a report is required under NR 706 (a report is not required if the discharge is fully contained in a mixing and loading pad, sump or secondary containment structure).

If a discharge is fully contained within a mixing and loading pad, sump or secondary containment structure, the operator must ordinarily recover the discharge at any time before the end of the business day, except that:

- The operator must recover discharged material from a mixing and loading pad, and rinse the pad, before allowing vehicles to drive through the discharge.

- The operator must recover liquid (including discharges, rinse water or precipitation runoff) from a mixing and loading pad, sump or secondary containment structure whenever necessary to mitigate health or environmental risks, maintain available discharge containment capacity, or prevent corrosion or instability of storage containers.
- The operator may use alternative methods, provided in this rule, to manage precipitation that has collected in a fertilizer secondary containment structure.

Storage, Use and Disposal of Recovered Material

Under this rule, an operator must safely use or dispose of discharges, rinsate and precipitation runoff recovered from a mixing and loading pad, sump or secondary containment structure. Use and disposal must comply with applicable federal, state and local regulations. Under this rule:

- Recovered liquid, if held by the operator pending use or disposal, must be held in a storage container that complies with this rule.
- Recovered liquid may be used as fertilizer or pesticide mix water if the resulting product complies with ATCP 40 (fertilizer) or ATCP 29 (pesticide).
- Recovered fertilizer material may be applied to land free of charge, or distributed free of charge for application to land (the operator must disclose fertilizer or pesticide contents to the landowner). However, any other sale or distribution of the recovered material, as a fertilizer or pesticide, must comply with ATCP 40 (fertilizer) or ATCP 29 (pesticide).

Under current rules (ATCP 35), an operator needs a DATCP permit to landspread material recovered from the environment, as part of an environmental cleanup. But this requirement does not apply to material recovered from a mixing and loading pad, sump or secondary containment structure.

Discharge Response Preparedness

Under this rule, as under current rules, an operator must have a written discharge response plan for a storage facility. The operator must keep a copy of the plan at the storage facility (and nearest local office), and must make the plan available to the department and local emergency responders upon request. The operator must keep the plan current at all times.

Under this rule, as under current rules, a discharge response plan must include all of the following:

- The name and telephone number of a responsible individual.
- A site map showing the location of each storage container or bin, and the type of fertilizer or pesticide stored in that container or bin.
- Procedures for responding to discharges at the facility.
- Procedures for using or disposing of recovered discharges.

Under this rule, a discharge response plan must also include all of the following:

- The Wisconsin spill reporting number (1-800-943-0003).
- A DATCP contact number.
- The names and telephone numbers of 2 local excavation contractors and 2 local earth hauling contractors.
- Procedures for responding to discharges from mobile containers shipped from the facility.

Under this rule, as under current rules, an operator must have personnel, equipment and supplies available for discharge responses. Equipment must include pumps, recovery containers and personal protective equipment. Personnel must be trained in emergency response procedures.

Transporting Bulk Fertilizer or Pesticide

This rule creates new requirements related to the transportation of bulk fertilizer and pesticides by a storage facility operator. Under this rule:

- An operator must transport bulk fertilizer and pesticides in a manner that prevents reasonably foreseeable and preventable hazards to persons, property and the environment.
- Mobile containers must be securely anchored to transport vehicles. Other equipment on the transport vehicle that could come in contact with the mobile container must also be securely anchored to the vehicle.
- Mobile containers must be protected from damage and unauthorized access.
- An operator may not transport bulk fertilizer or pesticides in visibly broken, damaged or improperly sealed containers.

Environmental Assessments

Under this rule, an operator must check for possible environmental contamination whenever a mixing and loading pad, sump or secondary containment structure leaks, is removed, or remains out of service for over 5 years:

As part of the environmental assessment, the operator must sample and analyze soils, groundwater and other media, as necessary, to determine the existence, nature and scope of possible contamination. The operator must report the results of the environmental assessment to DATCP.

Recordkeeping

Under this rule, as under current rules, an operator must keep records related to a storage facility. This rule modifies current record keeping requirements. Under this rule, an operator must keep records related to all of the following:

- Required API 653 inspections of bladder tanks, tank-in-tanks, and large storage containers constructed on-site (inspections, by a certified inspector, are required during construction and every 5 years after construction).
- Required pressure tests of buried or embedded piping.
- Required inspection and maintenance of storage containers and structures (this rule requires an operator to inspect and maintain storage containers and structures, as necessary, to maintain compliance with this rule).

This rule eliminates current record keeping requirements related to the following activities:

- Annual inventory reconciliation (this rule repeals annual inventory reconciliation requirement).
- Weekly inspections of liquid levels and appurtenances (this rule repeals weekly inspection requirements).
- Discharges to the environment (an operator must report discharges to DNR per DNR rules, and must provide DATCP with the operator's environmental assessment related to any leaking storage container).

Under this rule, an operator must:

- Keep API 653 inspection records for as long as the operator owns or operates the storage facility.
- Keep records of pressure tests, inspections and maintenance for at least 3 years.
- Keep the records at the storage facility or nearest local office.
- Make the records available to DATCP for inspection and copying upon request.

Real Estate Sale or Lease; Disclosure

Under this rule, an operator must do all of the following before the operator sells or leases storage facility real estate for a different use (this rule does not limit other disclosures that may be required under other applicable law):

- Notify DATCP of the impending sale or lease.
- Disclose to the purchaser or lessee that the real estate has been used as a storage facility.

Inspection and Enforcement

DATCP may inspect a storage facility for compliance with this rule, and may take enforcement action as necessary. Under current state statutes, DATCP is authorized to do all of the following as necessary:

- Conduct investigations and issue warning notices.
- Inspect facilities, and collect product and environmental samples for testing.
- Inspect and copy records.
- Issue subpoenas and investigative demands.

- Issue orders to correct violations of this rule. DATCP may issue orders on a summary basis, without prior notice or hearing, if necessary to protect public health or the environment.
- Seek court action to enforce this rule or a DATCP order. This may include actions for injunction, or for a civil forfeiture of up to \$1,000 per violation (each day of violation constitutes a separate offense). DATCP may also seek criminal penalties if appropriate (fine of up to \$200 and 6 months in jail, or both).
- Deny, suspend, revoke the operator's license as a fertilizer manufacturer or distributor or pesticide application business.
- Order an operator to investigate and clean up environmental contamination resulting from a discharge. DATCP may order removal of structures, as necessary, for the environmental cleanup.
- Deny reimbursement of environmental cleanup costs for which the operator would otherwise be eligible (for example, if a discharge occurs because of an intentional or grossly negligent violation of storage rules).

Standards Incorporated by Reference

Pursuant to s. 227.21, Stats., DATCP will request permission from the attorney general and revisor of statutes to incorporate the following standards by reference in this rule, without reproducing the complete standards in this rule:

- American Petroleum Institute standard 650, *Welded Steel Tanks for Oil Storage*, 10th edition (September 1, 2003).
- American Petroleum Institute standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction*, 3rd edition (December 1, 2001).
- *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.

Copies of these standards will be kept on file with DATCP, the secretary of state and the revisor of statutes. Copies are not reproduced in this rule.

Fiscal Estimate

This rule will increase DATCP costs by approximately \$24,400 per year. Additional staff time will be needed to train storage facility operators, review and comment on storage facility construction plans, and monitor compliance with construction standards and other requirements. This rule will not generate any new revenue to cover the increased costs, so DATCP will need to absorb the increase at the expense of other program activities. A complete fiscal estimate is attached.

This rule does not increase industry fees. By minimizing agrichemical discharges to the environment, this rule may limit the long-term growth of reimbursement claims under the agricultural chemical cleanup program. That would have a positive effect on DATCP's agricultural chemical cleanup fund, which is financed by industry fees. However, DATCP cannot accurately estimate the impact at this time.

Business Impact

This rule applies to commercial operators who store unpackaged bulk fertilizer or pesticides for sale or distribution. Many of these operators are “small businesses.” A complete small business analysis (“initial regulatory flexibility analysis”) is attached.

This rule does *not* apply to any of the following:

- Manure storage.
- On-farm storage of fertilizer or pesticide for on-farm use (not for sale or distribution).
- Facilities that store only packaged fertilizer or pesticides.

This rule establishes some new construction standards for fertilizer and pesticide storage facilities. These new standards apply to structures that are constructed *or substantially altered* after the effective date of this rule. This rule will not have a significant impact on an existing facility unless the operator *substantially alters* structures in that facility. Routine maintenance and repair is not considered a *substantial alteration*.

Under this rule, an operator must have construction plans reviewed by a professional engineer, and must submit the construction plans for discretionary review by DATCP. This may entail some additional costs for some operators, but will help prevent much more costly design and construction errors. This rule does *not* require DATCP pre-approval of new construction or alterations. This rule allows design flexibility, consistent with minimum standards.

Improved design and construction of storage facilities will minimize environmental contamination and costly cleanups that pose a large financial risk to storage facility operators. Environmental cleanup costs are typically much higher than preventive design and construction costs. Reduction of cleanup costs will also minimize financial demands on the industry-funded agricultural chemical cleanup program.

This rule reduces the overall recordkeeping burden for affected businesses (it adds some recordkeeping requirements but eliminates others). Consolidation of current fertilizer and pesticide bulk storage rules will make the rules easier to read, understand and implement.

DATCP has worked with University of Wisconsin-Extension to spell out basic design standards for concrete structures, so that engineering firms will not have to design those structures from scratch. That will reduce design costs for facility operators.

Under 2003 Wis. Act 145, DATCP and other agencies must adopt rules spelling out their rule enforcement policy for small businesses. DATCP has not incorporated a small business enforcement policy in this rule, but will propose a separate rule on that subject. DATCP will, to the maximum extent feasible, seek voluntary compliance with this rule.

Environmental Impact

This rule will help prevent environmental damage from fertilizer and pesticide spills at bulk storage facilities. This rule will have no significant adverse environmental impact. An environmental assessment is attached.

Federal and Surrounding State Programs

Federal Programs

There are no comparable federal programs to regulate the storage of bulk fertilizer or pesticides (Wisconsin is a national leader).

Michigan

Michigan's bulk fertilizer and pesticide storage rules are similar to Wisconsin's. Michigan requires mixing and loading pads and secondary containment structures, but does not have minimum design or construction standards for those structures (nor does it require professional engineering review of design specifications).

Minnesota

Minnesota's bulk *pesticide* storage rules are similar, in many respects, to Wisconsin's. Minnesota has not promulgated bulk *fertilizer* storage rules, but has been enforcing proposed rules that are similar to Wisconsin's. Minnesota requires mixing and loading pads and secondary containment structures and has minimum design and construction standards for those structures. However, Minnesota does not require professional engineering review of design specifications.

Indiana & Iowa

Indiana and Iowa have rules that are similar to each other, and somewhat similar to Wisconsin's. They require mixing and loading pads and secondary containment structures, but they do not set minimum design or construction standards or require professional engineering review of design specifications.

Illinois

Illinois has rules that are somewhat similar to Wisconsin's. Illinois requires mixing and loading pads and secondary containment structures, and Illinois also sets minimum design or construction standards or requires professional engineering review of design specifications.

DATCP Contact

Questions and comments related to this rule may be directed to:

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1 **SECTION 1.** Chapter ATCP 32 is repealed.

2 **SECTION 2.** Chapter ATCP 33 is repealed and recreated to read:

3 **CHAPTER ATCP 33**

4 **FERTILIZER AND PESTICIDE BULK STORAGE**

5
6 **NOTE:** Chapter ATCP 29 contains general rules related to the manufacture, storage,
7 labeling, distribution and use of pesticides. Persons who manufacture, label,
8 distribute or commercially apply pesticides must be licensed by the department.

9
10 Chapter ATCP 40 contains general rules related to the manufacture, labeling and
11 distribution of fertilizer. Persons who manufacture, label or distribute fertilizer
12 must be licensed by the department.

13
14 The department of agriculture, trade and consumer protection may investigate
15 violations of this chapter, and may take enforcement action as necessary. *See*, for
16 example, ss. 93.06(7) to (10), 93.08, 93.14 to 93.16, 94.645(4) and (5), and 94.77,
17 Stats. *See* also s. 94.64, Stats. (fertilizer) and ss. 94.67 to 94.71, Stats.
18 (pesticides).

19
20 Under ch. ATCP 35, the department may reimburse certain agricultural chemical
21 contamination cleanup costs. Failure to comply with this chapter may affect an
22 operator's eligibility for reimbursement under ch. ATCP 35.

23
24 Under the Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 et.
25 seq.), pesticide sellers who repackage pesticides by delivering them from bulk
26 storage to customers must do the following things, among others:

- 27
28
 - 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.
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- 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 revisor of statutes. 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 revisor of statutes. 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.

1 **NOTE:** A “bladder tank” is both a “secondary containment structure” as defined in sub.
2 (29) and a “storage container” as defined in sub. (31).

3
4 **(7)** “Bulk fertilizer” means fertilizer in a container larger than 55 gallons (208 liters), or
5 dry fertilizer in undivided quantities greater than 100 pounds (45 kilograms).

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

8 **(9)** “Department” means the Wisconsin department of agriculture, trade and consumer
9 protection.

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

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

17 **(12)** “Dry fertilizer” means fertilizer in solid form.

18 **(13)** “Dry pesticide” means pesticide in solid form, pesticide-impregnated fertilizer, and
19 includes pesticides formulated as dusts, wettable powders, dry flowable powders or granules.

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

22 **NOTE:** Under s. 94.64(1)(e), Stats., “fertilizer” means any substance, containing one or
23 more plant nutrients, which is used for its plant nutrient content and which is
24 designed for use or claimed to have value in promoting plant growth, except
25 unmanipulated animal or vegetable manures, marl, liming material, sewage
26 sludge other than finished sewage sludge products, and wood ashes. “Fertilizer”
27 includes fertilizer materials, mixed fertilizers, custom mixed fertilizers,

1 nonagricultural fertilizers and all other fertilizers or mixtures of fertilizers,
2 regardless of type or form.

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

5 (16) "Handling" means the transfer, loading, unloading, mixing or repackaging of bulk
6 fertilizer or bulk pesticide, or the cleaning of containers or equipment to remove fertilizer or
7 pesticide residues. "Handling" includes transferring water into a container that contains
8 pesticide or fertilizer residues.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

16 (a) A fertilizer-pesticide mixture.

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

19 **NOTE:** Under s. 94.67(25), Stats., “pesticide” means any substance or mixture of
20 substances labeled or designed or intended for use in preventing, destroying,
21 repelling or mitigating any pest, or as a plant regulator, defoliant or desiccant.

22 (27) “Professional engineer” means an individual licensed as a professional engineer by
23 the Wisconsin department of regulation and licensing.

24 (28) “Rinsate” means water or other liquid containing fertilizer or pesticide residue.

25 “Rinsate” includes liquid produced by the rinsing of fertilizer or pesticide containers.

1 **(29)** “Secondary containment structure” means a structure that is designed to contain a
2 discharge from a storage container or appurtenance.

3 **(30)** “Storage bin” means a stationary receptacle used to store an undivided quantity of
4 dry bulk fertilizer or dry bulk pesticide.

5 **(31)** “Storage container” means a container used to store liquid bulk fertilizer or liquid
6 bulk pesticide at a storage facility. “Storage container” includes a mobile container.

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

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

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

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

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

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

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

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

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

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

10 *NOTE:* A “tank-in-tank” is both a “secondary containment structure” under sub. (29)
11 and a “storage container” under sub. (31).

12
13 (37) “Waters of the state” means those portions of Lake Michigan and Lake Superior
14 within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells,
15 impounding reservoirs, marshes, watercourses, drainage systems and other surface water or
16 groundwater, natural or artificial, public or private, within this state or its jurisdiction.

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

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

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

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

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

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

12
13 **SUBCHAPTER II**
14 **CONSTRUCTION PLANS AND SITING**
15

16 **ATCP 33.10 Construction plans. (1) FILING REQUIRED.** At least 21 days before an
17 operator constructs or substantially alters a structure at a storage facility, the operator shall file
18 all of the following with the department:

- 19 (a) Design specifications for the construction or alteration.
- 20 (b) A signed written statement by a professional engineer, certifying that the design
21 specifications comply with applicable requirements under this chapter.

22 (c) The approximate date on which the operator plans to start the construction or
23 alteration. The operator may not start the construction or alteration before that date unless the
24 operator gives the department prior notice of the new start date. The department may request
25 additional schedule information, as necessary, in order to schedule an inspection under sub. (3).

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

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

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

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

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

19 (a) At least 5 feet above bedrock.

20 (b) At least 5 feet above the seasonal high groundwater level. A determination of
21 seasonal high groundwater level, by an independent soils tester licensed by the Wisconsin
22 department of regulation and licensing, is presumptively valid for purposes of this paragraph.

23 (c) At least 1,000 feet from the ordinary high water mark of any navigable lake and 300
24 feet from the ordinary high water mark of any navigable stream.

25 (d) Located outside of any 100-year flood plain.

1 (2) EXEMPTION. Subsection (1) does not apply to the reconstruction, expansion or
2 alteration of a mixing and loading pad, secondary containment structure or storage building that
3 was in use prior to *[revisor inserts effective date of this rule]*.

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

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

8 **NOTE:** Chapters NR 811 and 812 comprise the state well code.

9 (2) BACKFLOW PREVENTION. (a) All water supply outlets at the storage facility shall be
10 protected against backflow caused by backpressure or backsiphonage. Protection may include
11 any of the following:

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

15 2. A backflow prevention device that complies with s. Comm 82.41.

16 **NOTE:** Comm 82 is part of the state plumbing code.

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

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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 1. Designed and constructed according to API 650, and certified for compliance by the
2 manufacturer, if the structure is installed, constructed or substantially altered after *[revisor*
3 *inserts effective date of this rule]*. API 650 calculations shall be based on the highest specific
4 gravity of fertilizer or pesticide that may be stored in the container.

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

9 3. Repaired, when necessary, according to API 653 and the recommendations of an API
10 653-certified inspector.

11 **NOTE:** Copies of API 650 and 653 are on file with the department and the revisor of
12 statutes. Copies may be purchased from the American Petroleum Institute at 1220
13 L Street NW, Washington DC 20005-4070, telephone (202) 682-8000.
14

15 (2) APPURTENANCES. (a) Every storage container connection, except a safety relief
16 connection, shall be equipped with a shutoff valve located on the storage container or at a
17 distance from the storage container dictated by standard engineering practice.

18 (b) On pesticide storage containers other than mini-bulk containers or containers used to
19 store sodium hypochlorite, all wetted parts inside shutoff valves and all connections between
20 storage containers and shutoff valves shall be made of stainless steel.

21 **NOTE:** The department may grant a variance authorizing alternative materials that
22 provide equivalent protection for waters of the state. See s. ATCP 33.02.
23

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

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

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

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

8 (e) An appurtenance may not be installed below ground, within or beneath a mixing and
9 loading pad, within or beneath a secondary containment structure, or through any wall or floor of
10 a secondary containment structure, on or after *[revisor inserts effective date of this rule]*.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1 (5) PROHIBITED MATERIALS; PESTICIDE STORAGE CONTAINERS. (a) Pesticide storage
2 containers and appurtenances may not be made of polyvinyl chloride unless they are used only to
3 store sodium hypochlorite.

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

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

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

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

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

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

23
24 (b) Paragraph (a) does not apply to any of the following:

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

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

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

- 6 1. Keeping the storage container and appurtenances in a locked building.
- 7 2. Locking all valves on the storage container and appurtenances.
- 8 3. Keeping the storage container and appurtenances in a locked outdoor enclosure that
9 complies with par. (c).

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

- 11 1. The operator or employees are present at the storage facility.
- 12 2. The storage container and its appurtenances are empty and thoroughly cleaned.

13 Thorough cleaning, in the case of a pesticide storage container and its appurtenances, means
14 removal of pesticide residues from exterior surfaces and triple rinsing of interior surfaces. Triple
15 rinsing of interior surfaces is not required if a manufacturer-installed device prevents the
16 container from being opened.

17 (c) An enclosure under par. (a)3. shall consist of a secure wall or fence that is at least 5
18 feet tall at every point, and free of gaps that could allow unauthorized persons to enter. Security
19 fencing installed on a concrete secondary containment structure wall shall comply with chapter 2
20 of the *Wisconsin minimum design standards for concrete agricultural containment (February,*
21 *2005)*, if the secondary containment structure is constructed after *[revisor inserts effective date*
22 *of this rule]*.

1 **NOTE:** The *Wisconsin minimum design standards for concrete agrichemical*
2 *containment (February, 2005)*, written by Professor David W. Kammel,
3 department of biological systems engineering, university of Wisconsin-extension,
4 is on file with the department and the revisor of statutes. Copies are available
5 from the department, free of charge, at the following address:

6
7 Department of Agriculture, Trade and Consumer Protection
8 Agricultural Resource Management Division
9 P.O. Box 8911
10 Madison, WI 53708-8911
11 Phone: (608) 224-4500
12 Web: <http://www.datcp.state.wi.us>

13
14 **(8) STORAGE CONTAINERS PROTECTED FROM MOVING VEHICLES.** An operator shall protect
15 storage containers and appurtenances against damage that may be caused by moving vehicles.

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

18 (a) Kept at a constant temperature.

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

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

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

1 establishment that produced the pesticide. The label on a pesticide bulk sale container shall
2 show the net contents of the container.

3 **NOTE:** A storage facility at which an operator repackages pesticide from a storage
4 container to mini-bulk or other containers is considered a “pesticide producing
5 establishment” under the federal act. The operator of that storage facility must
6 obtain a pesticide producing establishment number from the federal
7 environmental protection agency, and must include that establishment number on
8 every mini-bulk or other container filled at that storage facility. Mini-bulk
9 containers must be properly labeled, regardless of whether they are mobile
10 containers.

11 Whenever an operator sells pesticide from a storage container, the operator must
12 supply the purchaser with the pesticide labeling required under ss. 94.676 and
13 94.70, Stats.

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

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

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

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

28 1. Thoroughly clean and rinse the storage container.

1 2. Remove any storage container appurtenances.

2 3. Remove the storage container if the storage container is an underground storage
3 container. A sump that has a capacity of more than 50 gallons is considered an underground
4 storage container for this purpose. The operator shall notify the department at least 3 business
5 days before the operator removes an underground storage container, and shall permit the
6 department to take soil samples upon request.

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

9 1. If the storage container was abandoned prior to *[revisor inserts effective date of this*
10 *rule]*, the operator shall comply with par. (a) within 2 years of *[revisor inserts effective date of*
11 *this rule]*.

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

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

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

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

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

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

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

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

8 (a) Products that are fully enclosed in durable sealed weatherproof packages or
9 containers.

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

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

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

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

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

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

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

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

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

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

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

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

12
13 **SUBCHAPTER IV**
14 **MIXING AND LOADING PADS**
15

16 **ATCP 33.30 Mixing and loading pads required.** (1) Except as provided in s. ATCP
17 33.32(8) or (9) or s. ATCP 33.34(6), all handling of bulk fertilizer or bulk pesticide at a storage
18 facility shall be conducted over a mixing and loading pad.

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

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

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

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

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

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

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

12 (a) It shall be liquid-tight.

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

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

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

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

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

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

21 (h) It may not have any precipitation drain through which spilled fertilizer or pesticide
22 could be discharged. Any precipitation drain that exists on *[revisor inserts effective date of this*
23 *rule]* shall be permanently sealed within 6 months after that date.

1 (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 *[revisor inserts effective date of this rule]* and complies with capacity requirements that were in effect at that time, unless the operator substantially alters the mixing and loading pad.

2 (5) CONSTRUCTION MATERIALS. (a) Except as provided in par. (b), a mixing and loading
3 pad shall be constructed of portland cement concrete. A portland cement concrete mixing and
4 loading pad constructed on or after *[revisor inserts effective date of this rule]* shall meet the
5 standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for concrete*
6 *agrichemical containment (February, 2005)*.

7 **NOTE:** The *Wisconsin minimum design standards for concrete agrichemical*
8 *containment (February, 2005)* were written by Professor David W. Kammel of
9 the department of biological systems engineering, university of Wisconsin-
10 extension. Copies are on file with the department and the revisor of statutes.
11 Copies are available from the department, at no charge, at the following address:

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19

20 (b) A mixing and loading pad that was in use prior to *[revisor inserts effective date of*
21 *this rule]* may be constructed of asphalt concrete, provided that it is not used after December 31,
22 2009.

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

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

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

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

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

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

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

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

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

6 1. The rail car outlet valve.

7 2. The pump.

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

11 (d) Every containment basin under par. (c) is liquid-tight, and is constructed of durable
12 rigid material that is chemically compatible with any liquid that may be discharged to it. The
13 basin shall have a capacity of at least 75 gallons, or a capacity at least equal to the capacity of the
14 appurtenances that may discharge to it, whichever is greater. A containment basin may be
15 permanent or portable. The operator shall routinely inspect and maintain the basin to ensure
16 compliance with this paragraph.

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

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

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

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

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

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

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

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

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

18 2. It has a rated operating pressure of at least 1,200 psi with a burst strength of at least
19 5,000 psi.

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

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

1 **NOTE:** The most common pesticide products loaded into anhydrous ammonia are
2 nitrapyrin based products.

3
4 **ATCP 33.34 Mixing and loading pad for dry products.** Except as provided in sub.
5 (6), a mixing and loading pad used for dry fertilizer or pesticide shall comply with all of the
6 following:

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

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

12
13 **(2) PORTLAND CEMENT OR ASPHALT CONCRETE CONSTRUCTION.** A mixing and loading
14 pad shall be constructed of portland cement or asphalt concrete.

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

18 **(4) MIXING AND LOADING PAD INSPECTION AND MAINTENANCE.** An operator shall inspect
19 a mixing and loading pad at least semi-annually, and shall maintain the mixing and loading pad
20 as necessary, to ensure compliance with this section. Whenever an operator repairs a mixing and
21 loading pad, the operator shall make the repair according to good engineering practice and
22 manufacturer specifications.

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

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

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

8 (b) A well-maintained tarpaulin, if the fertilizer is unloaded prior to December 31, 2009
9 and the facility utilized a well-maintained tarpaulin for dry fertilizer or pesticide unloading from
10 railcars prior to *[revisor inserts effective date of this rule]*.

11
12 **SUBCHAPTER V**
13 **SUMPS**

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

- 16 **(1)** Designed, constructed and maintained to contain liquid that drains to the sump.
- 17 **(2)** Liquid-tight.
- 18 **(3)** Constructed according to s. ATCP 33.38.
- 19 **(4)** Served by a pump and storage container that comply with s. ATCP 33.50.

20 **(5)** Inspected and approved at the time of construction, in the same manner as a mixing
21 and loading pad inspected under s. ATCP 33.32(6), if the sump is constructed of portland cement
22 concrete on or after *[revisor inserts effective date of this rule]*. The operator shall provide
23 DATCP with a copy of the inspection report and approval.

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

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

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

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

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

12 **NOTE:** The *Wisconsin minimum design standards for concrete agrichemical*
13 *containment (February, 2005)*, written by Professor David W. Kammel,
14 department of biological systems engineering, university of Wisconsin-extension,
15 is on file with the department and the revisor of statutes. Copies are available
16 from the department, free of charge, at the following address:

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25 (b) A sump shall have a capacity of not more 50 gallons.

26 (c) A sump may not be more than 2 feet deep, or have a depth that exceeds its shortest
27 width.

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

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

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

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

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

13 (2) EXEMPTION. Subsection (1) does not apply to a sump that was in service prior to
14 *[revisor inserts effective date of this rule]* if all of the following apply:

15 (a) The sump is not substantially altered on or after *[revisor inserts effective date of this*
16 *rule]*.

17 (b) The sump does not receive runoff from any mixing and loading pad or secondary
18 containment structure that is constructed or substantially altered on or after *[revisor inserts*
19 *effective date of this rule]*.

20 (c) The sump meets construction standards that applied at the time of its construction.

21 (d) The operator pressure tests any underground piping or conduit connected to the sump
22 to ensure that the piping or conduit is liquid-tight. The operator shall perform a pressure test at
23 least annually and shall keep a written record of the pressure test results.

1
2 **SUBCHAPTER VI**
3 **SECONDARY CONTAINMENT STRUCTURES**
4

5 **ATCP 33.40 Secondary containment required.** (1) GENERAL. Except as provided in
6 sub. (2), all of the following shall be located within a secondary containment structure that
7 complies with s. ATCP 33.42:

8 (a) Storage containers.

9 (b) Storage container shut-off valves under s. ATCP 33.20(2)(a).

10 (c) Liquid level gauging devices under s. ATCP 33.20(3).

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

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

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

18 1. Loading and unloading of the mobile container complies with s. ATCP 33.30 and
19 33.32.

20 2. The storage facility has at least one storage container that has unused capacity greater
21 than the total capacity of the mobile container.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

9 1. A tank-in-tank that complies with s. ATCP 33.44(9).

10 2. A bladder tank that complies with s. ATCP 33.44(10).

11 3. An opening for a pipe that extends through the wall of a secondary containment
12 structure constructed prior to *[revisor inserts the effective date of this rule]*, provided that the
13 operator complies with s. ATCP 33.20(2)(d)2. or the secondary containment structure has
14 adequate containment capacity as required under sub. (2) below the level of the opening.

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

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

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

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

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

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

11 (c) A secondary containment structure that was in use prior to *[revisor inserts effective*
12 *date of this rule]* may have walls more than 4 feet high if the structure provides safe access to
13 storage containers and appurtenances, and a safe exit in the event of a discharge.

14 (d) A secondary containment structure that was in use prior to *[revisor inserts effective*
15 *date of this rule]* may have walls less than 4 inches high, provided that the structure meets the
16 capacity requirements in sub. (2).

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

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

21 1. Storage containers installed in a secondary containment structure constructed prior to
22 *[revisor inserts effective date of this rule]*.

23 2. Bladder tanks.

1 3. Mini-bulk containers.

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

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

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

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

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

- 15 1. Other liquid pesticides.
- 16 2. Pesticide diluting agents.
- 17 3. Pesticide rinsate.
- 18 4. Empty pesticide containers.
- 19 5. Recovered pesticide discharges.

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

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

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

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

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

6 (b) A concrete secondary containment structure constructed on or after *[revisor inserts*
7 *effective date of this rule]* shall be constructed of portland cement concrete and shall comply
8 with standards specified in chapters 5 and 6 of the *Wisconsin minimum design standards for*
9 *concrete agrichemical containment (February, 2005).*

10 **NOTE:** The *Wisconsin minimum design standards for concrete agrichemical*
11 *containment (February, 2005)*, written by professor David W. Kammel,
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23 (c) If a concrete secondary containment structure is constructed on or after *[revisor*
24 *inserts effective date of this rule]*, the operator or a person chosen by the operator shall inspect
25 the construction for conformity to the design specifications filed with the department under s.
26 ATCP 33.10(1). The person conducting the inspection shall inspect and approve the
27 construction of the soil sub-base, the laying of structural steel, and the laying of waterstop
28 materials and devices before concrete is poured. The operator shall provide a copy of the
29 inspection report and approval to the department.

1 **NOTE:** The department recommends that construction inspection be performed by a
2 qualified person experienced in reading plans and inspection construction.

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

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

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

8 (c) The structure was constructed prior to *[revisor inserts effective date of this rule]*.

9 (d) The structure is not used after *[revisor inserts date that is one year after the effective*
10 *date of this rule]*.

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

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

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

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

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

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

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

10 3. A department inspector shall attend the inspection.

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

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

17 1. A synthetic geotextile.

18 2. A layer of soil, sand or smooth gravel at least a 6 inches (15.24 centimeters) thick.
19 The layer shall consist of particles less than ½ inch in diameter, and shall be free of sharp objects
20 that may penetrate the liner.

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

23 1. A synthetic geotextile that rests on the liner.

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

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

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

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

10 (a) The steel or synthetic material resists corrosion, puncture and cracking. Prefabricated
11 steel structures shall be at least $\frac{1}{8}$ inch thick at every point.

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

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

18 **(5) STEEL STRUCTURES CONSTRUCTED IN PLACE.** A secondary containment structure may
19 be constructed of steel, if it is constructed in place. A steel secondary containment structure
20 constructed on or after *[revisor inserts effective date of this rule]* shall be at least $\frac{1}{8}$ inch thick at
21 every point.

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

- 4 1. The structure was in use prior to *[revisor inserts effective date of this rule]*.
- 5 2. The structure contains only fertilizer storage containers that were constructed on site.

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

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

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

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

12 4. The liner shall be maintained to prevent cracking.

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

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

18 7. The liner, if treated with bentonite, shall have a uniform mixture of natural soil and
19 bentonite. The natural soil shall have a plasticity index of at least 12. Not less than 30% by
20 weight of the natural soil shall pass through a number 200 soil sieve, and not less than 95% by
21 weight of the natural soil shall pass through a number 4 soil sieve. Not less than 90% by weight
22 of the bentonite shall pass through a number 80 soil sieve, and the soil-bentonite mixture shall
23 contain at least 5% bentonite by weight.

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

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

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

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

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

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

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

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

18 (a) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide
19 into the inner tank when the inner tank is filled to the maximum level allowed under s. ATCP
20 33.20(9).

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

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

- 1 (d) The operator does all of the following in response to a leak:
- 2 1. Promptly reports the leak to the department.
- 3 2. Empties the tank-in-tank no later than a date specified by the department in writing .
- 4 3. Thoroughly cleans the tank-in-tank, and has it repaired by a person certified to
- 5 perform repairs under API 653, before restoring the tank-in-tank to service.

6 **(10) BLADDER TANK.** An operator may use a bladder tank, without any other secondary

7 containment structure, if all of the following apply:

- 8 (a) The outer steel part of the bladder tank complies with s. ATCP 33.20.
- 9 (b) The bladder within the tank is at least 40 mils thick.
- 10 (c) The manufacturer certifies that the bladder is chemically compatible with all
- 11 materials that may be stored in it, and will withstand normal operational stresses without failing.
- 12 (d) A qualified installer installs the bladder tank and its appurtenances.
- 13 (e) All appurtenances that extend through both the bladder and the tank have shut-off
- 14 valves. The shut-off valves shall be enclosed within a structural steel box that can withstand the
- 15 maximum hydrostatic head pressure of liquid within the bladder tank. The box shall be readily
- 16 accessible to the operator, but secured against unauthorized access.
- 17 (f) A liquid level monitoring device automatically stops the flow of fertilizer or pesticide
- 18 into the bladder when the bladder is filled to the maximum level allowed under s. ATCP
- 19 33.20(9).
- 20 (g) There is room for a person to enter the space between the bladder and tank when the
- 21 bladder is empty.
- 22 (h) The tank has a soft liner to protect the bladder from contact with the steel interior
- 23 surface of the tank.

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

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

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

5 1. Promptly reports the leak to the department.

6 2. Empties the bladder and tank no later than a date specified by the department in
7 writing .

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

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

12
13 **SUBCHAPTER VII**
14 **DISCHARGES AND PRECIPITATION**

15
16 **ATCP 33.50 Available pump and storage container.** An operator shall have, readily
17 available at a storage facility, one or more functional pumps that the operator can use to remove
18 liquid from every mixing and loading pad, sump or secondary containment structure at the
19 storage facility. Each pump shall be plumbed or have a readily available hose connection to a
20 storage container that complies with s. ATCP 33.20, so that recovered liquid can be pumped to
21 the storage container. The pump shall self-activate, or shall be susceptible to immediate
22 activation by the operator, whenever needed. The storage container shall have, at all times, an
23 unused capacity of at least 200 gallons.

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

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

3 **NOTE:** A release of rinsate is considered a discharge. See ATCP 33.01(10) and (28).

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

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

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

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

18 (b) Prevent instability of storage containers.

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

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

22 **(3) PRECIPITATION CONTAINED IN FERTILIZER SECONDARY CONTAINMENT STRUCTURE.**

23 Subsection (2) does not apply to precipitation that has collected in a fertilizer secondary
24 containment structure, provided that the operator uses at least one of the following methods to
25 manage that collected precipitation:

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

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

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

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

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

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

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

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

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

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

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

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

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

8 (b) Have the samples under subd. 1. analyzed, at a laboratory certified by the Wisconsin
9 department of natural resources under ch. NR 149, for nitrate/nitrite-nitrogen and
10 ammonia/ammonium-nitrogen.

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

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

16 **ATCP 33.54 Managing recovered discharges, rinsate and collected precipitation.**

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

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

1 **ATCP 33.56 Use and disposal of recovered material. (1) SAFE USE OR DISPOSAL.** An
2 operator shall safely use or dispose of material recovered under s. ATCP 33.52. Use and
3 disposal shall comply with applicable federal, state and local regulations.

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

6 *NOTE:* An operator must obtain a permit under s. ATCP 35.03 before landspreading
7 material recovered from the environment as part of an environmental remediation
8 under ch. ATCP 35.
9

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

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

17 *NOTE:* If rinsate contains pesticide, an operator must also comply with sub. (2). An
18 operator must obtain a permit under s. ATCP 35.03 before landspreading material
19 recovered from the environment as part of an environmental remediation under
20 ch. ATCP 35.
21

22 **ATCP 33.58 Discharge response preparedness. (1) DISCHARGE RESPONSE PLAN**
23 **REQUIRED.** (a) The operator of a storage facility shall have a written discharge response plan for
24 all of the following:

- 25 1. Discharges at the storage facility.
26 2. Discharges, at locations outside the storage facility, from mobile containers shipped
27 from the storage facility.

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

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

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

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

14 (a) The identity, address and telephone number of the individual who is responsible for
15 managing the storage facility.

16 (b) The spill reporting telephone number (1-800-943-0003) maintained by the
17 department of natural resources and department of military affairs emergency management
18 division.

19 (c) The telephone number of the department's agricultural resource management division
20 (608-224-4500), or the identity and telephone number of the division's local environmental
21 enforcement specialist.

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

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

1 1. The location of each fertilizer storage container or bin, and the name or grade of
2 fertilizer stored in that container or bin.

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

5 3. The location of each mini-bulk container storage area.

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

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

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

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

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

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

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

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

22

23

24

**SUBCHAPTER VIII
TRANSPORTATION AND HANDLING PRACTICES**

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

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

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

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

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

21
22 **SUBCHAPTER IX**
23 **ENVIRONMENTAL ASSESSMENTS**
24

1 (b) Records of inspection and maintenance required under ss. ATCP 33.20(13), 33.32(7),
2 33.36(6) and 33.42(5).

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

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

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

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

12 **ATCP 33.82 Real estate sale or lease; disclosure.** An operator shall do all of the
13 following before the operator sells or leases, for another use, real estate that has been used for a
14 storage facility:

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

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

18 **NOTE:** Section ATCP 33.82 does not relieve the operator of other disclosure
19 requirements that may apply under other law.

20
21 **EFFECTIVE DATE AND INITIAL APPLICABILITY.** (1) Except as provided in sub. (2), this
22 rule takes effect on the first day of the month following publication in the Wisconsin
23 administrative register, as provided in s. 227.22(2), Stats.

1 (2) This rule first applies to small businesses as defined in s. 227.114(1), Stats., on the
2 first day of the third month commencing after the date of publication in the Wisconsin
3 administrative register, as provided in s. 227.22(2)(e), Stats.

4
5
6

Dated this _____ day of _____, 2006.

STATE OF WISCONSIN
DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION

By _____
Rodney J. Nilsestuen, Secretary