ORDER OF THE
DEPARTMENT OF COMMERCE

CREATING RULES

The Wisconsin Department of Commerce amends Comm Table 2.43, 14.01 (2) Note, and 48.580 (2) (a) and Note;

repeals and recreates Comm 10 and 47.015 (19) and Note;

and creates Comm 48.580 (1) (c), relating to flammable, combustible and hazardous liquids, and affecting small businesses.

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Rule Summary

1. Statutes Interpreted

Sections 101.02 (15), 101.09 (3), 101.11 (2), 101.14 (1) (a) and (4) (a) and (g), 101.142, 101.19, 168.11 (1) (b) 1., and 168.16 (1) of the Statutes.

2. Statutory Authority

Sections 101.02 (15), 101.09 (3), 101.11, 101.14 (1) (a) and (4) (a), 101.142, 101.19, 168.16 (4) and 227.11 (2) (a) of the Statutes.

3. Explanation of Agency Authority

Under the statutes listed above, the Department has a responsibility to adopt and administer rules for safe storage, handling and use of flammable, combustible and hazardous liquids. The rules in this order encompass fire safety, life safety and environmental safety aspects for flammable, combustible and hazardous liquids, and include registration requirements for tanks that contain these liquids. The Department also has authority under section 227.11 (2) (a) of the Statutes to promulgate rules interpreting any statute that is enforced or administered by the Department, if the rule is considered necessary to effectuate the purpose of the statute.

4. Related Statute or Rule

The rules in this order are related to rules in chapter Comm 14, which addresses fire prevention; chapter Comm 47, which addresses Petroleum Environmental Cleanup Fund Awards

(PECFA); chapter Comm 48, which addresses grade specifications and inspection requirements for petroleum products; and chapters Comm 60 to 66, which address design and construction of public buildings and places of employment.

5. Plain Language Analysis

The rules contained in this proposal are primarily intended to establish or refine design, construction, operation and maintenance standards for public safety, and to protect the waters of the state from contamination by liquids that are flammable or combustible or are federally-regulated hazardous substances. Many of the changes from the current code requirements are intended to update adopted national standards, address advances in technology, remove obsolete deadline requirements, and streamline administrative processes. Some of the changes are designed to address current trends and practices, emphasize life safety requirements, clarify ambiguous requirements, provide consumer protection, and achieve compliance with recently enacted federal requirements. Several changes are included for more clearly showing which requirements apply to existing equipment, and why, rather than applying only to new equipment. Wherever possible, conflicting rules in chapter Comm 10 would be repealed so that the requirements will be as specified in the adopted, current national standards; and consent for that adoption will be obtained from the Attorney General and the Legislative Reference Bureau. New requirements have been added to focus environmental protection on the components of a tank system that have been shown to have the greatest potential for releases to the environment. Requirements have also been added to maintain consistency for re-commissioning of out-of-service corrosion protection systems. The changes would also allow certain types of fueling from movable tanks, which is generally prohibited under the current code and its adopted standards.

These rules also discontinue chapter Comm 10's regulation of small containers for flammable, combustible and hazardous liquids, and regulation of certain process containers for these liquids. This regulation will continue to occur instead under changes to chapter Comm 14 that became effective on March 1, 2008.

6. Summary of, and Comparison With, Existing or Proposed Federal Regulations

Federal regulations for aboveground storage tanks do not address fire and public safety issues or ground water pollution issues, except for protecting potable water supply sources. Federal regulations for underground storage tanks do not address fire and public safety issues or surface water pollution issues, except for protecting potable water supply sources. A summary and a comparison of the federal regulations that address topics in chapter Comm 10 are included in the following comparison with rules in adjacent states.

7. Comparison With Rules in Adjacent States

<u>Administrative requirements</u>

In Illinois and Minnesota, as in Wisconsin, ordinances or standards that are adopted locally can be more restrictive than the state rules. In Michigan, no municipality or fire protection district can be more restrictive than the state rules. Iowa allows

municipal or fire protection district requirements to be more restrictive for aboveground storage tank applications, however, those requirements cannot be more or less restrictive for underground storage tank applications.

Topical requirements

The following eight topics illustrate the most significant changes to the current requirements in chapter Comm 10. A comparison of these changes with federal regulations and with rules in adjacent states also follows.

A. Comm 10.100 (1) (a) 8. and (3) (a) 4. and 5. d., and 10.680 (3) (a) These sections would more specifically require plan review for new fueling systems using fuels with greater than 10 percent ethanol, and for converting an existing fueling system using fuels with less than 10 percent ethanol to a fueling system using up to 100 percent ethanol. These sections would also more specifically require cleaning of a tank during conversion of an existing system. The plan review requirement would also apply to new fueling systems using fuels with greater than 5 percent biodiesel, and to conversion of an existing system using fuels with less than 5 percent biodiesel to a fueling system using up to 100 percent biodiesel. The Department is currently requiring this plan review and tank cleaning through general criteria in chapter Comm 10.

A search of existing and proposed federal regulations, and existing rules in the adjacent states identified only Illinois as having a requirement for plan review for conversion of existing systems for both aboveground and underground storage systems. Michigan does not review changes to existing systems unless more than half of the system is changed – however, some local jurisdictions are more restrictive and may require a review. Iowa requires review for a conversion of an existing underground system only. Minnesota defers approval to the local jurisdiction; however, the Minnesota Weights and Measures program has authority to mandate changes that they believe impact consumer protection.

These rule changes are needed to ensure that components used in a storage tank system are compatible with the increased ethanol content of these alternative motor fuels. Incompatibility could result in fuel contamination from these components, and could cause these components to fail and thereby result in a release to the environment. Not removing water and residues from a tank before it is filled with fuel having more than 10 percent ethanol can result in formation of compounds that subsequently cause engine malfunctions.

B. Comm 10.400 (3) and Comm 10.500 (1) and (5) These sections would expand current requirements for providing double-wall piping and tanks, to apply to all new underground tanks and pressurized piping, including underground piping that serves an aboveground tank. These requirements would also apply when replacing more than half of an existing single-wall underground piping system. This expansion is in response to the federal Energy Policy Act of 2005, which (1) addresses secondary containment for federally regulated tanks or piping installed within 1,000 feet of any existing community water system, or any existing potable drinking water well or other potable water source; and (2) requires interstitial monitoring for any associated double-wall tanks or piping.

Since the 1980's, Michigan has required installation of double-wall piping for all new pressurized systems or when more than half of the pressurized piping is replaced. Since May 1, 2003, Illinois has required installation of double-wall piping for all new systems or where 100 percent of product piping is replaced; and upcoming rule changes will require double-wall tanks – and double-wall, monitored piping when replacing either more than either 20 feet or 50 percent of an existing piping run. Minnesota requires double-wall piping for hazardous materials, and for secondary containment for underground piping from a diked area, or from a double-wall aboveground storage tank, to a dispenser. Minnesota also requires replacement of piping for a repair of more than 10 feet of a single piping run; and if a repair is due to a leak or corrosion, the entire run must be replaced. In either replacement, the new piping must be double-wall. Iowa requires double-wall systems for hazardous materials and active, contaminated sites only.

These new requirements are justified considering that the results of a study initiated with the US Environmental Protection Agency indicate that piping failures cause over 15 percent of all environmental releases associated with storage tanks, piping and dispensers. These rule changes would (1) reduce environmental contamination from undetected piping failures; (2) simplify leak detection, because monitoring an interstitial space is the simplest leak detection method available; (3) reduce the potential for costs associated with environmental contamination, such as for cleanups, report writing, fines, lawsuits and business interruptions; and (4) satisfy the new federal regulations in the Energy Policy Act. Michigan, Illinois, Iowa and Minnesota either have been or soon will be modifying their rules, where needed, to include these same requirements (double-wall tank and piping for new and replacement systems) to satisfy the new federal regulations, which became effective on February 8, 2007.

C. Comm 10.400 (3), 10.500 (5) and Comm 10.615 (5) These sections would newly require liquid-tight containment sumps under and around all existing and new buried piping connections – including connections at fueling dispensers, transition sumps, and submersible pumps for tanks. A five-year period is allowed for upgrading existing equipment to meet this requirement. This requirement is in response to the federal Energy Policy Act of 2005.

Michigan has required installation of containment sumps since the early 1990's. Illinois requires installation of containment sumps when new piping systems are installed or when underground piping is replaced. Minnesota requires installation of containment sumps when new piping systems are installed, or when replacing an existing dispenser if work is performed on piping below the shear valve. Iowa does not have any specific rule for containment sump installation, but is currently evaluating a rule revision that includes this requirement.

This requirement is necessary considering that the results of a study initiated with the US Environmental Protection Agency indicate that over 34 percent of releases from components for underground storage tank systems occur where connections are made in piping and at dispensers. Because of widespread improvement in otherwise reducing leaks from tanks and piping, these connections are now the single-most susceptible portion of a tank and piping system, for having releases or spillage, other than at the spill buckets that are used during fuel deliveries. Site review staff in the Department's PECFA program believe that contamination levels which are increasing at current remediation sites or which are appearing in post-remediation monitoring at

other sites is the result of migration of under-the-dispenser contamination. Installing containment sumps will allow for detection of leaks, and repair of piping- or component-connection failures before a significant environmental release occurs. These installations will also achieve compliance with the federal regulations in the 2005 Energy Policy Act that became effective on February 8, 2007. Michigan, Illinois, Iowa and Minnesota either have adopted or are expected to soon adopt these same requirements, to satisfy the new federal regulations.

D. Comm 10.410 (9) This section would specifically require an overfill alarm when filling reaches 90 percent of full, and an automatic shutoff at 95 percent, for aboveground storage tanks that are not located within a dike.

These requirements are currently included indirectly in Comm 10, through adoption of an NFPA 30 standard. However, they have often been overlooked, so they are now being emphasized by inclusion directly in Comm 10.

During tank filling, federal spill prevention, control and countermeasure regulations in 40 CFR 112 require high-liquid-level alarms, with an audible or visual signal at a constantly attended operation or surveillance station. These federal regulations also require high-liquid-level, pump-cutoff devices that are set to stop flow at a predetermined container-content level. Michigan, Minnesota and Iowa have overfill-protection requirements for any tank not located within a dike, which are substantially the same as the federal regulations and these Comm 10 requirements. Illinois does not have overfill-equipment requirements for aboveground storage tanks – however, during loading and unloading of tank trucks and tank wagons, a person must be present and in charge at all times, and overfill protection may be required by a local municipality or fire protection district.

These requirements are justified considering that the results of a study initiated with the US Environmental Protection Agency indicate that over 26 percent of releases from shop-fabricated aboveground storage tanks are caused by overfills, and the majority of tanks in service are shop-fabricated. In addition, the Petroleum Equipment Institute's *Recommended Practices for Overfill Prevention for Aboveground Shop-Fabricated Tanks* notes that "overfill incidents are the most common cause of releases to the environment from aboveground tanks;" and that "occasionally . . . the consequences are catastrophic, resulting in fatalities, large fires and extensive property damage." Emphasis on preventing overfills is necessary not only for protection of the environment but also for fire safety.

E. Comm 10.505 (2) (b) This section would specifically apply requirements in an NFPA standard for providing an overfill alarm or flow restriction when filling reaches 90 percent of full, and an automatic shutoff at 95 percent, for underground storage tanks.

These requirements are currently included indirectly in Comm 10, through an NFPA 30 standard that was adopted in 2002. However, they have often been overlooked, so they are now being emphasized by directly referencing the specific NFPA 30 section in Comm 10. They would retroactively apply only to tanks that were not previously equipped with this protection.

Federal regulations only require the owner or operator to (1) ensure that before a tank is filled, the volume available in the tank is greater than the volume of the product to be transferred to the tank; and (2) ensure that the transfer operation is constantly monitored. Michigan, Minnesota, Illinois and Iowa have overfill protection requirements for underground storage tanks, that are substantially the same as these Comm 10 requirements.

These requirements are justified considering that the results of a study initiated with the US Environmental Protection Agency indicate that 49 percent of underground storage tank discharges are associated with the spill buckets which are used during fuel deliveries. However, the most significant justification for dual overfill protection is that several major catastrophic incidents have occurred during the past few years because of failure of a single overfill method. In one incident, five occupants of three vehicles were killed when an overfill resulted in flowing fuel that ignited and impinged on the vehicles. Department staff have reported five incidents in Wisconsin in recent years in which overfilling resulted in dangerous quantities of spilled fuel. In addition, internal tank inspections have identified a significant number of tanks where the overfill-warning mechanism deteriorated to an unreliable state. Emphasis on preventing overfills is necessary not only for fire safety but also for protection of the environment.

F. Comm 10.515 (8) (d) 3. and 4. These sections would specifically require annual testing of mechanical line leak detection equipment and electronic line leak detection equipment. This change is primarily for clarification purposes and better expresses the intent of the current requirements. Michigan, Illinois, Iowa, Minnesota and the federal regulations all require annual testing of this leak detection equipment. The major electronic line leak detector manufacturers all have testing procedures that address introduction of a physical leak in order to test the operability of the leak detector. Michigan, Illinois and Iowa require performing the testing in accordance with the manufacturer's requirements. Minnesota specifically requires creating a physical leak in a piping segment to verify a 3.0 gallon-per-hour detection limit. Under the current Wisconsin rules, there has been some confusion as to what "testing" means; this section would clarify what the testing must include.

G. Comm 10.535 (1) This section would change the inspection frequency for an internal lining of an underground storage tank from an initial inspection period of 10 years and every 5 years thereafter, to an initial inspection period of 5 years and every 5 years thereafter.

Federal regulations have allowed lining of underground storage tanks as one of the upgrade methods during implementation of nationwide corrosion protection for underground tanks, beginning in the late 1980s. The initial lining inspection after the tank is lined was set at 10 years, to be followed by an inspection frequency of every 5 years thereafter. Michigan, Illinois, Iowa and Minnesota recognize the 10/5-year schedule for existing lined tanks – however, Michigan and Iowa do not allow new tank lining installations. Minnesota, Illinois and this Comm 10 rule will continue to allow interior lining of tanks.

This rule change in the initial internal inspection frequency is needed due to recent, increased evidence that many tank internal linings fail within the first five years of installation and subsequently do not maintain the expected corrosion protection.

H. Comm 10.700 (1) This section would expand current requirements for financial responsibility to apply to aboveground storage tanks – including tank wagons, fuel delivery barges and tanks on non-solid-fill piers.

Generally, there are no federal or adjacent-state financial responsibility requirements for aboveground storage tanks. Michigan, Illinois, Iowa and Minnesota do not address use of tank wagons or fuel delivery barges. The national standards adopted in Comm 10 do not recognize, as an acceptable practice, transportation and dispensing by tank wagons or barges.

This requirement is necessary considering that these Comm 10 rule changes recognize and regulate use of tank wagons, barges, and tanks on non-solid-fill piers. The need for regulation of these types of tanks was determined based on the increasing number of instances, and trends, where these tanks are being used. Due to the increased use and industry practices, the Department believes that the number of releases from these types of tanks may also increase, thereby justifying a financial responsibility requirement for covering the cost of cleaning up a spill to the environment.

8. Summary of Factual Data and Analytical Methodologies

Surveys of Wisconsin PECFA claims, statistics from the US Environmental Protection Agency, and incidents of environmental contamination and personal injury and death were used to justify the rules on sump containment, and spill and overfill protection. Since the most recent major update of chapter Comm 10 became effective in May of 1991, considerable experience has been gained at the federal level and in Wisconsin and the adjacent states relative to failures of tank linings, failures with overfill protection methods, and faulty leak detection methods or practices. As cited in the above comparison with federal regulations and rules in adjacent states, the Department has applied that experience extensively in developing the rule changes.

The changes to chapter Comm 10 were also developed with assistance from the Department's advisory committee for flammable, combustible and hazardous liquids. The members of that advisory committee are as follows:

Name	Representing
Randy Shervey	Wisconsin Fire Inspectors Association
Erin Roth	Wisconsin Petroleum Council
Tim Clay	Wisconsin Federation of Cooperatives
Tara Wetzel	Wisconsin Transportation Builders Association
Paul Knower	Wisconsin Petroleum Equipment Contractors Association
Scott Miller	Wisconsin Fire Chiefs Association
Steve Danner	Wisconsin Aviation Trades Association
Elizabeth Hellman	Wisconsin Utilities Association
Gary Pate	Wisconsin Insurance Alliance
John Reed	Wisconsin Airport Management Association
Dale Safer	Wisconsin Innkeepers
Bill Noel	Wisconsin Paper Council

Matt Hauser Wisconsin Petroleum Marketers and Convenience Store Association

9. Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of Economic Impact Report

The Department derived the cost estimates in the following section from input from contractors.

10. Anticipated Costs Incurred by Private Sector

The following categories for new costs that are anticipated for the private sector correspond to the categories in section 7 above.

B. Comm 10.400 (3) and Comm 10.500 (1) and (5) – Double-wall piping for replacing repaired pipe and for new underground pipe of AST and UST systems: In the short term, the installation of double-wall piping may cost an additional $4000 for a typical service station. In the long term, reduced insurance premiums may result.

C. Comm 10.400 (3), 10.500 (5) and Comm 10.615 (5) – Liquid-tight sumps under dispensers and around fittings: $250 per dispenser, and upward to $4900, depending upon the mechanism used to meet the requirement. Formed-in-place sumps for existing facilities may cost substantially less than other types of upgrades because of not having to shut down operations, remove dispensers, or break and replace concrete.

D. Comm 10.410 (9) – AST overfill alarms and auto-shutoff: $1,000-2,000 (equipment and installation) per tank, depending upon the equipment and mechanism used to meet the requirement, and the size of the tank.

E. Comm 10.505 (2) (b) – UST overfill alarms and auto-shutoff: $200-2,000 per tank depending upon the mechanism used to meet the requirement, and the size of the tank.

G. Comm 10.535 (1) – Changing the interior-lining inspection from 10 years and every 5 years thereafter, to every 5 years: Two 5-year camera inspections are approximately 7 percent higher than one 10-year entry inspection. However, out-of-service time is considerably less for the camera inspection method.

H. Comm 10.700 (1) – Financial responsibility for ASTs (tank wagons, barges, tanks on non-solid-fill piers): Insurance cost varies with jobbers and is typically an add-on to existing pollution liability coverage. Annual cost may range from $800 and upward, depending on the type of system and risk.

11. Effect on Small Business

These rule changes may have an economic effect on any small business with at least one storage tank containing a flammable, combustible or federally-regulated hazardous liquid. This includes any business that sells gasoline or other liquid motor fuel for use in any type of internal combustion engine. These economic effects are not expected to be significant, except as summarized in section 10 above.

12. Agency Contact Information

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SECTION 1. Comm Table 2.43 is amended to read:

Table 2.43
Plan Examination and Inspection Fees for Liquid Storage Tanks[a]
(Partial Table)

Tank System Category	Plan Review Fee*	Installation Inspection Fee	Plan Revision Fee	Re-inspection Fee
Conversion of existing system to a point-of-sale (POS) type of dispensing system**	$35	$100	$100	$100
Upgrade, exchange or conversion of existing leak detection methodology to another approved methodology or manufacturer***	$35	$100	$100	$100
Upgrade of secondary containment only, for tanks	$150	$100	$100	$100
Installation or modification of vent piping on existing system	$60	$100	$100	$100
Installation of Stage II vapor recovery on existing system	Aggregate as above	Aggregate as above	Aggregate as above	Aggregate as above
Upgrade or ~~install~~ conversion of Stage II vapor recovery on existing system	~~Aggregate as above~~$60	~~Aggregate as above~~$100	$100	$100

[a] For all tanks which have a capacity of less than 5000 gallons and which are reviewed by a local program operator, no state fees are required. The local program operator will charge a fee which must be at least equal to the fee in this table, but which does not include the groundwater fee in sub. (2).

***Note:** If the Department is conducting plan review in the absence of an assigned local program operator, the appropriate Table 2.43 fees must be submitted, along with the groundwater fee in sub. (2). Further information on where local program operators perform reviews is available at the following Web site: http://apps.commerce.state.wi.us/ERSLPOLists/ERSLPOLists?=agency.

****Note:** A point-of-sale system is any dispensing system that will authorize fuel dispensing by means of key, card or code activation. These conversions are reviewed by local program operators.

*****Note:** These reviews are performed only by the Department.

SECTION 2. Chapter Comm 10 is repealed and recreated to read:

Chapter Comm 10
FLAMMABLE, COMBUSTIBLE AND HAZARDOUS LIQUIDS

Comm 10.010 Purpose. The purpose of this chapter is as follows:

(1) In accordance with ss. 101.02 (15) (a) and 101.14 (1) (a), Stats., to provide fire and life safety through the safe storage, display, installation, operation, use, maintenance and transportation of flammable, combustible and hazardous liquids and the equipment, facilities, buildings and premises that are used to store, transfer and dispense them.

Note: Section 101.02 (15) (a) of the Statutes reads in part: "The department has such supervision of every employment, place of employment and public building in this state as is necessary adequately to enforce and administer all laws and all lawful orders requiring such employment, place of employment or public building to be safe, and requiring the protection of the life, health, safety and welfare of every employee in such employment or place of employment and every frequenter of such place of employment, and the safety of the public or tenants in any such public building."

Note: Section 101.14 (1) (a) of the Statutes reads as follows: "The department may make reasonable orders for the repair or removal of any building or other structure which for want of repair or by reason of age or dilapidated condition or for any other cause is especially liable to fire, and which is so situated as to endanger other buildings or property and for the repair or removal of any combustible or explosive material or inflammable conditions, dangerous to the safety of any building or premises or the occupants thereof or endangering or hindering fire fighters in case of fire."

(2) To comply with s. 101.09 (3) (a), Stats.

Note: Section 101.09 (3) (a) of the Statutes reads in part: "The department shall promulgate by rule construction, maintenance and abandonment standards applicable to tanks for the storage, handling or use of liquids that are flammable or combustible or are federally regulated hazardous substances, and to the property and facilities where the tanks are located, for the purpose of protecting the waters of the state from harm due to contamination by liquids that are flammable or combustible or are federally regulated hazardous substances."

Note: The definition of federally regulated hazardous substances in section 101.09 (1) (am) of the Statutes corresponds to the CERCLA List of Hazardous Substances and Reportable Quantities contained in 40 CFR 302.4, Table 302.4.

Note: The definition of "waters of the state," as used in section 101.09 of the Statutes, is found in section 281.01 (18) of the Statutes, and reads as follows: " 'Waters of the state' includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction."

(3) To comply with the flammable and combustible liquid related provisions of subtitle I of the federal Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, which extended and strengthened the provisions of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act, also known as RCRA, of 1976 as contained in 42 USC 6912 and 6991.

(4) In accordance with s. 168.16, Stats., to establish standards for storing and dispensing motor fuel in a manner that does not compromise any minimum product grade specifications achieved under ch. Comm 48.

Comm 10.020 Scope and application. (1) NEW FACILITIES AND STRUCTURES. (a) The provisions of this chapter apply to all new facilities and structures and to new additions to facilities and structures that involve storage, transfer or dispensing of flammable, combustible or hazardous liquids, except as specified in par. (b).

(b) Plan approvals issued by an authorized agent or the department for viable plans received prior to [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] shall remain valid until six months after that date, or until two years after the approval date shown on the plans, whichever occurs first. Any construction shown on those plans that is not commenced by that date, at the address shown on those plans, shall comply with the rest of this chapter's requirements for new facilities and structures.

(2) ALTERATIONS TO FACILITIES AND STRUCTURES. The provisions of this chapter apply to new remodeling and alterations – for any flammable, combustible or hazardous liquid facility or structure – that are integral to storage, transfer or dispensing of flammable, combustible or hazardous liquids, including remodeling and alterations which affect fire hazard, release mitigation or replacement of major equipment, except as specified in sub. (1) (b).

(3) EXISTING FACILITIES AND STRUCTURES. (a) All elements, systems or components of an existing facility or structure that are integral to storage, transfer or dispensing of flammable, combustible or hazardous liquids shall be maintained to conform with the requirements of this chapter that applied when the facility, structure, element, system or component was constructed, unless specifically stated otherwise in this chapter.

Note: A listing of significant requirements in this chapter that apply to facilities and structures which have existed since before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

(4) CHANGE IN OPERATION. If the operation of an existing facility or structure is changed to an operation regulated by this chapter, the facility or structure shall be made to comply with the requirements for the new operation as provided in this chapter.

(5) GROUNDWATER PROTECTION AND FIRE SAFETY PROVISIONS. (a) Under ss. 101.09 and 101.14 (1) (a), Stats., the groundwater protection and fire safety provisions of this chapter apply to all new and existing flammable, combustible or hazardous liquid facilities and structures even if the facility or structure is not undergoing remodeling, alteration or a change of operation.

Note: Examples of groundwater protection provisions include requirements for leak detection, secondary containment, corrosion protection, and spill and overfill protection. Some of these provisions, such as the spill and overfill protection requirements, are also fire safety provisions.

Note: Existing facilities are affected in this manner by these provisions because under section 101.09 (3) (a) of the Statutes, this chapter "may include different standards for new and existing tanks, but all standards shall provide substantially similar protection for the waters of the state;" and because section 101.14 (1) (a) of the Statutes addresses dangerous conditions at both new and existing facilities. For a reprint of section 101.14 (1) (a) of the Statutes, see the second Note under section Comm 10.010 (1).

(b) The rules of this chapter apply to tanks located at US EPA superfund sites.

(6) EXCLUSIONS. The following tanks, containers, tank systems and facilities are not regulated under this chapter:

(a) Underground storage tanks that have a capacity of less than 60 gallons.

(b) Aboveground storage tanks and intermediate bulk containers that have a capacity of less than 110 gallons.

(c) Tanks storing products regulated under ch. ATCP 33 that are located either at facilities which are also regulated under ch. ATCP 33 or on farm premises.

Note: Chapter ATCP 33 addresses bulk storage of pesticides and fertilizers.

(d) Aboveground storage tanks storing liquids that are used in processes covered in any of the following standards:

1. NFPA 33 Spray Application Using Flammable or Combustible Materials.

2. NFPA 34 Dipping & Coating Processes Using Flammable or Combustible Liquids.

3. NFPA 35 Manufacture of Organic Coatings.

4. NFPA 45 Fire Protection for Laboratories Using Chemicals.

(e) Dedicated breakout tanks that are located at pipeline facilities.

(f) Odorant or other additive injection tanks that are directly connected to a pipeline.

(g) Contractor tanks that are mounted on pickup trucks.

(h) Oil-filled electrical equipment and transformers.

(i) Accumulator tanks.

(j) Process tanks.

(k) Product recovery tanks.

(L) Service tanks.

(m) Marine fueling facilities where fuel is stored and dispensed into the fuel tanks of marine craft of 300 gross tons or more.

(n) Aboveground or underground tank systems that store nonflammable and noncombustible hazardous liquids in concentrations of less than 1 percent by volume.

Note: Material Safety Data Sheets (MSDS) should be consulted for flash point and concentration.

(o) Aboveground tank systems which have a capacity of less than 5,000 gallons and which store nonflammable and noncombustible hazardous liquids in concentrations of 1 percent or more by volume.

Note: Material Safety Data Sheets (MSDS) should be consulted for flash point and concentration.

(p) Tank systems that store a hazardous waste which is listed or identified under subtitle C of the federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances that is nonflammable and noncombustible.

(q) Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 307 (b) or 402 of the federal Clean Water Act.

(r) Underground storage tank systems that contain radioactive material which is regulated under the federal Atomic Energy Act of 1954.

Note: The Atomic Energy Act of 1954 is contained in 42 USC 2011 et seq.

(s) Underground storage tank systems that are part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR 50 Appendix A.

(t) Asphalt-plant AC tanks which are used as burner or material-supply tanks in the process of making asphalt and which comply with all of the following:

1. Tank configurations are single-wall or double-wall, with or without heating coils.

2. The products stored in the tank are Class II or III liquids ranging from heating oil to used oil, to #4 or #5 heavy oils.

3. The asphalt process equipment and the tank are typically located at an isolated location, such as a quarry, and are generally relocated from year to year or every couple of years.

(u) 1. Facilities located on Indian reservation land that are held either in trust by the United States, or in fee by the tribe or a tribal member.

2. Facilities which are located on off-reservation Indian land that is held in trust by the United States – and which are held either in trust by the United States, or in fee by the tribe or a tribal member.

Note: Chapter Comm 14 has fire prevention requirements that may apply to tanks which are not regulated by chapter Comm 10 – such as service tanks – and to portable tanks or containers which have a capacity of less than 110 gallons and which are used for flammable or combustible liquids, or for other liquids that are hazardous. Also, in conjunction with addressing the quality and retail sales of petroleum products, chapter Comm 48 regulates containers which have a capacity of less than 275 gallons and which are used for storing gasoline or any other petroleum product that has a flash point of less than 100°F. Comm 48 requires these containers to be colored red and appropriately labeled, and prohibits using red containers for storing petroleum products that have a flash point of 100°F or more.

(7) DIFFERING RULES. (a) Where any department-written rule in this chapter differs from a requirement within a standard referenced in this chapter, the department-written rule shall govern.

(b) Where a rule prescribes a general requirement and another rule prescribes a specific or more detailed requirement regarding the same subject, the specific or more detailed requirement shall govern, except as provided in par. (a).

(c) Where different sections of this chapter specify conflicting requirements, the most restrictive requirement, as determined by the department, shall govern, except as provided in pars. (a) and (b).

(8) LOCAL REGULATIONS. (a) This chapter does not limit the power of municipalities to make or enforce additional or more stringent regulations, provided the regulations do not conflict with this chapter or with any other rule of the department, except as provided in par. (b).

(b) A first class city may apply different requirements for administering plan review and inspections by the city.

Note: As of [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] only the City of Milwaukee had become a first class city.

(9) RETROACTIVITY. The provisions of this chapter are not retroactively applied to existing facilities unless specifically stated in the administrative rule.

Note: A listing of significant requirements in this chapter that apply to facilities and structures which have existed since before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

(10) INTERPRETATIONS. Under s. 101.02 (1), Stats., the department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards.

Note: Section 101.02 (1) of the Statutes reads as follows: "The department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

Comm 10.050 Definitions. In this chapter:

(1) "Aboveground storage tank" or "AST" means any vessel that has a liquid capacity of 110 gallons or more, is intended for fixed installation, is not solely used for processing, and does not meet the definition of an underground storage tank.

(2) "Accessible to the public" means any whole or part of property that due to its location and commercial or public purpose, the public or a section of the public has or may reasonably be expected to have access to.

(3) "Aircraft" has the meaning given in s. 114.002 (3), Stats.

Note: Section 114.002 (3) of the Statutes reads as follows: " 'Aircraft' means any contrivance invented, used or designed for navigation of or flight in the air, but does not include spacecraft.."

(4) "Airport" means any area of land or water that is designed for the landing and take-off of aircraft, regardless of whether buildings are provided for the shelter, servicing, or repair of aircraft or for receiving or discharging passengers or cargo, and all appurtenant areas used or suitable for aircraft, and all appurtenant rights of way, whether new or existing, which are either public, private or federal.

(5) "Alteration" means any modification to an installed tank system that involves cutting, drilling or welding on the tank shell or associated piping.

(6) "Ancillary equipment" means any device, including such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of regulated substances to and from a storage tank.

(7) "Annual" means a period of time less than or equal to 365 calendar days.

(8) "Approved" means acceptable to the department.

(9) "ATV" or "all-terrain vehicle" means a self-propelled motor-driven vehicle with wheels or tracks, used to transport people on land, snow, ice or water for purposes of sport or recreation and which cannot be licensed through the department of transportation for highway use.

(10) "Authorized agent" means either a local program operator or a first class city, or their authorized representatives.

Note: See subsection (66) for a definition of local program operator. As of [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] only the City of Milwaukee had become a first class city.

(11) "Automatic leak detection" means a release or leak detection or monitoring system that will provide continuous 24 hour monitoring for the detection of a release or leak of vapor or product and immediately communicate the detection of the release or leak to an electronic signaling device.

(12) "Automatic line leak detection" means a method of leak detection which alerts the operator to the presence of a leak without any manual effort on the part of the operator, including a device or mechanism that signals the presence of a leak by restricting or shutting off the flow of a hazardous substance through piping, or by triggering an audible or visual alarm, and which detects leaks of 3 gallons per hour at 10 psi line pressure within 1 hour.

(13) "Authority having jurisdiction" means the department or an authorized agent or deputy responsible for approving equipment, installations or procedures.

(14) "Biodiesel fuel" means a fuel that is comprised of monoalkyl esters of long chain fatty acids derived from vegetable oils or animal fats.

Note: Under section 168.14 (2m) (b) 2. of the Statutes, pure biodiesel fuel is generally identified with the alphanumeric B100, and does not contain any petroleum product, any additive, or other foreign material. A fuel that is a blend of biodiesel and petroleum-based fuel generally has a volume percentage of the biodiesel fuel to the petroleum-based fuel of at least 2 percent. B20 would identify a blend as being 20 percent biodiesel and 80 percent petroleum-based fuel, by volume.

(15) "Bulk plant" means a facility used for temporary bulk storage of gasoline, diesel fuel, and similar liquid products, prior to the distribution of these products by tank vehicle to retail, commercial, or consumer outlets.

(16) "Business day" means any day Monday to Friday, excluding Wisconsin legal holidays.

(17) "CERCLA" means the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

(18) "Certified cathodic protection tester" means a person certified in accordance with ch. Comm 5 who demonstrates an understanding of the principles and measurements of all common types of cathodic protection systems as applied to buried or submerged metal piping systems and metal tanks.

(19) "Certified corrosion expert" means a person certified in accordance with ch. Comm 5 who is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks by reason of thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience.

(20) "Certified tank system inspector" means a person certified in accordance with ch. Comm 5 to inspect storage tank systems.

(21) "Certified installer" means either of the following:

(a) For aboveground tank systems, a person certified in accordance with ch. Comm 5 to install and repair aboveground storage tank systems – and for underground tank systems, a person certified in accordance with ch. Comm 5 to install and repair underground storage tank systems.

(b) A registered professional engineer who directly supervises an installation by being present during the activities specified in s. Comm 5.84 (5) or 5.85 (5), and who is competent in the engineering methods and requirements in Wisconsin for designing and installing storage tank systems for flammable, combustible or hazardous liquids, except the registration requirement does not apply where exempted under s. 443.14, Stats.

Note: A list of exemptions where the qualified engineer is not required to be a registered architect or professional engineer in accordance with section 443.14 of the Statutes is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

(22) "Certified remover-cleaner" means a person certified in accordance with ch. Comm 5 to remove storage tank systems and to remove accumulated sludge and remaining product from tanks that are to be closed, undergo a change in service, or otherwise be completely emptied and made inert.

(23) "Certified tank system liner" means a person certified in accordance with ch. Comm 5 to install interior linings for storage tanks.

(24) "Certified tank-system site assessor" means a person certified in accordance with ch. Comm 5 to conduct tank-system site assessments and to collect samples necessary for those assessments.

(25) "Certified tank system tightness tester" means a person certified in accordance with ch. Comm 5 to perform precision tightness testing to determine the presence of leaks in storage tank systems.

(26) "Change in service" means continued use of a storage tank system in another status; or continued use of a tank that previously stored a regulated substance, to store a non-regulated substance.

Note: An example of change-of-service resulting from another status is an "In-use" tank that moves to "Temporary-out-of service" status. An example of change-of-service resulting from previously storing a regulated substance, to storing a non-regulated substance is a tank that is converted from storing heating oil to storing water.

(27) "Class I liquid" means a flammable liquid.

Note: See subection (30) and Note for Class II and III liquids.

(28) "Cleaned tank system" means a tank system that is free of all residue and vapors.

(29) "Closure" means the procedure by which a tank system is evaluated and permanently rendered safe from contributing to human danger, fire, explosion, and environmental contamination.

(30) "Combustible liquid" means a liquid having a flash point at or above 100°F.

Note: Under NFPA 30 section 4.3.2, combustible liquids are further classified as being Class II, IIIA or IIIB liquids.

(31) "Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow.

Note: For the purpose of determining how much piping is connected to any individual underground storage tank system, the piping that joins 2 underground storage tank systems should be allocated equally between them.

(32) "Construction project" means a site or project that is under development, renovation or demolition, and is temporary in nature and has restricted public access.

Note: A construction project may involve a transportation corridor, building or structure, excavation or landscaping, or the replacement or upgrade of an existing storage tank system.

(33) "Consumptive use" means consumed on the premises where the storage tank system is located.

(34) "Continuous monitoring" means a leak detection method using equipment that routinely performs the required monitoring on a periodic or cyclic basis throughout each day.

(35) "Contractor" means a person or firm undertaking to do work or supply goods or a service.

(36) "Day" means any calendar day unless specifically stated otherwise in the rule.

(37) "Department" means the department of commerce.

(38) "Dispenser" means a device or configuration of components consisting of a motor or fluid control, and an area for storing a hose nozzle valve with or without a pump, that dispenses and measures the amount of product dispensed by means of a mechanical or electronic metering mechanism.

(39) "Dispensing" means the transfer of fuel into a vehicle or portable container from a storage tank system.

(40) "Dispensing area" means a zone around the dispenser that extends a distance of 20 feet horizontally from the dispenser body, exclusive of the length of the hose and nozzle.

(41) "Dispensing system" or "product transfer system" includes the dispensers, nozzles, dispensing hoses, suction fuel pump, pipe and any necessary core components between the emergency shut-off valve and dispensing nozzle that allow the dispensing system to function as intended and in accordance with the installation requirements.

Note: In a typical fueling island, the dispensing system begins immediately downstream of the emergency shut-off valve, and all components upstream of that point, including the shut-off valve, are part of the tank system, as defined in section Comm 10.050 (115).

(42) "Electronic monitoring" means an electrical device installed to monitor tanks or piping for leaks.

Note: Typically, electronic monitoring uses an audible or visual alarm and may incorporate an automatic shut down of the dispensing system. Examples include electronic line leak detectors and sump or interstitial liquid sensors.

(43) "Empty tank system" means a tank system from which all materials have been removed using commonly employed practices so that no more than 1 inch of residue remains in the system.

(44) "Excavation zone" means the volume containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the underground storage tank system is placed at the time of installation.

(45) "Existing" means installed or in place since before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(46) "Existing tank system" means a tank system used to contain an accumulation of regulated substances, or for which installation commenced, prior to [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE]. Installation is considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the tank system site or installation of the tank system, and a continuous on-site physical construction or installation program has begun.

(47) "Facility" means a plot of land developed or designated to serve a particular function.

(48) "Farm premises" and "farming" have the meaning given in s. 102.04 (3), Stats.

Note: Section 102.04 (3) of the Statutes, reads as follows: "As used in this chapter, 'farming' means the operation of farm premises owned or rented by the operator. 'Farm premises' means areas used for operations herein set forth, but does not include other areas, greenhouses or other similar structures unless used principally for the production of food and farm plants. 'Farmer' means any person engaged in farming as defined. Operation of farm premises shall be deemed to be the planting and cultivating of the soil thereof; the raising and harvesting of agricultural, horticultural or arboricultural crops thereon; the raising, breeding, tending, training and management of livestock, bees, poultry, fur-bearing animals, wildlife or aquatic life, or their products, thereon; the processing, drying, packing, packaging, freezing, grading, storing, delivering to storage, to market or to a carrier for transportation to market, distributing directly to consumers or marketing any of the above-named commodities,

substantially all of which have been planted or produced thereon; the clearing of such premises and the salvaging of timber and management and use of wood lots thereon, but not including logging, lumbering or wood cutting operations unless conducted as an accessory to other farming operations; the managing, conserving, improving and maintaining of such premises or the tools, equipment and improvements thereon and the exchange of labor, services or the exchange of use of equipment with other farmers in pursuing such activities. The operation for not to exceed 30 days during any calendar year, by any person deriving the person's principal income from farming, of farm machinery in performing farming services for other farmers for a consideration other than exchange of labor shall be deemed farming."

(49) "Flammable liquid" means any liquid that has a flash point below 100°F.

Note: Under NFPA 30 section 4.3.1, flammable liquids are classified as being Class I liquids, and are subclassified as Class IA, IB or IC liquids.

(50) "Flash point" means the minimum temperature at which a liquid will give off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or within the test vessel.

Note: See NFPA 30 for the appropriate test method for a specific liquid.

(51) "Free product" means any regulated substance that exists outside of a tank system, a dispenser system or a container for transporting the substance.

(52) "Hazardous substance storage tank system" means a storage tank system which contains a hazardous substance defined in section 101 (14) of CERCLA – but not including any substances regulated as hazardous wastes under subtitle C, or any mixture of such substances and petroleum products – and which is not a petroleum storage tank system.

(53) "Heating device" means equipment, fueled by liquids regulated by this chapter, intended to create or generate heat for the purpose of providing direct heat or heating another media for space heating, food processing, commercial and industrial manufacturing, or energy generation.

(54) "Heating fuel" or "heating oil" means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grades of fuel oil; other residual fuel oils, including Navy Special Fuel Oil and Bunker C; and other fuels when used as substitutes for one of these, including used oil or used cooking oils when used in an oil burner to provide space heat or processing heat for consumptive use on the property.

Note: Heating fuel used to produce steam for power generation such as electricity or emergency power does not apply to the general heating fuel application.

(55) "Housekeeping" means a facility management activity of keeping flammable, combustible and hazardous liquid storage organized and free of debris, vegetation, combustible goods and merchandise and non-essential combustible materials or products.

(56) "Hydrant system" means an underground pipe system – typically at airports – that carries fuel to various locations. At each of these locations, an access way typically provides connection points, or hydrants, for connecting filtering, metering or pumping equipment used to

transfer the fuel from the piping system to the craft powered by the fuel. A storage tank is not considered part of the hydrant system, and the hydrant system is not considered part of an aboveground or underground storage tank system.

(57) "Important building" or "important building or structure" means a building or structure that is not considered by the owner, the authorized agent or the department to be expendable in an exposure fire.

Note: Examples include buildings occupied by 1 or more persons for other than incidental use, buildings that have a high-hazard use where products from fire can harm the community or the environment, control buildings that need the presence of personnel for orderly shutdown of important or hazardous processes, buildings that contain high-value contents or critical equipment or supplies, and buildings that are sited with respect to a storage tank system such that they will have a detrimental effect on release-response or fire-control activities.

(58) "Impressed current system" means a method of corrosion protection that generates cathodic current from an external, direct-current power source.

(59) "Intermediate bulk container or IBC" means a container that is manufactured and marked in accordance with 49 CFR 178, is intended for the storage of regulated substances within warehouses and other storage areas with automatic wet-pipe sprinkler systems, and has a liquid capacity of 793 gallons or less.

(60) "Interstitial monitoring" means a leak detection method that entails the surveillance of the space between a tank system's walls and the secondary containment system, for a change in steady-state conditions.

(61) "Inventory controls" means techniques used to identify a loss of product that are based on volumetric measurements in the tank and reconciliation of those measurements with product delivery and withdrawal records.

(62) "Leak" means any discharge of a regulated substance from a point in a tank system or dispensing system, that is not intended to be a discharge or dispensing point.

Note: See subection (76) for a definition of "obvious release," subection (103) for a definition of "release" and subection (113) for a definition of "suspected release."

(63) "Leak detection" means determining whether a discharge of regulated substance has occurred from a storage tank system into the environment or into the interstitial space between the storage tank system and its secondary barrier or secondary containment around it.

(64) "Liquid" means any material that has both a fluidity greater than that of 300 penetration asphalt when tested in accordance with ASTM D 5 at standard conditions of temperature and pressure, and a vapor pressure of 40 pounds per square inch absolute (psia) or lower at 100°F as determined by ASTM D 323 or 4953. For materials outside the scope of the ASTM D 5 test, liquid means any material that both starts to melt at temperatures less than 100°F and has a vapor pressure of 40 psia or lower at 100°F.

Note: For example, #5 and #6 fuel oil do not meet the criteria for a liquid and therefore are not regulated by this chapter.

(65) "Listed and labeled" means equipment or materials to which has been attached a label or identifying mark by, and which is included in a list published by, an organization acceptable to the department that is concerned with product evaluation, that maintains periodic inspections of listed and labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance for a specified purpose.

(66) "Local program operator" or "LPO" means an entity, either public or private, under contract with the department to enforce the provisions of this chapter and provide tank system plan review and inspection services in a specific region of the state.

(67) "Lowest floor, story, cellar or basement" means the lowest space in which heavier-than-air vapors can accumulate.

(68) "Maintenance" means the normal operational upkeep to prevent a storage tank system from releasing product, or to maintain the structural and operational condition of any portion of the system.

(69) "Marine-craft tank vehicle" means any tank having a liquid capacity of 110 gallons or more, used for carrying flammable or combustible liquids and mounted permanently or otherwise upon a vessel or barge capable of water transportation. The tank is not solely for the purpose of supplying fuel for the propulsion of, or support of equipment on, the vessel upon which the tank is mounted.

Note: Section Comm 10.130 requires marine-craft tank vehicles to have a material approval before being placed into service.

(70) "Mechanical monitoring" means a mechanical device not dependent upon electricity, installed to monitor tanks and piping for leaks.

Note: An example is a mechanical line leak detector.

(71) "Monthly monitoring" means an approved electronic or non-electronic method of testing a tank or pipe for a leak at least monthly. The test must detect a 0.2 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05.

Note: For purposes of monitoring on a monthly cycle, the Department will accept tests no further than 30 days apart.

(72) "Motor fuel" means flammable or combustible liquid that is used in the operation of an internal combustion engine.

(73) "Motor vehicle" means a self-propelled motor-driven vehicle that is used for moving people or products on land, water or air.

Note: "Motor vehicle" in this definition is intended to apply to motorized equipment transporting people and goods for pleasure, construction or commerce – rather than equipment dedicated to warehousing and yard operations, such as forklifts; or for grounds and facility maintenance, such as lawnmowers; or for amusement facilities, such as go-carts.

(74) "New" means installed or constructed on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(75) "Non-discriminating" means not discriminating as to the type of liquid.

(76) "Obvious release" means there is an indication of a release, and there is both environmental evidence – such as soil discoloration, observable free product, or odors – and a known source – such as a tank or piping with cracks, holes or rust plugs, or leaking joints.

Note: See subection (62) for a definition of "leak," subection (103) for a definition of "release" and subection (113) for a definition of "suspected release."

(77) "Oil-burning equipment" means an oil burner of any type, together with its tank, piping, wiring, controls and related devices, and including all oil burners, oil-fired units and heating and cooking appliances.

(78) "Operational life" means the period beginning when installation of the tank system has commenced and extending to when the tank system is properly closed.

(79) "Operator" means any person in control of, or having responsibility for, the daily operation of a storage tank system.

(80) "Owner" means either of the following:

(a) In the case of an in-use storage tank system, any person who owns at least the tank storage portion of a storage tank system used for storage or dispensing of regulated substances, or the person owning the property on which the storage tank system is located.

(b) In the case of a storage tank system not in use, any person who owned at least the tank storage portion of the storage tank system immediately before the discontinuation of its use, or the person owning the property on which the storage tank system is located.

(81) "Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body, and includes a consortium, joint venture, commercial entity, and the United States government.

(82) "Petroleum" means crude oil, crude oil fractions, and refined petroleum fractions, including gasoline, kerosene, heating oils, and diesel fuels.

(83) "Petroleum storage tank system" means a storage tank system that primarily contains petroleum products, such as motor fuels, jet fuels, fuel oils, lubricants, petroleum solvents, and used oil.

(84) "Pier" means any structure, such as a dock, which extends into navigable waters from the shore, with water on both sides, and which is built or maintained for the purpose of servicing watercraft, providing a berth for watercraft, or for loading or unloading cargo or passengers onto or from watercraft. A pier may be an open-deck or solid-fill structure.

(85) "Pipe" or "piping" means a pressure-tight cylinder used to convey, transfer or move a fluid, and is ordinarily designated "pipe" in applicable material specifications. Materials designated as tube or tubing in the specifications are considered pipe when intended for pressure service. This term includes pipe emanating from or feeding storage tanks, or transferring product to or from storage tanks.

(86) "Pipe system" or "piping system" means the primary piping, secondary containment, leak detection devices, tubing, including suction line drop tube, flanges, bolts, gaskets, valves, fittings, flexible connectors, the pressure-containing parts of other components such as expansion joints and strainers, and devices that serve such purposes as mixing, separating, distributing, metering, or controlling flow, and any core components which allow the piping system to function as intended and in accordance with the installation requirements.

Note: For a typical underground system, the pipe system would be from the point of connection at the tank to the connection to the dispenser, immediately downstream of the emergency shut-off valve.

(87) "Pipeline facilities," including gathering lines, means new and existing pipe rights-of-way and any equipment, facilities, or buildings.

(88) "Place of employment" includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming.

Note: This definition is taken from section 101.01 (11) of the Statutess.

(89) "Point-of-sale," or "POS" means a marketing or dispensing practice that accommodates a cash, credit card, key, personal identification number or similar dispenser-authorized transfer of fuel into a motor vehicle without the direct oversight, supervision or intervention of an employee of the fueling facility.

(90) "Precision tightness testing" or "precision tightness test" means a procedure for testing the ability of a tank system to prevent a release of a regulated substance, that is capable of detecting a 0.1 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05.

(91) "Pressurized piping" means product piping that experiences product pressure above normal atmospheric pressure. Product pressure may be generated from a pump or static head of an aboveground storage tank.

(92) "Pressurized system" or "remote pumping system" means a dispensing system where the pump is not located at, or is remote from, the dispenser.

(93) "Product" means any regulated substance in a storage tank.

(94) "Public access fueling" means the use of a facility by persons who are not employees of the facility to dispense fuel into vehicles, or to transfer fuel for resale into vehicles that are not owned or operated by the facility.

(95) "Public building" means any structure, including exterior parts of the building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy, or use by the public or by 3 or more tenants.

Note: This definition is taken from section 101.01 (12) of the Statutes.

(96) "Public used-oil collection center" means any used-oil collection facility that allows an individual who is not an employee of the facility to transfer used oil from a portable container into a storage tank.

(97) "Public way" means any public thoroughfare, sidewalk, dedicated alley, railroad, waterway or right-of-way. The point of measurement is from the engineered or natural borders of the vehicle or pedestrian traffic lanes.

(98) "Readily accessible" means capable of being reached easily and quickly for operation, maintenance and inspection.

(99) "Re-commission" means the process of returning a system, component or process to a code-complying, in-service condition.

(100) "Recreational vehicle" means any self-propelled motor-driven vehicle that is used for moving people typically off-road, on land, snow, ice or water for sport or recreation, such as snowmobiles and all-terrain vehicles.

(101) "Red-tag" means a red tag secured to a component of a storage or dispensing system, which gives notice that the system or the product stored is under enforcement action for failure to comply with the requirements of either this chapter or ch. Comm 48, and which prohibits operation of the system until the tag is removed by an inspector.

(102) "Regulated substance" means any flammable or combustible liquid and any liquid that is a federally regulated hazardous substance as defined in s. 101.09, Stats.

Note: The definition of federally regulated hazardous substances in section 101.09 (1) (am) of the Statutes corresponds to the CERCLA List of Hazardous Substances and Reportable Quantities contained in 40 CFR 302.4, Table 302.4.

(103) "Release" means any discharge, including spilling, leaking, pumping, pouring, emitting, emptying, leaching, dumping or disposal of a regulated substance into groundwater, surface water or subsurface soils.

Note: See subsection (62) for a definition of "leak," subection (76) for a definition of "obvious release" and subsection (113) for a definition of "suspected release."

(104) "Release detection" means determining whether a discharge of regulated substance has occurred from a storage tank system into the environment or into the interstitial space between the storage tank system and its secondary barrier or secondary containment around it.

(105) "Repair" means any work necessary to correct or restore a tank or related storage tank system component to a condition suitable for safe operation.

(106) "Residential watercraft fueling facility" means that portion of a 1- or 2-family residential property where liquid fuels are stored in or dispensed for non-retail purposes from fixed equipment on land into the fuel tanks of self-propelled watercraft, including all facilities used for the storage, dispensing, and handling of flammable and combustible liquids.

(107) "Sacrificial anode system" means a method of corrosion protection that generates cathodic current from the galvanic corrosion of an expendable anode which is more electrochemically active than the structure being protected.

(108) "Secondary containment" means an approved barrier installed around a storage tank system that is designed to prevent a leak from the primary tank or piping from contacting the surrounding earth or the waters of the state before the leak can be detected and cleaned up.

(109) "Significant noncompliance" means the existence of one or more of the following:

(a) A violation that causes, or may cause, a substantial, continuing risk to public health or the environment.

(b) A violation that substantially deviates from a requirement of this chapter.

(c) A violation that includes failure to install, maintain or operate equipment essential to preventing or detecting leaks.

(d) A violation that is observed to reoccur repeatedly as a result of intentional or unintentional administrative or operational oversight.

(110) "Space heating" means heating of areas intended for occupancy or storage.

(111) "Storm water or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

(112) "Structure" means an assembly of materials forming a construction for occupancy, storage, use, shelter or weather protection meeting the definition of place of employment or public building.

Note: The Department does not consider a tank to be a structure although local or municipal regulations may classify a tank as a structure.

(113) "Suspected release" means either of the following:

(a) There is indication that a tank system or dispensing system has leaked – such as inventory losses; observable free product or evidence of free product in secondary containment at dispensers, submersible pumps or spill buckets; petroleum odors; unexplained presence of water in a tank; or activation of a leak detection alarm system – but there is no observable environmental evidence of a release.

(b) There is observable environmental evidence of a release – such as soil discoloration or free product – but the source is unknown.

Note: See subection (62) for a definition of "leak," subection (76) for a definition of "obvious release" and subection (103) for a definition of "release."

(114) "Tank" means a device designed to contain an accumulation of regulated substance and constructed of non-earthen materials such as concrete, steel, fiberglass or plastic, and including the following types of tanks, which have the following meanings:

(a) "Abandoned tank" means an aboveground or underground tank with or without product, that is not recognized by this chapter as in-use, temporarily-out-of-service or closed.

(b) "Accumulator tank" or "accumulator reservoir" means a container, integral to the closed-loop mechanical system operation of equipment, that is used to provide product on demand or to store product which is displaced from the functioning equipment, such as an elevator or hydraulic lift.

Note: Accumulator tanks are outside the scope of this chapter.

(c) "Breakout tank" means a tank that is used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by a pipeline. Tanks considered by this chapter to be breakout tanks do not have piping that transfers product directly to or from a loading rack.

(d) “Day tank” means an intermediate tank in a product transfer system between a storage tank and the end use of the product, usually a generator. The purpose of a day tank is to provide immediate product to the end source where the supply may otherwise be influenced by product temperature, viscosity or inadequate supply pressure.

(e) “Farm tank” means a tank that is constructed in accordance with NFPA 30A section 13.2 and installed on a farm premises.

(f) “Field-erected tank” means a tank that is built on the site from sections and components.

(g) “Gravity tank” means a supply tank from which the product is delivered directly by gravity.

(h) “Integral tank” means a vessel with a liquid capacity of less than 110 gallons, which supplies fuel to an engine and which is assembled and used with the engine as a single unit of equipment.

Note: Vessels with a capacity of 110 gallons or more are included in the definition of storage tank in par. (p).

(i) “Movable tank” means an aboveground storage tank that meets all of the following:

1. Has a liquid capacity of 110 gallons or more, and is used for storing and dispensing liquid motor vehicle fuel.

2. Is supported on skids, wheels without axles, or similar means and is not mounted upon a tank vehicle or chassis capable of road travel.

3. Is designed and constructed in accordance with s. Comm 10.250.

4. Is not intended for permanent placement.

Note: Movable tanks are acceptable for use at construction projects, farms, and other locations recognized in subchapter VI, where it is more practical to move the tank, typically by lifting equipment, to off-road motorized equipment for dispensing, rather than drive the motorized equipment to the tank.

(j) “Multi-compartment tank” or “multi-chamber tank” means a vessel that contains 2 or more compartments created by the presence of an interior wall so that 2 or more substances can be stored at the same time within a single tank shell.

Note: In accordance with section Comm 10.250, each compartment of a multi-compartment tank is considered a separate tank, even if the same substance is stored in more than 1 compartment.

(k) “Portable tank” means an aboveground closed vessel that has a liquid capacity of 110 gallons or more, is not otherwise defined in this chapter, and is not intended for fixed installation or for vehicle fueling, and includes intermediate bulk containers.

(L) 1. "Process tank" or "flow-through process tank" means a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process and the tank is utilized to carry out or control the heating, cooling, mixing, blending, separating, metering, or chemical action of materials. The processing is done on a regular basis and it is the primary function of the tank.

2. "Process tank" or "flow-through process tank" does not include a tank that is used for the storage of materials before their introduction into the production process or for the storage of finished products or by-products from the production process, or a tank that is only used to recirculate materials. A process tank would be considered a storage tank if the vessel is used as storage for a period exceeding 96 hours after the processing ends.

Note: Process tanks are outside the scope of this chapter.

(m) "Product recovery tank" means a tank that forms an integral part of a ch. Comm 10 regulated substance spill control system for a storage, processing or transfer area. The purpose of the tank is spill recovery and temporary containment. A product recovery tank does not include a tank that is used for the storage of materials or by-products from a flow-through reclamation process. A product recovery tank will be considered a storage tank if the vessel is used as storage for a period exceeding 96 hours after the control of a release or spill.

Note: Product recovery tanks are outside the scope of this chapter.

(n) "Residential tank" means a tank located on the same property as a 1- or 2-family dwelling or a residential building that falls within the scope of chs. Comm 60 to 66 and used only by the residents of the property or for the maintenance of the property.

(o) "Service tank" means a tank that is used for a limited period of time during the servicing of liquid-bearing equipment, to temporarily hold liquids during the servicing, cleaning or relocation of the equipment.

Note: Service tanks are outside the scope of this chapter. Service tanks include the defueling and refueling tanks that are used in commercial aviation environments. These tanks are used for removal of fuel from an aircraft to facilitate other maintenance for the aircraft, and for return of that fuel to the aircraft immediately thereafter. They are typically not moved from one site to another, and are operated by employees of an aviation service company under aviation service protocols and monitored situations.

(p) "Storage tank" means a liquid-tight vessel that is intended for fixed or stationary use or a tank that is used for fuel dispensing under subch. VI, but is not used for any of the excepted purposes in s. Comm 10.020 (6). This term includes a vessel which has a liquid capacity of 110 gallons or more and which is assembled and used with an engine as a single unit of equipment.

(q) "Work-top tank" means an aboveground steel rectangular tank for combined use as a working surface and a storage tank for Class IIIB liquids.

(115) "Tank system" includes the primary tank and pipe, integral secondary containment, integral supports, leak detection, overfill prevention, spill containment, anti-siphon devices, and the necessary core components that allow the tank system to function as intended and in

accordance with the installation requirements. Tank system configurations include on-shore underground storage tanks, on-shore aboveground storage tanks, and storage tanks over water that are integral with a stationary pier, floating vessel or floating structure for the purpose of storage or vehicle fueling.

Note: In a typical fueling island, the dispensing system, as defined in section Comm 10.050 (41), begins immediately downstream of the emergency shut-off valve, and all components upstream of that point, including the shut-off valve, are part of the tank system.

(116) "Tank-system integrity assessment" or "TSIA" means the process by which the department seeks to determine if the integrity of a tank system or any component thereof has been compromised. This process includes precision tightness testing, inventory reconciliation, visual inspection of system components, and calibration checks of dispensers and automatic tank gauges.

Note: In general, TSIAs are to be performed if there are indications that the integrity of a system has been compromised.

(117) "Tank-system site assessment" or "TSSA" means the process by which the department expects tank-system owners or operators to determine if a tank system or any component of that system has released petroleum products or other hazardous substances into the soil, groundwater or surface waters. This process includes all of the following:

(a) Observation of field conditions, such as stained soils; odors; pitting, holes or cracks in tank system components; observable leaks; and elevated in-field soil-gas readings.

(b) Collection of soil samples for laboratory analysis of petroleum products or other hazardous substances, as prescribed in the department's *Assessment and Reporting of Suspected and Obvious Releases From Underground and Aboveground Storage Tank Systems*.

(c) Reporting of the field observations and sampling results in a format prescribed by the department.

Note: In general, TSSAs are to be performed at the time a storage tank system, or some component thereof, is to be permanently closed, upgraded or repaired, or if a change in service is to take place.

Note: *Assessment and Reporting of Suspected and Obvious Releases From Underground and Aboveground Storage Tank Systems* is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(118) "Tank vehicle" means a tank truck or trailer system designed and constructed to comply with NFPA 385.

Note: NFPA 385 recognizes 3 types of tank vehicles: (1) a tank truck in which the cargo tank is supported entirely on the truck chassis, (2) a tank semi-trailer in which the cargo tank is supported by both the truck chassis and trailer chassis, and (3) a tank full-trailer in which the cargo tank is supported entirely on the trailer chassis.

(119) "Tank wagon" means a tank that is affixed to a trailer system with at least 1 axle, is constructed in accordance with s. Comm 10.610 (1), has a liquid capacity of 1,100 gallons or less, and is used for storing and dispensing liquid motor vehicle fuel for equipment used on the site, or is used for storing other liquids regulated under this chapter. A tank wagon is not constructed to comply with NFPA 385.

Note: Since a tank wagon is not designed and constructed under NFPA 385 criteria, it must be towed empty on the road for transport and placement in accordance with section Comm 10.610 (1).

(120) "Temporarily-out-of-service" means a storage tank system that is not being used, but is intended to be placed back into operation within the next annual registration period.

Note: Temporarily-out-of-service does not apply to stationary tanks that are of seasonal use, such as heating fuel storage tanks.

(121) "Transfer area" means the area where product is transferred, commonly referred to as loading or unloading, between a storage tank and a transport vehicle. Transfer areas are located at terminals, as well as at end-user and intermediate vendors in the product distribution stream. The transfer area may involve loading racks, pipe stands, or direct hose-to-valve connections, and accommodate top or bottom transfer.

(122) (a) "Underground storage tank system" or "UST" means any one or combination of tanks, including connected pipes, that is used to contain an accumulation of regulated substances, and the volume of which, including the volume of connected underground pipes, is 10 percent or more beneath the surface of the ground.

(b) "Underground storage tank system" or "UST" does not include any of the following or pipes connected to any of the following:

1. Surface impoundment, pit, pond, or lagoon.

2. Storm water or wastewater collection system.

3. A liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.

4. A storage tank situated in an underground area, such as a basement, cellar, mine shaft or tunnel, if the storage tank is situated upon or above the surface of the floor and not surrounded by earth.

5. A pipeline facility, including gathering lines, regulated under any of the following:

a. The federal Natural Gas Pipeline Safety Act of 1968 (49 USC App. 1671, et seq.).

b. The federal Hazardous Liquid Pipeline Safety Act of 1979 (49 USC App. 2001, et seq.).

c. An intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in this section.

(123) "Upgrade" means the addition to or retrofit of some part of a storage tank system, such as cathodic protection, leak detection, lining, or spill and overfill controls, to improve the ability of a storage tank system to prevent the release of product.

(124) "Used oil" or "waste oil" means any oil refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities; and means used cooking oils that are used as fuel for purposes such as space heating or fueling motor vehicles.

Note: See chapter NR 679 and section 287.15 of the Statutes for other definitions of used oil and waste oil, and for requirements relating to those definitions, such as criteria for transporting or recycling these liquids.

(125) "Vehicle collision protection" means a structure or mechanism to protect a tank or system component from vehicle impact.

(126) "Vehicle fueling" means the process of adding motor fuel to the engine fuel supply tank for motor driven vehicles, including aircraft, watercraft, on- or off-road vehicles and vehicles on rails.

Note: For definitions of terms associated with petroleum storage facilities or petroleum equipment, not provided in this list of definitions, refer to the Petroleum Equipment Lexicon.

Subchapter I – Administration and Enforcement

Comm 10.100 Plan review. (1) GENERAL. (a) Plan review and written approval from the authorized agent or the department shall be obtained before any of the following activities are performed on storage tank systems used to store a regulated substance, except where exempted under par. (b):

1. Commencing any construction of new or additional tank or piping installation.

2. Changing the operation of a tank system from storage of a non-regulated substance to a regulated substance.

3. Adding or modifying tank or pipe corrosion protection.

4. Adding leak detection or modifying leak detection as specified in s. Comm 10.110 (3) (e) when performed in conjunction with other changes that require plan review. A certified installer is not required to perform the modification of leak detection.

Note: Under subsection (3) (a) 5. c., the Department's leak detection installation form (ERS-9 LD) must be filled out and submitted anytime leak detection equipment is added or modified, whether or not plan review is required. This form is available from the Division of Environmental and Regulatory Services at P.O. Box 7837,

Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

5. Upgrading or modifying spill or overfill protection.

6. Lining or relining of underground tanks.

7. Converting a full-service motor fuel dispensing facility or a self-service motor fuel dispensing facility to the use of a point-of-sale dispensing system or device. A certified installer is not required to perform the conversion to a point-of-sale dispensing system. The installer shall fill out the department's point-of-sale fueling installation form (ERS-6294 POS) and shall provide the form to the authorized agent or the department, for inspection of the system.

Note: Form ERS-6294 POS is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

8. a. Converting from the storage and dispensing of flammable or combustible liquids containing 10 percent or less ethanol by volume to liquids containing more than 10 percent ethanol by volume.

b. Converting from the storage and dispensing of flammable or combustible liquids containing 5 percent or less biodiesel fuel by volume to liquids containing more than 5 percent biodiesel fuel by volume.

9. Using a tank system to store a substance that poses a significant fire hazard or safety hazard to people or the environment due to material compatibility, equipment functionality or product characteristics, as determined by the authorized agent or the department, or fire department.

10. Adding or modifying any device or system component making an underground connection to a tank, product pipe or vent pipe.

(b) Plan review and approval is not required for any of the following:

1. Oil-burning installations for a 1- or 2-family dwelling which are located aboveground or in a basement, and which have a capacity of less than 1,100 gallons.

2. Integral fuel supply tanks of a motor vehicle, aircraft, watercraft, mobile power plant or mobile heating plant.

3. Aboveground tanks which have a capacity of less than 1,100 gallons and which store Class IIIB liquids other than used oil.

4. Reconfiguration of product piping that is located aboveground, from storage tanks supplying a regulated substance to a manufacturing, industrial or blending process.

5. Tank wagons, tank vehicles, or movable tanks, that are used for vehicle fueling operations under subch. VI.

6. Aboveground tank systems that store liquid hazardous substances which are not also flammable or combustible liquids.

Note: See section Comm 10.140 for registration requirements for tanks that store federally regulated hazardous substances. Section Comm 10.350 requires aboveground hazardous substance tank systems to be designed by a qualified engineer.

7. Portable tanks that are not used as fixed tanks.

8. Tanks that are located at a US EPA superfund site.

9. Aboveground tanks which are used at a farm premises or construction project in accordance with s. Comm 10.630, and which meet all of the following conditions:

a. Have a capacity of less than 1,100 gallons.

b. Are located at least 40 feet from either the buildings and structures listed in s. Comm 10.630 (2) (a), or important buildings or structures.

Note: See section Comm 10.630 (3) for administrative requirements for ASTs located at farms and construction projects.

10. Fuel supply tanks which are used for a mobile power plant or mobile heating plant and which meet all of the following requirements:

a. The tank system is built and operated in accordance with a national standard.

b. The tank system is intended to be at the site for a period of 24 months or less.

c. The tank system has an aggregate capacity of less than 1,100 gallons.

d. The tank system does not use any Class I liquids.

11. Where the department determines that the review of a specific application, modification or contractor activity would not meet the regulatory oversight objective for technical plan review and approval.

(2) PLANS, SPECIFICATIONS AND INFORMATION. Plans, specifications and information submitted to the authorized agent or the department for review and approval shall contain all of the following:

(a) At least 5 sets of plans and specifications, that are clear, legible and permanent copies, along with fees and a completed installation application.

(b) 1. The name of the owner.

2. The name of the person, firm or corporation proposing the installation, if other than the owner.

3. The address of the facility, including the names of adjacent streets and highways.

(c) 1. A plot plan, drawn to a minimum scale of 1 inch equals 20 feet, indicating the location of the installation with respect to property lines; adjoining streets or alleys; fences, including those installed over or through any part of the system; and other buildings on the same property. The plot plan shall indicate the location of buildings; other tanks; loading and unloading points; utilities; sanitary or storm sewers; water mains; water service piping; community and private potable water wells or other potable water source on the subject property; any private potable water wells on adjacent property that are within 100 feet of the tank, piping or dispenser; and any offsite community wells that are within 1200 feet of the tank, piping or dispenser.

Note: See section Comm 10.260 for minimum separating distances between tank systems and potable water supply sources. See section Comm 10.500 (1) for additional rules and information regarding separation from water wells and reservoirs.

Note: Chapter NR 116 requires municipalities to prohibit any storage of materials that are buoyant, flammable, explosive or injurious to animal, plant or aquatic life, in floodway areas of floodplains.

Note: For installations where cathodic protection will be installed, buried metal underground structures and components within 200 feet, such as culverts and guy wire anchor points, should be included in the plan drawing.

2. The class of construction of each building or room in a building that contains a storage tank shall also be indicated.

(d) The location, size and capacity of each tank and the following information on the contents of the tank:

1. The name of the stored liquid.

2. The flammability or combustibility classification of the stored liquid.

Note: Flammability and combustibility classifications are established in NFPA 30 sections 4.3.1 and 4.3.2, and are expressed as a roman numeral and a letter, such as IB or IIIA.

3. Whether the stored liquid is classified in any of the following hazard categories as defined in the applicable model fire code adopted by reference under ch. Comm 14:

a. Explosive or pyrophoric.

b. Oxidizer or organic peroxide.

c. Unstable or water reactive.

d. Toxic or highly toxic.

e. Cryogenic or corrosive to living tissue.

(e) The location of all piping runs and spacing between all tanks and piping.

(f) The type of tank supports and clearances, including clearances between tanks.

(g) The type of venting and pressure relief used and combined capacity of all venting and relief valves on each aboveground tank.

(h) The location of fill, gauge and vent pipes and other openings for the tank.

(i) Location of burners, tanks, pumps, piping and control valves and the relative elevations of any areas within the building where heavier-than-air vapors can accumulate.

(j) The distances to dispensers, sizes of islands and traffic flow patterns or vehicle routes around or through the facility.

(k) Information and specifications describing the design and placement of leak detection systems.

(L) 1. Information regarding the type and operation of corrosion protection systems for tanks and piping**.**

2. For impressed current systems, the location and materials of gas mains and gas service lines serving the facility.

(m) Information regarding the type of secondary containment system.

(n) Specifications describing the spill and overfill protection devices.

(o) Information regarding the compatibility of the tank and piping system with the regulated substance.

(p) A copy of any easement that reflects any property not owned by the system operator on which any portion of the system is located or any vehicle is parked while transferring product.

(q) Any material-approval numbers issued under s. Comm 10.130.

(r) Information and specifications on materials, equipment and devices to be used in the project which do not have material-approval numbers issued under s. Comm 10.130 and which have a direct impact on the regulated system.

Note: Examples of this equipment include valves, nozzles and hoses.

(s) Additional data and information regarding storage of regulated substances within buildings or enclosures to demonstrate compliance with the requirements of this chapter.

(t) Any other information necessary for the reviewer to determine code compliance.

(3) APPLICATION AND APPROVAL PROCESS. (a) *Submission of forms*. 1. 'General.' The department's installation application form (ERS-9) shall be completed and included with each application for approval, except as provided in subd. 5.

2. 'POS fueling.' For facilities that include dispenser point-of-sale fueling, the first page of the department's POS fueling installation form (ERS-6294 POS) shall also be completed and submitted.

3. 'Leak detection.' For facilities that include leak detection installation during the overall installation process, the first page of the department's leak detection installation form (ERS-9 LD) shall also be completed and submitted.

4. 'Alternative motor fuels.' For facilities that include ethanol- or biofuel-blended motor fuel, as regulated under s. Comm 10.680, Part I of the department's alternative fuel installation/conversion application form (ERS-9 Alternative Fuels) shall be completed and submitted for approval. Part II shall serve as an addendum to the inspection checklist.

5. 'Exceptions.' a. For aboveground storage tanks that have a capacity of less than 1,100 gallons, at a farm premises or construction project, the department's farm and construction AST installation notification form (ERS-10764) shall be completed and submitted as notification to the authorized agent or the department at the time of installation inspection. This form shall also serve as the plan submittal application and the installation checklist.

b. Where conversion to point-of-sale fueling is the only change at a facility, the department's POS fueling installation form (ERS-6294 POS) shall be completed and submitted to the authorized agent or the department at least 10 days prior to conversion. This form shall also serve as the plan submittal application and the installation checklist.

c. Where an upgrade, exchange or conversion of installed leak detection methodology to another approved methodology or manufacturer is the only change at a facility, the department's leak detection installation form (ERS-9 LD) shall be completed and submitted to the department within 5 days of installation. This form shall also serve as the plan submittal application and the installation checklist.

d. Where conversion to storage and dispensing of alternative motor fuels is the only change at a facility, Part I of the department's alternative fuel installation/conversion application form (ERS-9 Alternative Fuels) shall be completed and submitted to the department prior to conversion. Part I shall serve as the plan submittal application and Part II as the installation checklist.

Note: Forms ERS-9 – Flammable/Combustible Liquid Tanks Installation Application, ERS-6294 POS – Point-of-Sale Fueling Installation Notification, ERS-9 LD – Storage Tank Leak Detection Installation or Upgrade Application /Notification, ERS-9 Alternative Fuels – Storage Tank Alternative Fuel Installation/Conversion Application, and ERS-10764 – Farm & Construction AST Installation Notification, are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: Within a first class city, the provisions in subdivisions 5. c. and d. may be administered by that city instead of the department, as authorized in sections Comm 10.020 (8) (b) and 10.110 (3) and (4). As of [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] only the City of Milwaukee had become a first class city.

(b) *Review time*. The authorized agent or the department shall review and make a determination on an application for installation approval and plan review within 15 business days of receiving all of the required information and fees.

Note: Chapter Comm 2 addresses fees associated with Comm 10 plan submittal, review and inspection.

Note: Chapter Comm 2 authorizes double fees when construction is initiated without the required plan approval.

(c) *Conditional approval*. 1. If the authorized agent or the department determines that the plans and the application substantially conform to the provisions of this chapter, a conditional approval shall be granted in writing.

2. All conditions stated in the conditional approval shall be met before or during construction or installation.

3. A conditional approval issued by the authorized agent or the department is not an assumption of any responsibility for the design, construction or maintenance of the facility.

Note: Various sections of this chapter address the responsibilities that contractors have, under section 101.09 (2) (a) of the Statutes, in achieving compliance with the technical requirements of this chapter, after plans and specifications are approved. For example, section Comm 10.115 (2) (b) 2. a. has requirements about completing a pre-construction installation form, and meeting then with an inspector; section Comm 10.115 (2) (b) 3. has requirements about notifying an inspector before starting an installation; sections Comm 10.400 (5) (b) and 10.500 (6) (a) have requirements about installing aboveground and underground tank systems according to the manufacturer's instructions, the applicable national standards in section Comm 10.200, plans and specifications approved under section Comm 10.100 and this chapter; sections Comm 10.400 (5) (f) and 10.500 (6) (d) have requirements about completing a checklist during installation of aboveground and underground tanks or piping; and section Comm 10.500 (9) (a) 2. has requirements about documenting the performance of newly installed leak detection equipment.

Contractors also have compliance responsibilities under various other sections – such as notifying an inspector about installing small tanks at farms and construction sites, in section Comm 10.630 (3) (c); notifying an inspector about converting a dispensing facility to a point-of-use dispenser, in section Comm 10.100 (1) (a) 7.; performing tank linings for underground tanks, in section Comm 10.530; applying for approval to convert an installed tank system to store alternative fuel, in section Comm 10.680 (4) (b); not allowing releases to occur, in section Comm 10.230 (a); stopping leaks and preventing migration of free product into the environment, in section Comm 10.585 (1); reporting releases to the Department of Natural Resources, in section Comm 10.585 (2); and cleaning or removing tanks during closure, in sections Comm 10.315 (2) and 10.560 (2).

Note: Section Comm 10.115 (2) (b) 4. addresses the responsibility of the authorized agent or the Department to inspect installation of shop-built tanks, and to record the results on the installation checklist.

(d) *Plan sets*. 1. A letter shall be sent to the designer and the owner of record with a statement relating to the examination of the plans and specifications and citing the conditions of approval or denial.

2. The plans and specifications shall be dated and stamped either "Conditionally Approved" or "Not Approved."

3. For all projects reviewed by the department, the department shall retain 2 copies of the plans and specifications – and shall forward 1 copy of the plans and specifications, the approval letter, and the installation application to the corresponding LPO if there is one.

4. The remaining 2 sets of plans and specifications and the approval letter shall be returned to the person designated on the installation application.

Note: Under sections Comm 10.400 (11) (b) and 10.500 (9) (b), the approved plans and specifications and approval letter must be kept on site and available to the authorized agent or the department during all phases of installation. After installation is completed, the plans and and specifications and approval letter must be made available to the authorized agent or the department upon request.

(e) *Plan denial*. If the authorized agent or the department determines that the plans and specifications or application do not substantially conform to the provisions of this chapter, the application shall be denied in writing, specifying the reasons for denial.

(f) *Appeals*. In the event of a dispute as to whether the information submitted to an authorized agent shows compliance with the provisions of this chapter, the application may be submitted to the department for informal review, instead of filing a formal appeal under s. Comm 10.190, and the decision of the department shall then govern.

(4) PLAN CHANGES. (a) *Submittal as new installation*. Additions or modifications to systems that occur or become known after the closing of the excavation and commencement of system operation shall be submitted for review as a new installation.

(b) *Submittal as a revision*. 1. Additions or modifications which deviate from the original conditionally approved plans and specifications and which are made before closing the excavation and using the system shall be submitted for plan review and approval as a revision.

2. The replacement of parts or components shall be submitted for plan review and approval as a revision, unless they will be identical in function to the previously approved parts or components, and they will be in the identical location of the previously approved parts or components.

Note: Examples of modifications that require plan review as a revision include changes in tank placement, size of tank, length or direction of piping run, additional system components, and changes in monitoring equipment. The Department will determine if the number and importance of items submitted for revision would be addressed more appropriately through a new plan submittal.

Comm 10.110 Jurisdiction over enforcement. (1) DEPARTMENT APPROVAL OF LPO. (a) With the approval of the chief elected municipal official, the municipality shall determine if a municipal department or other agent approved by the department will exercise jurisdiction over the provisions of this chapter as the local program operator.

(b) The review of plans and specifications and the installation inspection for administering and enforcing this chapter shall be performed by a certified tank system inspector.

Note: LPOs are under contract with the Department. The contract specifies LPO qualifications and responsibilities, such as plan review, inspection and consultation.

(c) The department may revoke its approval of a local program operator where the plan examiners or inspectors do not meet the standards specified by the department or where other requirements of the department are not met.

(2) PLAN REVIEW BY LPO. All of the following types of plans shall be submitted to the LPO for review and approval, except as provided in sub. (3) (b):

(a) Plans in which all tanks for the storage, handling or use of flammable or combustible liquids have an individual capacity of less than 5000 gallons.

(b) Plans that consist solely of converting a full- or self-service motor fuel dispensing facility to the use of a point-of-sale dispensing system or device, regardless of tank size.

Note: Conversion to a point-of-sale dispensing system or device does not require a certified installer.

(3) DEPARTMENTAL PLAN REVIEW. Plan review and approval shall be obtained from the department in all of the following situations, except as provided in sub. (4):

(a) Where 1 or more tanks for storage of a regulated substance have an individual capacity of 5,000 gallons or more.

(b) Where the tank system is located in an area where there is no LPO.

(c) Where there is installation of, or an upgrade or addition to, the corrosion protection system, regardless of tank size.

(d) Where there is initial installation of leak detection to a tank system, regardless of tank size.

(e) Where there is an upgrade or addition to the leak detection system, regardless of tank size, including any of the following:

1. A change in manufacturer.

2. A change in model number.

3. A change in methodology.

Note: Examples of changes in methodology include switching from a mechanical line leak detector to an electronic one or changing from statistical inventory reconciliation (SIR) to an automatic tank gauge (ATG).

Note: A change from another leak detection methodology to statistical inventory reconciliation (SIR) is not required to have plan review but must follow the registration requirements in section Comm 10.140 (2).

(f) Where there is a conversion from the storage and dispensing of flammable or combustible liquids containing 10 percent or less ethanol by volume to liquids containing more than 10 percent ethanol by volume.

(g) Where there is a conversion from the storage and dispensing of flammable or combustible liquids containing 5 percent or less biodiesel fuel by volume to liquids containing more than 5 percent biodiesel fuel by volume.

(4) PLAN REVIEW BY FIRST CLASS CITY. All plans for facilities within a first class city shall be submitted to that city for review and approval.

Note: As of [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] only the City of Milwaukee had become a first class city.

(5) SEQUENCE OF JURISDICTION. Where an authorized agent has jurisdiction under this chapter, and a provision of this chapter refers to the authorized agent or the department, the authorized agent's jurisdiction shall be exercised in advance of the department's jurisdiction.

Note: Under section Comm 10.020 (10), the Department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards.

Comm 10.115 Enforcement and inspections. (1) GENERAL ENFORCEMENT. (a) *Enforcing agents*. This chapter shall be enforced by the authorized agent and the department and by other code officials having jurisdiction and authority under this chapter.

(b) *Access.* The authorized agent or the department or other code official is authorized to enter any building, facility or premises and examine any tank system or component and associated records for the purpose of enforcing this chapter.

(c) *Re-exposure.* If any tank system or component that is subject to inspection is covered or concealed without the prior knowledge and authorization of the authorized agent or the department or other code official, the agent or department or official has the authority to require such work be exposed for inspection.

(d) *Tampering.* Signs, red-tags or seals posted or affixed by the authorized agent or the department or other code official may not be removed, mutilated or tampered with unless authorized by the agent, the department or official.

Note: Code officials with Comm 10 enforcement responsibility have the authority to shut down a system or to prohibit specific actions relating to the operation of a system, dispensing product from the system, or adding product to a tank, by securing a "red-tag" to a component of the system marking the respective component inoperable until compliance has been achieved. A Comm 10 code official is the only individual authorized to grant the removal of the red-tag.

(2) INSPECTIONS. (a) *General*. 1. Tank system inspections for administering and enforcing this chapter shall be conducted by certified tank system inspectors.

2. Fire safety inspections involving flammable, combustible or hazardous liquids shall be conducted by either the authorized agent or the department or by an authorized member of the local fire department.

3. This chapter is not intended to limit or deny the ability of department deputies to conduct the activities under s. 101.14 (1) (a) and (b), Stats., for the purpose of ascertaining and causing to be corrected any condition liable to cause fire, or any violation of any law or order relating to fire hazards or to the prevention of fire.

Note: See chapter Comm 14 for requirements for fire prevention not otherwise covered in this chapter.

(b) *New and replacement installations.* 1. Inspections shall be conducted during the installation of new or replacement storage tanks or piping systems within the plan review scope of s. Comm 10.100.

2. There shall be a minimum of 3 inspections performed on underground storage tank systems or on any system that has underground piping, at the following installation points:

a. At a pre-construction meeting. For installations involving underground tanks or piping, the department's pre-construction installation form (ERS-6294 PCM) shall be filled out by the certified installer, and a copy shall be provided to the certified tank system inspector at the end of the meeting. Where an LPO has jurisdiction, the LPO shall send a copy of the form to the department.

Note: Form ERS-6294 PCM – Pre-Construction UST/PIPE Installation is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

b. During the line-pressure tests.

c. At the pre-commissioning start up in accordance with the applicable standard listed in s. Comm 10.200.

3. The certified installer shall notify the authorized agent or the department, on form ERS-9198, at least 5 business days before starting an installation, to arrange for inspections.

Note: Form ERS-9198 – Comm 10 Notification Record is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

4. a. Before a shop-built tank system is placed into operation, including back into operation after undergoing a modification or upgrade that is required to have plan approval or registration, the authorized agent or the department shall inspect the installation, and shall record the results by completing and signing the installation checklist – form ERS-9658, or ERS-6294 UST – as received from the installer, under s. Comm 10.400 (5) (f) or 10.500 (6) (e).

b. The original of the installation checklist – form ERS-9658, or ERS-6294 UST – shall be completed and submitted to the department. A copy of the checklist shall be furnished to the owner, and a copy shall be retained by the authorized agent if there is one.

5. The owner or operator of a facility shall notify the authorized agent or the department before placing a tank into service.

Note: Section Comm 10.145 specifies where a permit to operate must also be applied for before placing a tank into service.

(c) *Operating facilities.* Inspections at operating facilities, as determined by the authorized agent or the department, shall be conducted periodically by the authorized agent or the department to determine if the installation remains in conformance with the provisions of this chapter.

(d) *Written order.* When the tank system is inspected by a certified tank system inspector, any violations of this chapter shall be specifically listed, along with an allotted time to correct the violation.

(3) SYSTEM SHUTDOWN. Persons with enforcement authority under this chapter may shut down any part of a tank system, using the department-issued red-tag procedure, under any of the following conditions:

(a) *Immediate shutdown.* The following tank systems shall be subject to immediate shutdown:

1. Tank systems or their components that pose an immediate danger to life, safety or health. Conditions that cause immediate danger to life, safety, or health include visual evidence of leakage of a regulated substance, immediate human exposure to a regulated substance in the environment, defective equipment resulting in release of a regulated substance, overfill prevention that is not functioning properly or inadequate tank venting.

2. Tank systems that do not have leak detection, corrosion protection or spill and overfill protection installed as required under this chapter.

Note: Immediate shutdown is not authorized under subdivision 2. where equipment is installed properly but is operating improperly, such as a sacrificial anode system that fails to meet the negative 850-millivolt threshold in section Comm 10.520 (2).

3. Tank wagons and movable tanks that are located, used or moved in a manner which presents an immediate environmental or safety hazard.

4. Tank systems undergoing installation that are not in compliance with this chapter, until the certified installer, professional engineer or owner obtains a petition for variance or code interpretation from the department showing that the action in question provides an equivalent degree of fire and environmental protection as the requirement in this chapter.

5. Tank systems that have experienced a lapse in financial responsibility required under subch. VII, until financial responsibility is obtained and the tank system is issued a permit to operate.

6. Tank systems used to store liquids that have been shown to be corrosive, reactive or otherwise incompatible with materials used in the construction of the tank system.

7. Tank systems with any breach that has the potential for liquid or vapor release, discovered as a result of an actual leak or a leak detection test, until the breach is repaired or otherwise corrected.

8. Tank systems that undergo a change of ownership in violation of s. Comm 10.150, until all the requirements of that section are met.

(b) *Shutdown after investigation or inspection*. The following tank systems shall be subject to shutdown after investigation or inspection:

1. Tank systems or their components for which there is clear evidence of a release to the environment.

Note: Data sources that can yield evidence of these releases include inventory records, precision tightness testing results, and leak detection system results.

2. Tank systems that show evidence of attempts to mislead the authorized agent or the department regarding code compliance.

Note: Examples of this evidence include obviously falsified records, sensors that are altered or rendered inoperative, or spill and overfill prevention equipment that has been tampered with or altered.

(c) *Shutdown after continued violation.* 1. Tank systems or components for which there is a continuing code violation under this chapter are subject to shutdown provided all of the following conditions are met, except as specified in subd. 2.:

a. An initial order, allowing a period for compliance of at least 10 days, is issued with a specific compliance date.

b. The first re-inspection made after the specified compliance date shows that compliance has not been achieved.

c. A second specific compliance date, allowing at least 5 days, is set.

d. Re-inspection after the second compliance date shows that compliance has still not been achieved.

e. The owner has not filed a written appeal with the department within 15 calendar days of receiving the original order.

2. If the owner files a written appeal with the department within 15 calendar days of receiving the original order, enforcement action shall proceed until such time as a decision is issued in relation to the appeal, overturning or modifying the order.

Note: See section Comm 10.190 for further requirements relating to appeals.

(d) *Required information*. The owner or operator shall provide the authorized agent or the department with all of the following information when a system is shut down:

1. The type and volume of product in the tank system.

2. The date of last delivery into the tank system.

3. The name of the transport provider.

(4) PRODUCT DELIVERY INTO NONCOMPLYING TANK SYSTEMS. (a) It is a violation of this chapter for any person to knowingly deliver or place a regulated substance into a tank system that has been shut down by an enforcement action under this section.

(b) The department may authorize delivery in human welfare or emergency situations, on a case-by-case basis, such as for emergency generator systems serving healthcare facilities.

(5) EQUIPMENT TAMPERING. It is a violation of this chapter for any person to tamper with or disable systems that provide corrosion protection, leak detection or spill and overfill protection.

(6) STOP-WORK ORDER. (a) When the code official determines that tank systems, components or work methods regulated under either this chapter or ch. Comm 5 are contrary to the provisions of these chapters, or are unsafe or dangerous in any manner, the official is authorized to issue an order to stop the work or activity until the unsafe or dangerous act or condition is corrected.

(b) The stop-work order shall be issued verbally to the individual responsible for supervising the actions.

(c) If the actions cannot be corrected immediately and witnessed by the code official, the code official shall issue a written order within 6 hours of the verbal stop-work directive.

(d) The written order shall state the reason for the order and the conditions under which the cited work activity is authorized to resume.

Comm 10.120 Revocation and expiration of approval. **(1)** The authorized agent or the department may revoke any approval issued under the provisions of this chapter for any false statements or misrepresentation of facts upon which the approval was based.

(2) Plan approval by the authorized agent or the department shall expire 2 years after the date indicated on the approved plans if construction has not commenced within that 2 year period.

Comm 10.130 Specific approval of materials, equipment, concepts, technology and devices. (1) SPECIFIC APPROVAL REQUIRED. Specific approval shall be obtained in writing from the department for any of the following items:

(a) Any leak detection method for tanks or piping used to comply with a leak detection requirement under this chapter or federal law.

(b) Flexible non-metallic piping.

(c) Synthetic flexible dike liners.

(d) Prefabricated dike systems with integrated collision protection.

(e) Marine-craft tank vehicles.

(2) DISCRETIONARY APPROVAL. (a) The department may require specific, written approval in accordance with sub. (3) for use of new, unique or unproven materials, equipment, concepts, technology or devices. This approval may specify conditions or limitations.

(b) Any person may request specific, written approval in accordance with sub. (3) for use of new or unproven materials, equipment, concepts, technology or devices not specified in this chapter.

(3) APPLICATION FOR APPROVAL. (a) *General*. 1. Application for approval shall be made on the department's material approval application form (ERS-8028A) and shall include sufficient test results or other evidence from an independent third party to prove that the material, equipment, concept, technology or device meets the requirements or the intent of this chapter.

2. Application for approval shall include information on inspection, testing and maintenance of the product.

3. Upon receipt of a completed application, the fee specified in ch. Comm 2, and all information and documentation needed to complete the review, the department shall review and make a determination on the application within 60 business days.

(b) *Leak detection methods*. 1. The application for approval of leak detection methods specified in sub. (1) (a) shall include certification from an independent third party that the method has been evaluated in accordance with the applicable US EPA standard test procedure for evaluating the method.

Note: US EPA test protocols require precision tightness testing for tanks to be capable of detecting a 0.1 gallon per hour leak rate from any portion of the tank that routinely contains product when the tank is 95 percent full, with a probability of detection of 0.95 and probability of false alarm of 0.05. Precision tightness testing for piping must be capable of detecting a 0.1 gallon per hour leak rate with a probability of detection of 0.95 and a probability of false alarm of 0.05. Automatic tank gauges and all methods of monthly monitoring must be capable of detecting a 0.2 gallon per hour leak rate from any portion of the tank that routinely contains product with a probability of detection of 0.95 and probability of false alarm of 0.05.

2. The test methods shall be capable of detecting the minimum leak rate with the required probability of detection and false alarm, while accounting for the effects of thermal expansion or contraction of the product, vapor pockets, tank deformation, evaporation or condensation, and the height of the water table.

3. Manufacturers of leak detection methods shall specify what threshold leak rate is used with their test methods to indicate a leak.

Note: Section Comm 10.515 (5) (d) requires automatic tank gauges to be provided with a printer that prints out the measured leak rate, and to state whether that leak rate indicates an actual leak in the system.

(c) *Flexible non-metallic piping*. The application for approval of flexible non-metallic piping shall include certification from an independent third party that the material has been evaluated in accordance with UL 971 – Nonmetallic Underground Piping for Flammable Liquids or an equivalent standard.

(d) *Synthetic flexible dike liners*. 1. The application for approval of synthetic flexible dike liners shall include certification from an independent third party that the material has been evaluated according to a protocol acceptable to the department, along with information on product compatibility, construction methods and specifications, field installation, seam testing procedures, bedding specifications and any required soil cover.

2. For flexible dike liners that are not required to have a soil cover, information and test results shall be submitted to assess the fire hazard of the exposed liner material.

Note: NFPA 701 (Test Method 2) is an example of an appropriate fire test.

(e) *Marine-craft tank vehicles*. Marine-craft tank vehicles shall be evaluated on an individual basis considering the proposed area of operation.

(4) EXPIRATION OF APPROVAL. (a) Approvals issued under this section are valid for a period of 3 years, with an expiration date of December 31 of the third full year after initial approval, except as provided in par. (b).

(b) Approvals designated as experimental are issued for a maximum term of 12 months.

(c) Approvals may be terminated at any time the department considers them to be in noncompliance with the assumptions on which the approval was based or with the conditions of approval.

Note: Form ERS-8028-A – Wisconsin Material Approval Application is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(5) PRODUCTS REQUIRING LISTING AND LABELING. The following products or materials shall be listed and labeled to show compliance with a standard recognized by the department, that has been developed by a nationally recognized association or independent testing laboratory:

(a) Metallic flex connectors.

(b) Shop-built aboveground and underground storage tanks used for public access fueling of automobiles, trucks, watercraft, ATVs, snowmobiles or aircraft as specified in s. Comm 10.620.

(c) Shop-built aboveground and underground storage tanks used for fueling fleet vehicles that are licensed for public highway use except for tank wagons, movable tanks, farm tanks and tank vehicles as defined in this chapter and used in accordance with s. Comm 10.610 or s. Comm 10.630.

(d) Work-top tanks.

(e) Any product or material required to be either listed or listed and labeled by a standard adopted in ss. Comm 10.200 to 10.220.

Note: Examples include required listings for dispensing devices for Class I and II liquids under NFPA 30A section 6.3.2; aboveground tanks under NFPA 30 section 25.3.1.4; and used-oil burners and the tanks that supply them, under NFPA 31 section 7.5.

Comm 10.140 Tank registration. **(1)** GENERAL. All new and existing storage tanks that are used to store a regulated substance shall be registered with the department, except this requirement does not apply to any of the following tanks:

(a) Aboveground tanks which have a capacity of less than 1,100 gallons and which have any of the following characteristics:

1. Are farm tanks, or are located at and serve a construction project.

2. Are used to store heating oil or used oil, for consumptive use on the premises.

3. Are used to store Class IIIB liquids other than used oil.

Note: There is no exemption for used oil unless it is consumed on the premises where stored. Therefore used-oil storage tanks that have a capacity of 110 gallons or more must be registered.

4. Are located inside a building and are used for industrial processes, if that use occurs through piping which connects the tank to the process.

(b) Aboveground tanks which are used to store nonflammable or noncombustible federally regulated hazardous substances and which have a capacity of less than 5,000 gallons.

Note: The list of federally regulated hazardous substances covered in this subchapter, also known as the CERCLA List, is located in 40 CFR 302.4, Table 302.4.

Note: Registration is not required for aboveground or underground tanks that are used to store nonflammable and noncombustible federally regulated hazardous substances in concentrations of less than 1 percent by volume, because section Comm 10.020 (6) (n) excludes those tanks from this chapter.

(c) Tank vehicles.

(d) Tank wagons, portable tanks and movable tanks, that are located on a property for less than 24 months.

(e) Tanks that are located at a US EPA superfund site.

Note: Per Wisconsin Statutes, eligibility for Petroleum Environmental Cleanup Fund Act (PECFA) funds is conditioned upon prior tank registration.

(2) REGISTRATION DEADLINES AND RESPONSIBLE PARTY. (a) The owner of a newly-installed storage tank shall have the tank registered with the department in accordance with sub. (3) within 15 business days of completion of the installation.

Note: See section Comm 10.150 for the deadline and other procedures for notifying the Department of a change in ownership for a registered storage tank.

(b) An owner of a registered tank who changes their name or mailing address, or an owner of a registered tank at a facility that undergoes a name change, shall have the change registered with the department on form ERS-7437, ERS-8731 or ERS-10861 E, as provided by the department, within 15 business days of the change.

Note: Form ERS-7437 – Underground Storage Tank Registration, form ERS-8731– Aboveground Storage Tank Registration, and form ERS-10861 E – Change of Ownership, Flammable/Combustible/Hazardous Liquid Storage Tank Registration are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874. Forms ERS-7437 and 8731 are also available from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(c) The owner of a registered tank system that undergoes any of the following changes or modifications shall have the change or modification registered with the department in accordance with sub. (3) (a) and (c) or (d) within 15 business days of completion of the change or modification:

1. Change in service, where the subsequent service is storing a regulated substance.

2. Addition of leak detection, spill or overfill control or corrosion protection for any part of the system; or upgrade, exchange or conversion of installed leak detection methodology to another approved methodology or manufacturer.

3. Converting to point-of-sale fueling.

(d) The owner of a tank system that is undergoing any of the following changes shall have the change registered with the department in accordance with sub. (3) (a) within 15 business days of the change.

1. Conversion to being either temporarily out of service or back into service.

2. Disconnecting and discontinuing use of a stage II vapor-recovery system.

(e) The owner of land on which unregistered tanks are discovered, including any that are permanently closed, shall have the tanks registered with the department in accordance with sub. (3) (a) and (b) within 15 business days of discovery.

Note: See section Comm 10.400 (6) (c) for registration requirements that apply when an AST is relocated to a property with a different street address.

Note: See section Comm 10.450 or 10.550 (1) (e) for registration requirements that apply when an AST or UST, respectively, is changed from storing a regulated substance to storing a non-regulated substance.

Note: See section Comm 10.460 (4) or 10.560 (2) (d) for registration requirements that apply during permanent closure or removal of an AST or UST system, respectively.

Note: See section Comm 10.530 (2) (f) for registration requirements that apply when a UST lining is installed.

(3) REGISTRATION PROCEDURE. (a) *General*. A storage tank registration form – form ERS-7437 or ERS-8731 – shall be completed, signed by the owner and submitted to the department, for each tank which stores regulated substances and which is not exempted in sub. (1).

Note: Form ERS-7437 – Underground Flammable/Combustible/Hazardous Liquid Storage Tank Registration, and form ERS-8731 – Aboveground Flammable/Combustible/Hazardous Liquid Storage Tank Registration, are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(b) *Proof of financial responsibility*. For a tank owner meeting any of the conditions in sub. (2) (a) and (e), except for permanently closed tanks, proof of any required financial responsibility and an affidavit of financial responsibility, in accordance with subch. VII shall be submitted with the registration form.

Note: See section Comm 10.700 (1) for the types of tanks that must have financial responsibility. See section Comm 10.745 (2) (j) for requirements for an affidavit of financial responsibility.

(c) *Tank installation checklist and tests.* 1. Submittal of a registration form for a newly installed shop-built tank system, or for a registered shop-built tank system addressed in sub. (2) (c), shall include the original of the tank installation inspection checklist – form ERS-9658, or ERS-6294 UST, as completed by the certified tank system inspector under s. Comm 10.115 (2) (b) 4., except as specified in par. (d).

2. Submittal of a registration form for a newly installed UST system shall include the results of the installation tests required in s. Comm 10.500 (6).

(d) *Exceptions.* In the following circumstances, the specified documents shall be submitted instead of form ERS-9658 or ERS-6294 UST:

1. 'Newly installed aboveground tanks storing federally regulated hazardous substances.' Submittal of a registration form for an aboveground tank which stores federally regulated hazardous substances and which is put into service on or after [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall include a statement from the qualified engineer responsible for designing and overseeing the construction of the tank system. The statement shall include the name, business address and signature of the qualified engineer and a summary list of design standards used.

Note: The list of federally regulated hazardous substances referred to in this subdivision, also known as the CERCLA List, is located in 40 CFR 302.4, Table 302.4.

2. 'Conversion to point-of-sale fueling.' Where conversion to to point-of-sale fueling is the only change at a facility, submittal of the registration form shall include the POS fueling installation form (ERS-6294 POS) completed under s. Comm 10.100 (3) (a) b.

3. 'Upgrade, exchange or conversion of installed leak detection methodology to another approved methodology or manufacturer.' Where upgrade, exchange or conversion of installed leak detection methodology to another approved methodology or manufacturer is the only change at a facility, submittal of the registration form shall include the leak detection installation form (ERS-9 LD) completed under s. Comm 10.100 (3) (a) c.

4. 'Conversion to storage and dispensing of alternative motor fuels.' Where conversion to storage and dispensing of alternative motor fuels is the only change at a facility, submittal of the registration form shall include Part II of form ERS-9 Alternative Fuels, as completed by the tank owner under s. Comm 10.100 (3) (a) d.

Comm 10.145 Tank permits. **(1)** GENERAL. All in-use and temporarily-out-of-service storage tanks, whether new or existing, that are used to store a regulated substance shall have a permit to operate from the department, except this requirement does not apply to any of the following tanks:

(a) Aboveground tanks.

(b) Farm and residential underground storage tanks which have a capacity of less than 1,100 gallons and which are used for storing motor fuel.

(c) Underground storage tanks storing heating oil for consumptive use on the premises.

(d) Tanks located at a US EPA superfund site.

(2) PERMIT APPLICATION TIMELINE. The tank owner shall apply for a permit to operate, in accordance with sub. (3), after all requirements for plan approval under s. Comm 10.100 and registration under s. Comm 10.140 are completed and the tank is installed, but before the tank is placed into service.

(3) PERMIT APPLICATION PROCEDURE. (a) The owner shall complete 1 permit application – form ERS-7658 – as provided by the department, for each tank and submit it to the department along with the information required on the application, except as specified in par. (b), and with any fees due to the department as assessed under chs. Comm 2 or 48.

(b) Where registration information in full compliance with s. Comm 10.140 (3) is submitted for a newly installed tank, the department shall use that information as the permit application.

(4) PERMIT PROCESSING. (a) The department shall review and make a determination on the permit application within 30 business days of receipt of the completed forms and required information.

(b) Upon review and acceptance of the required forms, information and fees specified in sub. (3), the department shall issue an underground storage tank operating permit for each storage tank.

(c) The department may decide to not issue or to not renew an operating permit for a tank if the department finds that there has been significant noncompliance with either this chapter or orders issued pursuant to this chapter. Upon making this decision, the department shall inform the owner or operator in writing of the reasons for the decision.

Note: See section Comm 10.190 for requirements relating to appealing a decision by the department.

(5) PERMIT POSTING. Each permit to operate shall be posted at the premises where the tank is located, and in a location where the permit is visible to the public. The posted permit shall be maintained in a legible state.

(6) PERMIT EXPIRATION AND RENEWAL. (a) 1. The underground storage tank permit to operate shall annually expire on the 28th day of the month specified in the initially issued permit, except as provided in subd. 2.

2. When a change of ownership occurs, the permit to operate shall expire upon completion of the real-estate transaction.

(b) 1. The department shall send the tank owner of record a permit renewal notice, and a permit application – form ERS-7658 – for each tank, before the expiration of the current permit, except as provided in subd. 2.

2. Where a change of ownership occurs, the department shall send the new tank owner a permit application – form ERS-7658 – within 15 business days of being notified of the change of ownership, as addressed in s. Comm 10.150.

(c) To renew a permit, the tank owner shall complete the application received under par. (b) 1. and submit it to the department along with the information required on the application, and with all of the following:

1. Proof of financial responsibility in accordance with subch. VII.

2. An affidavit of financial responsibility in accordance with s. Comm 10.745 (2) (j)

3. Any fees due to the department as assessed under chs. Comm 2 or 48.

(7) PERMIT SUSPENSION. (a) 1. The department may suspend any permit issued under this section, upon determining that operation of any involved tank constitutes an imminent hazard to human health or the environment, or that financial responsibility required in subch. VII has been discontinued.

2. When suspending a permit, the department shall inform the owner or operator in writing of the reasons for the suspension.

(b) Upon suspension of a permit, all dispensing from any involved tank shall cease, and the department may order the owner or operator to properly empty the tank.

(c) The department may reinstate a suspended permit upon determining that the hazard or financial-responsibility failure which resulted in the suspension no longer exists.

Note: See section Comm 10.190 for requirements relating to appealing a decision by the department.

Comm 10.150 Change of ownership. **(1)** An individual or company taking ownership of property with a storage tank registered under s. Comm 10.140 shall notify the department of the change of ownership within 15 business days of completing the real-estate transaction.

(2) The ownership-change notification shall be on form ERS-7437, ERS-8731 or ERS-10861 E, as provided by the department, and shall include all of the following:

(a) The name and address of the new owner and of a local contact person.

(b) The date the documents evidencing the property transfer are executed.

(c) The name of the previous owner.

(d) The address of all locations included in the real-estate transaction that have tanks which are subject to the registration requirements in s. Comm 10.140.

Note: Form ERS-7437 – Underground Storage Tank Registration, form ERS-8731– Aboveground Storage Tank Registration, and form ERS-10861 E – Change of Ownership, Flammable/Combustible/Hazardous Liquid Storage Tank Registration are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874. Forms ERS-7437 and 8731 are also available from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(3) A permit application – form ERS-7658 – if received under s. Comm 10.145 (6) (b) 2., shall be completed and submitted to the department within 15 business days of its receipt; and shall include all of the following:

1. Proof of financial responsibility in accordance with subch. VII.

2. An affidavit of financial responsibility in accordance with s. Comm 10.745 (2) (j)

3. Any fees due to the department as assessed under chs. Comm 2 or 48.

(4) All records that are required to be retained under either s. Comm 10.400 (11) or Comm 10.500 (9) shall be transferred to the new owner or operator.

(5) The authorized agent or the department shall inspect the tank system and dispensing system before the new owner puts the tank system into service.

Note: Marketer facilities should refer to the Web site http://www.commerce.state.wi.us/ER/pdf/ERS-RPS-DistrictMapERS8592.pdf

Non-marketer facilities should refer to the Web site http://www.commerce.state.wi.us/ER/pdf/ER-BST-Fm-9687TankerMap.pdf

Comm 10.160 Fees. (1) Fees shall be submitted to the department as specified in ch. Comm 2 and 48.

(2) Fees shall be submitted at the time of application.

(3) No examinations, approvals, variances, permits or inspections may be given until all fees are received.

Comm 10.170 Petition for variance and petition for rule change. (1) PETITION FOR VARIANCE. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.

Note: Chapter Comm 3 requires submittal of a petition for variance form (ERS-9890-A) and a fee, and that an equivalency is established in the petition for variance which meets the intent of the rule being petitioned. Chapter Comm 3 also requires the Department to process regular petitions within 30 business days and priority petitions within 10 business days. A position statement from the fire department is applicable when the rule being petitioned relates to fire safety issues.

Note: Form ERS-9890-A is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(2) PETITION FOR RULE CHANGE. As specified in s. 227.12, Stats., any municipality; any association which is representative of a farm, labor, business or professional group; or any 5 or more persons having an interest in a rule may petition the department requesting the adoption, amendment or repeal of the rule.

Comm 10.180 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.09 (5), Stats., and shall apply separately to each tank that is in violation of this chapter.

Note: Section 101.09 (5) of the Statutes states "Any person who violates this section or any rule or order adopted under this section shall forfeit not less than $10 nor more than $5,000 for each violation. Each violation of this section or any rule or order under this section constitutes a separate offense and each day of continued violation is a separate offense."

Note: Section 40 CFR 281.41 allows the US EPA to assess fines of $5,000 or more for each tank for each day of violation.

Comm 10.190 Appeals and hearings on enforcement decisions. (1) HEARINGS. (a) *General.* The owner or operator of a tank system may request a hearing with the department, as specified in s. 101.02 (6) (e) or 101.02 (7) (b), Stats., on any decision affecting that person's legal rights, including enforcement orders and any petition-for-variance, material-approval or permit decision issued under the scope of this chapter.

(b) *Appeal requirements.* 1. All appeals of enforcement orders issued under this chapter shall be in writing and shall be received by the department no later than 15 calendar days after the date of the enforcement order or decision being appealed, except as provided in subd. 2.

2. All appeals of petitions for variance or material-approval or permit decisions issued under this chapter shall be in writing and shall be received by the department no later than 30 calendar days after the date of the decision being appealed.

3. The department may make a determination not to proceed with a request for a hearing depending on the nature of the issue being appealed.

4. Appeals received after the appeal deadline shall be dismissed.

5. For purposes of this section, appeals filed after 4:30 p.m. shall be considered received on the next business day.

Note: The appellant or an attorney representing the appellant may request an administrative hearing to review this action by delivering, mailing, or faxing a written request for a hearing to one of the following:

In-person delivery address:
Dept. of Commerce - Comm 10 Appeals
201 West Washington Ave., 3rd Floor
Madison, Wisconsin 53703

Mailing address:
Dept. of Commerce Hearing Office
P.O. Box 7838
Madison WI 53707-7838

Fax number: (608) 261-7725

6. An appeal shall be signed by the person whose legal rights are affected by the decision being appealed or an attorney representing such person. Any appeal filed by a person other than the person whose legal rights are affected by the decision being appealed or an attorney representing that affected person shall be dismissed.

7. The written appeal shall list every reason the department's or authorized agent's decision is incorrect and shall identify every issue to be considered at the hearing. Issues not raised in the written appeal under this paragraph are considered waived and shall be dismissed.

(c) *Response.* Upon receipt of notification of hearing from the department, the affected party shall submit to the department a written response within 15 calendar days of the date of service. Failure to respond within the prescribed time limit, or failure to appear at the scheduled hearing, may result in the allegations specified in the complaint being accepted as true and accurate.

(d) *Settlement agreement prior to hearing.* 1. If the department and the affected party are able to reach preliminary agreement on disposition of a complaint prior to a hearing, such agreement shall be processed in accordance with all of the following:

a. Be transmitted in writing to the secretary of the department or the person so designated by the secretary.

b. Not be binding upon any party until accepted by the secretary of the department or the person so designated by the secretary.

2. The settlement agreement shall be considered a joint motion by the parties to dismiss the appeal in its entirety with prejudice or to dismiss such portions of the appeal with prejudice as may be covered by the terms of the settlement agreement.

(e) *Witness fees.* Witness fees and mileage of witnesses subpoenaed on behalf of the department shall be paid at the rate prescribed for witnesses in circuit court.

(2) CONDUCT OF HEARINGS. (a) All hearings shall be conducted by persons selected by the department in accordance with ch. 227, Stats.

(b) Persons selected under par. (a) may administer oaths or affirmations and may grant continuances and adjournments for cause shown.

(c) The affected party shall appear in person and may be represented by legal counsel.

(d) Witnesses may be examined by persons designated by the department.

(e) There shall be no prehearing discovery except as provided in s. 227.45 (7), Stats.

(3) DETERMINATIONS. (a) The department may make determinations and enter its order on the basis of the facts revealed by its investigation.

(b) Any determinations as a result of petition or hearing shall be in writing and shall be binding unless appealed to the secretary of the department.

(4) APPEAL ARGUMENTS. Appeal arguments shall be submitted to the department in writing unless otherwise ordered.

(5) LOCATION OF HEARINGS. (a) All hearings shall be held at a location determined by the department.

(b) Telephone testimony of individual witnesses and telephone hearings may be held at the discretion of the person designated by the secretary as hearing officer.

(6) HEARING TRANSCRIPTS. (a) All hearings shall be electronically recorded.

(b) Any party may request a copy of the electronic recording.

(c) 1. A transcript of the recorded hearing shall be prepared upon request at the expense of the party requesting the transcript.

2. Copies of transcripts prepared under this subsection shall be provided to the other party or parties upon payment of the actual cost of copying or obtaining a copy of the transcript.

3. The department may require payment in advance.

4. A transcript may be provided at the department's expense to a party who demonstrates impecuniousness or financial need if that party has filed a petition for judicial review.

5. Where the department contracts with a court reporting firm for the preparation of transcripts, the fees charged for transcription and copying shall be equal to the fees charged to the department by the court reporting firm.

(7) ENFORCEMENT ACTION STATUS. Enforcement action shall proceed until such time as an administrative law judge has issued under this subsection a decision overturning or modifying the order.

Subchapter II – Adopted Standards and General Requirements

Comm 10.200 Adoption of standards. (1) INCORPORATION BY REFERENCE. The standards listed in Tables 10.200-1 to 10.200-11 are hereby incorporated by reference into this chapter.

Note: Copies of the adopted standards are on file in the offices of the department and the legislative reference bureau. Copies of the standards may be purchased through the respective organizations listed in Tables 10.200-1 to 10.200-11.

(2) ALTERNATE STANDARDS. Alternate standards that are equivalent to or more stringent than the standards incorporated by reference in this chapter may be used in lieu of incorporated standards if the alternate standard is approved by the department, or if written approval is issued by the department in accordance with s. Comm 10.130, under all of the following conditions:

(a) Determination of approval shall be based on an analysis of the alternate standard and the incorporated standard, prepared by a qualified independent third party or the organization that published the incorporated standard.

(b) The department may include specific conditions in issuing an approval, including an expiration date for the approval. Violations of the conditions under which an approval is issued shall constitute a violation of this chapter.

(c) If the department determines that the alternate standard is not equivalent to or more stringent than the standards incorporated by reference, the request for approval shall be denied in writing.

(d) The department may revoke an approval for any false statements or misrepresentations of facts on which the approval was based. The department may re-examine an approved alternate standard or issue a revised approval at any time.

Table 10.200-1

ACI	American Concrete Institute PO Box 9094

	Farmington Hills, MI 48333
Standard Reference Number	**Title**
350.2R–04, except for section 6.3	Concrete Structures for Containment of Hazardous Materials.

Table 10.200-2

API	American Petroleum Institute 1220 L Street, NW Washington, DC 20005
Standard Reference Number	**Title**
1. 570–98 (With addenda 1 to 4, through June 2006)	Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems.
2. RP 575–05	Guidelines and Methods for Inspection of Existing Atmospheric and Low-pressure Storage Tanks.
3. Std 650–07	Welded Steel Tanks for Oil Storage.
4. RP 651–07	Cathodic Protection of Aboveground Petroleum Storage Tanks.
5. RP 652–05	Lining of Aboveground Petroleum Storage Tank Bottoms.
6. Std 653–01	Tank Inspection, Repair, Alteration, and Reconstruction.
7. Std 1529–05	Aviation Fuelling Hose and Hose Assemblies.
8. Std 1542–02	Identification Markings for Dedicated Aviation Fuel Manufacturing and Distribution Facilities, Airport Storage and Mobile Fuelling Equipment.
9. RP 1604–96	Closure of Underground Petroleum Storage Tanks.
10. RP 1615–96	Installation of Underground Petroleum Storage Systems.
11. RP 1621–93	Bulk Liquid Stock Control at Retail Outlets.
12. RP 1626–85	Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations.
13. Std 1631–01	Interior Lining and Periodic Inspection of Underground Storage Tanks.
14. RP 1632–96	Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems.
15. RP 1637–06	Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals.
16. Std 2000–98	Venting Atmospheric and Low-Pressure Storage Tanks.
17. Std 2015–01	Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks.
18. RP 2200–94	Repairing Crude Oil, LP Gas and Product Pipelines.
19. RP 2350–05	Overfill Protection for Storage Tanks in Petroleum Facilities.
20. Std 2610–05	Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities.

Table 10.200-3

	ASTM International

ASTM	100 Barr Harbor Drive West Conshohocken, PA 19428
Standard Reference Number	**Title**
G 158–98(2004)	Standard Guide for Three Methods of Assessing Buried Steel Tanks.

Table 10.200-4

KWA	Ken Wilcox Associates 1125 Valley Ridge Drive Grain Valley, MO 64029
Standard Reference Number	**Title**
1999 Version	Recommended Practice for Inspecting Buried Lined Steel Tanks Using a Video Camera.

Table 10.200-5

NACE	NACE International P.O. Box 218340 Houston, TX 77218
Standard Reference Number	**Title**
1. SP0169–07	Control of External Corrosion on Underground or Submerged Metallic Piping Systems.
2. SP0178–07	Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service.
3. SP0188–06	Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates.
4. RP0193–01	External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms.
5. RP0285–02	Corrosion Control of Underground Storage Tank Systems by Cathodic Protection.
6. SP0286–07	Electrical Isolation of Cathodically Protected Pipelines.
7. TM0497–02	Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems.

Table 10.200-6

NFPA®	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269
Standard Reference Number	**Title**
1. 10–07	Standard for Portable Fire Extinguishers.
2. 30–08	Flammable and Combustible Liquids Code.
3. 30A–08	Code for Motor Fuel Dispensing Facilities and Repair Garages.
4. 30B–07	Code for the Manufacture and Storage of Aerosol Products.
5. 31–06	Standard for the Installation of Oil-Burning Equipment.

6. 37–06	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.
7. 68–07	Standard on Explosion Protection by Deflagration Venting.
8. 110–05	Standard for Emergency and Standby Power Systems.
9. 326–05	Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning or Repair.
10. 385–07	Standard for Tank Vehicles for Flammable and Combustible Liquids.
11. 407–07	Standard for Aircraft Fuel Servicing.
12. 410–04 - Chapter 6 only	Standard on Aircraft Maintenance.
13. 418–06	Standard for Heliports.
14. 704–07	Standard System for the Identification of the Hazards of Materials for Emergency Response.

Table 10.200-7

PEI	Petroleum Equipment Institute P.O. Box 2380 Tulsa, OK 74101
Standard Reference Number	**Title**
1. RP100–05	Recommended Practices for Installation of Underground Liquid Storage Systems.
2. RP200–03	Recommended Practices for Installation of Aboveground Storage Systems for Motor-Vehicle Fueling.
3. RP300–04	Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites.
4. RP400–02 (Reaffirmed 2007)	Recommended Procedure for Testing Electrical Continuity of Fuel-Dispensing Hanging Hardware.
5. RP500–05	Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment.
6. RP600–07	Recommended Practices for Overfill Prevention for Shop-Fabricated Aboveground Tanks.
7. RP800–08	Recommended Practices for Installation of Bulk Storage Plants.
8. RP900–08	Recommended Practices for the Inspection and Maintenance of UST Systems.
9. Lexicon, 1995	Petroleum Equipment Lexicon.

Table 10.200-8

SSPC	Society for Protective Coatings 40 24th Street Pittsburgh, PA 15222
Standard Reference Number	**Title**
VIS 2–00	Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces.

Table 10.200-9

STI	Steel Tank Institute 944 Donata Court Lake Zurich, IL 60047
Standard Reference Number	**Title**
1. F051–06	Standard for Double Bottom Steel Storage Tanks.
2. R051–06	Cathodic Protection Testing Procedures for sti-P3® USTs.
3. R972–06	Recommended Practice for the Addition of Supplemental Anodes to sti-P3® USTs.
4. R012–07	Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks.
5. SP001–06 (4th Edition)	Standard for the Inspection of Aboveground Storage Tanks.
6. SP031–06	Standard for Repair of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids.

Table 10.200-10

UL	Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 USA
Standard Reference Number	**Title**
SU 2258–08	Nonmetallic Tanks for Oil-Burner Fuels and Other Combustible Liquids.

Note: Several other UL design standards are indirectly applied by this chapter through their inclusion in other standards that are directly adopted in this chapter. For example, UL 58, 80, 142, 1316, 1746, 2080 and 2085 are included in NFPA 30, in section 21.4.2, which is adopted in Table 10.200-6.

Table 10.200-11

U.S. Department of Energy	U.S. Department of Energy Alternative Fuels and Advanced Vehicles Data Center Phone: (800) 423-1363 e-mail: hotline@afdc.nrel.gov
Standard Reference Number	**Title**
1. DOE/GO-1002006-2343, July 2006	Handbook for Handling, Storing, and Dispensing E85.
2. DOE/GO-102006-2358, September 2006	Biodiesel Handling and Use Guidelines.

Comm 10.210 Application of standards. (1) All flammable, combustible and hazardous liquids, and equipment and facilities that are used to store them shall be designed, constructed, installed, operated, inspected, tested and maintained as specified in the standards adopted in s. Comm 10.200, as those standards apply to the specific liquid, equipment or facility, except as otherwise provided in this chapter.

(2) All codes and standards referenced in the standards adopted in s. Comm 10.200 shall apply to the prescribed extent of each such reference, except as modified by this chapter.

(3) Any requirements in the standards adopted in s. Comm 10.200 that address design and construction of public buildings or places of employment and which conflict with requirements in chs. Comm 60 to 66, are not included as part of this chapter.

Note: In addition to addressing new construction for public buildings and places of employment, chapters Comm 60 to 66 generally require – in section Comm 61.03 (13) – that every existing public building or place of employment be maintained to conform with the building code requirements which applied when the building, structure, element, system, or component thereof was constructed.

(4) All fire detection, prevention, suppression and isolation features required by a standard adopted in s. Comm 10.200 shall be provided as specified in the standard, unless mandated otherwise by chs. Comm 60 to 66, under sub. (3).

(5) All fire detection, prevention, suppression and isolation features that are installed, whether or not they are required by rule or standard, shall be inspected, tested and maintained as required by the applicable standard adopted in s. Comm 10.200 or by other rules of the department.

Note: See also chapter Comm 14, *Wisconsin Fire Prevention Code*, for requirements on the inspection, testing and maintenance of fixed and portable fire protection systems.

(6) Any permit referenced in the standards adopted in s. Comm 10.200 is not required by this chapter, but may be required at the local level if done so through a local ordinance.

Note: For example, the permit referenced in NFPA 30 section 6.5.3.1 for spark-producing operations is not required by this chapter, but may be applied through a local ordinance.

Comm 10.220 Secondary references. For the purposes of this chapter, the department shall enforce the applicable provisions of the following Wisconsin administrative codes in lieu of the indicated standards that are referenced in the NFPA standards adopted in s. Comm 10.200:

(1) BOILERS AND PRESSURE VESSELS. Chapter Comm 41 in lieu of the ASME Boiler and Pressure Vessel Code.

(2) BUILDING ELEMENTS. Chapters Comm 60 to 66 in lieu of the following NFPA standards:

(a) NFPA 101® – Life Safety Code®.

(b) NFPA 220 – Standard on Types of Building Construction.

(c) NFPA 221 – Standard for High Challenge Fire Walls, Fire Walls and Fire Barrier Walls.

Note: In addition to addressing new construction for public buildings and places of employment, chapters Comm 60 to 66 generally require – in section Comm 61.03 (13) – that every existing public building or place of employment be maintained to conform with the building code requirements which applied when the building, structure, element, system, or component thereof was constructed.

(3) ELECTRICAL INSTALLATIONS. Chapter Comm 16 in lieu of NFPA 70 – National Electrical Code®.

Comm 10.230 General requirements. (1) APPLICATION. This section applies to all new and existing tank systems, their appurtenances and the associated property and facilities.

(2) ACCESS. (a) Owners and operators of storage tank systems shall cooperate fully with inspections, monitoring, testing and requests for document submission conducted or required by the authorized agent or deputy of the department.

(b) Facilities shall have available keys, codes or other items necessary to open access to sumps, dispensers, pumps or areas that contain liquid system valves, controls, connections and fittings for the purpose of inspecting for leaks, functionality of fire safety and leak prevention equipment or verification of proper system operation.

Note: Section 101.02 (15) (g) of the Statutes reads as follows: "The secretary or any deputy of the department may enter any place of employment or public building, for the purpose of collecting facts and statistics, examining the provisions made for the health, safety and welfare of the employees, frequenters, the public or tenants therein and bringing to the attention of every employer or owner any law, or any order of the department, and any failure on the part of such employer or owner to comply therewith. No employer or owner may refuse to admit the secretary or any deputy of the department to his or her place of employment or public building."

Section 101.02 (15) (k) of the Statutes reads as follows: "Every employer and every owner shall furnish to the department all information that the department requires to administer and enforce this subchapter, and shall provide specific answers to all questions that the department asks relating to any information that the department requires."

(3) RELEASES. (a) Owners and operators and contractors performing work under this chapter may not allow releases to occur from tank systems or dispensing systems, or from spilling or overfilling.

(b) Fuel-delivery persons may not allow releases to result from any overfilling or spilling that occurs during their delivery procedure.

Note: For further information on industry practices for preventing or detecting releases with aboveground storage systems, and for protecting groundwater, surface water and soil in the event of a liquid release, see API Publication 340 – *Liquid Release Prevention and Detection Measures for Aboveground Storage Facilities.*

(4) MSDS. Facilities shall have available a material safety data sheet for each stored product regulated by this chapter.

(5) UNITS OF MEASURE. Units of measurement shall be traditional U.S. measures.

Note: An important unit of measure used by this chapter is the U.S. gallon. It is equivalent to 4 U.S. quarts or 3.79 liters.

(6) DEGREASING AND CLEANING. (a) A Class I liquid may not be used for degreasing or cleaning any engine, machine, part or equipment, or for cleaning any part of a building or premises, except as provided under par. (b).

(b) Industrial processes that use Class I liquids for degreasing or cleaning shall incorporate a ventilation system to reduce and maintain vapor concentration to less than 25 percent of the lower explosive limit.

(7) SYSTEM COMPATIBILITY. Tank system components and containment systems shall be compatible with the substance stored in the tank system.

(8) FIRE EXTINGUISHER MAINTENANCE. All portable fire extinguishers shall be maintained in accordance with NFPA 10.

(9) PROPERTY MAINTENANCE. All surface area within a 20-foot radius of a storage tank or dispenser shall be maintained free of combustible material and debris, except as allowed for public-access motor vehicle fueling operations in s. Comm 10.620.

(10) SYSTEM MAINTENANCE. (a) All system equipment and components shall be maintained to function to the manufacturer's original specifications and shall be maintained to be leak-free.

(b) 1. At least monthly, except as provided in subd. 2, sumps and secondary containment systems for tanks, piping and dispensers shall be inspected, and any liquids and debris contained then shall be removed.

2. Sumps with a non-discriminating electronic sensor that detects liquid in the sump shall be inspected at least semiannually unless more frequent inspection is required by RP500 or RP900.

(c) Deficiencies in product lines or structural or transition components that allow for liquid leaks or water intrusion shall be repaired or corrected.

(d) Leak detection, fill and overfill prevention equipment shall be maintained in a functional condition.

(e) Fire and leak prevention and detection equipment installed, but not required by the department's rules, shall be maintained functional or be removed.

Note: Section Comm 10.115 (3) (a) 7. allows the authorized agent or the Department or fire department to shut down the tank system until any breach in the tank system is repaired or otherwise corrected.

(11) DAMAGE TO UNDERGROUND COMPONENTS. (a) When damage has occurred to underground pressurized tank system components or to underground vent and remote

fill lines, the affected portion of the tank system shall be removed from service, and the following actions shall be taken before that portion of the system is put back into service, except as provided in par. (b):

1. Perform third-party precision tightness testing of the portion of the tank system where damage occurred, in accordance with s. Comm 10.515 (4) (a) 1.

2. Isolate system components through the use of pressure-retaining components.

3. Perform functional operational tests of existing monitoring equipment.

4. Perform any additional monitoring, processes, or procedures needed to verify system integrity.

5. Comply with the tank-system site assessment and response requirements in ss. Comm 10.575 to 10.585 if a release is suspected.

(b) The actions in par. (a) 1. to 4. are not required where the damage is limited to dispenser system components that are isolated from the rest of the dispenser or tank system through the use of pressure-retaining components.

Note: These are minimum requirements for the restart of a damaged system, dependent on the situation at the incident site. Additional safety or environmental protection actions or repairs may be needed by the owner or operator.

(12) PRODUCT COLOR CODING FOR FILL PIPE CAPS AND MANHOLE COVERS. (a) *General*. 1. All fill pipe caps and manhole covers for underground fuel tanks at distribution terminals, bulk plants and motor fuel dispensing facilities shall be identified by the standard color and symbol coding in API 1637.

2. Products containing extenders such as ethanol shall be designated by the addition of a black border around white symbols and a white border around other colored symbols.

Note: Extenders or oxygenates are added to gasoline and typically comprise a maximum of 10 percent of the fuel by volume.

3. Vapor-recovery connections and manholes shall be marked with orange circles.

4. a. Observation and monitoring wells shall be marked with a black triangle on a white background.

b. The well shall be provided with a durable label warning against the introduction of petroleum products into the well.

(b) *Location of identification*. 1. The color coding required in par. (a) shall be applied to the fill pipe cap and manhole cover or within the spill containment.

2. At all facilities with more than one tank, the color coding applied to the fill cap or manhole cover shall extend at least 12 inches beyond the edge of the cap or cover onto adjacent concrete or pavement.

Note: See section Comm 10.340 for additional information on product identification at bulk plants and terminals.

(13) DEACTIVATION OF VAPOR RECOVERY. When deactivating a stage II vapor-recovery system or a portion thereof, the deactivated pipe shall be removed, or be capped or plugged at the dispenser. If the pipe is removed, the connection to the tank shall be capped or plugged.

Note: Each connection of a tank to deactivated, unremoved vapor-recovery pipe should be capped or plugged at the tank, if readily accessible, to minimize the potential for water intrusion from the pipe.

Comm 10.240 Certifications and enforcement. **(1)** CERTIFICATIONS. Persons and firms providing or supervising any of the following services shall be credentialed by the department in accordance with ch. Comm 5:

(a) Tank-system site assessment as referenced in s. Comm 10.465 for aboveground tanks and s. Comm10.580 for underground tanks.

(b) Underground tank system lining under ss. Comm 10.530 and 10.535.

(c) The cleaning and removal of underground storage tanks and stationary shop-built aboveground storage tanks.

(d) Storage tank system precision tightness testing using equipment that is not permanently installed on the tank system.

Note: All methods of precision tightness testing are required to be approved by the department in accordance with section Comm 10.130

(e) Corrosion protection services as required in s. Comm 10.520.

(f) Installation of underground storage tanks and shop-built aboveground storage tanks, except this requirement does not apply to any of the following tanks:

1. Aboveground heating oil tanks at 1- or 2-family dwellings.

2. Tanks or piping that are installed or constructed under the direct supervision of a registered professional engineer.

Note: "Under the direct supervision of a registered professional engineer" means the registered professional engineer must be on the site during, and responsible for, the key installation and test activities described in section Comm 5.84 (5) or 5.85 (5).

(2) ENFORCEMENT ACTIONS. (a) The department may take actions to ensure compliance with the provisions of this chapter, including revoking or suspending credentials.

Note: Section 101.09 (3) (c) of the Statutes, reads in part: "Any rule requiring certification or registration shall also authorize the revocation or suspension of the certification or registration." See chapter Comm 5 for revocation and suspension criteria.

Note: Sections Comm 5.83, 5.88 and 5.89 prohibit a person from engaging in tank-system site assessment, tank system tightness testing, or cathodic protection specialties if the person or the person's employer has a personal or financial interest in the facility.

(b) The department may require attendance at a specified education class.

(c) The department may commence civil action or administrative action under the provisions of s. 101.09 (4) and (5), Stats.

Comm 10.250 Tank construction and marking. (1) MULTI-COMPARTMENT TANKS. Each compartment of a multi-compartment tank shall be considered a separate tank, even if the same substance is stored in 2 or more of the compartments.

(2) CONSTRUCTION. Tanks containing flammable or combustible liquids shall be constructed to one of the recognized design standards in NFPA 30 section 21.4.2, or to another standard or design approved by the department, except this requirement does not apply to any of the following tanks:

(a) Tanks that contain liquids which are also hazardous substances.

Note: Section Comm 10.350 requires hazardous substance tanks to be designed and constructed under the supervision of a qualified engineer.

(b) Tank wagons, farm tanks and tank vehicles used in accordance with the requirements in ss. Comm 10.610 and 10.630, for fuel dispensing from aboveground tanks and at farms and construction projects.

Note: Design standards recognized by NFPA 30 section 21.4.2 include API 12B, API 12D, API 12F, API 650, UL 58, UL 80, UL 142, UL 1316, UL 1746, UL 2080 and UL 2085. Another standard approved by the department is SU 2258 from Underwriters Laboratories Inc.

Note: Tank wagons have construction requirements in section Comm 10.610 (1). Farm tanks are required to meet the construction specifications in NFPA 30A section 13.2.3. Tank vehicles are required to meet the construction specifications in NFPA 385 chapters 2 and 3. Movable tanks covered under the dispensing requirements in section Comm 10.610 (2) are not exempted from this requirement.

(c) Tanks which are custom built for a specific purpose and which are supported by a statement acceptable to the department, from a qualified engineer, as defined in s. Comm 10.350 (2) (d), except the competency of the engineer shall relate to the purpose for the custom-built tank.

(3) MARKING. Newly manufactured or erected tanks shall have at least all of the following information permanently marked on the exterior of the tank by the manufacturer or the party responsible for tank erection:

(a) The name of the manufacturer or the party responsible for tank erection.

(b) The year of manufacture or erection.

(c) The standard under which the tank is manufactured or erected.

(d) The minimum rate of any required emergency venting.

Note: The applicable construction standard may already require this information or additional information to be marked on the tank. This marking requirement especially applies to farm tanks which have a capacity of less than 1,100 gallons and which are not required to be manufactured to any specific construction standard other than the minimal requirements in NFPA 30A section 13.2.3.

Note: The department periodically publishes program letters to address issues in relation to applications of this chapter. The program letters are intended to provide and communicate implementation of regulatory and enforcement policy. Storage Tank Program Letters can be accessed on the department's Web site at www.commerce.state.wi.us or by contacting the department by writing to the Bureau of Storage Tank Regulation, PO Box 7837, Madison, WI 53707-7837.

Comm 10.260 Setbacks from already-installed potable water supply sources. (1) (a) Tank systems and their dispensing systems shall comply with the setback requirements in Table 10.260, except as specified in pars. (b) and (c).

(b) These setbacks do not apply where piping or dispensers are being replaced without replacing the tank.

(c) These setbacks do not apply where shorter setbacks are specified by the department of natural resources.

Note: The Department of Natural Resources administers separating distances for *proposed* public community water supply wells regulated under chapter NR 811, and those distances may differ from the distances in Table 10.260. See footnote 4 under Table 10.260 for DNR requirements about separating distances for proposed and already-installed private water supply wells regulated under chapter NR 812.

Note: Longer setback distances may be imposed through local wellhead-protection requirements.

Table 10.260
Setbacks From Already-Installed Potable Water Supply Sources

Tank Type[1]	Minimum Distance to a Water Supply Well Regulated Under Chapter NR 811 (feet) [2]	Minimum Distance to a Water Supply Well Regulated Under Chapter NR 812 (feet) [3,4]
Farm UST or AST system with single wall	1200	100
Farm UST system with double wall and with electronic interstitial monitoring for the system	600[5]	50[5]
Farm AST system with double wall, or with other secondary containment that is under a canopy	600[6]	50[6]
One- or two-family residential heating oil UST or AST system	200	25
Emergency or standby power system AST with double wall and with continuous electronic interstitial monitoring for the tank	10[7]	10[7]
Other UST or AST system with single wall	1200	100
Other UST system with double wall and with electronic interstitial monitoring for the system	600[5]	50[5]
Other AST system with double wall, or with other secondary containment that is under a canopy; and with electronic interstitial monitoring for double wall, or electronic sensor for other secondary containment	600[6]	50[6]

[1]Any reference in this column to a UST or AST "system" means both the tank and any product piping connected to it have the subsequently specified features.

[2]The setback in this column is at least 1200 feet if any associated fueling area is not on a concrete surface, and any associated AST is not on a concrete surface, except this requirement does not apply to the setback for a one- or two-family residential heating oil AST.

[3]The setback in this column is at least 100 feet if any associated fueling area is not on a concrete surface, and any associated AST is not on a concrete surface, except this requirement does not apply to the setback for a one- or two-family residential heating oil AST.

[4]Any setback in this column that is less than 100 feet, other than the 25-foot setback for one- and two-family residences, may be utilized only after obtaining a variance or other approval from the department of natural resources, except a variance or other approval is not required for an AST that has a capacity of 1500 gallons or less.

[5]This distance may be reduced by 50% if all of the following features are provided and maintained in addition to the features in the tank-type column: tank system construction of corrosion-resistant material, such as fiber-reinforced plastic, or steel with a fiber-reinforced plastic wrap or jacket; non-discriminating sump sensors; testable secondary containment spill bucket; continuous electronic liquid-filled, pressure, or vacuum interstitial monitoring

with automatic system shut-down; audible and visual high-level alarm at 90% full, and automatic shut-off at 95%; all fueling area protected by canopy; and downspouts for drainage of rainwater do not discharge into a fueling area.

[6]This distance may be reduced by 50% if all of the following features are provided and maintained in addition to the features in the tank-type column: either continuous non-discriminating electronic interstitial monitoring for double wall, or continuous non-discriminating electronic sensor for other secondary containment; audible and visual high-level alarm at 90% full, and either automatic shut-off at 95% or no latch-open device is used with any manual-shutoff nozzle; all dispensing by suction pump fuel transfer; all motor vehicle fueling limited to private or fleet use; all fueling area protected by canopy; and downspouts for drainage of rainwater do not discharge into a fueling area.

[7]This reduced setback is only permitted for emergency or standby power systems that are operated by the same facility which operates the well, and only if all of the following features are provided and maintained in addition to the features in the tank-type column: audible and visual high-level alarm at 90% full, and either automatic shut-off at 95% or no latch-open device is used with any manual-shutoff nozzle. This setback may be reduced further where approved in writing by the department, upon submittal of an explanation of why reducing the setback is needed, along with demonstration that additional features will be included which will provide adequate protection for the well.

Note: Aboveground storage tanks (ASTs) include tanks that are inside a building and have a liquid capacity of 110 gallons or more, are intended for fixed installation, and are not solely used for processing.

(2) Tank systems and their dispensing systems shall be at least 50 feet from ground-level potable water reservoirs regulated under ch. NR 811, except as specified in sub. (1) (b) and (c).

(3) Tank systems and their dispensing systems shall be at least 25 feet from potable water mains regulated under ch. NR 811, except as specified in sub. (1) (b) and (c).

Subchapter III – Specific Tank Storage Applications

Comm 10.300 Tanks storing used oil. (1) GENERAL. (a) Used oil shall be considered a Class IIIB liquid unless designated otherwise in this chapter or as shown by product flashpoint testing.

(b) Tanks used to store used oil to supply an oil burner shall comply with the heating-fuel storage requirements in s. Comm 10.310 and NFPA 31 section 7.2.9.

Note: Devices that burn used oil are regulated by the Commercial Building Code, chapters Comm 60 to 66, and the Fire Prevention Code, chapter Comm 14. The tank that stores the oil is regulated by this chapter.

Note: NFPA 31 section 12.9.1 requires tanks that supply used oil to an oil burner to be listed.

(2) TANK CONSTRUCTION AND INSTALLATION. (a) Tanks for the storage of used oil shall comply with the construction and marking requirements in s. Comm 10.250 anytime a tank system is installed.

(b) Aboveground tanks for used-oil storage that have a capacity of less than 750 gallons are not required to be listed, or marked in accordance with s. Comm 10.250 (3), except for tanks which supply oil to an oil burner.

Note: See section Comm 10.250 for minimum marking requirements for newly constructed or erected tanks.

(c) Tanks shall be constructed of noncombustible materials, unless constructed and utilized in accordance with SU 2258 from Underwriters Laboratories Inc.

(d) The fill opening shall be screened to prevent the passage of solid objects into the tank.

(e) The fill opening may be located directly at the tank.

(f) The fill opening shall be closed except when a transfer is actually taking place.

(g) Tanks that store used oil shall be installed by or under the supervision of a certified installer.

(h) The building setback for tanks which have a capacity of less than 1,100 gallons and which store used oil may be less than the setbacks listed in NFPA 30 Table 22.4.1.6 if approved in writing by the authorized agent or department; and that approval shall be based on consideration of the construction material for the building wall, the size of the tank, and the adjacent vehicular traffic.

Note: See section Comm 10.260 for minimum separating distances between tanks and water supply wells.

(3) SPILL AND OVERFILL PREVENTION. All tanks, whether new or existing, shall comply with all of the following:

(a) The fill opening shall be provided with spill containment.

(b) If the fill opening is located outdoors, the opening shall be located in a watertight enclosure of noncombustible construction.

(c) 1. If the fill point is remote from the tank or if the delivery person cannot readily observe the tank gauge, an overfill alarm shall be provided at the fill point.

2. The alarm shall be readily audible or visible at the fill point and shall alert the delivery person when the tank is 90 percent full.

3. All overfill alarms shall be labeled as such.

(4) SIGNAGE. All tanks, whether new or existing, shall be provided with a permanent and durable sign installed at the used-oil handler site or facility, that includes all of the following:

(a) “NO SMOKING.”

(b) “USED-OIL COLLECTION ONLY.”

(c) “DEPOSITING OTHER MATERIAL IS PROHIBITED.”

(5) VEHICLE COLLISION PROTECTION. Vehicle collision protection shall be provided for aboveground tanks in accordance with s. Comm 10.430 unless the authorized agent or the department determines the tank system is not subject to vehicle collision.

(6) SECONDARY CONTAINMENT. (a) Aboveground tanks located outdoors shall have secondary containment that complies with s. Comm 10.420 (1) to (4).

(b) Tanks located inside a building shall have secondary containment for 100 percent of the tank capacity if a leak from the storage tank could reach a floor drain, the exterior of the building or areas that pose an ignition hazard.

Note: An oil-water separator connected to a floor drain may be used for all or a portion of the required secondary containment, depending on the system capacity.

(7) UNDERGROUND TANKS. (a) *General*. Underground tanks for used-oil storage shall comply with the applicable portions of NFPA 30 and this section.

(b) *Spill protection*. For underground tanks that store used oil, spill protection is not required at any point other than the fill point, if the tank meets all of the following conditions:

1. The tank receives used oil in batches of 25 gallons or less by manual transfer.

2. The tank is emptied only by suction transfer.

(c) *Corrosion protection*. Corrosion protection shall be provided in accordance with s. Comm 10.520 except this protection is not required for piping that is associated with an underground tank which stores used oil, provided the tank and piping meet all of the following conditions:

1. The tank receives used oil in batches of 25 gallons or less by manual transfer.

2. All piping that is underground is sloped at an angle of at least 30 degrees from horizontal between the point at which it enters the ground and the tank, to allow for the free flow of oil.

Note: This section does not exempt the tank itself from corrosion protection requirements.

(d) *Leak detection*. Leak detection shall be provided in accordance with ss. Comm 10.510 and 10.515.

(8) TANK CLOSURE AND GENERAL ADMINISTRATIVE REQUIREMENTS. (a) *Aboveground tanks*. Aboveground tanks that store used oil shall comply with ss. Comm 10.440 to 10.470.

Note: Sections Comm 10.440 to 10.470 address inspections; seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank closures; tank-system site assessments; and confirming and responding to leaks, spills, overfills and releases.

(b) *Underground tanks*. Underground tanks that store used oil shall comply with ss. Comm 10.545 to 10.585.

Note: Sections Comm 10.545 to 10.585 address seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank system closures; conditions indicating releases; tank-system integrity assessments; tank-system site assessments; and responding to leaks, spills, overfills and releases.

Comm 10.305 Public used-oil collection centers. (1) GENERAL. Public used-oil collection centers shall comply with s. Comm 10.300 and this section.

Note: Also see chapter NR 679 for additional rules pertaining to used-oil collection centers, such as operational criteria.

(2) TANK CONSTRUCTION. The tank shall be constructed to one of the recognized design standards in NFPA 30 chapter 21 unless otherwise accepted by the department.

Note: Design standards recognized by NFPA 30 chapter 21 include API 12B, API 12D, API 12F, API 650, UL 58, UL 80, UL 142, UL 1316, UL 1746, UL 2080 and UL 2085.

(3) TANK SIZE AND INSTALLATION REQUIREMENTS. (a) The tank may be of any size.

(b) Tanks located outdoors shall comply with the setback requirements of NFPA 30 Tables 22.4.1.1(a) and (b) for a Class IIIA liquid.

(c) Tanks located inside a building shall have venting that terminates outdoors.

(4) DIKING. (a) A single-wall tank shall be placed within a diked area that meets the requirements of s. Comm 10.420.

(b) A tank of double-wall construction, that is accessible to the public, shall be placed within secondary containment which meets all of the following requirements:

1. Any curb shall have a height of at least 4 inches.

2. The containment shall extend at least 2 feet beyond the greatest tank dimension in all directions.

(c) The tank shall be set back from the curb or dike wall such that an overflow of the tank will be contained within the diked or curbed area.

(c) The fill opening with spill containment shall be located within the diked or curbed area.

Comm 10.310 Heating fuel storage. (1) SCOPE. This section applies to any new or existing aboveground or underground tank that is used to supply liquid fuel to a heating device, including a used oil burner, if the device and the fuel have the following characteristics:

(a) The heating device is used for space heating, processing or manufacturing.

(b) The fuel is consumed on the premises where stored.

Note: Number 5 and #6 fuel oil do not meet the criteria for a liquid and therefore are not regulated by this chapter.

(2) INSTALLATION, USE AND MAINTENANCE. (a) Tanks that supply oil-burning equipment shall be installed, used and maintained in accordance with NFPA 31 chapters 7 and 12, and this section.

(b) Tanks used to store heating fuel shall be installed by or under the supervision of a certified installer.

Note: Tanks installed at 1- or 2-family dwellings are not required to have plan review under section Comm 10.100, and aboveground tanks that have a capacity of less than 1,100 gallons are not required to have registration under section Comm 10.140.

Note: Devices that burn used oil are regulated by the Commercial Building Code, chapters Comm 60 to 66, and the Fire Prevention Code, chapter Comm 14. The tank that stores the oil is regulated by this chapter.

(3) UNDERGROUND TANKS THAT HAVE A CAPACITY OF 4000 GALLONS OR LESS. Underground heating oil tank systems that have a capacity of 4000 gallons or less shall have all of the following:

(a) A vent whistle, or equivalent means of overfill protection.

(b) Corrosion protection that complies with s. Comm 10.520, except this requirement does not apply to tanks that were installed before November 1, 1994.

(c) 1. Precision tightness testing every 2 years or leak detection in accordance with s. Comm 10.510, except this requirement does not apply to residential tanks which have a capacity of less than 1,100 gallons and which were installed before October 29, 1999, for consumptive use on the property where stored.

2. The tightness testing or leak detection methods used to comply with subd. 1. shall be specifically approved for use with the specific type of heating oil in accordance with s. Comm 10.130.

(4) UNDERGROUND TANKS THAT HAVE A CAPACITY OF MORE THAN 4000 GALLONS. Underground heating oil storage tanks that have a capacity of more than 4000 gallons shall have leak detection that complies with s. Comm 10.510 and corrosion protection that complies with s. Comm 10.520.

(5) SPILL AND OVERFILL PREVENTION. (a) Spill and overfill prevention for aboveground tanks shall be provided in accordance with s. Comm 10.300 (3).

(b) Spill and overfill prevention for underground tanks shall be provided in accordance with s. Comm 10.505.

(c) Fill pipes for used-oil tanks that are part of a heating system may be located inside a building.

(6) TANK CLOSURE AND GENERAL ADMINISTRATIVE REQUIREMENTS. (a) *Aboveground tanks*. Aboveground tanks that store heating oil shall comply with ss. Comm 10.440 to 10.470.

Note: Sections Comm 10.440 to 10.470 address inspections; seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank closures; tank-system site assessments; and confirming and responding to leaks, spills, overfills and releases.

(b) *Underground tanks*. Underground tanks that store heating oil shall comply with ss. Comm 10.545 to 10.585.

Note: Sections Comm 10.545 to 10.585 address seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank system closures; conditions indicating releases; tank-system integrity assessments; tank-system site assessments; and responding to leaks, spills, overfills and releases.

Comm 10.315 Heating oil tanks that are removed from service. (1) APPLICATION. This section applies to aboveground heating oil storage tanks which are connected to heating appliances and which store heating oil that is consumed on the premises.

(2) GENERAL. Placing a heating oil storage tank out of service for any reason other than immediate repair or replacement shall follow the procedure in either par. (a) or (b):

(a) The tank and all connected piping, including the vent and fill piping, shall be emptied, cleaned and removed from the premises.

(b) 1. The tank and all connected piping shall be emptied and purged of all vapors.

2. If the tank is not removed, the tank vent shall be left intact and open.

3. If the fill pipe is not removed, it shall be filled to the top with concrete and capped.

4. Any piping that is not removed, other than a tank vent, shall be capped or otherwise sealed.

(3) RESPONSIBLE PARTIES. (a) *Contractors.* A person who is under contract, with the person who owns or controls a property, to remove a heating oil storage tank or to place a heating oil storage tank out of service shall comply with the requirements in sub. (2).

Note: A contractor must be certified in accordance with chapter Comm 5 to perform tank cleaning and tank removal at other than 1- and 2-family dwellings. Section Comm 10.460 states that certification is not required for persons performing cleaning and removal of heating fuel tanks located aboveground or in basements at 1- and 2-family dwellings.

(b) *Owners.* If there is no contractor, the person who owns or controls a property from which a heating oil storage tank is removed, or on which a heating oil storage tank is placed out of service, shall comply with the requirements in sub. (2).

(4) NOTIFICATION REQUIREMENT. The person who owns or controls property from which a heating oil storage tank has been removed, or on which a heating oil storage tank has been placed out of service, shall provide written notice to the current heating oil vendor within 7 days after removing the tank or placing the tank out of service. If there is a scheduled delivery in less than 7 days, notification may be given verbally provided it is followed by written notification within 7 days after verbal notification.

Comm 10.320 Fuel storage for stationary combustion engines and gas turbines. (1) INSTALLATION AND USE. (a) *General*. This section applies to the fuel storage tanks of stationary combustion engines and gas turbines, except when used at a farm premises or construction project.

Note: Stationary combustion engines are commonly used to power emergency generators and pumps that provide fire protection. For setbacks for storage tanks that are used to fuel stationary combustion engines at a farm premises or construction project, see section Comm 10.630 (2).

(b) *Certified installer*. The installation of tanks used to store fuel for stationary combustion engines and gas turbines shall be supervised by a certified installer.

Note: See section Comm 10.100 (1) (b) 11. for criteria that can be used to exempt these tanks from plan review.

(c) *Marking.* 1. Aboveground tanks with the fill point remote from the tank and all new and existing underground storage tanks used to store fuel for stationary combustion engines and gas turbines shall have the fill point labeled with the type of fuel.

2. Aboveground storage tanks used to store fuel for stationary combustion engines and gas turbines shall have the tank labeled with the type of fuel.

(d) *Aboveground storage tanks located in buildings*. Aboveground storage tanks located in buildings and used to store fuel for stationary combustion engines and gas turbines shall comply with NFPA 37 chapter 6 and all of the following:

1. The fill connection shall be located outside the building.

2. Spill and overfill prevention shall be provided in accordance with s. Comm 10.410.

(e) *Aboveground storage tanks not located in a building*. Aboveground storage tanks not located in a building and used to store fuel for stationary combustion engines and gas turbines shall comply with subch. IV and NFPA 37 chapter 5, except that double-wall tanks which are only filled with a manual-shutoff nozzle without a latching mechanism are not required to have additional spill prevention at the fill point.

(f) *Underground storage tanks*. Underground storage tanks used to store fuel for stationary combustion engines and gas turbines shall comply with subch. V and NFPA 37 chapter 5.

(2) SPILL AND OVERFILL PREVENTION. (a) Spill and overfill prevention shall be provided in accordance with s. Comm 10.410, except as exempted in par. (b).

(b) Tanks that are filled by hand using a nozzle without a latch-open device are not required to have spill containment at the fill point.

(3) TANK CLOSURE AND GENERAL ADMINISTRATIVE REQUIREMENTS. (a) *Aboveground tanks*. Aboveground tanks that store fuel for stationary combustion engines and gas turbines shall comply with ss. Comm 10.440 to 10.470.

Note: Sections Comm 10.440 to 10.470 address inspections; seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank closures; tank-system site assessments; and confirming and responding to leaks, spills, overfills and releases.

(b) *Underground tanks*. Underground tanks that store fuel for stationary combustion engines and gas turbines shall comply with ss. Comm 10.545 to 10.585.

Note: Sections Comm 10.545 to 10.585 address seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank system closures; conditions indicating releases; tank-system integrity assessments; tank-system site assessments; and responding to leaks, spills, overfills and releases.

Comm 10.330 Converted tanks for the storage of flammable and combustible liquids. (1) APPLICATION. This section applies to all converted tanks, whether new or existing.

(2) GENERAL INSTALLATION AND USE. Converted tanks for the storage of flammable and combustible liquids shall be installed by a certified installer.

(3) PRESSURE VESSELS. (a) Low-pressure tanks and pressure vessels that are being converted to the storage of flammable or combustible liquids at atmospheric pressure shall meet the applicable tank storage requirements of this chapter, specific to the liquid stored.

(b) Tank supports shall be capable of supporting a static load equal to at least 2 times the weight of the full tank. This capability shall be confirmed by engineering structural analysis, field testing, or by reference to an approved design standard.

(4) TANK VEHICLES. (a) The cargo tank of a tank vehicle that is converted to a stationary tank for the storage of flammable or combustible liquids shall meet the applicable tank storage requirements of this chapter, specific to the liquid stored, along with the requirements in pars. (b) to (d).

(b) Cargo tanks for permanent stationary use shall be constructed of steel only.

(c) The cargo tank vehicle platform shall be supported off the vehicle wheels and secured against movement by the use of blocking devices and anchoring mechanisms that are acceptable to the department.

(d) Venting of the cargo tank shall follow the requirements of either NFPA 385 chapter 5 or this chapter.

(5) GENERAL ADMINISTRATIVE REQUIREMENTS. Converted tanks shall follow the operating requirements of this chapter applicable to their current use.

Comm 10.340 Bulk plants and terminals. **(1)** CLEARANCES AT BULK PLANTS THAT WERE IN EXISTENCE ON MAY 1, 1991. Bulk plant facilities that were in existence on May 1, 1991, with setbacks less than those specified in NFPA 30 section 22.4 may be renovated or updated, but no additional storage capacity may be added in violation of the specified clearances.

(2) PRODUCT IDENTIFICATION. (a) *Standard color code*. All new and existing tanks and piping at bulk plants and terminals shall use the identification scheme in API 1637.

Note: See section Comm 10.230 (11) for color coding of fill pipe caps and manhole covers, for underground tanks.

(b) *Type of identification*. The product identification scheme in API 1637 shall be accomplished by one of the following methods:

1. A disc tag of non-sparking material.

2. A label using minimum 1-inch block letters.

3. Painted sections at least 12 inches long.

(c) *Location of identification*. Tags shall be permanently affixed to the valve at the unloading riser, the pump control valves, the valve of a storage tank and load rack and on the product pipe lines in at least 3 locations equally spaced between terminating points or valves.

(3) PROPERTY MAINTENANCE. Tank yards and diked areas shall be kept free from weeds, high grass, rubbish and combustible materials that are not essential to the operation and shall be kept clean and orderly.

(4) SECURITY AT BULK PLANTS AND TERMINAL STORAGE FACILITIES. Owners and operators shall be aware of regulations, standards and operating practices that relate to facility security.

Note: Information on how to develop a comprehensive site security program is available in the API document *Security Guideline for the Petroleum Industry,* or the American Chemistry Council document *Site Security Guidelines for the U.S. Chemical Industry*.

(5) TRANSFER OPERATIONS. In order to prevent a spill from moving beyond the loading or unloading area, any new or existing aboveground tank that has a capacity of 5000 gallons or more shall be provided with a catchment basin or treatment facility to contain the maximum capacity of any single compartment of a tank car or tank vehicle loaded or unloaded at the facility.

Note: Federal Spill Prevention Control and Countermeasure requirements in 40 CFR 112 may apply to smaller product transfers.

(6) GENERAL REQUIREMENTS. (a) *Aboveground tanks*. Aboveground tanks at bulk plants and terminals shall comply with subch. IV.

(b) *Underground tanks*. Underground tanks at bulk plants and terminals shall comply with subch. V.

Comm 10.350 Hazardous substances. (1) SCOPE AND APPLICATION. (a) *General*. 1. The requirements of this section apply to tanks that store, handle or use liquids which are federally regulated hazardous substances, in any concentration of 1 percent or more by volume, for the purpose of protecting the waters of the state from contamination.

Note: The list of federally regulated hazardous substances covered in this subchapter, also known as the CERCLA List, is located in 40 CFR 302.4, Table 302.4.

Note: Other sections of this chapter regulate the storage and use of flammable and combustible liquids. Chapter Comm 14 – the *Wisconsin Fire Prevention Code*, through the adoption of NFPA 1, *Uniform Fire Code*™ also regulates the storage and use of liquids that have properties such as being flammable, combustible, toxic, water reactive, explosive, and corrosive.

2. Liquids within the scope of subd. 1. that are flammable or combustible shall also meet the requirements of this chapter which apply to flammable or combustible liquids.

(b) *Exemptions*. The requirements of this section do not apply to any of the following:

1. Hazardous waste storage tanks that are licensed under s. 291.25, Stats., except any tank containing a flammable or combustible mixture of hazardous wastes regulated under that section, and other liquids, is not exempt from this chapter.

2. Aboveground tanks which are used to store a federally regulated hazardous substance and which have a capacity of less than 5,000 gallons, and transfer operations involving these tanks, unless the substance is flammable or combustible.

Note: Section Comm 10.140 requires registration with the Department for all aboveground storage tanks that have a capacity of 5000 gallons or more and all underground tanks – unless the stored substance is nonflammable and noncombustible, and has a concentration of less than 1 percent by volume.

3. Accumulator tanks, process tanks or service tanks.

4. Portable tanks containing liquids that are not flammable or combustible.

5. Tanks regulated under, and maintained in compliance with the rules in 40 CFR 430.03.

Note: 40 CFR 430.03 is entitled "Best Management Practices for Spent Pulping Liquor, Soap, and Turpentine Management, Spill Prevention and Control."

(2) TANK SYSTEM DESIGN AND CONSTRUCTION. (a) *General*. Design, construction and maintenance of tank systems for the storage of federally regulated hazardous substances shall be in accordance with good engineering practices and this chapter and shall be under the supervision of a qualified engineer.

(b) *Notification.* The qualified engineer shall notify the department, on form ERS-9198, of an impending installation of a tank system under this section, unless this notice is provided under s. Comm 10.115 (2) (b) 3. for a UST.

Note: Form ERS-9198 – Comm 10 Notification Record is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(c) *Testing.* All new tanks and pipe systems shall have pressure or vacuum testing that shall assure that all components and connections are tight, in a manner equivalent to the protocol and parameters specified in NFPA 30 section 21.5 and PEI RP 100 section 11, before the tanks and pipe systems are placed into service.

(d) *Qualified engineer*. 1. The qualified engineer responsible for design and oversight of construction of federally regulated hazardous substance liquid storage tank systems under this chapter shall meet the requirements of this paragraph.

2. The qualified engineer shall be competent in the engineering methods for designing and installing hazardous liquid tank systems.

3. The qualified engineer shall be a registered professional engineer, unless one of the exemptions in s. 443.14, Stats., applies.

Note: A list of exemptions where the qualified engineer is not required to be a registered architect or professional engineer in accordance with section 443.14 of the Statutes is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

(3) GENERAL REQUIREMENTS FOR TANKS. Storage tanks shall meet all of the following requirements:

(a) *Structural.* Tanks shall have a stable foundation, under all operating conditions, and be of sufficient structural strength to withstand normal handling and use.

(b) *Chemical compatibility.* Tanks shall be chemically compatible with the substance being stored.

(c) *Wear, vibration, shock and corrosion.* Tanks shall be protected from failure due to internal and external wear, vibration, shock and corrosion.

(d) *Fire, heat, vacuum and pressure.* Tanks shall be protected from fire, heat, vacuum and pressure that might cause tank failure.

(e) *Collision protection.* Tanks that are subject to vehicle collision shall be protected from collision damage by vehicles and equipment.

(f) *Fiberglass-reinforced plastic.* If fiberglass-reinforced plastic material is used, the material shall be of sufficient density and strength to form a hard, impermeable shell that will not crack, wick, wear, soften or separate under normal service conditions.

(g) *National standards*. Tanks shall be designed, constructed and installed or certified by a qualified engineer in accordance with a standard, recognized by the department, that is developed by a nationally recognized association or independent testing laboratory.

Note: Examples of recognized standards include NACE RP 0178 – Fabrication Details, Surface Finish Requirements, and Proper Design Considerations for Tanks and Vessels to Be Lined for Immersion Service; UL 142 – Steel Aboveground Tanks for Flammable and Combustible Liquids; API 620 – Design and Construction of Large, Welded, Low-Pressure Storage Tanks; API 650 – Welded Steel Tanks for Oil Storage; ULC-S601-2000 – Aboveground Horizontal Shop-Fabricated Steel Tanks; ULC-S630-1993 – Aboveground Vertical Shop-Fabricated Steel Tanks; ASTM D 4097 – Standard Specification for Contact-Molded Glass-Fiber-Reinforced Thermoset Resin Corrosion-Resistant Tanks; and ASTM D 3299 – Standard Specification for Filament-Wound Glass-Fiber-Reinforced Thermoset Resin Corrosion-Resistant Tanks.

(h) *Listing*. Tanks used for underground storage shall be listed or shall be approved by the department.

(i) *Reinstallation of used tank systems*. 1. Used tank systems that do not meet the standards for new tanks under par. (g) or new piping under sub. (4) may not be reinstalled for hazardous substance storage.

2. If a used tank meets the standards for new tanks under par. (g), it may be reinstalled provided it is certified by a qualified engineer for use.

(j) *Compliance schedules for existing tanks*. 1. All tanks within the scope of this section that were in existence or under construction before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall comply with the registration requirements in s. Comm 10.140 within 6 months after that date.

2. All tank systems within the scope of this section that were in existence or under construction before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall comply with the secondary containment requirements in sub. (5) (a) by December 31 of the fifth year after that date.

(k) *Spill prevention at pumps and valves*. The owner or operator shall prevent spills and leaks at all pumps and valves that control a liquid hazardous substance, by using one or more of the following methods:

1. Installation of seal-less pumps and valves, double-seal pumps and valves or equivalent technology.

2. a. Implementation of a pump and valve inspection, maintenance and repair program that complies with subd. 2. b.

b. The frequency of inspection and scope of maintenance and repair shall be based on a minimum of 5 years of actual operating and service records, manufacturer's recommendation or records for similar operations.

3. a. Installation of pumps and valves within a catchment basin – such as a drip pan, pad or secondary containment system – that complies with subds. b. and c.

b. The catchment basin shall be compatible with the substance stored for a period of time that will allow for cleanup under all operating conditions.

c. The catchment basin shall be inspected each day of operation for accumulation of liquid and shall have the capacity to contain all spills likely to accumulate in the basin.

(L) *Tanks subject to melting*. Aboveground storage tanks constructed of a material subject to melting when exposed to fire shall be located so that any spill or leak resulting from the failure of the material could not unduly expose persons, structures or the environment.

(m) *Tanks subject to scouring*. 1. Storage tanks subject to scouring by the inflow of materials, or subject to wear from manual gauging shall be equipped with wear plates, diffusers or other means to prevent localized wear or corrosion.

2. If wear plates are used, they shall cover an area of at least 1 square foot and be installed in a manner that prevents crevice corrosion of the tank.

(n) *Explosion protection*. Tanks shall be protected from explosion in accordance with generally accepted engineering practices. Protection shall be provided by cooling systems, fire-resistance measures, depressurizing valves, foundation sloping to prevent burning liquids from accumulating under the tank, or other means determined by a qualified engineer and acceptable to the department.

(o) *Protection from freezing*. Tanks, piping, valves and other ancillary equipment shall be protected from physical damage by freezing.

(4) PIPING SYSTEMS. (a) *General requirements*. Piping systems serving hazardous substance storage tanks shall meet all of the following requirements:

1. Piping systems shall be compatible with the substance stored and be protected from failure due to internal and external wear, vibration, shock and corrosion.

2. Piping systems shall be free of leakage, structurally sound, properly supported under all operating conditions and be protected from fire, heat, vacuum and pressure that would cause the system to fail.

3. Piping systems shall be designed, installed and maintained to prevent damage from expansion, jarring, vibration, contraction and frost.

4. Piping systems shall be protected from collision damage or crushing loads by vehicles and equipment.

5. Joint compounds and gaskets shall be compatible with the substance stored.

6. Piping with pump or compressor connections shall be provided with shut-off valves located adjacent to the connections.

7. Flexible connectors, elbows, loops, expansion chambers or similar measures shall be installed to allow for movement and prevent damage from water hammer.

8. Piping systems that carry liquids which expand upon freezing shall be protected from freezing or shall have provisions to prevent rupture due to freezing.

9. Refrigerated piping systems shall be constructed of materials suitable for extreme temperatures and pressures in the storage system.

(b) *National standards*. Hazardous substance piping systems serving storage tanks shall be designed, constructed and installed or certified by a qualified engineer in accordance with a standard, as recognized by the department, that is developed by a nationally recognized association or independent testing laboratory.

Note: Examples of recognized standards include ORD-C107.7 – Glass-Fibre Reinforced Plastic Pipe and Fittings; and ASTM D 2996 – Standard Specification for Filament-Wound "Fiberglass" (Glass-Fiber-Reinforced Thermosetting Resin) Pipe.

(5) SECONDARY CONTAINMENT. (a) *General*. 1. Tank systems used to store hazardous liquids shall be provided with secondary containment.

2. Secondary containment systems shall be designed, constructed and installed to prevent the release of regulated substances to the environment at any time during the operational life of a tank system by containing a leak or spill from the system until the leak or spill is detected and removed.

3. A building may serve as secondary containment if at least one of the following requirements is met:

a. The building is an enclosed structure resting on or above impermeable surfaces, from which a discharge of the entire contents of the largest tank would not escape through any doorway, floor drain or other means.

b. The building drains and spillways are connected to an onsite wastewater treatment facility and are designed and maintained such that any leak or spill cannot drain elsewhere.

c. The building drains and spillways are connected to a municipal wastewater treatment facility with agreement of the municipality on the specific materials stored, and drains and spillways are designed and maintained such that any leak or spill cannot drain elsewhere.

4. Secondary containment systems shall be checked for evidence of a leak or spill at least every 30 days.

5. Double-walled tanks shall be designed, constructed, and installed to contain a leak from any portion of the inner tank, and to detect a failure of the inner or outer wall.

6. Capacity requirements for secondary containment structures may be reduced by the amount of available treatment plant capacity that is directly accessible to the tank.

7. Secondary containment, including liners and vaults, shall be designed, constructed, and installed to do all of the following:

a. Contain 100 percent of the capacity of the largest tank within the containment area, except as provided in subd. 8.

b. Prevent precipitation or groundwater intrusion from interfering with the ability to contain or detect a leak or spill of a regulated substance.

c. Surround the tank completely and be capable of preventing migration of a regulated substance.

d. Use materials that are compatible with the substances stored and the environment.

e. Isolate incompatible liquids and tank materials from each other and from the environment.

8. a. Permanent containment structures that are not protected from the weather shall be designed and maintained to allow for the containment of 125 percent of the volume of the largest tank within the containment area.

b. Precipitation and debris shall be removed from the containment structure on a regular basis.

c. No precipitation, ice or debris that is noticeably contaminated may be discharged to the environment.

9. Underground piping shall be provided with secondary containment and leak detection in accordance with sub. (8).

10. a. Connections to tanks shall be located within a containment structure constructed of compatible material and capable of containing leaks from the connections.

b. The containment structure for underground tanks shall have an access way so connections can be inspected and repaired.

(b) *Secondary containment systems for product transfers*. Transfer of hazardous substances shall take place within a secondary containment system that meets all of the following requirements:

1. a. For facilities that are designed on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], the system shall be capable of containing leaks and spills from the largest compartment of the vehicle being loaded or unloaded, including leaks or spills from connections, couplings, vents, pumps and valves, hose failure or overturning of a container.

b. For facilities designed or installed before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], the system shall be capable of containing the volume of any leak or spill deemed likely to occur, in the professional judgment of a qualified engineer. Facility modifications to meet this requirement shall be completed no later than December 31 of the fifth year following [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

c. Open-ended fill lines shall be located within the secondary containment system.

2. a. The system shall be designed, installed, and operated to prevent any migration of hazardous substances into the soil or the waters of the state, before cleanup occurs, except as allowed in subd. 2. b.

b. The system may allow migration of the gaseous component of a spill.

3. The system shall be constructed, coated, or lined with materials that are compatible with the substances to be transferred and the environment.

4. a. Product transfers using temporary containment structures shall be constantly attended.

b. The attendant shall be familiar with emergency procedures such that the secondary containment capacity will not be exceeded in the event of a leak or spill.

5. a. Permanent containment structures shall have sufficient strength and thickness to withstand wear, hydrostatic forces, frost heaving and weathering.

b. The structure shall support any vehicle brought into the transfer area.

6. Permanent containment structures shall have a foundation that prevents failure due to settlement, compression, or uplift.

7. a. Permanent containment structures shall be designed with a manually controlled drainage system to permit the drainage of liquids resulting from leaks, spills and precipitation, such as a manually controlled pump or siphon or a manually controlled dike valve.

b. Pump, siphon and valve controls shall be located outside of the diked area.

c. All drainage systems shall be locked in a closed position when a transfer of a hazardous substance is in progress.

d. Spilled or leaked substances shall be removed from the containment system to prevent a release to the waters of the state.

(6) PRESSURE RELIEF AND VENTING. (a) *General pressure relief and venting requirements*. 1. a. Tanks shall be protected from over-pressurization and excessive vacuum that may be caused by operator error, filling, emptying, atmospheric temperature changes, pumping, refrigeration, heating and fire exposure.

b. Tanks subject to failure due to pressure or vacuum shall be provided with pressure control devices as determined by the qualified engineer.

c. Protection shall be provided by vents, rupture discs, pressure or vacuum relief devices, controllers, fail-safe vessel designs or other means determined by a qualified engineer.

2. If a pilot-operated relief valve is used, it shall be designed so the main valve will open automatically and will protect the tank in the event of failure of the pilot valve or other device.

3. Venting used on a tank containing a flammable or combustible hazardous substance shall follow the requirements of NFPA 30 sections 21.4.3 and 22.7.

4. Vent discharge openings shall be designed and constructed to prevent interference of operation due to precipitation.

5. Vents shall have provisions for draining any condensate that may accumulate.

6. Vents shall be protected from tampering.

7. Vents shall have direct contact with the vapor space of the tank.

8. Venting shall be sized to limit the back pressure to less than the maximum pressure allowed by the design of the system.

9. Tanks fitted with relief valves may not be equipped with an isolation valve below the relief valve unless 2 or more relief valves are provided, and isolation valves are interlocked.

10. Cooled tanks with sealed double-wall construction shall have a pressure relief valve on the outer wall in addition to a pressure relief valve or safety disk on the inner tank.

(b) *Normal venting*. Closed-roof atmospheric tanks and low-pressure tanks shall be equipped with normal vents designed to accommodate all of the following conditions:

1. Inbreathing resulting from maximum outflow of liquid from the tank.

2. Inbreathing resulting from contraction of vapors caused by a decrease in atmospheric temperature.

3. Out-breathing resulting from maximum inflow of liquid into the tank and maximum evaporation caused by the inflow.

4. Out-breathing resulting from expansion and evaporation that result from maximum increase in atmospheric temperature.

Note: Examples of normal venting include pilot-operated relief valves, pressure relief valves, pressure-vacuum valves, conservation vents, open vents or a combination of devices.

(c) *Emergency venting*. 1. Atmospheric, low-pressure and high-pressure aboveground tanks shall have emergency venting to insure that the maximum pressure for the tank is not exceeded.

2. Emergency venting shall be designed by a qualified engineer in accordance with good engineering practices.

Note: Examples of emergency venting include larger or additional open vents, pressure-vacuum valves, pressure relief valves, a gauge hatch that permits the cover to lift under abnormal internal pressure or a manhole cover that lifts when exposed to abnormal internal pressure.

(d) *Labeling of pressure relief valves*. 1. Where safety, pressure relief or vacuum relief valves are used, each valve shall be permanently labeled with all of the following information:

a. The name or identifying trademark of the manufacturer.

b. The manufacturer's design or type number.

c. The pipe size of the inlet.

d. The set pressure or vacuum, in pounds per square inch gauge.

e. The full open pressure or vacuum, in pounds per square inch gauge.

f. The capacity at the indicated pressure or full open vacuum, in either cubic feet of gas per minute or cubic feet of gas per hour.

2. The labeling shall be provided either on the valve itself or on a plate securely fastened to the valve.

(7) TEMPERATURE MONITORING. (a) Temperature indicators and corresponding alarms shall be provided for storage tanks where heat from a reaction could cause damage to the system or a release to the environment.

(b) Heated or cooled tanks shall be equipped with appropriate thermal controls and gauges.

(c) Protection against overheating or overcooling shall be provided for heated or cooled tanks in accordance with generally accepted engineering practices.

Note: Means of protection may include temperature controllers, insulation, alarms, cooling systems and special material selection.

(8) LEAK DETECTION FOR UNDERGROUND TANK SYSTEMS. (a) Underground storage tank systems that contain federally regulated hazardous substances shall be equipped with a leak detection system which will detect a leak in the primary containment of the tank and piping.

(b) The leak detection method shall be capable of meeting the requirements in s. Comm 10.510, except as provided in par. (c).

(c) Other methods of leak detection may be used if approval from the department is obtained before the installation and operation of the new UST system.

(9) CORROSION PROTECTION Corrosion protection shall be provided in accordance with s. Comm 10.520 for underground storage tank systems or s. Comm 10.400 for aboveground storage tank systems.

(10) IDENTIFICATION AND LABELING. (a) Transfer points shall be labeled with the name of the substance transferred.

(b) Aboveground tanks storing hazardous substances within the scope of this section shall be identified and labeled in accordance with s. Comm 10.400 (7).

Note: Section Comm 10.400 (7) requires conformance with NFPA 704.

(c) All tanks on a property shall have a unique tank identification number that is readily visible to emergency response personnel.

(11) INSPECTIONS, CHANGES IN SERVICE, TANK CLOSURE AND RELEASES FROM A TANK. (a) *Aboveground storage tanks*. 1. Aboveground storage tanks shall comply with ss. Comm 10.440 to 10.470, except as provided in subd. 2.

2. Periodic inspections of aboveground tanks may be conducted in accordance with any nationally recognized standard that is more applicable to hazardous tanks than STI SP001.

Note: Aboveground storage tanks which store hazardous substances and which have a capacity of less than 5,000 gallons are exempt from this chapter unless the substance is also flammable or combustible.

Note: Sections Comm 10.440 to 10.470 address inspections; seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank closures; tank-system site assessment; and confirming and responding to leaks, spills, overfills and releases.

(b) *Underground storage tanks*. Underground storage tanks shall comply with ss. Comm 10.545 to 10.585.

Note: Sections Comm 10.545 to 10.585 address seldom-used and temporarily-out-of-service tanks; change in service to store a non-regulated substance; tank system closures; conditions indicating releases; tank-system integrity assessments; tank-system site assessments; and responding to leaks, spills, overfills and releases.

(12) QUALIFICATIONS OF TANK INSTALLERS. The installation of a storage tank under this section shall be performed under the direct supervision of a qualified engineer who is competent in the engineering methods for installing hazardous substance tank systems.

(13) SECURITY AT CHEMICAL STORAGE FACILITIES. Owners and operators shall be aware of regulations, standards and operating practices that relate to facility security.

Note: Information on how to develop a comprehensive site security program is available in the API document *Security Guideline for the Petroleum Industry,* or the American Chemistry Council document *Site Security Guidelines for the U.S. Chemical Industry*.

Comm 10.360 Storage of Class IA flammable liquids. (1) All storage, whether new or existing, of Class IA flammable liquids with a Reid vapor pressure not exceeding 25.3 psig (40 psia) and a boiling point of less than 100°F shall comply with the applicable requirements of NFPA 30 and this chapter, except as provided in sub. (2).

(2) Design standards for new tank systems do not apply to existing tank systems unless specified otherwise.

Note: See chapter Comm 41 for additional requirements that may apply to flammable liquid storage in pressure vessels at pressures greater than 15 psig.

Note: Further explanatory material is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

Comm 10.370 Emergency shut-off for transfers. An emergency electrical shut-off shall be installed in accordance with NFPA 30A section 6.7 on any new or existing system that provides for the transfer of product from a fixed storage tank system to a tank vehicle, rail tank car or vehicle fuel tank.

Subchapter IV – General AST Storage

Comm 10.400 General requirements. (1) ABOVEGROUND TANK DESIGN. (a) *General.* Tanks designed and built for underground use may not be used aboveground.

(b) *Tanks for Class I, II or IIIA liquids*. Tanks used for aboveground storage of Class I, II or IIIA liquids shall comply with the tank construction and marking requirements in s. Comm 10.250.

(c) *Tanks for Class IIIB liquids*. Tanks which have a capacity of 1,100 gallons or more and which are used for aboveground storage of Class IIIB liquids shall be listed or shall be acceptable to the department.

Note: See section Comm 10.130 (5) for listing and labeling requirements for aboveground tanks.

(d) *Tank foundations*. Tank foundations shall be designed to prevent uneven settling of the tank. Tank supports shall be placed on a prepared, flat, smooth, solid surface.

(2) CORROSION PROTECTION. (a) *General*. Aboveground storage tank systems shall be protected from excessive external corrosion through the use of paint, protective coatings, or corrosion resistant materials that are applied after the surface has been prepared in accordance with the manufacturer's recommendations.

(b) *Tanks*. Any portion of an aboveground tank that is in contact with the ground shall be protected from corrosion by one of the following methods:

1. The tank is constructed of an inherently corrosion-resistant material.

2. The tank is isolated from the ground by a method acceptable to the department.

Note: Methods of isolation acceptable to the Department include dielectric coating, placement on clean concrete, placement on an elevated ring wall or mounting on listed saddles.

3. The tank is protected by a sacrificial anode or impressed current system.

4. a. Single- or double-wall tanks which are constructed of material subject to corrosion and which are supported on runners or tank supports shall be constructed such that the bottom of the tank shell is at least 3 inches but no more than 12 inches above grade, as measured from the lowest point of the tank shell, except the 12-inch maximum does not apply where subd. 4. b. is met.

b. The 12-inch maximum in subd. 4. a. may be exceeded where structural fire resistance is provided that complies with NFPA 30 section 22.5.2.4.

(c) *Underground piping*. All new and existing underground piping connected to an aboveground tank shall be protected from corrosion using one of the methods in s. Comm 10.520 (1). Existing piping shall comply with this paragraph and par. (d) within 2 years after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(d) *Designed corrosion protection systems*. 1. Aboveground tank systems equipped with a new sacrificial anode or impressed current corrosion protection system shall follow the installation, operation, maintenance and testing requirements in s. Comm 10.520.

2. Existing sacrificial anode or impressed current corrosion protection systems shall follow the operation, maintenance and testing requirements in s. Comm 10.520.

(3) SECONDARY CONTAINMENT FOR PIPING. (a) When any underground piping is installed as part of a new tank system or when 50 percent or more of a run is replaced, the piping shall be provided with approved secondary containment with approved non-discriminating interstitial monitoring, except as specified in par. (f).

(b) 1. The material used for fabricating both the primary and secondary containment shall be listed in accordance with a standard that assures liquid- and vapor-tightness.

2. a. Secondary containment sumps shall be fabricated and installed in a manner that prevents release of liquids. These sumps shall be tested for leaks hydrostatically at installation, to the levels specified in subds. 2. b. to d., in accordance with the manufacturer's instructions and the requirements of this chapter, for a period of not less than 60 minutes.

b. To no less than 1 inch over the top of the highest penetration.

c. To no less than 1 inch over the top of any horizontal joint between wall sections.

d. To no lower than the top of any vertical joint.

(c) All pipe connections at a dispenser for motor vehicle fueling that are installed or replaced on or after [the effective date of this chapter…LEGISLATIVE REFERENCE

BUREAU TO INSERT DATE] shall be placed within a secondary containment sump at the time of installation or replacement.

(d) All pipe connections at a dispenser for motor vehicle fueling that were in existence or under construction before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] shall be placed within a secondary containment sump by December 31 of the fifth year following [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(e) All pipe connections at a transition between aboveground and underground piping that are installed or replaced on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall be placed within a secondary containment sump at the time of installation or replacement.

(f) Secondary containment is not required for underground piping that is evaluated and maintained in accordance with API Standard 570, by organizations that maintain or use an authorized inspection agency, a repair organization, and technically qualified piping engineers, inspectors and examiners, all as defined in API 570.

(g) 1. Secondary containment sumps provided under this subsection shall have non-discriminating electronic sensors that will detect liquids in the sump, unless approved otherwise by the department.

2. Piping for secondary containment sumps provided under this subsection may not pass through the bottom of the sump.

3. All electrical conduit and wiring at secondary containment sumps provided under this subsection for dispensers shall pass over the top of the sump wall rather than through the wall or bottom of the sump.

Note: This subsection recognizes dispenser pans, spray-on liners, brushed-on liners, formed-in-place containment products, and other effective secondary containment practices that are currently in use.

(4) LEAK DETECTION FOR PIPING. (a) All new and existing underground piping connected to an aboveground tank shall be provided with approved leak detection in accordance with s. Comm 10.510 (4), except as specified in par. (c). Existing piping shall comply with this paragraph within 2 years after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(b) Leak detection in accordance with par. (a) shall be installed immediately at the time of new installation or replacement of pipe.

(c) 1. Piping over 4 inches in diameter shall follow the plan and system requirements and deadlines in s. Comm 10.517, except as specified in subd. 2. Leak detection for piping of 4 inches in diameter or less may be provided as specified in subd. 2. only if approved in writing by the department.

2. Leak detection for piping may consist of evaluations that are performed in accordance with API 570, by organizations that maintain or use an authorized inspection agency, a repair organization, and technically qualified piping engineers, inspectors and examiners, all as defined in API 570.

(5) INSTALLATION. (a) 1. The installation of shop-built tanks and associated piping shall be performed or supervised by a certified installer.

2. A certified installer shall verify that the installation of the electrical components for a tank system does not conflict with this chapter, except this verification is not required for the electrical criteria in ch. Comm 16.

(b) All installation shall be in accordance with the manufacturer's instructions, the applicable national standards adopted in s. Comm 10.200, plans and specifications approved under s. Comm 10.100 and this chapter.

(c) Single wall horizontal-cylindrical and rectangular aboveground storage tanks shall be installed to allow full visual inspection of the outer tank shell, except for any portion of the shell that is in contact with a support for it.

(d) The foundations for all types of tanks shall be designed to minimize the possibility of uneven settling, and to minimize corrosion in any part of the tank resting on the foundation.

(e) Tank supports shall be placed on a prepared, flat, compacted surface.

(f) Upon completion of any installation of new or replacement shop-built tanks or piping, or any modification or upgrade thereto that requires plan approval or registration, the certified installer shall provide the authorized agent or the department with a completed tank installation checklist – form ERS-9658.

Note: Form ERS-9658 – Checklist for Aboveground Tank Installation is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(6) MOVING SHOP-BUILT TANKS. Aboveground shop-built tanks that are moved from one location to another shall meet all of the following requirements, except for tanks covered in s. Comm 10.610:

(a) The tank shall meet all the plan review, installation and registration requirements in this chapter for the new location.

(b) If the tank contained Class I liquids, it shall be rendered free of flammable vapors before the move and maintained vapor-free until placed into service at the new location.

(c) If the tank is relocated to a property with a different street address, a revised tank registration – form ERS-8731 or ERS-10861 E – and part A of a tank-system service and closure

assessment report – form ERS-8951 – shall be completed and submitted to the department for the former location.

Note: Form ERS-8731 – Aboveground Flammable/Combustible/Hazardous Liquid Storage Tank Registration; form ERS-10861 E – Change of Ownership, Flammable/Combustible/Hazardous Liquid Storage Tank Registration; and form ERS-8951 – Tank System Service and Closure Assessment Report are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874. Forms ERS-8731 and 8951are also available from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(d) The tank shall undergo pre-operational testing and inspection in accordance with PEI RP200 chapter 14.

(e) The tank shall have an inspection performed by an certified tank system inspector before being placed into operation.

(f) The tank shall continue to follow the inspection schedule in STI SP001 that was established at the former location.

(7) ABOVEGROUND TANK MARKING. (a) 1. All aboveground tanks, whether new or existing, that store Class I liquids, other than at refineries or at marine, pipeline or transport terminals shall have attached, the wording "FLAMMABLE—KEEP FIRE AWAY."

2. The wording shall be clearly visible and written in letters of a contrasting color at least 5 inches high with a minimum stroke width of 1 inch.

(b) 1. All aboveground tanks, whether new or existing, that store flammable or combustible liquids shall be labeled in accordance with NFPA 704.

2. The visibility and size of the label shall be in accordance with Table 10.400.

Table 10.400
Tank Labels

Tank Capacity in Gallons	Distance From Which the Label Shall Be Visible	Minimum Size of Label
Up to 5,000	75 feet	5" x 5"
5,001 to 50,000	100 feet	10" x 10"
50,001 to 250,000	200 feet	12" x 12"
Greater than 250,000	300 feet	15" x 15"

(8) MAINTENANCE. (a) *Tanks*. 1. a. All shop-built aboveground steel storage tanks, whether new or existing, shall be maintained and repaired in accordance with STI SP031.

b. All repairs or modifications under STI SP031 shall be recorded on the department's ERS-10873 form.

Note: Form ERS-10873 – STI SP031 Tank Repair/Modification Summary, is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

c. A copy of the completed ERS-10873 form shall be provided to the tank owner or operator.

d. The tank owner or operator shall have the completed ERS-10873 form on site and available for inspection within 30 days after receiving it from the party that performed the repair.

2. Field-erected aboveground storage tanks shall be maintained and repaired in accordance with API 653.

(b) *Property*. Tank yards and diked areas shall be kept free from weeds, high grass, rubbish, and combustible materials that are not essential to the operation, and shall be kept clean and orderly.

(9) FACILITY LIGHTING. Adequate lighting shall be provided for loading, unloading and dispensing operations.

(10) SYSTEM ACCESS. (a) All new aboveground storage tank systems shall be designed and constructed to allow access to all connections between the tank and piping, venting, and appurtenances that require maintenance or replacement.

(b) The means of access shall be sufficient in size to allow for installation, maintenance and inspection of all connections and appurtenances.

(11) RECORD KEEPING. (a) *General.* Operators of new and existing aboveground storage tank systems shall maintain all of the following records:

1. Documentation of any system repairs, alterations or upgrades – including software and hardware upgrades – and any inspections required under this chapter.

2. Testing results obtained from any leak detection equipment, as retained from the equipment's printer or a hand-written log kept on site.

3. Documentation maintained for all calibration, inspection, monitoring, testing, repair, and annual performance verification of any leak detection equipment, if so equipped.

4. Response to and investigation of any leak detection alarms.

5. Documentation maintained for all calibration, inspection, monitoring, testing, repair, and periodic performance verification of any corrosion protection equipment permanently located on-site.

6. Records of any environmental information that has accrued for a site, such as from site investigations, phase I or II environmental site assessments, repairs and tank-system site assessments.

7. Results of functional testing of impact and emergency shut-off valves.

8. Electrical continuity testing for dispensers of motor fuels that are Class I liquids.

9. One set of stamped, approved plans and specifications and a copy of the approval letter.

(b) *Availability of records.* 1. Operators shall maintain the required records at the site, except as provided in subds. 2. and 3., and par. (c) 9.

2. Owners and operators of unattended sites shall make the records available for inspection at the site when given 72 hours of prior notice.

3. The approved plans and specifications and approval letter shall be kept on site and available to the authorized agent or the department during all phases of installation. After installation is completed, the approved plans and specifications and approval letter shall be made available to the authorized agent or the department upon request.

4. Records may be kept electronically, provided they are in a format acceptable to the department.

(c) *Maintenance of records*. Records shall be maintained for the following periods from the date of the most recent test, inspection or upgrade:

1. Monthly leak detection monitoring for underground piping – 1 year.

2. Annual precision tightness testing for underground piping – 1 year.

3. Impressed current corrosion protection system, 60-day inspection – the previous 3 inspections.

4. Corrosion protection system, annual test – the previous 3 tests.

5. Annual performance verification of leak detection equipment and flow restrictor, for underground piping – 2 years.

6. Results of functional testing of impact and emergency shut-off valves and electrical continuity testing for dispensers – 2 years.

7. The owner's manual provided by the leak detection equipment manufacturer – until the leak detection system is replaced or no longer used.

8. Any tank or pipe system modification or repair – the life of the system.

9. Inspection records – 3 years or the interval between required inspections, whichever is longer.

10. Tank-system site assessments and other environmental assessments, such as assessments for property transactions – 3 years after completion of any permanent closure, upgrade, repair or change in service. These records shall be maintained at one of the following locations:

a. With the owner or operator who took the AST system out of service.

b. With the current operator of the AST system site.

c. With the department if records cannot be maintained at the closed facility.

11. Leak detection alarm investigation – 2 years.

Note: All leak detection records should be retained. The documentation could be helpful to exclude the site as a possible source of contamination at a later date.

12. One set of stamped, approved plans and specifications and a copy of the approval letter – the life of the system.

(12) TANKS AT REMEDIATION SITES. (a) 1. Recovery systems using oil water separators or recovery systems pumping free product at the rate of 60 gallons or more per week shall comply with this paragraph.

2. Recovery product piping and storage tanks shall comply with either the plan review requirements in s. Comm 10.100 or the design and construction requirements in s. Comm 10.350 (2) for hazardous substances.

3. Tanks shall be registered in accordance with s. Comm 10.140.

4. Tank construction and marking shall comply with the requirements in ss. Comm 10.250 and Comm 10.400 (7).

(b) Tanks used in recovery systems that pump free product at the rate of less than 60 gallons per week shall be constructed and marked in accordance with ss. Comm 10.250 and Comm 10.400 (7).

Comm 10.410 Spill and overfill prevention. **(1)** Prior to delivery, the operator of the product delivery equipment that is transferring the product shall ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank.

(2) The transfer operation shall be monitored constantly by the operator of the delivery equipment so as to prevent overfilling and spilling.

(3) Equipment shall be clearly marked so visual and audible warning signals are recognizable to the delivery person.

(4) Spill and overflow prevention equipment shall be maintained to work as originally designed and installed.

(5) The fill opening shall be separate from the vent opening.

(6) (a) All aboveground storage tanks, whether new or existing, with the fill point not located within a diked area shall be provided with a catch basin or similar containment, except for tanks exempted by par. (d) and tanks that are exempted from secondary containment by s. Comm 10.420 (1) (a) to (c). Existing tanks shall comply with this paragraph within 1 year after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(b) The catch basin or similar containment to contain spillage at the fill point shall have a minimum liquid capacity of 5 gallons, except where the catch basin or similar containment was installed before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(c) The basin shall be equipped with a method to remove product or a push-to-drain system that directs spilled product into the tank.

(d) The following tanks are exempt from this requirement:

1. Tanks provided with controls before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] that comply with this subsection.

2. Tanks filled with a manual-shutoff nozzle without a latch-open device.

3. Tanks filled with a tight-connect with either a dry break connection or a manual shutoff valve on the hose-end connection.

(7) Tanks that are filled via hand-held nozzles shall be constantly attended during product delivery and shall be provided with a vent whistle or with other overfill prevention equipment which provides a visual signal at 90 percent of the tank's capacity.

(8) Tanks located remote from the fill point, that are filled only with a manual-shutoff nozzle without a latching mechanism shall be provided with overfill prevention equipment which notifies the person filling the tank – with both an audible and a visual signal – that the liquid level has reached 90 percent of the tank's capacity.

(9) The following tanks shall be provided with overfill prevention equipment which notifies the person filling the tank – with both an audible and a visual signal – that the liquid level has reached 90 percent of the tank's capacity, and which automatically shuts off flow when the quantity of liquid in the tank reaches 95 percent of the tank's capacity:

(a) Tanks using tight-connect delivery.

(b) Tanks located remote from the fill point, that use delivery nozzles with latch-open devices.

(10) (a) Operators shall utilize the procedures and equipment as specified in PEI RP600 for preventing overfilling of new and existing shop-built aboveground tanks.

(b) Fuel-delivery persons shall utilize the procedures in PEI RP600 for preventing overfilling of new and existing shop-built aboveground tanks, and may not interfere with equipment that is intended to prevent overfilling.

Note: PEI RP600 does not mandate installation of equipment, but instead addresses how to effectively use the equipment that is provided, as required by other sections and referenced standards in this chapter.

Note: Under sections Comm 10.470 and Comm 10.585 (2) (b), fuel-delivery persons must immediately inform the owner or operator of any spilling or overfilling which occurs during the delivery procedure and which may result in or be a release. Requirements for the owner or operator to report, investigate and clean up any spills and overfills are contained in sections Comm 10.575 to 10.585.

Comm 10.420 Secondary containment. (1) APPLICATION. Aboveground storage tanks using secondary containment as a method of spill control shall comply with the secondary containment requirements in NFPA 30 section 22.11 and this section, except this requirement does not apply to any of the following tanks:

(a) Tanks covered in ss. Comm 10.610 (1) to (3) and 10.630.

Note: Sections Comm 10.610 (1) to (3) and 10.630 cover tank wagons, movable tanks, tank vehicles and aboveground farm tanks.

(b) Tanks storing Class IIIB liquids other than used oil.

Note: Federal regulations, such as the Spill Prevention Control and Countermeasure requirements in 40 CFR 112, may also apply to these tanks and be more restrictive, but are not enforced by the Department.

(c) Tanks storing Class IIIB liquids that are not in the same diked area as a tank containing Class I, II, or IIIA liquids.

(2) DIKE SYSTEMS FOR TANKS. (a) *Weather exposure.* Where a dike system is used to provide secondary containment for a tank system that is exposed to the weather, the dike system shall be constructed in accordance with NFPA 30 section 22.11; ACI 350.2R, if concrete is used; and this subsection.

(b) *Capacity.* The capacity of a dike system open to the weather shall be 25 percent larger than required under NFPA 30 section 22.11.1.2 or 22.11.2.2.

(c) *Construction.* The walls and floor of the dike system shall be constructed of earth, solid masonry, steel, pre-cast concrete, engineered poured concrete, or other materials approved by the department.

(d) *Sealing.* Dike systems with the walls and floor made of steel or poured or pre-cast concrete shall have all cracks, seams and joints sealed to be liquid-tight.

(e) *New earthen or masonry dikes.* 1. New dike systems that have walls or floor made of earth or masonry shall be lined with a synthetic material having a permeability of no faster than 10^{-6} centimeters per second for the substance stored, except as provided in subd. 2.

2. a. Tanks included in either subd. 2. b. or c. may have dike systems designed by an engineer, with the walls and floor made of clay material having a permeability of no faster than 10^{-6} centimeters per second for the substance stored. The dike system shall be designed to maintain the permeability for a minimum of 35 years.

b. Tanks that have a double bottom which includes interstitial monitoring.

c. Single-bottom tanks that are constructed to ensure that any leaks from the bottom will drain to a conspicuous location and be contained there.

Note: A method to achieve compliance with subdivision 2. c. could include placing a tank over coarse aggregate that rests on a concrete base which is configured to provide the specified drainage and containment.

Note: As applied under sections Comm 10.440 (2) and (3), API 653 requires routine inspection of field-erected tanks, and STI SP001 requires periodic inspection of shop-built tanks, for evidence of leaks. Section Comm 10.440 (6) requires submitting records of these inspections to the Department, for all tanks within a dike system that has walls or floor made of earth or masonry

(f) *Existing earthen or masonry dikes.* 1. Tanks may be installed within an existing dike system that has walls or floor made of earth or masonry only if all of the following conditions are met:

a. The dike system complies with par. (b).

b. The new tanks comply with par. (e) 2. b. or c.

c. All other tanks within the dike system have overfill protection as specified in NFPA 30 section 21.7.1.

2. An existing dike system that has walls or floor made of earth or masonry may be expanded with materials which are similar to the materials in the existing walls and floor. After

that expansion, tanks may be installed within the dike system only if all of the conditions in subd. 1. a. to c. are met.

3. Tanks within an existing dike system that has walls or floor made of earth or masonry may be converted from storing an unregulated substance to storing a regulated substance only if all of the following conditions are met:

a. The dike system complies with par. (b).

b. The converted tanks comply with par. (e) 2. b. or c.

c. All other tanks within the dike system have overfill protection as specified in NFPA 30 section 21.7.1.

(g) *Installation of synthetic liners.* Synthetic liners shall be installed under the direct supervision of a qualified representative of the manufacturer.

(h) *Testing and maintenance.* All new and existing synthetic liners and their seams shall be tested and maintained in accordance with the manufacturer's recommendations.

(i) *Inspection of seams.* Dike systems shall be constructed and maintained such that the liquid-tight seams can be visually inspected, except as provided in pars. (j) and (k).

(j) *Seam exceptions.* The following dike systems are not required to have seams that can be visually inspected:

1. Concrete or steel systems that are coated with a liquid-proof sprayed coating.

2. Systems using an additional synthetic liner.

3. Systems using a synthetic liner that is covered with earthen material.

(k) *Existing seams.* For existing dike systems, the seams directly under the tank are not required to be visible for inspection.

(L) *Separation.* A separation of at least 2 feet shall be provided between any new tank and the toe of any new or existing dike wall, and a minimum of 3 inches shall be provided between the bottom of any new tank and the dike floor, to allow for visual inspection of the exterior tank surface – except this requirement does not apply to tanks that comply with par. (e) 2. b. or c., or where otherwise approved by the department.

(m) *Drainage.* Permanent containment structures shall be designed with a manually controlled drainage system to permit the drainage of liquids resulting from leaks, spills and precipitation, such as a manually controlled pump or siphon or a manually controlled dike valve.

(3) SECONDARY CONTAINMENT TANKS. (a) The department may accept secondary containment tanks of any size as providing acceptable secondary containment, except where dike systems are specifically required by this chapter.

(b) Secondary containment tanks shall be provided with an approved method of interstitial leak detection.

(4) PIPING. All underground piping connected to an aboveground tank shall comply with the secondary containment requirements in s. Comm 10.400 (3).

(5) TRANSFER OPERATIONS. In order to prevent a spill from moving beyond the loading or unloading area, any tank which has a capacity of 5,000 gallons or more and which is involved in transfer operations for bulk loading and unloading of tank cars or tank vehicles at facilities that refine, process, distribute or manufacture liquids regulated under this code shall be provided with a catchment basin or treatment facility to contain the maximum capacity of any single compartment of a tank car or tank vehicle loaded or unloaded at the facility.

Note: This transfer requirement does not apply to transfers of used oil or fuel oil for heating or other burning purposes.

Note: For further information on industry practices for preventing or detecting releases with aboveground storage systems, and for protecting groundwater, surface water and soil in the event of a liquid release, see API Publication 340 – *Liquid Release Prevention and Detection Measures for Aboveground Storage Facilities.*

Comm 10.425 Tank lining of aboveground storage tanks. (1) The installation or repair of tank linings or coatings for aboveground storage tanks shall comply with API 652 and this section.

(2) The interior lining or coating of aboveground storage tanks or the repair of such linings or coatings shall be supervised and conducted by persons as required by the material manufacturer.

(3) Any openings cut for tank lining or similar purposes shall comply with API 653 for field-erected tanks and STI SP031 for shop-built tanks.

Comm 10.430 Vehicle collision protection. (1) Permanent vehicle collision protection shall be provided for any new or existing tank or system component that could result in a release of product when damaged, in any area where impact due to speed, turning, or backing of any type of motorized or self-propelled vehicle is likely to occur, except for tanks covered in ss. Comm 10.610 (1) to (3) and 10.630.

Note: Sections Comm 10.610 (1) to (3) and 10.630 cover tank wagons, movable tanks, tank vehicles and aboveground farm tanks.

Note: Vehicle collision protection is required for tanks located outside or inside a building in motorized-vehicle or self-propelled-equipment traffic areas, where impact resulting from vehicle speed, turning or backing is a

risk factor. For example, vehicle collision protection is required for tanks located adjacent to traffic areas that accommodate public and fleet fueling, service and delivery vehicles, self-propelled construction and service equipment, and forklift equipment.

Vehicle collision protection is not required for tanks adjacent to vehicle and equipment service bays where traffic patterns and speed would not be expected to impact the tank system.

Vehicle collision protection is generally not required at a terminal where roadways are clearly defined, access is restricted to authorized personnel, and vehicle drivers are familiar with the layout of the facilities.

(2) At least 24 inches of clearance shall be provided between a vehicle impact barrier and the tank or system component to be protected, unless otherwise approved by the department.

(3) Impact barriers shall be designed to protect the tank or component from impact damage by the force of the largest vehicle routinely in the traffic area traveling at 5 miles per hour or at the average traveling speed, if higher than 5 miles per hour, except as provided in sub. (4).

(4) (a) For impact barriers designed primarily to protect from the impact of automobiles, the portion determined to be most vulnerable to vehicle impact shall be capable of withstanding a single impact of 12,000-lb force applied at 10 miles per hour or equivalent impact energy.

(b) The impact shall be applied using a minimum 0.5-inch thick steel plate having a frontal surface area of 12 inches by 12 inches centered at 18 inches above grade.

Note: For many applications, the Department will accept either D.O.T. guardrails or 4-inch steel posts filled with concrete, set at least 3 feet into the ground and spaced no more than 4 feet on center.

(5) Vehicle impact barriers shall have a minimum height of 3 feet above grade or as acceptable to the authorized agent or the department.

Comm 10.440 Aboveground tank inspection. **(1)** DELAYED EFFECTIVE DATE FOR EXISTING TANKS. The requirements in this section shall become effective for existing tanks within 1 year after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(2) INSPECTION OF FIELD-ERECTED METALLIC ABOVEGROUND STORAGE TANKS. (a) Metallic aboveground storage tanks within the scope of API 653 shall be inspected in accordance with the requirements of API 653.

(b) Initial inspections shall be conducted as required in Table 10.440.

(c) 1. The agency conducting an API 653 inspection shall report all applicable information from the inspection on an API 653 tank inspection summary form supplied by the department.

Note: Form ERS-10737 – API 653 Tank Inspection Summary is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

2. A copy of the API 653 tank inspection summary shall be provided to the tank owner or operator along with the complete API 653 inspection report.

(d) The tank owner or operator shall have the API 653 inspection summary on site and available for inspection within 30 days after receiving it from the agency that performed the inspection.

(e) For tanks undergoing a transition from storing an unregulated substance to storing a regulated substance, any inspection in Table 10.440 that has not occurred shall be performed before putting the regulated substance into the tank. For the purposes of this paragraph, the service date is the date the tank was initially placed into service after construction.

Table 10.440
Inspection Type and Schedule

API 653 Inspection Type	First Required Inspection From Initial Service Date	Re-Inspection Frequency
In-Service	1 month	Monthly
External	5 years	Follow API 653
Ultrasonic, external	5 years	Follow API 653
Internal	10 years	Follow API 653

(3) INSPECTION OF SHOP-BUILT METALLIC ABOVEGROUND STORAGE TANKS. (a) 1. The owner or operator of all shop-built metallic aboveground fixed storage tanks shall have the tanks inspected in accordance with STI SP001, except as provided in subd. 2.

2. a. An alternate inspection procedure that provides equivalent environmental and fire safety protection may be used if accepted in writing by the department, or if developed by the certifying engineer for a facility in accordance with the federal spill prevention control and countermeasure regulations in 40 CFR 112.

b. This paragraph does not apply to tanks that have a capacity of less than 1,100 gallons.

c. This paragraph does not apply to heating oil tanks or to tanks at farms and construction projects.

Note: STI SP001 requires monthly and annual inspections, and requires maintaining records of these inspections. For almost all ASTs that have a capacity of 5000 gallons or less, these inspections are only required to be visual. For most tanks that have a capacity of more than 5,000 gallons, the requirements include, but are not limited to, having a certified inspection every 20 years – consisting of a visual exam and spot, ultrasonic examination, with no requirement for an integrity pressure test. STI SP001 includes optional checklists that may be used for the required recordkeeping. These checklists and a compendium that contains further guidance for these inspections are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: Tanks that are not required by this paragraph to have periodic inspections may otherwise be required to have periodic inspections, by the federal Spill Prevention Control and Countermeasure regulations in 40 CFR 112.

Note: Heating oil tanks and tanks at farms and construction projects are subject to the requirements in NFPA 31 or 30A, under sections Comm 10.310 and 10.630, respectively.

(b) 1. The inspection schedule required in par. (a) shall be implemented as stated, for tanks put into service on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

2. The inspection schedule required in par. (a) shall be implemented within 4 years after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], for tanks put into service before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

3. The inspection schedule required in par. (a) shall be based on the tank's time in service.

4. Monthly inspections may be omitted for seasonal-use tanks during periods when the tank does not contain a regulated substance.

(c) If product is found within a tank's interstitial space during an inspection under this subsection, delivery of product into the tank shall be immediately suspended, and either of the following actions shall be taken within 10 business days:

1. A vacuum or pressure test shall be performed in accordance with the manufacturer's recommendations.

2. The tank shall be closed in accordance with s. Comm 10.460.

Note: See subection (5) for further requirements for corrective action.

(4) INSPECTION OF NON-METALLIC ABOVEGROUND STORAGE TANKS. (a) The owner or operator of all non-metallic aboveground storage tanks – including concrete, tile-lined, fiber-reinforced plastic, and homogeneous plastic tanks – that have a capacity of 1,100 gallons or more shall have the tanks inspected in accordance with all of the following:

1. 'Monthly inspection.' a. At least monthly there shall be a visual inspection of the tank exterior, pipe connections and secondary containment, for signs of leakage, physical damage, and environmentally induced degradation.

b. Any product or water present in the secondary containment shall be removed.

2. 'Annual inspection.' a. At least annually there shall be a visual inspection of tank supports and foundation for signs of physical damage and chemical or environmentally induced degradation.

b. At least annually there shall be a test of the functionality of the tank venting system, if so equipped.

3. 'Qualifications for inspection.' The monthly and annual inspections shall be done by owners, contractors or operations personnel, who are knowledgeable of the facility operations, the tank construction and operation, and the characteristics of the product stored.

4. 'Every 5 years.' At least every 5 years there shall be an external and internal examination of tank and pipe connections for physical or chemical damage or environmentally induced degradation, conducted by personnel trained and experienced in examining the specific tank construction type.

(b) Inspection records shall be maintained at the site and available for review by the authorized agent or the department upon request.

(5) CORRECTIVE ACTION. (a) If a suspected or obvious release is encountered during the inspections under this section, a tank-system site assessment shall be conducted in accordance with s. Comm 10.465 before the tank is returned to service.

(b) All corrective actions, including repairs, that are indicated by the inspections under this section shall be completed before the tank system is returned to service.

(6) SUBMITTAL OF INSPECTION RECORDS. (a) For all tanks within a new or existing dike system that has walls or floor made of earth or masonry, all inspections required by API 653 or STI SP001 section 1.6 shall be documented as required or recommended by those standards. Each of these inspection records shall be submitted to the department no later than 1 month after the inspection, except as specified in par. (b).

(b) For all tanks within an existing dike system that has walls or floor made of earth or masonry, a record of the most recent inspection shall be submitted to the department no later than 6 months after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], and records of subsequent inspections shall be submitted to the department no later than 1 month after each inspection.

Comm 10.445 Seldom-used and temporarily-out-of-service tanks. Owners or operators of aboveground seldom-used and temporarily-out-of-service tanks shall comply with s. Comm 10.545 except that a precision tightness test is not required when an aboveground tank is placed back into active status.

Comm 10.450 Change in service to store a non-regulated substance. Owners or operators of aboveground tanks shall comply with the change-in-service requirements of s. Comm 10.550, except a revised registration for aboveground tanks – form ERS-8731 – shall be completed and submitted.

Note: Form ERS-8731 – Aboveground Flammable/Combustible/Hazardous Liquid Storage Tank Registration is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Comm 10.460 Closure of aboveground tanks. (1) GENERAL. Owners or operators of aboveground tanks shall comply with the closure requirements of s. Comm 10.560, except as provided in this section.

(2) CERTIFICATIONS. (a) Certified persons are not required to perform the following closure functions:

1. Cleaning and removal of heating fuel tanks, at 1- and 2-family dwellings, that are located aboveground or in the basement.

2. Cleaning and removal of field-erected tanks.

3. Cleaning and removal of tanks storing a Class III liquid that is neither petroleum nor CERCLA-listed.

(3) MARKINGS. (a) All aboveground tanks closed before, on or after [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] and not immediately removed from the site shall have the word "CLOSED" and the date of permanent closure permanently marked on the exterior tank wall, at least 3 feet above grade, with lettering at least 3 inches in height.

(b) A certified tank system inspector may perform the marking specified in par. (a).

(4) FORMS. When an aboveground tank is closed, the a revised tank registration – form ERS-8731 – and part A of a tank-system service and closure assessment report – form ERS-8951 – shall be completed and submitted to the department within 21 business days of closure.

Note: Form ERS-8731 – Aboveground Flammable/Combustible/Hazardous Liquid Storage Tank Registration, and form ERS-8951 – Tank System Service and Closure Assessment Report are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Comm 10.465 Tank-system site assessment. (1) GENERAL. (a) Tank-system site assessments for aboveground tanks shall comply with this section and the assessment requirements in s. Comm 10.580, except as provided in sub. (2).

(b) Tank-system site assessments for aboveground storage tank systems shall include assessment of any underground piping, the loading rack or transfer area, and the area under each

tank; and shall be performed after notifying the authorized agent or the department but before completing any permanent closure.

Note: For further information on sampling and reporting for these assessments, see the Department's *Assessment and Reporting of Suspected and Obvious Releases From Underground and Aboveground Storage Tank Systems,* which is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(2) EXCEPTIONS. (a) Aboveground storage tanks or underground piping that have been placed in secondary containment complying with s. Comm 10.420 (2) (d), (e) or (g) for their entire operational life, and loading rack or transfer areas that have been placed in secondary containment complying with s. Comm 10.420 (5) for their entire operational life are exempt from tank-system site assessment requirements, unless there is a suspected or obvious release outside the secondary containment.

(b) Aboveground storage tanks that have a capacity of less than 5,000 gallons are exempt from tank-system site assessment requirements unless a suspected or obvious release is present.

(c) A tank-system site assessment is not required for closure of double-wall pipe when modification or upgrading is conducted on an existing system that will remain in operation, unless a suspected or obvious release is present.

Comm 10.470 Responding to a leak, spill, overfill or release. Owners or operators, contractors and fuel-delivery persons for aboveground tanks shall comply with the requirements relating to the presence of a leak, spill, overfill or release, and the assessment of, and response to a leak or release, in ss. Comm 10.570 to 10.585.

Note: In section Comm 10.585, releases are required to be reported to the Department of Natural Resources. Failure to notify the DNR of a release may have serious consequences – such as forfeitures under section 101.09 (5) of the Statutes of $10 to $5000 for each violation. Each day of continued violation is a separate offense, and under section Comm 10.180, each tank that is in violation is a separate offense.

Subchapter V – General UST Storage and Underground Piping

Comm 10.500 General requirements. (1) SECONDARY CONTAINMENT (a) *General.* All new and replacement underground storage tanks and piping systems shall be provided with secondary containment and continuous electronic interstitial monitoring, except as provided in par. (b).

Note: This section is coordinated with the federal Energy Policy Act of 2005, which addresses secondary containment for federally regulated tanks or piping installed within 1,000 feet of any community water system or any potable drinking water well, and which requires interstitial monitoring for any associated double-wall tanks or piping.

(b) *Exceptions.* This section does not apply to any of the following:

1. Any farm or residential underground storage tank system which has a capacity of less than 1,100 gallons and which is used for storing motor fuel for noncommercial purposes.

2. Any underground storage tank system which has a capacity of less than 4,000 gallons and which is used for storing heating oil for consumptive use on the premises where stored.

3. Piping of safe suction systems.

4. A pipe manifold connecting 2 or more tanks.

5. Airport fuel hydrant systems.

(c) *Motor fuel* d*ispenser containment*. All new motor fuel dispensing systems and all new dispensers added to an existing island or to an extension of existing pipe shall have under-dispenser containment.

(2) FLEXIBLE CONNECTIONS. Flexible piping approved under s. Comm 10.130 or listed metallic flex connectors shall be used in all of the following locations:

(a) At the top of the tank.

(b) Between the tank and the vent pipe.

(c) Below the dispenser.

(d) In fiberglass pipe, where there are sections less than 4 feet long between turns.

(3) UNDERGROUND TANK DESIGN. (a) *General.* Tanks designed and built for underground use may not be used aboveground.

(b) *Tanks for Class I, II, IIIA or IIIB liquids*. Tanks used for underground storage of Class I, II, IIIA or IIIB liquids shall be listed and shall comply with the construction and marking requirements in s. Comm 10.250.

Note: See section Comm 10.130 (5) for listing and labeling requirements for underground tanks.

(c) *Reuse of tanks*. Tanks that are moved from one underground location to another shall meet all of the following requirements:

1. The integrity of the tank shall be assessed and certified by the manufacturer, or a registered professional engineer, stating that the tank still meets the construction requirements in s. Comm 10.250. The certification and a report of the assessment shall be included in the plan review documentation for the new installation.

2. The integrity assessment required in subd. 1. shall occur after the tank has been removed.

3. The tank shall meet all the installation requirements in this chapter.

(4) SYSTEM ACCESS. (a) Underground storage tank systems shall be designed and constructed to allow access to all connections between the tank and piping, venting, and appurtenances that require maintenance, inspection or replacement.

Note: Piping elbows are an example of connections that do not need access because typically they do not need maintenance or inspection. Valves, extractor fittings, flex connectors, corrosion-protection test connections and overfill prevention devices are examples of connections that need this access.

(b) The means of access shall be sufficient in size to allow for installation, maintenance and inspection of all system appurtenances.

(c) The means of access shall allow sufficient clearance for proper drainage from surface water incursion.

(5) SECONDARY CONTAINMENT FOR PIPING. (a) 1. When any underground product piping is installed as part of a new tank system or when 50 percent or more of a run is replaced, the piping shall be provided with approved secondary containment with non-discriminating electronic interstitial monitoring, except as specified in subd. 2.

Note: Underground fill piping is included in the piping that is addressed by this paragraph.

2. a. Underground fill piping that does not drop vertically into a tank may have secondary containment that includes a sump which is monitored visually on a monthly basis, instead of monitored with an electronic sensor.

b. Secondary containment is not required for underground fill piping that drops vertically into a tank.

(b) The material used for fabricating both the primary and secondary containment shall be listed in accordance with a standard that assures liquid- and vapor-tightness.

Note: The UL 971 standard meets this requirement.

(c) All pipe connections provided at the dispenser and at the top of the tank, that routinely contain product and are installed or replaced on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall be placed within a secondary containment sump.

(d) All existing pipe connections at the top of the tank and beneath all freestanding pumps and dispensers, that routinely contain product shall be placed within secondary containment sumps by December 31 of the fifth year following [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(e) All pipe connections at a transition between aboveground and underground piping that are installed or replaced on or after [the effective date of this chapter…LEGISLATIVE

REFERENCE BUREAU TO INSERT DATE], shall be placed within a secondary containment sump at the time of installation or replacement.

(f) 1. Secondary containment sumps provided under this subsection shall have non-discriminating electronic sensors that will detect liquids in the sump, unless approved otherwise by the department.

2. Piping for secondary containment sumps provided under this subsection may not pass through the bottom of the sump.

3. All electrical conduit and wiring at secondary containment sumps provided under this subsection for dispensers shall pass over the top of the sump wall rather than through the wall or bottom of the sump.

Note: This subsection recognizes dispenser pans, spray-on liners, brushed-on liners, formed-in-place containment products, and other effective secondary containment practices that are currently in use.

(6) INSTALLATION. (a) *General.* 1. a. The installation of underground tanks and associated piping shall be performed or supervised by a certified installer.

b. A certified installer shall verify that the installation of the electrical components for a tank system does not conflict with this chapter, except this verification is not required for the electrical criteria in ch. Comm 16.

2. All installation shall be in accordance with the manufacturer's instructions, the applicable national standards adopted in s. Comm 10.200, plans and specifications approved under s. Comm 10.100 and this chapter.

(b) *Tanks*. 1. Tanks shall have an air pressure and soap test performed after unloading.

2. a. All new tanks and pipe systems shall have pressure or vacuum testing that shall assure that the tank, pipe and all connections are tight in accordance with NFPA 30 section 21.5 and PEI RP100 section 11 and 14 before the tanks and pipe systems are placed into service.

Note: For further guidance, see the program letter at the following Web site: http://commerce.wi.gov/ERpdf/bst/ProgramLetters_PL/ER-BST-PL-Pre-operationalIntegrityTestRequirementSingle-DoubleWallUST.pdf.

b. If a volumetric tank integrity test is used, it shall be capable of detecting a release of 0.1 gallon per hour from any portion of the tank when the tank is at least 70 percent full of product, shall be approved in accordance with s. Comm 10.130, and shall be conducted in accordance with the approval. In addition, a precision tightness test shall be performed on the ullage portion of the tank.

Note: Volumetric tests approved under section Comm 10.130 at 90 percent capacity are acceptable under this section at 70 percent capacity in combination with the ullage test.

c. If a non-volumetric tank integrity test is used, it shall be capable of detecting a release of 0.1 gallon per hour from any portion of the tank at any product level.

d. The volumetric or non-volumetric tests performed under this section shall be conducted by a certified tank system tightness tester.

3. If the tank has integral secondary containment, both the primary and secondary containment shall be tested in accordance with this section.

(c) *Piping*. 1. Piping shall be shown to be leak free by testing before backfilling and after backfilling.

2. Pressure piping, or suction piping with a check valve located at the tank, shall pass an approved precision tightness test before being placed into service.

3. Piping that has leak detection provided by electronic line leak detection shall have the leak detection system certified as operable by performing a functional leak test in accordance with the material approval issued under s. Comm 10.130, before the piping is placed into service.

4. Any aboveground product or vent piping that is adjacent to or in the path of motorized vehicles or equipment shall have vehicle collision protection meeting the performance requirements in s. Comm 10.430, unless approved otherwise by the authorized agent or the department.

(d) 1. Secondary containment sumps shall be fabricated and installed in a manner that prevents release of liquids. These sumps shall be tested for leaks hydrostatically at installation, to the levels specified in subds. 2. to 4., in accordance with the manufacturer's instructions and the requirements of this chapter, for a period of not less than 60 minutes.

2. To no less than 1 inch over the top of the highest penetration.

3. To no less than 1 inch over the top of any horizontal joint between wall sections.

4. To no lower than the top of any vertical joint.

(e) *Installation checklist*. Upon completion of any installation of new or replacement shop-built tanks or piping, or any system modification or upgrade that requires plan approval or registration or permitting, the certified installer shall provide the authorized agent or the department with a completed tank installation checklist – form ERS-6294 UST.

Note: Form ERS-6294 UST – Checklist for Underground Tank Installation is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: Section Comm 10.140 (3) (c) requires the tank installation checklist to be submitted to the Department as part of the tank registration process.

(7) REPAIRS. (a) *General*. Owners and operators of tank systems shall ensure that repairs will prevent releases due to structural failure or corrosion as long as the tank system is used to store regulated substances.

(b) *Standards*. Repairs to tank systems shall be made by the manufacturer's authorized representative or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory that is acceptable to the department.

(c) *Pipe repair and replacement*. Metal pipe and fittings that have released product as a result of corrosion or other damage shall be replaced. Fiberglass pipe and fittings that have released product shall be replaced or repaired in accordance with the manufacturer's specifications.

(d) *Tank-system site assessment*. When repairs are made to piping or fittings that have released product to the environment, an assessment of the piping run, to identify points of release, shall be performed in accordance with ss. Comm 10.575 to 10.585.

(e) *Precision tightness testing*. Repaired tanks and piping shall have precision tightness testing in accordance with s. Comm 10.515 (4) before being placed back into service.

(8) INSPECTION AND MAINTENANCE OF UST SYSTEMS. Operators of new and existing UST systems shall conduct routine and periodic inspection and maintenance in accordance with the applicable sections of PEI RP900.

(9) RECORD KEEPING. (a) *General*. Operators of new and existing underground storage tank systems shall maintain all of the following records:

1. Documentation of any system repairs, alterations or upgrades – including software and hardware upgrades – and any inspections required under this chapter.

2. Documentation demonstrating conformance with leak detection requirements, and the manner in which these claims have been justified or tested by the equipment manufacturer and certified installer, including all of the following:

a. Information pertaining to the leak detection system, including the material approval as issued under s. Comm 10.130 that was valid when the system was installed; operator manual; warranty; and documentation verifying that the equipment has been installed, programmed and tested to perform as required in this chapter.

b. Testing results obtained from leak detection equipment, as retained from the equipment's printer or a hand-written log kept on site.

c. Documentation maintained for all calibration, inspection, monitoring, testing, repair, and annual performance verification of leak detection equipment permanently located on-site.

3. Response to and investigation of leak detection alarms.

4. Documentation maintained for all calibration, inspection, monitoring, testing, repair, and periodic performance verification of any corrosion protection equipment permanently located on-site.

5. Analysis from a corrosion expert of site corrosion potential if corrosion protection equipment is not used.

6. Records of any environmental information that has accrued for a site, such as from site inspections or investigations, phase I or II environmental site assessments, or repairs – or from tank-system site assessments conducted under ss. Comm 10.560 to 10.585.

7. Documentation of product inventory verification, at facilities that are subject to the requirements of ch. Comm 48.

8. Results of functional testing of impact and emergency shut-off valves.

Note: See NFPA 30A section 6.3.9.1 for testing requirements.

9. Electrical continuity testing for dispensers of motor fuels that are Class I liquids.

10. One set of stamped, approved plans and specifications and a copy of the approval letter.

(b) *Availability of records*. 1. Operators shall maintain the required records at the site, except as provided in subds. 2. and 3., and par. (c) 11.

2. Operators of unattended sites shall make the records available for inspection at the site when given 72 hours of prior notice.

3. The approved plans and specifications and approval letter shall be kept on site and available to the authorized agent or the department during all phases of installation. After installation is completed, the approved plans and specifications and approval letter shall be made available to the authorized agent or the department upon request.

4. Records may be kept electronically, provided they are in a format acceptable to the department.

(c) *Maintenance of records*. Records shall be maintained for the following periods from the date of the most recent test, inspection or upgrade:

1. Monthly leak detection monitoring – 1 year.

2. Annual precision tightness testing – 1 year.

3. Periodic precision tightness testing in association with inventory control – until the next test is conducted.

4. Impressed current corrosion protection system, 60-day inspection – the previous 3 inspections.

5. Corrosion protection system, annual test – the previous 3 tests.

6. Internal inspection associated with underground tank lining – 10 years.

7. Annual performance verification of leak detection equipment and flow restrictor – 2 years.

8. Results of functional testing of impact and emergency shut-off valves and electrical continuity testing for dispensers – 2 years.

9. The owner's manual provided by the leak detection equipment manufacturer – until the leak detection system is replaced or no longer used.

10. Any tank or pipe system modification or repair – the life of the system.

Note: Lifetime maintenance of upgrading records is required by 40 CFR 281.32 (e).

11. Inspection records – 3 years or the interval between required inspections, whichever is longer.

12. Tank-system site assessments and other environmental assessments, such as assessments for property transactions – 3 years after completion of any permanent closure, upgrade, repair or change in service. These records shall be maintained at one of the following locations:

a. With the owner or operator who took the UST system out of service.

b. With the current operator of the UST system site.

c. With the department if records cannot be maintained at the closed facility.

13. Leak detection alarm investigation – 2 years.

14. Product inventory verification in accordance with s. Comm 10.503, and inventory control in accordance with s. Comm 10.515 (2) – 10 years.

Note: All leak detection records should be retained. The documentation could be helpful to exclude the site as a possible source of contamination at a later date.

15. One set of stamped, approved plans and specifications and a copy of the approval letter – the life of the system.

Comm 10.503 Product inventory verification at retail facilities. (1) This section applies to all facilities that are subject to the requirements of ch. Comm 48.

Note: Chapter Comm 48 is entitled "Petroleum Products."

Note: The inventory verification specified in this section is not required to conform to the inventory control specifications in API 1621.

(2) To verify and maintain the integrity of delivered products, product inventory verification shall be conducted monthly for the life of the tank system, and reconciled on a monthly basis, in the following manner:

(a) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day.

(b) The equipment used is capable of measuring the level of product over the full range of the tank's height, to the nearest one-eighth of an inch.

(c) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery. Where blend pumps are used, reconciliation may address all tanks as a group rather than as individual tanks.

(d) Product dispensing is metered and recorded in accordance with applicable requirements in ch. ACTP 92 for meter calibration, or an accuracy of 6 cubic inches for every 5 gallons of product withdrawn.

(e) The measurement of any water level in the bottom of the tank is made to the nearest one-eighth of an inch at least once a month.

(3) The reconciliation under sub. (2) shall be used to determine whether either of the following are indicated:

(a) A leak detection method has failed, as addressed in s. Comm 10.570 (4).

(b) Unauthorized product mixing has occurred, as addressed in ch. Comm 48.

Comm 10.505 Spill and overfill prevention. **(1)** GENERAL. (a) Prior to delivery, the operator of the fuel delivery equipment that is transferring the product shall ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank.

(b) The transfer operation shall be monitored constantly by the operator of the delivery equipment so as to prevent overfilling and spilling.

(2) EQUIPMENT. All underground storage tank systems, whether new or existing, shall meet all of the following requirements:

(a) 1. A liquid-tight containment system with a minimum capacity of 5 gallons shall be provided on top of the tank where connections are made for product fill piping, except the 5-gallon minimum does not apply to containment that was installed before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

2. The basin shall be equipped with either a push-to-drain system that directs spilled product into the tank, or a mechanism to pump product out of the basin.

(b) Storage tank overfill prevention equipment shall be provided that complies with NFPA 30 section 21.7.1.5 and PEI RP100 chapter 7. Existing tank systems shall comply with this paragraph within 2 years after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

Note: NFPA 30 section 21.7.1.5 requires equipment that will (1) automatically shut off the flow into a tank when the tank is no more than 95 percent full; and (2) alert the transfer operator when the tank is no more than 90 percent full, by restricting the flow into the tank or triggering a high-level alarm. Retrofit equipment is available which complies with these requirements and which can be installed in a tank without removing pavement. See PEI RP100 section 7.3.2 for description of how the contents of the delivery hose can be drained into the tank after an automatic shut-off valve closes.

(3) MAINTENANCE. All new and existing spill and overfill protection shall be maintained to perform as originally intended.

Note: Under section Comm 10.585 (2) (b), fuel-delivery persons must immediately inform the owner or operator of any spilling or overfilling which occurs during the delivery procedure and which may result in or be a release. Requirements for the owner or operator to report, investigate and clean up any spills and overfills are contained in sections Comm 10.575 to 10.585.

Comm 10.510 Leak detection requirements. (1) GENERAL. (a) All new and existing underground tank systems used to store regulated substances shall be provided with a method of leak detection that complies with this section and s. Comm 10.515, except as exempted in par. (d).

(b) The method of leak detection shall be approved in accordance with s. Comm 10.130.

(c) All monitoring equipment used to satisfy the requirements of this section shall be installed, calibrated, operated and maintained to perform as originally intended in accordance with the manufacturer's instructions and the department's approval, such as issued under s. Comm 10.130.

(d) Leak detection is not required for any of the following tanks:

1. Tanks which have a capacity of less than 1,100 gallons and which are located on farm premises or at private residences.

2. Tanks storing Class IIIB liquids that are neither petroleum nor CERCLA-listed products.

(e) If a tank system exhibits a continuing pattern of failing and then not failing leak detection testing, a precision tightness test shall be performed within 10 business days in accordance with s. Comm 10.515 (4), and if a tank system fails to pass that test, the site shall be assessed for the presence of a release in accordance with ss. Comm 10.575 to 10.585.

(2) ANNUAL CALIBRATION. (a) The following equipment shall be verified by a qualified person every 12 months for the same degree of operability and capability as when the equipment was newly installed:

1. Equipment for measuring product levels that is used for manual tank gauging or statistical inventory reconciliation.

2. Automatic tank gauging equipment used for monthly monitoring, statistical inventory reconciliation or precision tightness testing.

3. Interstitial monitoring equipment.

4. Sensors used to detect leaks in tanks, lines or sumps.

(b) Under this subsection, a qualified person is a person certified by the equipment manufacturer as being trained in the operational characteristics of the equipment.

(c) Annual monitoring equipment certification shall be made on the department's underground tank system release and leak monitoring form (ERS-10778) and shall be maintained onsite in accordance with s. Comm 10.500 (9) (a).

Note: Form ERS-10778 – Underground Tank System Release and Leak Monitoring Functionality Verification is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(3) LEAK DETECTION FOR TANKS. (a) *General*. 1. Tanks shall be monitored at least every 30 days for leaks using one of the methods listed in s. Comm 10.515, except as provided in subd. 2.

2. Tanks that have a capacity of 1,000 gallons or less may use manual tank gauging conducted in accordance with s. Comm 10.515 (3) as the sole means of leak detection provided it is performed weekly.

Note: Under section Comm 10.500 (1) (a), continuous electronic interstitial monitoring is generally required for all secondary containment installed on or after [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(b) *Failed tests*. If a passing test using monthly monitoring is not achieved for 2 consecutive months, a precision tightness test shall be performed within 10 business days in accordance with s. Comm 10.515 (4), and if a tank fails to pass that test, the site shall be assessed for the presence of a release in accordance with ss. Comm 10.575 to 10.585.

(c) *Inconsistent results*. The authorized agent or the department may require a precision tightness test to be performed where any of the following events occur:

1. A tank system is accumulating water for no apparent reason.

2. A leak detection method is providing erratic results.

3. A tank system is tested with multiple leak detection methods that show different results.

(d) *Inventory control as leak detection*. Tank systems may use monthly inventory control performed in accordance with s. Comm 10.515 (2) as leak detection provided all of the following conditions are met:

1. The tank is 10 years old or less.

2. The tank has precision tank tightness testing conducted in accordance with s. Comm 10.515 (4) at least once every 5 years from the date of installation until the tank is 10 years old.

3. The tank system has corrosion protection in accordance with s. Comm 10.520.

(4) LEAK DETECTION FOR PIPING. (a) *Pressurized piping*. Underground piping that conveys regulated substances under pressure shall comply with all of the following requirements unless all of the piping is visible:

1. The system shall be equipped with an automatic line leak detector in accordance with s. Comm 10.515 (8) (b).

2. Single-wall piping systems shall have at least one of the following leak detection methods:

a. An annual precision tightness test.

b. Monthly monitoring to the 0.2 gallon per hour rate.

3. Double-wall piping systems shall use one of the leak detection methods in subd. 2., or statistical inventory reconciliation, or continuous interstitial monitoring.

Note: Under section Comm 10.500 (1) (a), continuous electronic interstitial monitoring is generally required for all secondary containment installed on or after [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

4. If a passing test using monthly monitoring is not achieved for 2 consecutive months, a precision tightness test shall be performed within 10 business days in accordance with s. Comm 10.515 (4), and if the piping fails to pass that test, the site shall be assessed for the presence of a release in accordance with ss. Comm 10.575 to 10.585.

(b) *Suction piping*. 1. Piping which conveys regulated substances under suction and which is not entirely visible shall use one of the following leak detection methods, except as provided in subd. 2.:

a. A precision tightness test conducted at least every 3 years.

b. Interstitial monitoring.

2. Leak detection may be omitted for suction piping that meets all of the following requirements:

a. The below-grade piping operates at less than atmospheric pressure.

b. The below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released.

c. Only 1 check valve is included in each suction line.

d. The check valve is visibly located directly below and as close as practical to the suction pump.

e. A method is provided that allows compliance with subd. 2. b. to d. to be readily observed or otherwise determined.

(c) *Inventory control as leak detection.* Piping connected to a tank using inventory control in accordance with sub. (3) (d) shall comply with one of the following:

1. Pressurized piping shall have leak detection complying with par. (a).

2. Suction piping shall have leak detection complying with par. (b).

Comm 10.515 Leak detection methods. **(1)** GENERAL. (a) Leak detection methods for tank systems shall meet the requirements of this section.

(b) The leak detection test information reports submitted to the department, or maintained on site as required in s. Comm 10.500 (9), shall include at least all of the following:

1. Site information including the name of the business, the street address, and the municipality in which the site is located.

2. Tank system information including the department-assigned tank identification number, the site identification number designated by the owner or operator, the tank capacity, the product in the tank, the type of pipe system, and whether there are pipe manifolds in the tank system.

3. Test method information including the name of the method or equipment used, the material approval number as issued under s. Comm 10.130, the date the test was performed, the threshold value used to declare a leak, the rate of volumetric change, whether the final result was a pass or fail, and the name and certification of the technician performing the test.

(2) INVENTORY CONTROL. (a) *General methodology*. Inventory control that is used as the leak detection method shall be conducted in accordance with API 1621 and with this subsection.

(b) *Prescriptive requirements*. Product inventory control shall be conducted monthly and reconciled to detect a leak rate of at least 0.5 percent of throughput on a monthly basis, in the following manner:

Note: A leak rate of 0.5 percent is equal to 5 gallons out of every 1000 gallons of throughput.

1. Inventory volume measurements for inputs, withdrawals, and the amount still remaining in the tank shall be recorded each operating day.

2. The equipment used shall be capable of measuring the level of product over the full range of the tank's height, to the nearest one-eighth of an inch.

3. a. The inputs shall be reconciled with delivery receipts by measurement of the tank inventory volume before and after delivery.

b. Where blend pumps are used, reconciliation may address all tanks as a group rather than as individual tanks.

4. The measurement of any water level in the bottom of the tank shall be electronically or manually gauged to the nearest one-eighth of an inch at least once a month and recorded.

(c) *Product losses*. Tank systems that exceed the losses allowed under par. (b) for 2 consecutive months shall follow the requirements in ss. Comm 10.575 to 10.585 for assessing and responding to a release.

(d) *Precision tightness test.* A precision tightness test shall be performed within 10 business days of notification from the authorized agent or the department for any of the following reasons:

1. Failure to provide monthly inventory control data for the past 12 months.

2. Incomplete or inconsistent data entry reflected during any 2 months of data entry out of the most recent 3 months of inventory control recordkeeping.

(3) MANUAL TANK GAUGING. (a) *Where allowed*. 1. Manual tank gauging may be used as the sole method of leak detection for tanks that have a capacity of 1,000 gallons or less, for the life of the tank.

2. For tanks that have a capacity of more than 1000 gallons, to 2,000 gallons, manual tank gauging may be used if all of the following conditions are met:

a. The tank system has a precision tightness test performed in accordance with sub. (4) at least once every 5 years.

b. The tank is less than 10 years old.

c. The piping either receives an annual precision tightness test or has electronic line leak detection testing, and this tightness test or leak detection testing is performed in accordance with the capabilities specified in s. Comm 10.130 (3) (b).

3. Tanks which have a capacity of more than 1000 gallons, to 2,000 gallons and which are more than 10 years old shall be provided with monthly monitoring in accordance with sub. (5), (6) or (7).

4. Tanks that have a capacity of more than 2,000 gallons may not use manual tank gauging as the method of required leak detection.

(b) *Manual tank gauging procedures*. Manual tank gauging shall meet all of the following requirements:

1. Liquid level measurements shall be taken with a gauge stick that is marked to measure the liquid to the nearest one-eighth of an inch over the full range of the tank's height.

2. Tank liquid level measurements shall be taken at the beginning and ending of the test duration periods given in Table 10.515, during which no liquid may be added to or removed from the tank, and shall be based on the average of 2 stick readings taken at both the beginning and ending of the period.

3. A leak is suspected and subject to the requirements of ss. Comm 10.575 to 10.585 if the variation between beginning and ending measurements exceeds the weekly or monthly standards in Table 10.515.

Table 10.515
Test Duration and Standards

Nominal Tank Capacity	Minimum Test Duration	Weekly Standard (1 test)	Monthly Standard (average of 4 tests)
550 gallons or less	36 hours	10 gallons	5 gallons
551-1000 gallons, tank diameter of 48 inches	58 hours	12 gallons	6 gallons
551-1000 gallons, tank diameter of 64 inches	44 hours	9 gallons	4 gallons
551-1,000 gallons and using precision tightness testing every 5 years	36 hours	13 gallons	7 gallons
1001-2000 gallons[1]	36 hours	26 gallons	13 gallons

[1] Requires precision tightness testing every 5 years. This method is only allowed until the tank is 10 years old.

(4) PRECISION TIGHTNESS TESTING. (a) Precision tightness testing shall be conducted in one of the following ways:

1. By a certified tank system tightness tester, using methods approved under s. Comm 10.130 to perform precision tightness testing for tanks or piping.

2. With permanently installed leak detection equipment as approved under s. Comm 10.130 to perform precision tightness testing for tanks or piping.

(b) Where a certified tank system tightness tester is used, the tester shall include the date and the beginning and end times in the test results report.

(5) AUTOMATIC TANK GAUGING. Automatic tank gauging shall meet all of the following requirements:

(a) 1. No more than 30 days may elapse between monthly monitoring tests using an automatic tank gauge.

2. Monthly monitoring tests shall have the capabilities specified in s. Comm 10.130 (3) (b).

3. An automatic tank gauge shall be placed in the center of the tank and no closer than 24 inches from the fill pipe and the submersible pump, unless approved otherwise by the department.

(b) Inventory verification shall also be conducted in accordance with the requirements of s. Comm 10.503, to verify the functioning of the automatic tank gauge, unless any of the following conditions are met, except as required in par. (c):

1. The automatic tank gauge also tests the piping to the 0.2 gallon per hour leak rate, with the 0.95 and 0.05 probabilities.

2. The piping receives an annual precision tightness test.

(c) Inventory verification shall be conducted in accordance with the requirements of s. Comm 10.503, to verify the functioning of the automatic tank gauge, if any of the following conditions exist:

1. The automatic tank gauge is not capable of printing a monthly report.

2. The automatic tank gauge is not capable of providing continuous monitoring.

(d) Automatic tank gauges shall be provided with a printer that provides at least all of the following information:

1. The starting date and time and ending date and time of the test.

2. The volume of liquid in the tank during the test.

3. The measured leak rate in gallons per hour and whether this leak rate indicates a pass or a fail.

4. The specific identification of the tank and any associated piping that is being tested.

(6) STATISTICAL INVENTORY RECONCILIATION. (a) Operators using statistical inventory reconciliation (SIR) as the primary method of leak detection shall have in effect a process to submit their data to the vendor within 4 business days of the end of the monthly reporting period.

(b) The SIR vendor shall analyze the data and supply a summary report to the operator on a monthly basis.

(c) The SIR vendor shall return the summary report to the submitter within 10 business days after the postmark on the submittal.

(d) Operators using statistical inventory reconciliation shall review the vendor summary report within 24 hours of receipt. If the summary report indicates a failure, the operator shall take immediate action in accordance with the requirements in ss. Comm 10.575 to 10.585 for assessing and responding to a release.

(e) Operators who receive summary reports that indicate either a failure or inconclusive results, or 1 of each, for 2 out of any 3 consecutive months shall have a precision tightness test performed on the tank system within 7 calendar days of receipt of the report.

(f) Statistical inventory reconciliation may not be used as a method of precision tightness testing.

(g) Before changing from another method of leak detection to statistical inventory reconciliation, the operator shall provide the department with proof of a precision tightness test completed within the previous 12 months showing the tank system to be tight.

(7) INTERSTITIAL MONITORING. Interstitial monitoring between an underground tank system and a secondary barrier immediately around it may be used only if the system is installed and maintained to detect a leak from any portion of the tank that could contain product, and the system meets one of the following requirements:

(a) *System testing*. Post-installation testing shall be performed on the interstitial monitoring system to verify that the system operates in accordance with the manufacturer's specifications.

(b) *Double-walled systems*. For double-walled systems, the sampling or testing method shall be capable of detecting a leak through the inner wall in any portion of the tank that routinely contains product.

(c) *Systems with internally fitted liners*. 1. For tank systems with an internally fitted liner, a monitoring system shall be installed that is capable of detecting a leak between the inner wall of the tank and the liner.

2. The liner shall be chemically compatible with the substance stored.

(d) *Systems with a barrier in the excavation zone*. Systems with a secondary barrier within the excavation zone shall meet all of the following requirements:

1. The testing method shall be capable of detecting a leak between the system and the secondary barrier.

2. The secondary barrier around the system shall consist of manufactured material which is impermeable to at least 10^{-6} cm/sec for the regulated substance stored, and which will direct a leak to the monitoring point, to be detected.

3. The liner shall be chemically compatible with the substance stored.

4. For cathodically protected tanks, the secondary barrier shall be installed so that it does not interfere with the proper operation of the cathodic protection system.

5. The test method shall be designed, installed and maintained so groundwater, soil moisture, and rainfall do not render the method inoperative, so that a leak could go undetected.

6. The site shall be investigated to ensure that the secondary barrier is always above groundwater and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions.

7. Monitoring wells shall be clearly marked and secured to avoid unauthorized access and tampering.

(8) METHODS OF LEAK DETECTION FOR PIPING. (a) *General*. Leak detection for piping shall follow the requirements of s. Comm 10.510 (4) and this section.

(b) *Automatic line leak detectors*. Underground piping systems serving a storage tank with a submersible pump or pressurized booster pump shall be provided with an automatic line leak detector that alerts the operator to the presence of a leak by restricting or shutting off flow from the pump, when it detects leaks of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour.

(c) *Line tightness testing*. 1. In addition to the automatic line leak detection required by par. (b), a periodic precision tightness test of piping shall be conducted in accordance with sub. (4), except as provided in subds. 2 and 3. The test shall be performed by a certified tank system tightness tester.

2. Where piping leak detection is installed that has the capability to perform monthly monitoring, a separate precision tightness test is not required.

3. Any of the methods in subs. (6) and (7) may be used in lieu of complying with subd. 1. if they are designed and approved under s. Comm 10.130 to detect a leak from any portion of the underground piping that routinely contains product.

(d) *Periodic line leak detection equipment testing*. 1. A start-up functionality test of the operation of the leak detector shall be conducted in accordance with the manufacturer's procedures for testing to the leak thresholds in par. (b) by inducing a physical line leak.

2. A functionality test of the operation of a mechanical line leak detector shall be conducted annually in accordance with the manufacturer's procedures for testing to the leak thresholds in par. (b) by inducing a physical line leak.

3. A functionality test of the operation of an electronic line leak detector shall be conducted at least annually in accordance with the manufacturer's procedures for periodic testing to the leak thresholds in par. (b) by inducing a physical line leak, except as provided in subd. 4.

4. A leak shall be introduced to the line system to prove the functionality of the electronic line leak detector unless the manufacturer has an alternate approved or equivalent method for testing whether the detector is functioning as intended by the manufacturer. This testing shall be conducted annually by an individual who has no financial interest in the facility and who is certified by the manufacturer to perform the testing, and it shall include all of the following elements:

a. Review of the test diagnostics for a 3 and 0.2 gallon per hour leak test and the history reports for the leak detector showing monthly leak tests.

b. Verification that the programming parameters are correctly set.

c. Verification that the leak detector is producing normal pump-on pressures, by activating a 3 gallon per hour test from the tank monitor console.

d. Verification that electrical wiring and connections have not deteriorated.

e. Verification that associated sensors are functioning as intended.

(9) OTHER METHODS. The department may approve other methods of leak detection in accordance with s. Comm 10.130.

Comm 10.517 Airport hydrant leak detection requirements. (1) GENERAL. All new and existing airport fuel hydrant systems shall comply with this section.

(2) LEAK DETECTION PLANS. All fuel hydrant systems shall have a leak detection plan that is specifically approved by the department in accordance with s. Comm 10.130.

(3) PLAN DEADLINES. (a) For new fuel hydrant systems, leak detection plans shall be submitted to the department before the system becomes operational.

(b) For existing fuel hydrant systems, leak detection plans shall be submitted to the department within 10 years after [the effective date of this chapter . . . LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(4) PLAN REQUIREMENTS. Fuel hydrant leak detection plans shall include all of the following:

(a) A description of the fuel hydrant system.

(b) A description of the leak detection method used.

Note: A designer of an airport hydrant leak detection system who does not have a financial interest in the airport may be considered to be the independent third party that is required in Comm 10.130 (3) (b) 1. for leak detection methods.

(c) A schedule for testing the system.

(d) Any limitations of the leak detection method.

(e) An action plan in the event a leak is identified.

(5) SYSTEM REQUIREMENTS. (a) All new fuel hydrant systems shall be designed and equipped with isolation valves appropriate for leak testing.

(b) Any repair or upgrade to an existing fuel hydrant system shall include the installation of isolation valves in the section that is repaired or upgraded.

(c) Existing fuel hydrant systems shall have isolation valves for leak testing installed within 10 years after [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

Comm 10.520 Operation and maintenance of corrosion protection. **(1)** GENERAL. (a) *Where required*. Vent lines, vapor lines and any portion of a single or double-wall tank system, whether new or existing, that routinely contains product and is in contact with the ground or with water shall be protected from corrosion by one of the following methods:

1. The tank and piping are constructed of an inherently corrosion-resistant material.

2. a. The tank and piping are installed at a site that is determined by a certified corrosion expert to be non-corrosive during the operational life of the system.

b. A certified corrosion expert retained for the purpose of determining a non-corrosive site shall make at least 1 personal visit to each tank site during the design stage.

Note: See section Comm 10.200, Table 10.200–5 for information on contacting NACE.

3. The tank is a listed composite or jacketed tank designated as complying with UL 1746, and the piping is protected by one of the methods in this subsection.

Note: In addition to composite and jacketed tanks, the UL 1746 standard also includes requirements for coated tanks and tanks with pre-engineered cathodic protection systems. These last 2 types of cathodic protection are not included in the blanket approval under this section.

4. The tank and piping are protected with a sacrificial anode system in accordance with a standard developed by a nationally recognized association or independent testing laboratory that is acceptable to the department.

5. a. The tank and piping are protected with a corrosion protection system designed by a certified corrosion expert and meet the requirements of either sub. (2) or (3).

b. A corrosion expert retained for the purpose of designing an impressed current corrosion protections system shall make at least 1 personal visit to each tank site during the design stage.

(b) *Design and construction.* 1. To allow for periodic testing, factory- or field-installed corrosion protection systems shall include appropriate connections, insulated lead wires and accessible test stations.

2. All lead wires connected to a tank, anode, reference electrode, or other component associated with the corrosion protection system shall terminate at a test station.

3. The termination of each lead wire at a test station shall be clearly labeled or coded to identify the specific component to which it is connected.

4. Impressed current systems shall be designed to prevent stray current conditions that may negatively impact other underground structures, utility lines, or cable anchors, or any impressed current systems protecting those items.

5. Local utilities shall be notified by the contractor when impressed current systems are installed, repaired or adjusted, including where an increase in rectifier amperage or voltage output occurs.

(c) *Operation and maintenance*. 1. Operation and maintenance of corrosion protection systems shall be in accordance with national standards acceptable to the department.

2. All new and existing corrosion protection systems shall be operated and maintained to continuously provide corrosion protection for the life of the tank system.

3. For impressed current systems, operation and maintenance practices and procedures shall be evaluated, and conducted in a manner that minimizes DC interference to or from any underground structure, utility line or cable anchors in the area.

(d) *Testing periods*. 1. a. All new and existing corrosion protection for UST systems shall be tested within 6 months of installation or repair and at least annually, except as provided in subd. 3.

b. Structure-to-soil potential readings shall be conducted with a minimum of three readings per tank along the center line, located at the ends and in the middle, and with one reading remote from the structure.

c. For each product line, structure-to-soil potentials shall be taken above the piping, at the ends and middle, away from the anode locations. Piping runs over 30 feet shall have additional readings taken every 10 feet.

d. For impressed current systems, the annual test shall include instant-off potentials.

2. In addition to the requirements in subd. 1., impressed current corrosion protection systems shall be inspected and evaluated by the site operator at least every 60 days to ensure the equipment is providing adequate current in accordance with its design.

3. Tanks designated as sti-P3®, equipped with a pre-installed sacrificial anode system and test station, shall be tested in accordance with all of the following:

a. Testing shall occur within 6 months of installation and at least every 3 years thereafter until the tank is 10 years old.

b. Testing shall occur annually in accordance with subd. 1. after the tank is 10 years old.

4. The results of the inspections, evaluations and testing under this paragraph shall be summarized on the department's form ERS-10785, and retained at the site in accordance with s. Comm 10.500 (9).

Note: Form ERS-10785 – Underground Tank System Corrosion Protection Summary Documentation is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: Section Comm 10.500 (9) specifies retention requirements for testing and repair records of corrosion protection systems.

(e) *Certifications for corrosion protection*. 1. A certified cathodic protection tester shall be on the site to supervise and monitor the initial post-installation start-up of impressed current corrosion protection systems.

Note: NACE requires a person with Senior Corrosion Technologist certification or higher for corrosion protection system commissioning.

2. A certified cathodic protection tester shall perform or supervise the performance of reinstallation or replacement of anodes.

Note: NACE requires a person with Level 1 Cathodic Protection Tester certification or higher for reinstallation or replacement of anodes.

3. a. All new and existing corrosion protection for UST systems shall be tested by a certified cathodic protection tester, except as provided in subd. 3. b.

Note: NACE requires a person with corrosion technologist certification or higher or a person with corrosion technician certification who is directly supervised by a certified corrosion technologist or higher to perform work as a state-certified cathodic protection tester.

b. Tanks designated as sti-P3® shall be tested by a person holding a certification from the Steel Tank Institute or one of the certifications in subd. 3. a.

Note: Additional information on corrosion protection certifications is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

(2) SACRIFICIAL ANODE SYSTEMS. (a) *General*. All new and existing sacrificial anode systems shall maintain the standard protection threshold reading of at least negative 850 millivolts or shall comply with the requirements of par. (b).

(b) *Failing sacrificial anode systems*. 1. Unless arrangements are made with the authorized agent or the department to conduct follow-up testing, the cause of the failure shall be investigated and repaired within 90 days of the failed reading; or the entire tank system shall be

emptied in accordance with s. Comm 10.545 (1) (a) 2. b. within 90 days of the failed reading, and shall remain empty until the repair is completed.

2. If more than 2 years has elapsed since the previous corrosion protection test, or if the corrosion protection system has been inoperative for 2 years or more, an internal inspection shall be performed by a third party in accordance with one of the following standards:

a. For lined tanks, the internal inspection shall be in accordance with API 1631 or KWA.

b. For unlined tanks, the internal inspection shall be in accordance with ASTM G 158.

3. If the tank fails the internal inspection, one of the following shall occur:

a. The tank system shall be permanently closed.

b. The tank system shall be lined or any present lining shall be repaired in accordance with API 1631, and an impressed current corrosion protection system shall be installed.

(3) IMPRESSED CURRENT SYSTEMS. (a) *General*. 1. Equipment for impressed current systems shall be served by a dedicated and clearly marked electrical circuit that remains energized at all times.

2. All new and existing impressed current systems shall maintain either of the following standard protection levels:

a. An instant-off reading of at least negative 850 millivolts.

b. A 100 millivolt or greater polarization shift from the instant-off reading.

3. When a new impressed current system is installed or an existing system is replaced in whole or in part, an ammeter shall be installed, along with an hour meter that totals the number of hours during which electric current flows through the system.

(b) *Failing impressed current systems*. If impressed current corrosion protection readings taken in accordance with sub. (1) (d) 2. indicate the system is not maintaining adequate continuous protection, the system shall be analyzed by a certified corrosion expert for site corrosion potential and qualification of system functionality.

(c) *Inoperative impressed current systems*. 1. Impressed current systems that have been inoperative for 120 days or less shall comply with all of the following requirements:

a. Power shall be restored and the system shall be tested by a certified cathodic protection tester for system functionality.

b. If the impressed current system is damaged or inoperable, a certified corrosion expert shall repair, survey and re-commission the system.

2. Impressed current systems that have been inoperative for 121 to 180 days shall comply with all of the following requirements:

a. A precision tightness test shall be performed on the tank system in accordance with s. Comm 10.515 (4) within 15 days of discovery.

b. Power shall be restored and the system shall be tested for system functionality by a certified cathodic protection tester.

c. If the impressed current system is damaged or inoperable, a certified corrosion expert shall repair, survey and re-commission the system.

3. Impressed current systems that have been inoperative for 181 to 365 days shall comply with all of the following requirements:

a. A precision tightness test shall be performed on the tank system in accordance with s. Comm 10.515 (4) within 15 days of discovery.

b. A certified corrosion expert shall assess, survey and re-commission the impressed current system and perform any necessary repairs.

4. Impressed current systems that have been inoperative for more than 365 days shall comply with all of the following requirements:

a. An internal inspection of the tank shall be performed in accordance with sub. (2) (b) 4.

b. If the tank fails the internal inspection, the tank owner shall either have the tank repaired and lined, or have the lining repaired in accordance with s. Comm 10.530, or have the tank permanently closed and removed in accordance with s. Comm 10.560.

c. If the tank is not closed under subd. 4. b., a certified corrosion expert shall assess, survey and re-commission the impressed current system and perform any necessary repairs.

d. If the tank is not closed under subd. 4. b., a precision tightness test shall be performed on the tank system in accordance with s. Comm 10.515 (4). The tightness test shall test 100 percent of the tank's volume.

Comm 10.530 Tank lining of underground storage tanks. (1) GENERAL. (a) The installation of interior tank lining for underground storage tanks shall comply with API 1631 and this section.

(b) An underground storage tank that does not meet the structural requirements specified in API 1631 may not be upgraded or repaired by lining and shall be permanently closed in accordance with this chapter.

(2) INSPECTION AND REPORTING REQUIREMENTS FOR TANK LINING. (a) *General*. 1. It is the responsibility of the lining contractor to communicate with the authorized agent or the department to establish the time for inspections.

2. The lining contractor shall give the authorized agent or the department at least 5 days written notice before beginning the tank lining or any excavation preliminary to tank lining.

(b) *Plan approval.* The tank owner is responsible for obtaining plan approval from the authorized agent or the department in accordance with s. Comm 10.100 before beginning the tank lining or any excavation preliminary to tank lining.

(c) *Tank integrity assessment before lining*. 1. The tank-lining contractor shall provide the tank owner and the authorized agent or the department with a written report of the assessment of the interior surface and structural condition of the tank, before leaving the site and before installing the lining.

2. The tank integrity assessment shall include all of the following:

a. A description of the internal wall condition including any deflection and any defects, rust plugs, holes or leaks, regardless of size or number.

b. A description of any repair or other conditioning necessary to prepare the tank for interior lining.

c. A description of the degree of compliance with all requirements under API 1631 regarding structural qualification, tank cleaning and other pre-lining activities.

Note: Section 292.11 of the Statutes requires immediate notification of the Department of Natural Resources in the event of a hazardous substance discharge.

3. If holes or rust plugs are observed during the visual internal inspection, the tank-lining contractor shall notify the owner, before lining the tank, that a tank-system site assessment must be performed, and that assessment shall be performed in accordance with ss. Comm 10.575 to 10.585.

(d) *Inspection before lining*. 1. The authorized agent or the department shall be at the site before the actual application of the lining.

2. The application of the interior lining may proceed only when authorized by the authorized agent or the department after verifying all of the following:

a. The tank integrity assessment and any required tank-system site assessment have been completed.

b. An approved set of plans is on the site.

c. The condition of the tank has been communicated to the owner.

(e) *Completion of forms*. 1. a. The certified tank system liner shall provide a completed, signed and notarized API 1631 Form B inspection affidavit to the tank owner within 10 business days of completing the lining procedure.

b. The signature on API 1631 Form B shall be that of the certified tank system liner who conducted the pre-lining tank integrity assessment and the lining procedure.

2. An underground tank installation checklist – form ERS-6294 UST – shall be completed and signed by the certified tank system liner and the certified tank system inspector.

Note: Form ERS-6294 UST – Checklist For Underground Tank Installation is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: See chapter Comm 5 – Licenses, Certifications and Registrations, for requirements that certified tank system liners supervise specific lining-related activities involving underground storage tanks.

(f) *Submittal of forms*. The tank owner shall have all of the following documents submitted to the department within 15 business days of completing the lining procedure:

1. The pre-lining tank integrity assessment under par. (c).

2. The completed and signed API 1631 Form B under par. (e) 1.

3. The tank installation checklist under par. (e) 2.

4. A revised tank registration – form ERS-7437.

Note: Form ERS-7437 – Underground Flammable/Combustible/Hazardous Liquid Storage Tank Registration is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Comm 10.535 Periodic inspection and repair of previously lined tanks. **(1)** (a) The owner of a lined tank shall obtain an internal inspection of the tank lining within 5 years after the date of initial tank lining, or repair to a previously installed tank lining, and at least every 5 years thereafter. The first inspection shall be conducted within the years specified in Table 10.535.

(b) This section applies whether or not cathodic protection has been added to the tank system.

Table 10.535
Year of Initial Required Lining Inspection

Date of Initial Lining or Repair	First Required 5-Year Inspection
1993 – 2004	2009
2005 and after	Within 5 years after initial lining or repair

(2) Any complete or partial tank lining conducted anytime after the original tank lining was installed is considered a repair of the lining.

(3) The owner shall notify the authorized agent or the department in writing at least 5 business days before having the inspection performed.

(4) (a) Tank lining inspections shall use one or more of the following methods:

1. Video camera in accordance with KWA.

2. Ultrasound tester.

3. Other method acceptable to the department.

(b) The use of the equipment to perform the inspection under par. (a) 2. and 3. shall be in accordance with national consensus standards.

(5) The person performing the inspection shall be certified by the manufacturer of the inspection equipment and acceptable to the department.

(6) (a) The person performing the inspection shall ascertain that the tank has been adequately emptied and cleaned to allow for a complete inspection of the tank.

(b) The authorized agent or the department may not accept an inspection that does not include all interior portions of the tank.

(7) The person performing the inspection shall provide a report to the owner and to the authorized agent and the department within 15 days of completing the inspection, that describes all of the following items in addition to those required in API 1631:

(a) The type of repairs that have been made.

(b) The total dimension of the area in square inches that has been repaired by lining.

(c) A schematic drawing of the tank showing the area of repairs.

(8) A previously lined tank that is repaired to more than 10 percent of the lined surface may be returned to service only if all of the following conditions are met:

(a) The tank meets the structural requirements for lining when tested in accordance with API 1631 before the lining repair.

(b) The tank has impressed current corrosion protection installed in accordance with s. Comm 10.520 before being placed back into service.

Comm 10.545 Seldom-used and temporarily-out-of-service tanks (1) OPERATIONAL REQUIREMENTS. When a storage tank system is placed temporarily out of service, the owner or operator shall comply with all of the following:

(a) 1. Operation and maintenance of corrosion protection and leak detection systems shall be continued, except as provided in subd. 2.

2. a. Leak detection shall be maintained in accordance with this chapter unless the tank system is empty.

b. The tank system is empty when all liquid has been removed so that no more than 1 inch of residue, or 0.3 percent by weight of the total capacity of the tank system, remains in the system.

(b) The tank shall be protected against floatation caused by flooding or soil saturation.

(c) 1. The tank, piping, dispensing equipment, lines, pumps, manways, and other ancillary equipment shall be secured to prevent tampering, except as exempted in subd. 2.

2. Facilities that are in operation and secured against general public access are not required to have the additional security required in subd. 1.

(d) All vent lines shall be left open and functioning.

(e) All periodic inspections and maintenance shall be performed as if the tank were still in service.

(f) Financial responsibility requirements of subch. VII shall be maintained.

(2) PLACING A TANK BACK INTO SERVICE. (a) A precision tightness test shall be performed on the tank and piping in accordance with s. Comm 10.515 (4) before placing the tank system back into service.

(b) Tank systems out of service for more than 365 days shall fully comply with this chapter before being placed back into service, except double-wall construction is not newly required for tank systems installed before [the effective date of this chapter...LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(c) Tanks covered in par. (a) shall immediately have the leak detection system verified in accordance with s. Comm 10.510 (2).

(3) NON-COMPLYING TANKS. Tanks that are placed out of service which do not comply with this section shall be permanently closed in accordance with s. Comm 10.560 within 60 calendar days.

Comm 10.550 Change in service to store a non-regulated substance. **(1)** When a tank system that held a regulated substance undergoes a change in service to store a non-regulated substance, the owner or operator shall comply with all of the following requirements:

(a) At least 5 business days before beginning a change in service, the owner or operator shall notify the authorized agent or the department of the intended change.

(b) Before a change in service, the owner or operator shall have the tank emptied and cleaned, by removing all liquid and accumulated sludge in accordance with the procedures specified in API 2015.

(c) A tank-system integrity assessment, and if necessary, a tank-system site assessment shall be performed for the tank system in accordance with ss. Comm 10.575 to 10.585 after notifying the authorized agent or the department but before completing the change in service.

(d) Cleaning of tanks and tank-system site assessments shall be performed by persons certified in accordance with ch. Comm 5.

(e) The owner shall have a revised tank registration – form ERS-7437 – and part A of the department's tank-system service and closure assessment report – form ERS-8951 – completed and submitted to the department within 21 business days of changing a tank system to storage of a non-regulated substance.

Note: Forms ERS-7437 – Underground Flammable/Combustible/Hazardous Liquid Storage Tank Registration, and form ERS-8951 – Tank System Service and Closure Assessment Report are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(2) When a tank system that held a non-regulated substance undergoes a change in service to store a regulated substance, all applicable requirements of this chapter apply upon placing the tank system into service.

Comm 10.560 Tank system closure. **(1)** NOTIFICATION. At least 5 business days before beginning permanent closure of a tank system, the owner or operator shall notify the authorized agent or the department of the intended closure, on form ERS-9198, except a shorter notification period is permitted where unexpected closure is commenced upon finding adverse conditions during a corrective action conducted under s. Comm 10.585.

Note: Form ERS-9198 – Comm 10 Notification Record is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(2) CLOSURE PROCEDURES. (a) To permanently close an underground tank system, the owner or operator shall have the tank and piping emptied and cleaned, by removing all liquids and accumulated sludge, and shall remove the tank and piping from the site unless allowed otherwise under par. (e). Tanks that are removed shall be scrapped unless reused in accordance with s. Comm 10.350 (3) (i) or 10.500 (3) (c).

(b) Tank cleaning processes shall comply with the appropriate national standard referenced in s. Comm 10.200.

(c) Individuals cleaning tanks or removing tanks or portions of tank systems shall be certified in accordance with ch. Comm 5.

(d) When an underground tank is closed, or when a previously closed tank is removed under sub. (4), the owner shall have a revised tank registration – form ERS-7437 – and part A of the department's tank-system service and closure assessment report – form ERS-8951 – completed and submitted to the department within 21 business days of closure or removal.

Note: Form ERS-7437 – Underground Flammable/Combustible/Hazardous Liquid Storage Tank Registration, and form ERS-8951 – Tank System Service and Closure Assessment Report are available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(e) Underground tanks systems may be closed in-place by filling with an inert, solid material, after emptying and cleaning, if the authorized agent or the department determines, upon written request from the owner or operator, that one or more of the following conditions exist:

1. Excavation would impact the structural integrity of an adjacent building or structure.

2. Overhead utilities at a commercial site pose a safety hazard.

3. Excavation would impact adjacent transformers or substations.

4. Unauthorized encroachment would occur onto neighboring property under different ownership.

5. The tank location is inaccessible to necessary equipment.

6. Excavation would result in the destruction of mature trees.

7. Excavation would encroach upon a public way.

8. Excavation would necessitate the disconnection or relocation of underground utilities.

Note: Closing a tank in-place does not exempt the tank from tank-system site assessment requirements.

(3) TANK-SYSTEM SITE ASSESSMENT. A tank-system site assessment shall be performed in accordance with ss. Comm 10.575 to 10.585 after notifying the authorized agent or the department but before installing a new system or backfilling the tank basin and the piping trenches.

Note: The Department and the Department of Natural Resources share jurisdiction over tank closures and tank-system site assessments. The DNR must be notified if a release is discovered.

(4) APPLICABILITY TO PREVIOUSLY CLOSED SYSTEMS. (a) *General*. When directed by the department, the owner or operator of any tank system closed in-place before December 22, 1988, shall have the system removed in accordance with this section and have the tank basin assessed in conformance with s. Comm 10.580.

(b) *Systems previously closed without solid, inert fill*. The owner or operator of any tank system that was closed before September 1, 1971, without removing the tank from the site but by filling the tank with water, shall bring the closed system into compliance with sub. (2) within a time period established by the department on a case-by-case basis, except that the tank-system site assessment in s. Comm 10.580 is not required unless there is a suspected or obvious release. Written documentation shall be provided to prove closure with water before September 1, 1971.

Note: Before September 1, 1971, chapter Ind 8 – Flammable and Combustible Liquids Code allowed UST systems to be filled with water when closed or abandoned in-place.

(c) Empty or improperly closed or abandoned tanks that do not meet the requirements of sub. (2) or the exemption under par. (b) shall be permanently closed in accordance with all of the provisions of this section.

(5) ABANDONED TANKS. Tanks that are abandoned with or without product shall be permanently closed within 60 days of being abandoned or discovered.

Comm 10.570 Conditions indicating a release. The owner or operator of a storage tank system shall follow the procedures in s. Comm 10.575 when any of the following conditions exist or when ordered to do so by the department:

(1) OPERATING CONDITIONS. Unusual operating conditions exist, such as erratic behavior of product dispensing equipment, loss of product from the tank system or an unexplained presence of water in the tank.

Note: Significant damage to equipment would be considered to be an unusual operating condition that could result in needing to perform the assessments specified in section Comm 10.575.

(2) MONITORING RESULTS. Results from a leak detection method indicate that a release may have occurred.

(3) OFFSITE IMPACTS. Offsite impacts appear, such as the presence of contaminated soils or free product, dissolved phase product or vapors in soils, basements, sewer or utility lines or nearby waters of the state.

(4) INVENTORY VERIFICATION. Inventory verification results indicate that a required method of leak detection has failed.

Comm 10.575 Tank-system integrity assessment. (1) GENERAL. The owner or operator shall assess all suspected or obvious releases in accordance with sub. (2) within 7 business days of discovery of any of the conditions described in s. Comm 10.570, unless any of the following conditions occur:

(a) System equipment or the monitoring device is found to be defective and is immediately repaired, re-calibrated or replaced, and additional monitoring does not confirm the initial result.

(b) Inventory control is the method of leak detection, as allowed by s. Comm 10.510 (3) (d), and the data is re-evaluated using an additional 7 days of data, and the re-evaluation does not show a loss.

(2) ASSESSMENT. The owner or operator shall evaluate and confirm all suspected or obvious releases by taking one or all of the following actions at the direction of the department:

(a) *Tank-system integrity assessment*. The owner or operator shall have a precision tightness test conducted in accordance with s. Comm 10.515 (4) to determine whether a leak exists.

(b) *Tank-system site assessment*. The owner or operator shall have the site assessed for the presence of a release in accordance with s. Comm 10.580.

Comm 10.580 Tank-system site assessment. **(1)** GENERAL. When a tank-system site assessment is required by this chapter, or when directed by the department, the owner or operator shall have the site evaluated for the presence of a suspected or obvious release in accordance with sub. (3).

Note: An "obvious release" means there is an indication of a release, and there is both environmental evidence – such as soil discoloration, observable free product, or odors – and a known source – such as a tank or piping with cracks, holes or rust plugs, or leaking joints.

A "suspected release" means either of the following: (a) There is an indication that a tank system has leaked – such as inventory losses; observable free product or evidence of free product in secondary containment at dispensers, submersible pumps or spill buckets; petroleum odors; or leak detection alarm system activation – but there is no observable environmental evidence of a release; or (b) There is observable environmental evidence of a release – such as soil discoloration or free product – but the source is unknown.

(2) EXEMPTION FROM ASSESSMENT. A tank-system site assessment is required for the following tank systems or components only if there is a suspected or obvious release:

(a) Tanks which have a capacity of less than 4,000 gallons and which stored heating oil for consumptive use on the premises where stored.

(b) Tanks located at a private residence or on a farm premises, which have a capacity of less than 1,100 gallons, and which stored fuel for dispensing into motorized vehicles.

(c) The closure of double-wall pipe when modification or upgrading is conducted on a system that will remain in operation, unless the piping is to be closed in-place.

(d) Where the entire tank system, including the connections at the tank and dispensers, has been placed in liquid-tight secondary containment for the entire life of the system.

(3) TANK-SYSTEM SITE ASSESSMENT PROCEDURES. (a) *General.* When a tank-system site assessment is required, the owner or operator shall have a certified tank-system site assessor document field observations and sample for the presence of a release wherever contamination is identified or is most likely to be present at the tank site. If the assessor discovers obvious contamination, he or she shall complete the appropriate assessment sampling – such as for the entire system; or for only the tank, or piping, or sumps, or dispensers – and complete the documentation and reporting in its entirety. All sampling, documentation and reporting under this paragraph shall be in a format prescribed by the department.

Note: The sampling, documentation and reporting format prescribed by the Department is contained in *Assessment and Reporting of Suspected and Obvious Releases From Underground and Aboveground Storage Tank Systems*, which includes Part B of form ERS-8951, where the assessment data is documented. This publication is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: In section Comm 10.585, releases are required to be reported to the Department of Natural Resources. Failure to notify the DNR of a release may have serious consequences – such as forfeitures under section 101.09 (5) of the Statutes of $10 to $5000 for each violation. Each day of continued violation is a separate offense, and under section Comm 10.180, each tank that is in violation is a separate offense.

(b) *Exception.* A person who is not a certified tank-system site assessor may perform assessments if directly supervised by a certified tank-system site assessor who is on the site during the entire assessment.

(c) *Filing.* 1. The documentation required in par. (a) shall be filed with the owner or operator no later than 21 business days after discovery of the conditions that resulted in the assessment.

2. For all tank or piping removals, and for all releases that must be reported to the department of natural resources under s. Comm 10.585 (2), the documentation required in par. (a) shall also be filed with the department of natural resources no later than 21 business days after the tank removal or the discovery of the release.

Note: Documentation under par. (a) for a site with no contamination should be sent to UST Closure Assessments - RR/3, Department of Natural Resources, P.O. Box 7921, Madison WI, 53707. Send documentation that addresses contamination to the corresponding DNR regional spill coordinator office shown under the following DNR Web site: http://dnr.wi.gov/org/aw/rr/spills/. The fax numbers and addresses for those offices are as follows:

Northern Region (NOR), 715-365-8932, 107 Sutliff Avenue, P.O. Box 818, Rhinelander WI, 54501.
Northeast Region (NER), 920-662-5197, 2984 Shawano Ave, PO Box 10448, Green Bay WI, 54313.
Southeast Region (SER), 414-263-8716, 2300 North Martin Luther King Jr. Drive, Milwaukee WI, 53212.
South Central Region (SCR), 608-273-5610, 3911 Fish Hatchery Road, Fitchburg WI, 53711.
West Central Region (WCR), 715-839-6076, 1300 West Clairemont Avenue, Call Box 4001, Eau Claire WI, 54702.

Comm 10.585 Responding to a leak, spill, overfill or release. (1) GENERAL. (a) *Leaks.* Immediately upon discovery of any evidence of a leak from a tank system or dispensing system, the owner or operator or any contractor performing work under this chapter shall take all measures necessary to stop the leak and to prevent migration of any free product into the environment.

(b) *Releases.* Immediately upon confirming any suspected release or discovering any obvious release, the owner or operator shall investigate the extent of contamination, and undertake corrective and mitigation actions in accordance with s. 292.11 (3), Stats.

(2) REPORTING A RELEASE. (a) *Reporting to the Department of Natural Resources*. The owner or operator or a person who causes it shall immediately report any release of a regulated substance to the department of natural resources in accordance with s. 292.11 (2), Stats.

Note: Releases that must be reported to the Department of Natural Resources under section 292.11 (2) of the Statutes include the discovery of contaminated soils or free product; dissolved phase product or vapors, in soils, in basements, in sewer or utility lines, or in surface water or groundwater either at the tank site or in the surrounding area; and spills or overfills.

Note: Releases of substances defined in section 101 (14) of CERCLA that are not flammable or combustible liquids must also be reported to the Department of Natural Resources in accordance with chapter 292 of the Statutes.

Note: For more information about reporting releases to the Department of Natural Resources, refer to the DNR Web site at http://dnr.wi.gov/org/aw/rr/spills/. That site includes a notice to use a 24-hour hotline number of 800-943-0003 for reporting spills.

Note: Failure to notify the DNR of a release may have serious consequences – such as forfeitures under section 101.09 (5) of the Statutes of $10 to $5000 for each violation. Each day of continued violation is a separate offense, and under section Comm 10.180, each tank that is in violation is a separate offense.

Note: Department of Commerce staff and authorized agents of the Department, such as Local Program Operators, periodically inspect storage facilities for petroleum products and other hazardous substances. These inspectors have authority to report any release encountered during these inspections that has not been reported to the DNR by the owner or operator – and these releases may become the subject of formal enforcement actions.

(b) *Reporting to the owner or operator.* Fuel-delivery persons shall immediately inform the owner or operator of any overfilling or spilling which occurs during the delivery procedure and which may result in or be a release.

(c) *Reporting under CERCLA*. The release of a regulated substance to the environment, that equals or exceeds its reportable quantity under CERCLA shall be reported immediately to the U.S. environmental protection agency.

Note: The CERCLA List of Hazardous Substances and Reportable Quantities is contained in 40 CFR 302.4, Table 302.4.

(3) FIRE HAZARD RESPONSE. The owner or operator shall identify, mitigate and monitor fire and explosion hazards, such as the presence of free product or vapors in structures.

(4) PREVENTION OF FURTHER RELEASE. The owner or operator shall take action to prevent further release of the regulated substance to the environment, including all of the following:

(a) Removing and safely storing as much of the regulated substance from the tank system as necessary to prevent further release to the environment.

(b) Taking steps to prevent migration of the substance, including managing any contaminated soils or water in accordance with ch. 292, Stats.

(5) DEMONSTRATION OF ADEQUATE CORRECTIVE ACTION. (a) No later than 21 business days after reporting a release under this section, the owner or operator shall submit documentation to the department of natural resources demonstrating compliance with subs. (1) (b) and (4), and demonstrating that the corrective and mitigation actions which were taken have accomplished or will accomplish all of the following:

1. Restoration of the environment to the extent practical.

2. Minimization of the harmful effects from the release to the air, lands or waters of Wisconsin.

(b) Any repairs or changes to a tank system that are made because of a release reported under this section shall be reported to the department within 21 business days of completing the repair or change.

Subchapter VI – Dispensing of Motor Fuels

Comm 10.600 Applicability. This subchapter applies to all new and existing motor fuel dispensing facilities, except where specified otherwise.

Comm 10.605 General fuel dispensing requirements. (1) STANDARDS AND INSPECTIONS. (a) *General.* Periodic and annual inspections and maintenance shall be conducted in accordance with PEI RP500 and RP900.

(b) *Electrical continuity*. At least once each calendar year, dispensers for motor fuel that is a Class I liquid shall be tested for electrical continuity in accordance with PEI RP400.

(c) *Records.* Records shall be maintained for underground tanks in accordance with s. Comm 10.500 (9), and for aboveground tanks in accordance with s. Comm 10.400 (11).

(d) *Nozzles*. 1. Nozzles used for dispensing motor fuel shall be listed and shall be automatic closing.

Note: Latch-open nozzles may be prohibited in some of the circumstances addressed by this chapter.

2. New and replacement nozzle spouts shall comply with one of the following:

a. Nozzle spouts used for spark-ignition fuels shall have an outside diameter of 0.807 to 0.840 inches.

b. Nozzle spouts used for compression-ignition fuels for passenger cars and light-duty trucks shall have an outside diameter of 0.929 to 0.9375 inches.

c. Nozzle spouts used for compression-ignition fuels for heavy-duty trucks and off-road heavy equipment shall have an outside diameter of either 1.122 to 1.250 inches or 0.929 to 0.9375 inches.

(e) *Hose*. 1. Hose used for dispensing motor fuels shall be listed and labeled.

Note: Per section Comm 10.650, hose used for fueling aircraft must also meet the requirements of API 1529.

2. Where fueling hose is allowed to be longer than 18 feet, the hose shall be reeled or racked unless approved otherwise by the authorized agent or the department.

3. All fueling hose shall be protected from damage.

4. Hose and fittings used for dispensing motor fuels shall be maintained in a manner where they are not subject to being driven over by vehicle traffic.

5. Hose and fittings used for dispensing of flammable and combustible liquids shall be periodically inspected for wear and stress. Hose or fittings that are suspect or have the appearance of wear shall be immediately replaced.

(2) PORTABLE CONTAINERS. (a) Portable containers for the sale or purchase of a flammable or combustible liquid shall be clearly marked with the name of the product.

(b) Liquids having a flash point of less than 100°F may not be dispensed into a portable container or portable tank unless all of the following conditions are met:

1. The container or tank is substantially bright red in color.

2. The container or tank has a listing mark from an independent testing agency.

(c) No kerosene, fuel oil or similar liquids having a flash point of 100°F or more may be filled into any portable container or portable tank that is colored red.

(3) DISPENSING OPERATIONS. (a) All dispensing areas shall be provided with lighting where fueling operations are performed during hours of darkness.

(b) Dispenser displays shall be located to be fully visible to the person fueling the vehicle.

(c) All surface area within a 30 foot radius of the dispenser shall be maintained free of high grass, weeds and debris.

(d) Fuel may not be dispensed using tank pressurization.

(4) DISPENSER LABELING. Dispensers at facilities subject to the requirements of ch. Comm 48 shall be labeled in accordance with the requirements of that chapter.

(5) ATTENDED AND UNATTENDED FUELING. (a) To be considered as being an attended fueling facility, there shall be at least 1 attendant regularly on duty on a daily basis, but not necessarily during all hours of operation, to supervise, observe and control the actual dispensing of fuel.

(b) All point-of-sale dispensing systems, whether attended or not, shall meet the requirements in NFPA 30A section 9.5 for unattended self-service motor fuel dispensing facilities.

(c) 1. All new fueling facilities that are not attended as specified in par. (a) shall have pipeline catastrophic leak detection, and sump monitors if so equipped, that will automatically shut down either the submersible pump or the dispenser operation upon detection of a system leak.

2. All existing fueling facilities that are not attended as specified in par. (a) shall have pipeline catastrophic leak detection, and sump monitors if so equipped, that will do either of the following upon detection of a system leak:

a. Automatically shut down either the submersible pump or the dispenser operation.

b. Send an alarm to a facility that is staffed 24 hours a day, 7 days a week.

Note: As an example, paragraph (c) would not apply to a convenience store and retail station that closes each day at 10:00 p.m. and then continues to operate its point-of-sale, card-reader dispensers until the store and station reopen the next day.

(6) OVERFILL PROTECTION. Before delivery of product into a storage tank, the driver, operator or attendant of the tank vehicle shall measure the available capacity of the tank. The available capacity shall be more than the volume of the product to be delivered.

(7) PRODUCT TRANSFERS. Fuel from public access fueling dispensers may only be transferred into integral vehicle and equipment fuel supply tanks, contractor pickup mounted cross-over tanks, and approved portable containers that have a capacity of 10 gallons or less.

Comm 10.610 Fuel dispensing systems using aboveground mobile tanks. (1) TANK WAGONS. (a) *General*. 1. Tank wagons shall be constructed and used in accordance with this subsection.

2. Existing tank wagons shall be brought into compliance with the requirements in par. (e) within 5 years after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

Note: In accordance with section Comm 10.700, tank wagon owners and operators are required to comply with the financial responsibility requirements in subchapter VII**.**

(b) *Duration of use*. A tank wagon may stay on the customer's premises for a maximum of 24 months.

(c) *Location and type of use*. The use of tank wagons is limited to the fueling of vehicles and equipment in the following operations:

1. Landfill and mine, pit and quarry operations.

2. Highway or runway construction, including associated material processing sites.

3. Construction projects for buildings, structures and utilities.

4. Logging and woodcutting operations.

5. De-watering operations.

6. Farming operations included under the definition of farming.

7. Trail grooming.

8. Fueling of heating or cooling units on semi-trailers.

(d) *Limitations on location and type of use*. 1. Tank wagons may not be used for fueling vehicles unless the vehicles are dedicated to the operation of the specific project or facility.

2. Tank wagons may not be used for general fueling of fleet vehicles or any retail sales.

(e) *Specifications for tank wagons*. Tank wagons shall be constructed in accordance with all of the following:

1. The maximum total capacity of a tank wagon shall be 1,100 gallons.

2. The maximum capacity of a tank or individual compartment used to store Class I liquids shall be 330 gallons.

3. The tank shall be permanently affixed to the chassis.

4. Tanks shall be coated on the exterior to inhibit rust.

5. Tank wall thickness and joint configuration shall be in accordance with UL 142.

6. a. The fill opening for the tank shall be liquid tight, lockable and separate from any other opening.

b. Tanks used to dispense gasoline shall be equipped with a drop tube at the fill opening, that terminates within 6 inches of the tank bottom.

7. Tanks shall be provided with an updraft-type vent affixed to an 18-inch high standpipe, and the vent shall comply with one of the following:

a. For tanks up to 660 gallons – a 2-inch vent.

b. For tanks of 661 to 900 gallons – a 2.5-inch vent.

c. For tanks of 901 to 1,100 gallons – a 3-inch vent.

8. Tanks shall be provided with a liquid-level gauge.

9. a. Tanks that store Class I liquids shall be provided with a permanently mounted, listed pumping device.

b. A pump using a gasoline combustion engine may only be used on tanks containing Class II or III liquids.

10. Tank wagons shall be provided with listed fueling hose that is stored and secured on a hanger or hose reel.

11. The pump shall be equipped with a manufactured anti-siphon device.

12. Where Class I or II liquids are dispensed, means shall be provided to electrically bond the tank to the equipment being fueled.

13. Frames, chassis, tires, and rims shall be constructed and maintained so they are adequate to support the weight of the system and keep it stable.

14. a. The product stored in the tank shall be clearly marked on the tank.

b. Tanks with multiple compartments shall also be marked at the fill point of the tank.

15. Nozzles may not have a latch-open device.

(f) *Operations involving tank wagons*. 1. Tank wagons shall be empty of liquid product while being towed off the premises where used or on any public-access road, lane or highway.

2. Tank wagons shall be protected from public access and public vehicle collision while on the premises where used.

3. Tanks placed within 25 feet of a public roadway shall be protected by collision protection.

4. Tank wagons that contained Class I liquids immediately before transport shall be purged of flammable vapors before transport off of the premises where used.

5. The fueling operator shall remain in attendance at the dispensing nozzle while fuel is flowing.

6. Fuel may not be dispensed using gravity discharge.

7. No more than 1 tank wagon may be towed at one time by a transport vehicle.

8. Support shall be provided for single-axle units to prevent tipping.

9. a. Tank placements shall comply with the setback requirements in s. Comm 10.630 (2) (a), except as provided in subd. 9. b.

b. Where setbacks required in subd. 9. a. cannot be met, the setbacks from buildings and public ways shall be the maximum allowed by the current conditions at the site, as approved by the authorized agent or the department.

(2) MOVABLE TANKS. (a) *General.* This section applies to temporary uses of aboveground storage tanks constructed in accordance with NFPA 30 section 21.4.2. or a similar standard recognized by the department.

(b) *Duration of use.* A movable tank may be used on the customer's property for a maximum of 24 months.

(c) *Location and type of use*. Movable tanks may be used only for fueling of vehicles and equipment in the following situations:

1. In accordance with sub. (1) (c) 1. to 7.

2. At recycling centers and refuse centers.

3. At power generating stations.

4. For short-term use during fuel storage equipment changeovers.

(d) *Limitations on location and type of use*. Movable tanks may not be used for any retail sales, or for fueling vehicles unless the vehicles are dedicated to the operation of the specific project or facility.

(e) *Specifications for movable tanks*. 1. Movable tanks shall be constructed in accordance with the design standards of NFPA 30 section 21.4.2 or a similar standard recognized by the department.

2. Nozzles may not have a latch-open device.

3. The maximum capacity of a movable tank shall be 1,100 gallons.

4. Movable tanks are not required to be listed.

(f) *Operations involving movable tanks.* 1. a. Tank placements shall comply with the setback requirements in s. Comm 10.630 (2) (a), except as provided in subd. 1. b.

b. Where setbacks required in subd. 1. a. cannot be met, the setbacks from buildings and public ways shall be the maximum allowed by the current conditions at the site, as approved by the authorized agent or the department.

Note: For farming operations, there are additional setback requirements in section Comm 10.630.

2. Movable tanks shall be protected from public access and public vehicle collision.

3. Tanks placed within 25 feet of a public roadway shall be protected by collision protection.

4. The fueling operator shall remain in attendance at the dispensing nozzle while fuel is flowing.

(3) TANK VEHICLES. (a) *General.* This section applies to temporary uses of tank vehicles that are constructed in accordance with NFPA 385.

Note: See section Comm 10.330 (4) for requirements for converting a tank vehicle to a stationary tank.

Note: In accordance with section Comm 10.700, owners or operators of tank vehicles who conduct fueling in accordance with this section are required to comply with the financial responsibility requirements in subchapter VII.

(b) *Duration of use*. Tank vehicles may remain on the customer's property for a maximum of 5 days unless any of the following conditions apply:

1. The tank vehicle is used to fill aircraft in accordance with s. Comm 10.650, or aircraft support equipment.

2. Prior to the tank vehicle arriving at the customer's property, the local fire department has approved conditional use for more than 5 days.

3. The tank vehicle is converted to a stationary tank in accordance with s. Comm 10.330.

Note: Federal Spill Prevention Control and Countermeasure requirements in 40 CFR 112 include provisions for secondary containment for tank vehicles while parked.

(c) *Location and type of use*. Tank vehicles may be used only for transferring fuel into a fixed-tank system, or for fueling of vehicles and equipment in the following situations:

1. With the expressed permission of the local fire department.

2. Fueling of vehicles and equipment on the customer's premises and in connection with the business, for the uses listed in subs. (1) (c) 1. to 7. and (2) (c) 2.

3. Fueling of fleet vehicles or locomotives in accordance with this subsection.

Note: This type of fueling is also known by the term "wet-hose fueling."

4. Fueling of watercraft under emergency conditions in accordance with s. Comm 10.640 (5) or as allowed under NFPA 30A section 9.6.

Note: NFPA 30A section 11.9 allows fueling of Class II fuels directly from a tank vehicle, for commercial or governmental watercraft used in connection with the business.

5. Fueling of aircraft in accordance with s. Comm 10.650.

(d) *Specifications for tank vehicles*. 1. Tank vehicles shall be constructed in accordance with NFPA 385.

2. Readily accessible and functional portable fire extinguishers shall be carried on the vehicle as required by NFPA 385.

Note: NFPA 385 requires 1 portable fire extinguisher with a minimum rating of 4A, 40-B:C – or 2 or more extinguishers, each having a minimum rating of 2A, 20-B:C. NFPA 385 and this chapter require portable fire extinguishers to be maintained in accordance with NFPA 10.

3. Tank vehicles shall carry all of the following supplies:

a. A storm drain plug kit.

b. A containment berm with a minimum effective length of 12 feet.

c. Non-water absorbent material capable of absorbing a minimum of 25 gallons of fuel.

(e) *Transfer into tank vehicles.* Fuel may be transferred into a tank vehicle only from a fixed storage tank system, except where this chapter permits otherwise for emergencies.

(f) *Operations involving tank vehicles*. All operations involving tank vehicles shall be in accordance with all of the following requirements:

1. The fueling operation shall take place outdoors, and the point of transfer shall be at least 15 feet from a building.

2. Fuel may not be dispensed using gravity discharge.

3. Expansion space shall be left in each tank to prevent overflow in the event of a rise in temperature.

4. Nighttime deliveries shall be made in well-lighted areas, or a means of lighting shall be provided for the dispensing and delivery area.

5. The tank vehicle shall have its flasher lights in operation during fueling.

6. Fueling operations are prohibited within 25 feet of an ignition source.

7. Dispensing operations may not take place where either the operation or a fuel spill would impede either egress from a building or facility access by emergency response personnel.

8. Fueling operations shall take place in locations that utilize natural features or manmade barriers such that a spill will not flow into a building or into the waters of the state.

9. The company providing the mobile fueling service shall maintain an agreement with a local emergency response provider unless the company is equipped to provide emergency response.

10. The 2 vehicles shall be electrically bonded when dispensing Class I or II liquids.

11. a. Where the fueling operation is accessible to the public, precautions shall be taken, such as the placement of signs, to notify the public that fueling is in process.

b. The signs shall have black letters at least 2 inches high with a minimum stroke width of ½ inch on a yellow background.

c. The signs shall read as follows:

"NO SMOKING
FUELING IN PROGRESS
AUTHORIZED PERSONNEL ONLY"

12. All engines, motors, and electrical equipment not essential to the fueling operation shall be shut down.

13. The fuel delivery nozzle shall be put in contact with the fill pipe before the flow of fuel begins, and this contact shall be continuously maintained until the flow stops.

14. The operator shall remain in attendance at the dispensing nozzle while fuel is flowing.

(4) OTHER MOBILE TANKS. Written approval shall be obtained from the department prior to dispensing fuel from any mobile tank that is not addressed in subs. (1) to (3).

Comm 10.615 Fuel dispensing systems using aboveground fixed tanks. (1) GENERAL. Fixed-tank fuel dispensing facilities shall comply with NFPA 30, NFPA 30A, ss. Comm 10.445 to 10.470 and this section.

(2) DURATION OF USE. There is no limit on the duration of use for a fixed-tank fuel dispensing facility, provided the system is installed, operated and maintained in compliance with this chapter.

(3) LOCATION AND TYPE OF USE. (a) A fixed-tank fuel dispensing facility may be used for any type of fueling, subject to the requirements of this chapter.

(b) A fixed-tank fuel dispensing facility shall be used for all of the following types of fueling:

1. Public access fueling of trucks and automobiles.

2. General fueling of fleet vehicles, except where a tank vehicle is allowed under s. Comm 10.610 (3).

3. Fueling from aboveground tanks at a farm premises or a construction project, which have a capacity of 1,100 gallons or more or which do not meet the required setbacks.

4. Fueling from tanks that are used on the same premises for more than 2 years, unless otherwise allowed under this chapter.

5. Aircraft fueling in accordance with the dispensing requirements in s. Comm 10.650 – except where use of tank vehicles is also allowed, in accordance with the requirements for tank vehicles in s. Comm 10.610 (3).

6. Watercraft, snowmobile and ATV fueling in accordance with the dispensing requirements in s. Comm 10.640, except as provided in s. Comm 10.640 (4) and (5) for residential watercraft and emergency fueling.

Note: Section Comm 10.640 (4) has requirements for residential non-public fueling of watercraft. Section Comm 10.640 (5) allows watercraft to be fueled from a tank vehicle under emergency conditions.

(4) LIMITATIONS ON LOCATION AND TYPE OF USE. There are no general limitations on location or use for fixed fuel tanks.

(5) SPECIFICATIONS FOR FIXED-TANK FUEL DISPENSING FACILITIES. (a) *Dispensers*. 1. All new or replacement dispensing devices for Class I liquids shall be provided with a double-poppet, heat-actuated emergency shut-off valve that will stop the flow of fuel if the dispenser is displaced from its base, or if the fusible link is activated.

2. Anytime an emergency shut-off valve is replaced, the valve shall meet the requirements of subd. 1.

3. All pipe connections provided at the dispenser that are installed or replaced on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall be placed within a secondary containment sump, except as exempted in subd. 6.

4. Any existing dispenser that shows visible contamination shall have a liquid-tight secondary containment sump installed under it by December 31 of the next calendar year, except as exempted in subd. 6.

5. Any existing dispenser not showing visible contamination shall have a liquid-tight secondary containment sump installed under it by December 31 of the fifth year after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], except as exempted in subd. 6.

6. A secondary containment sump is not required under a dispenser if the storage tank system meets all of the following conditions:

a. All piping is aboveground and readily accessible for inspection.

b. The pipe and dispenser are on or above a surface that is at least as impermeable as concrete.

Note: This paragraph recognizes dispenser pans, spray-on liners, brushed-on liners, formed-in-place containment products, and other effective secondary containment practices that are currently in use.

Note: See section Comm 10.400 (3) (b) for requirements for hydrostatically testing sumps during installation. See section Comm 10.400 (3) (g) for requirements for piping, electronic sensors and electrical conduit and wiring in secondary containment sumps.

(b) *Tank listing*. Tanks shall be listed and labeled appropriate to their use.

(c) *Installer certification*. Installation shall be by a certified installer.

(d) *Setbacks for public access fueling*. The setbacks specified in Table 10.615-A for public access fueling shall be maintained at all times.

(e) *Setbacks for other fueling*. 1. The setbacks specified in Table 10.615-B for fleet vehicle fueling shall be maintained at all times.

2. There is no required setback between the dispenser and the tank at a farm premises or construction project, in accordance with s. Comm 10.630.

(f) *Setback measurement*. 1. The setback distances for vaulted tanks shall be measured from the outer perimeter of the vault.

2. The setback distances for tanks that are placed in diked areas shall be measured from the inner edge of the dike wall.

3. The setback distances for all tanks other than vaulted or diked tanks shall be measured from the outermost surface of the tank.

Table10.615-A
Setbacks for Aboveground Tanks Used for Public Access Vehicle Fueling

Type of Tank	Individual Tank Capacity (gal)	Setback From Nearest Important Building on Same Property (ft)	Setback From Nearest Retail Dispenser (ft)	Setback From Lot Line That Can be Built Upon, Including the Far Side of a Public Way (ft)	Setback From Near Side of a Public Way (ft)	Minimum Distance Between Tanks (ft)
Vaulted[1]	0-15,000	0	0	0	0	Separate compart-ment for each tank
Protected[2]	0-6,000	5	0	15	5	3
	6,001-12,000	15	0	25	15	3
Fire-Resistant[3]	0-2,000	25	25	25	25	3
	2,001-12,000	25	25	50	25	3
Other code-complying tank	0-2,000	25	30	50	50	3
	2,001-12,000	50	50	100	50	3

[1]A vaulted tank is one placed in a liquid-tight concrete enclosure consisting of 4 walls, a top and a bottom that completely encloses the tank and provides protection from physical damage and limits heat transfer from a high intensity liquid pool fire.

[2]A protected tank is a listed and labeled system that consists of a primary tank along with integral secondary containment which provides protection from physical damage and limits heat transfer from a high intensity liquid pool fire. Systems listed as complying with UL 2085 or an equivalent standard are considered protected tanks.

[3]A fire-resistant tank is a listed and labeled primary tank with or without integral secondary containment that provides protection from heat transfer from a high intensity liquid pool fire. Systems listed as complying with UL 2080 or an equivalent standard are considered fire-resistant tanks.

Table 10.615-B
Setbacks for Aboveground Tanks Used for Fleet Vehicle Fueling Only

Type of Tank	Individual Tank Capacity (gal)	Setback From Nearest Important Building on Same Property (ft)	Setback From Nearest Dispenser (ft)	Setback From Lot Line That Can be Built Upon, Including the Far Side of a Public Way (ft)	Setback From Near Side of a Public Way (ft)	Minimum Distance Between Tanks (ft)
Vaulted[1]	0-15,000	0	0	0	0	Separate compart-ment for each tank
Protected[2]	0-6,000	5	0	15	5	3
	6,001-12,000	15	0	25	15	3
Fire - Resistant[3]	0-2,000	25	0	25	25	3
	2,001-12,000	25	0	50	25	3
Other code-complying tank	≤12,000 for Class I ≤20,000 for Class II or III	25	0	50	25	3

[1]A vaulted tank is one placed in a liquid-tight concrete enclosure consisting of 4 walls, a top and a bottom that completely encloses the tank and provides protection from physical damage and limits heat transfer from a high intensity liquid pool fire.
[2]A protected tank is a listed and labeled system that consists of a primary tank along with integral secondary containment which provides protection from physical damage and limits heat transfer from a high intensity liquid pool fire. Systems listed as complying with UL 2085 or an equivalent standard are considered protected tanks.
[3]A fire-resistant tank is a listed and labeled primary tank with or without integral secondary containment that provides protection from heat transfer from a high intensity liquid pool fire. Systems listed as complying with UL 2080 or an equivalent standard are considered fire-resistant tanks.

(g) *Secondary containment*. 1. Diking or a similar system shall be used to provide secondary containment for aboveground tanks in accordance with NFPA 30 section 22.11.1 or 22.11.2, and s. Comm 10.420.

2. a. When any underground piping is installed as part of a new tank system or when 50 percent or more of a run is replaced, the piping shall be provided with approved secondary containment with approved leak detection**.**

b. The material used for both the primary and secondary containment shall be liquid- and vapor-tight.

(h) *Collision protection*. Aboveground motor fuel tanks shall be protected from vehicle impact in accordance with s. Comm 10.430.

(i) *Aboveground piping*. 1. Aboveground piping may not rest directly on grade.

2. All aboveground piping shall be of steel and be coated or otherwise protected to inhibit corrosion.

3. Piping shall be supported against impact, vibration, expansion and contraction.

4. Collision protection shall be provided on all sides of aboveground piping not protected by a structure, building or dike wall.

5. Collision protection shall meet the performance requirements in s. Comm 10.430.

(j) *Underground piping*. Any underground piping shall comply with the leak detection requirements for pressurized piping specified in s. Comm 10.510 (4).

(k) *Check valves*. A check valve shall be installed in the piping at a point where connection and disconnection is made for tank vehicle unloading. The valve shall be protected from tampering.

(L) *Vents and fill openings*. 1. Fill and vent openings shall be separate.

2. Tanks shall be provided with bottom loading or a fill pipe that terminates within 6 inches of the bottom of the tank.

3. All fill pipes for aboveground fueling tanks shall be locked, and shall be labeled and color coded as specified in s. Comm 10.230 (12).

(m) *Spill prevention*. Spill and overfill control shall be provided in accordance with s. Comm 10.410.

(n) *Overfill prevention*. 1. Tanks that are filled via hand-held nozzles shall be constantly attended during product delivery and shall be provided with a vent whistle or with other overfill prevention equipment which provides a visual signal at 90 percent of the tank's capacity.

2. Tanks that are filled by means of a tight connection between the delivery hose and the fill pipe or a similar device acceptable to the department shall be provided with overfill protection equipment which complies with NFPA 30 section 21.7.1.6.

(o) *Leak detection for aboveground tanks*. Leak detection for aboveground tanks shall be provided in accordance with one of the following:

1. Where dikes are provided, a minimum of 2 feet shall be provided between any new tank and the toe of the dike walls, and a minimum of 3 inches shall be provided between the bottom of any new tank and the dike floor, to allow for visual inspection of the exterior tank surface, except as provided in subd. 2. or as otherwise approved by the department.

2. Where double-walled tanks are used or where clearances for visual inspection of the primary containment surface are not provided as specified in subd. 1., interstitial monitoring shall be provided as specified in s. Comm 10.515 (7).

(p) *Tank enclosures*. Aboveground tanks shall be provided with enclosures in accordance with sub. (7).

(6) OPERATIONS INVOLVING FIXED-TANK FUEL DISPENSING FACILITIES. Operations involving fixed-tank fuel dispensing facilities shall follow the requirements in NFPA 30, NFPA 30A and all of the following:

(a) Fuel may not be dispensed using gravity discharge.

(b) 1. Tanks used to store motor fuels or kerosene shall have the water level checked and recorded at least once per month.

2. Anytime the water level exceeds 2 inches, the water shall be removed within 5 days.

(c) Aboveground tanks may not be used for vehicle fueling at residences, except as allowed in s. Comm 10.640 (4) for watercraft fueling.

(7) ABOVEGROUND TANK ENCLOSURES. (a) The area around an aboveground motor vehicle fuel tank and its secondary containment shall be secured by a 6-foot high noncombustible building or by a 6-foot high noncombustible fence with a gate, except where exempted under par. (b) or (c).

(b) If the property on which the tanks are located has a perimeter security fence, additional enclosure of the tank system is not required.

(c) For tanks that have a capacity of 1320 gallons or less, enclosure of the tank and secondary containment by one of the structures listed in par. (a) is not required if all of the following conditions are met:

1. The fill opening of the tank is kept locked.

2. The electrical control panel is secured inside of a building.

3. The dispenser is secured against unauthorized use.

4. The top of the tank is at least 6 feet above grade.

5. Dusk-to-dawn lighting is provided above the tank area.

6. All tank system vents terminate at least 12 feet above grade.

Note: Federal Spill Prevention Control and Countermeasure regulations in 40 CFR 112 may require fencing for tanks with capacities of more than 1320 gallons.

(d) Buildings or fences under this subsection shall be made entirely of noncombustible materials and have a minimum of 1 exit in compliance with chs. Comm 60 to 66.

(e) Buildings or fences may not be supported by the tanks they enclose.

(f) Buildings or fenced enclosures shall not be used for occupancy, storage or any other use unless specifically allowed under chs. Comm 60 to 66.

(g) Fences surrounding tanks shall be of chain-link design or other open fencing approved by the department.

(h) Gates and doors shall be normally locked.

Comm 10.620 Public access motor vehicle fueling operations. (1) GENERAL. (a) Public access fueling operations shall follow the operational requirements of NFPA 30A and this section.

(b) When the product dispensed from a tank system is changed from a Class I liquid to a Class II or III liquid, the department's district petroleum products inspection office shall be notified, and the new product shall be tested and approved before being dispensed.

Note: See the Department Web site www.commerce.state.wi.us/ER/ER-RPS-Index.html for the contact information for petroleum products inspectors.

(2) DISPENSING AREA SAFETY. (a) Equipment or devices not required for, or not integral to the fueling operation, such as vending machines or automated teller machines, may only be installed outside of the fuel dispensing area.

(b) Containers of LP gas and similar fuels may not be located within 20 feet of any motor fuel dispenser.

(c) No Class I liquid, other than fuel being dispensed, may be located within 20 feet of any motor fuel dispenser.

(d) A person shall be at least 14 years old to dispense fuel into the fuel tank of a motor vehicle.

(e) Combustible merchandise placed within 20 feet of a fuel dispenser shall meet all of the following requirements:

1. No combustible merchandise, including pallets and packaging material, may be within 3 feet horizontally of the dispenser cabinet.

2. The height of the merchandise display, including pallets and packaging material, may not exceed 3 feet above grade.

Note: Trash receptacles and window washing containers that are for public use are not considered merchandise under this section. Window washing solution in containers for sale to the public would be considered merchandise under this section.

(f) A means of two-way voice communication between the customer and attendant shall be maintained while the facility is open to the public and an attendant is on duty.

(g) No vehicle may be fueled from an aboveground storage tank while the storage tank is being filled.

Comm 10.630 Fuel dispensing at farms and construction projects. (1) GENERAL. (a) Aboveground storage tank systems for fueling operations at a farm premises or construction project shall comply with the requirements of NFPA 30A chapter 13 and this section.

(b) *Limitations on location and type of use*. The tanks may not be used for fueling vehicles unless the vehicles are dedicated to the operation of the farm premises or construction project.

(c) *Specifications for tanks*. 1. The tanks shall be constructed in accordance with NFPA 30A chapter 13 and this section.

2. Nozzles may not have a latch-open device.

3. There is no minimum required setback between the tank and the dispenser.

(d) *Operations involving tanks*. Operations shall be in accordance with NFPA 30A chapter 13.

(e) *Security.* The tank system shall be equipped so either the hose, hanger or outlet valve can be locked to prevent tampering.

(2) MODIFICATIONS TO SETBACKS IN NFPA 30A SECTION 13.2.3.6. (a) *Farming operations*. For farming operations using a tank without secondary containment, the tank and the fueling operation shall be placed outside of a building and at least 40 feet from the near side of a public way and from a building or structure used for any of the following purposes:

1. Human occupancy.

2. Housing of any livestock.

3. Storage or repair of any motor-driven vehicle or machine.

4. Storage of chemicals, pesticides or other fuels.

5. Storage of hay or similar crops susceptible to spontaneous combustion**,** if stored in a combustible building or structure.

(b) *Other operations*. For all operations within the scope of this section using a tank without secondary containment, other than farming, the tank and the fueling operation shall be placed outside and at least 40 feet from the near side of a public way and from any important building or structure.

(c) *Operations using secondary containment tanks*. All operations within the scope of this section using a tank with secondary containment shall follow the setback requirements in Table 10.630.

(3) TANKS OF LESS THAN 1,100 GALLONS. (a) Aboveground tanks that have a capacity of less than 1,100 gallons shall comply with this subsection before use.

(b) Installation shall be by a certified installer.

(c) The certified installer shall fill out a tank installation notification – form ERS-10764 – and provide the form to the authorized agent or the department for inspection of the tank system.

Note: Form ERS-10764 – Farm & Construction AST Installation Notification is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

(d) Before a tank may be filled or used, the tank system shall be inspected or authorized for use by the authorized agent or the department, except as allowed otherwise by par (g).

(e) The owner shall remit the inspection fee under ch. Comm 2 to the authorized agent or the department before filling or using the tank.

(f) The tank shall be inspected within 5 business days after notification for a standard inspection and within 2 business days after notification for a priority inspection, except as provided in par (g).

(g) The tank may be filled and used if the inspection has not been completed within the time limits after notification specified in par. (f).

(h) Tanks that are filled via hand-held nozzles shall be constantly attended during product delivery and shall be provided with a vent whistle or with other overfill prevention equipment that provides a visual signal at 90 percent of the tank's capacity.

(i) 1. Tanks shall be mounted on noncombustible supports that are adequate to provide stability.

2. The base of the tank supports shall be at the same grade level as the vehicles when positioned for fueling.

3. The bottom of the tank, irrespective of any supports, shall be elevated at least 6 inches above the surrounding grade.

(4) TANKS OF 1,100 GALLONS OR MORE, OR LOCATED LESS THAN 40 FEET FROM BUILDINGS. Aboveground tanks which have a capacity of 1,100 gallons or more, or which are located less than 40 feet from either the buildings and structures listed in sub. (2) (a), or important buildings or structures, shall comply with all of the following:

(a) *Tank listing*. The tank shall be listed and labeled for aboveground use.

(b) *System design and location*. The tank system shall comply with the specifications for dispensing facilities in s. Comm 10.615 (5), with the following exceptions:

1. The tank system and the fueling operation shall be located in accordance with Table 10.630.

2. Vehicle collision protection may be omitted where a dike meeting the requirements of this chapter is provided for secondary containment.

Table 10.630
Tank System Setbacks for Tanks With Secondary Containment

Aggregate Capacity (gallons)	Distance to Nearest Building, Haystack or Combustible Structure or Nearest Side of Any Public Way	Distance to Property Line That Is or Can Be Built Upon, Including the Opposite Side of a Public Way
275 or less	5 feet	5 feet
276-750	5 feet	10 feet
751-12,000	5 feet	15 feet
12,001-30,000	5 feet	20 feet
Any size	The minimum setback between multiple tank fueling systems is 200 feet.	

(c) *Administrative requirements.* 1. The tank system shall be installed in accordance with the manufacturer's instructions, the applicable national standards adopted in s. Comm 10.200, plans and specifications approved under s. Comm 10.100 and this chapter.

2. The tank system installation shall be performed or supervised by a certified installer.

3. The tank system shall be inspected in accordance with s. Comm 10.115 (2).

4. The tank shall be registered in accordance with s. Comm 10.140.

Comm 10.640 Watercraft, snowmobile and ATV fueling. (1) GENERAL REQUIREMENTS. (a) *General.* Use of aboveground storage tank systems and fueling

operations for watercraft, snowmobiles and ATVs shall comply with NFPA 30A chapter 11, the requirements for dispensing systems in s. Comm 10.615, and the requirements of this section, except as otherwise approved under this chapter.

(b) *Tank location.* 1. Aboveground tanks located on land shall be set back at least 10 feet from the ordinary high water mark of a navigable body of water.

Note: The ordinary high water mark is determined by the county zoning department or the Department of Natural Resources.

Note: The municipality in which the tank is located may have additional requirements for the siting of the tank.

2. Tanks shall follow the setback requirements of Table 10.615-A, except that there is no required separation between the tank and the dispenser if the tank is used exclusively for watercraft, snowmobile or ATV fueling.

(c) *Tank appurtenances*. 1. Any dispenser used for a fueling operation above or within 100 feet of navigable water shall use a dry-break connection or a listed no-drip nozzle with automatic shutoff.

2. A nozzle latch-open device may not be installed or used above or within 100 feet of navigable water.

(d) *Hose*. Hose lengths more than 18 feet long, used for dispensing fuel, shall be reeled, racked or otherwise protected from damage.

(2) PUBLIC ACCESS WATERCRAFT FUELING. (a) *General.* 1. All tanks, and any associated pump that is not integral with the dispensing device, which are used in fueling watercraft shall be located on land or on a pier of solid-fill construction, except as allowed otherwise in subd. 2.

Note: The placement of piers is subject to the requirements of chapter 30 of the Statutes, and may need permits from the Department of Natural Resources or local zoning or building departments.

2. The components listed in subd. 1. may be located on other types of piers if all of the following conditions are met:

a. The plans submitted for review clearly describe the size and type of pier.

b. The tank is a listed and labeled double-wall tank.

c. The primary tank has a capacity of 1,100 gallons or less.

(b) *Piping*. 1. 'General.' Piping that extends from shore onto a pier shall meet the requirements of NFPA 30 chapter 27 and this paragraph.

2. 'Material requirements.' Piping used along a pier shall be one of the following types:

a. Steel piping that is coated to prevent corrosion.

b. Flexible piping that is listed and rated for aboveground marine use.

c. Fiberglass piping placed in steel containment that has standoffs to maintain clearance between the piping and the containment.

3. 'Flex connectors.' a. At least 1 flex connector, listed and labeled for aboveground use, shall be placed between rigid pipe that is connected to the shore and rigid pipe that serves a dispenser located on a pier.

b. An accessible shutoff valve with an expansion relief device shall be located on at least one end of the flex connector, where it connects to the rigid pipe from shore.

(3) SEASONAL INSTALLATION OF A FUELING SYSTEM ON A PIER. (a) *Plan requirements*. Before installing a fueling system on a pier, plans shall be submitted for review and shall specify the requirements of this subsection.

(b) *Pipe and tank requirements*. 1. All connections that are broken shall use dry-break couplings listed for use with petroleum products.

2. Broken connections shall be plugged during storage.

3. The tank vent shall be left open.

(c) *Management plan*. 1. The owner shall develop and maintain onsite, a written plan for safely draining the tank and pipe system before disassembly.

2. For systems first installed on or after [the effective date of this chapter... LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], the disassembly plan shall also be submitted with the plans at the time of review.

(4) RESIDENTIAL WATERCRAFT FUELING OPERATIONS. (a) Aboveground tanks for watercraft fueling for noncommercial purposes at a private residence shall comply with the requirements for aboveground tanks in ss. Comm 10.400 to 10.420, and this subsection.

(b) No more than 2 tanks are allowed at any residence.

(c) Tanks shall be listed and may not exceed 600 gallons in aggregate capacity.

(d) The tank shall be used only by the residents of the property, for fueling their watercraft or for maintenance of their property.

(e) 1. The tank shall be located outdoors, on land, at least 25 feet from the dwelling and other important buildings, and at least 10 feet from the ordinary high water mark of a navigable waterway, public roadway or property line.

2. All setbacks shall be measured from the inside of the dike wall to the dwelling, important building, ordinary high water mark, public roadway or property line.

(f) A means shall be provided to prevent the discharge of liquid due to a siphoning effect. Gravity dispensing systems may not be used.

(g) Transfer of product shall be from a tank by means of an approved, fixed, fuel dispensing hand pump or a listed, fixed, electrical pump.

(5) EMERGENCY FUELING FROM A TANK VEHICLE. Where fixed dispensing facilities are not available, dispensing of Class I or II liquids directly from a tank vehicle into permanently installed fuel tanks of self-propelled watercraft shall be permitted for emergency fueling, provided the operation is in accordance with the requirements for tank vehicles in s. Comm 10.610 (3).

(6) SNOWMOBILE AND ATV FUELING. (a) *General*. Tank systems used for fueling snowmobiles or ATVs shall meet the requirements for dispensing systems in s. Comm 10.615 and this subsection.

(b) *Tank location.* Tank systems adjacent to a body of water shall also meet the requirements for watercraft fueling.

(c) *Collision protection*. 1. Aboveground tank systems used for snowmobile and ATV fueling shall be provided with collision protection.

2. The collision protection shall be spaced no more than 30 inches on center.

3. If the fueling area is adjacent to vehicle traffic or a parking area, bollards or equivalent protection shall be placed to separate the snowmobile or ATV fueling area from motor vehicle traffic.

Comm 10.650 Aircraft fuel dispensing. (1) GENERAL REQUIREMENTS. Fueling operations shall follow the requirements in s. Comm 10.610 (3) or 10.615, NFPA 407, NFPA 418 and this subchapter.

(2) SETBACKS. (a) Aboveground tanks used for public access fueling shall be at least 30 feet from the point of fuel transfer into the aircraft.

(b) Aboveground tank setbacks from buildings, public ways and property lines shall follow the requirements in Table 10.615-B.

(c) 1. The point of fuel transfer into the aircraft, from any tank or truck supply source, shall be at least 100 feet from public traffic or assembly areas at public events, unless a reduced distance is authorized by the fire chief.

2. The public events referred to in subd. 1. do not include passenger terminals, fixed base operators, or persons entering or exiting the aircraft.

(3) COLLISION PROTECTION. (a) Barriers shall be provided to protect tanks, pumps, dispensers and vents from collision damage from aircraft or other vehicles in accordance with s. Comm 10.430.

(b) Where subject to collision from aircraft, barriers protecting an aboveground tank shall extend at least 12 inches above the top of the tank.

(4) PRODUCT IDENTIFICATION. (a) All fuel handling equipment and installations within the scope of API 1542, whether new or existing, shall be marked as referenced in the standard.

(b) All aboveground tanks and fill pipes for underground tanks, whether new or existing, shall be labeled or otherwise marked using the identification scheme in API 1542.

Note: API 1542 has requirements for identifying aviation gasoline (AVGAS) and turbine fuels and the equipment used to store and dispense them.

(5) FUELING HOSE. (a) All public access, self-service fueling hose that is installed or replaced on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] shall be reeled or racked unless approved otherwise by the authorized agent or the department.

(b) All fueling hose shall be protected from damage.

(6) OPERATIONS. (a) *General*. Individuals who dispense fuel into aircraft shall be knowledgeable in operations and emergency procedures specific to the fuel and fueling systems they are operating.

(b) *Amphibious aircraft*. Shoreline fuel dispensing systems for amphibious aircraft shall follow the requirements of s. Comm 10.640.

Comm 10.660 Racetrack and amusement vehicle fueling operations (1) Racing vehicles and amusement ride vehicles with integral internal combustion engines shall follow the requirements of this section.

(2) The fuel tanks of racing vehicles shall be filled from safety cans or a fixed fueling system meeting the requirements of s. Comm 10.615.

(3) During a race in which the vehicle is competing, the vehicle may be refueled with the engine running, if the racetrack is equipped with onsite fire protection that is capable of responding adequately to fires ignited during the fueling.

(4) Fueling areas shall be posted with signs that read as follows:

"NO SMOKING OR OPEN FLAMES"

(5) A portable fire extinguisher with a minimum 40-B:C rating shall be provided at each fueling area, including pit stalls, pit work areas and garages.

(6) Fueling areas that use methanol shall provide a minimum of 10 gallons of water at each fueling area, including pit stalls, pit work areas and garages – for the purpose of diluting a methanol fire.

Comm 10.680 Alternative motor fuels. (1) APPLICATION. All storage or dispensing systems for fuel consisting of more than 10 percent ethanol by volume shall follow the requirements of this section.

Note: Alternative motor fuels include ethanol blends greater than 10 percent by volume, and biodiesel blends greater than 5 percent by volume.

(2) MATERIAL COMPATIBILITY. Equipment used to store or dispense fuel consisting of more than 10 percent ethanol by volume may not contain or consist of any of the following materials:

(a) *Metals*. Zinc, lead, aluminum or alloys containing these metals, such as brass or terne.

Note: Terne-plated steel and lead-based solder are commonly used in equipment that handles gasoline. These materials will dissolve when in contact with high concentrations of ethanol.

(b) *Natural materials*. Cork, leather or natural rubber.

(c) *Polymers*. Polyurethane, polyvinyl chloride, polyamides, or methyl-methacrylate plastics.

Note: Materials that have been shown to be generally compatible with high concentrations of ethanol include unplated steel, stainless steel, black iron, bronze, Neoprene rubber, Buna-N, polypropylene, nitrile, Viton, Teflon, thermoset reinforced fiberglass and thermoplastic piping material.

(3) GENERAL REQUIREMENTS. (a) *Tank cleaning*. 1. If another type of fuel was stored in the tank, the tank shall be cleaned in accordance with API 2015 or another method approved by the department, before introducing the ethanol-blended fuel.

2. All cleaning work shall be performed by a certified tank cleaner unless specifically approved by the department based on an alternate cleaning method.

Note: Most metal storage tanks and pipe are compatible with ethanol. However, some fiberglass storage tank systems manufactured before 1992 might not be compatible with higher levels of ethanol. The tank manufacturer and installation contractor should be consulted for additional information on the reuse of underground storage tanks.

(b) *Tightness testing*. A precision tightness test shall be performed on the tank and piping in accordance with s. Comm 10.515 (4) before placing the tank system back into service.

(c) *Equipment requirements*. 1. 'Listed equipment.' Equipment used for dispensing ethanol-blended motor fuel shall be listed or shall be recognized by the manufacturer as being compatible with ethanol-blended fuel, except where otherwise approved in writing by the department.

2. 'Dispenser nozzles and hoses.' Dispensers that are installed on or after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], shall use a separate fueling nozzle and hose for dispensing ethanol-blended motor fuels of more than 10 percent ethanol by volume.

Note: See chapter Comm 48 for signage requirements for ethanol-blended fuels.

3. 'In-line filters.' A 1- or 2-micron in-line filter shall be used for dispensing ethanol-based fuel.

4. 'Lined tanks.' Tanks with linings regulated under s. Comm 10.530 may not be used to store ethanol-blended fuels.

(4) NOTIFICATION PROCEDURES. (a) Before commencing normal fueling operations using ethanol-blended fuel, the operator shall notify the department's district petroleum products inspection office.

Note: See the Department Web site www.commerce.state.wi.us/ER/ER-RPS-Index.html for the contact information for petroleum products inspectors.

(b) A certified installer or professional engineer shall complete part I of the department's alternative fuel installation/conversion application form (ERS-9 Alternative Fuels) and submit it to the department as part of the plan review submittal.

Note: Within a first class city, the provisions in par. (b) may be administered by that city instead of the department, as authorized in sections Comm 10.020 (8) and 10.110 (3) and (4). As of [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE] only the City of Milwaukee had become a first class city.

(c) Before commencing normal fueling operations using ethanol-blended fuel, the operator shall complete part II of the department's alternative fuel installation/conversion application form (ERS-9 Alternative Fuels) and provide the completed form to the certified tank system inspector performing the pre-operational inspection.

Note: Form ERS-9 Alternative Fuels – Storage Tank Alternative Fuel Installation/Conversion Application is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: Plan review is required in section Comm 10.100 for facilities converted to store and dispense ethanol-based fuels.

Subchapter VII – Financial Responsibility

Comm 10.700 Applicability. (1) This subchapter applies to owners and operators of any of the following storage tank systems, whether new or existing, that are in-use, seldom-used or temporarily-out-of-service:

(a) Petroleum underground storage tank systems.

(b) Petroleum aboveground storage tank systems located on piers that are not of solid-fill construction.

(c) Petroleum aboveground storage tank systems, located on floating structures or watercraft, that are not used exclusively for the propulsion of that floating structure or watercraft.

(d) Tank wagons. Financial responsibility requirements for tank wagons shall begin 1 year after [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(e) Tank vehicles that perform fueling operations covered in s. Comm 10.610 (3).

(f) Petroleum aboveground storage tank systems using tanks with individual capacities of 5,000 gallons or more, with single bottoms, that were upgraded with tank lining but not placed in impermeable dike systems.

(g) Petroleum aboveground storage tank systems using tanks with individual capacities of 5,000 gallons or more, with double bottoms, that are not provided with interstitial monitoring and not placed in impermeable dike systems.

(2) This subchapter does not apply to owners and operators of the following storage tank systems:

(a) State and federal government entities whose debts and liabilities are the debts and liabilities of a state or the United States.

(b) Farm and residential underground storage tanks which have a capacity of less than 1,100 gallons and which are used for storing motor fuel for noncommercial purposes.

(c) Storage tanks used for storing heating oil for consumptive use on the premises.

(d) Any portion of an airport hydrant fuel distribution system except for the underground storage tanks included in those systems.

(e) Any tank in sub. (1) (a) that is permanently closed, or registered as temporarily-out-of-service, with an environmental assessment which demonstrates the absence of a release of product from the tank.

(3) If the owner and operator of a petroleum storage tank are separate persons, only 1 person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance.

Comm 10.703 Definitions. In this subchapter:

(1) "Accidental release" means any release of petroleum from a storage tank system that results in a need for compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator or corrective action, or both.

(2) "Affidavit of financial responsibility" means a form, supplied by the department on which the owner and operator attest to compliance with 40 CFR 280.111.

Note: The affidavit of financial responsibility is available from the Division of Environmental and Regulatory Services at P.O. Box 7837, Madison, WI, 53707-7837, or at telephone (608) 266-7874, or from the Division's Web site at http://www.commerce.state.wi.us/ER/ER-BST-FM-Comm10Forms.html.

Note: The affidavit of financial responsibility is required in addition to the certification showing the specific type of financial responsibility. See section Comm 10.745 (2) (j) for further information.

(3) "Aggregate" means an accident or a continuous or repeated exposure to conditions that result in a release from a storage tank system which might occur in 1 year.

Note: This definition is intended to assist in the understanding of these regulations and is not intended either to limit the meaning of "aggregate" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "aggregate."

(4) "Bodily injury" has the meaning given to this term by applicable Wisconsin statutes; however, this term does not include those liabilities that, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

Note: For further information about this term, see chapter Ins 6, which interprets this term as it is used in section 101.143 (1) of the Statutes, for petroleum storage environmental cleanup.

(5) "Controlling interest" means direct ownership of at least 50 percent of the voting stock of another entity.

(6) "Financial reporting year" means the latest consecutive 12-month period for which any of the following reports are prepared:

(a) A 10-K report submitted to the US securities and exchange commission.

(b) An annual report of tangible net worth submitted to Dun and Bradstreet.

(c) An annual report submitted to the federal energy information administration or rural electrification administration.

Note: "Financial reporting year" may thus comprise a fiscal or a calendar year period.

(7) "Legal defense cost" means any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought by any of the following:

(a) By the US EPA or the department to require corrective action or to recover the costs of corrective action.

(b) By or on behalf of a third party for bodily injury or property damage caused by an accidental release.

(c) By any person to enforce the terms of a financial assurance mechanism.

(8) "Occurrence" means an accident or a continuous or repeated exposure to conditions, that results in a release from a storage tank system.

Note: This definition is intended to assist in the understanding of these regulations and is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "occurrence."

(9) "Operation" or "in operation" means the underground storage tank was used to store a regulated substance at any time after December 22, 1988, regardless of the current status of the tank.

(10) "Owner or operator," when the owner or operator are separate parties, means the party that is obtaining or has obtained financial assurances.

(11) "Petroleum marketing facilities" means all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum marketers or to the public.

(12) "Petroleum marketing firms" means all firms owning petroleum marketing facilities. Firms owning other types of facilities with tanks covered in the scope of this subchapter as well as petroleum marketing facilities are considered to be petroleum marketing firms.

(13) "Property damage" has the meaning given to this term by administrative rules of the office of commissioner of insurance. This term does not include those liabilities that, consistent with standard insurance industry practices, are excluded from coverage in liability insurance

policies for property damage. However, such exclusions for property damage do not include corrective action associated with releases from tanks that are covered by the policy.

Note: For further information about this term, see chapter Ins 6, which interprets this term as it is used in section 101.143 (1) of the Statutes, for petroleum storage environmental cleanup.

(14) "Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of a tank system covered in this subchapter through one of the mechanisms listed in ss. Comm 10.710 to 10.735, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

(15) "Substantial business relationship" means the extent of a business relationship necessary under Wisconsin law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued incident to that relationship if it arises from and depends on current economic transactions between the guarantor and the owner or operator.

(16) "Tangible net worth" means the tangible assets that remain after deducting liabilities; the assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all current and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

Comm 10.705 Amount and scope of required financial responsibility. (1) Owners or operators of petroleum storage tank systems within the scope of this subchapter shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum storage tank systems within the scope of this subchapter in at least the following per-occurrence amounts:

(a) For owners or operators of petroleum underground storage tank systems that are located at petroleum marketing facilities, or that throughput an average of more than 10,000 gallons of petroleum per month based on annual throughput for the previous calendar year; $1 million.

(b) For all other owners or operators of petroleum storage tank systems covered in s. Comm 10.700 (1); $500,000.

(2) Owners or operators of petroleum underground storage tank systems shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tank systems in at least the following annual aggregate amounts:

(a) For owners or operators of 1 to 100 petroleum underground storage tanks; $1 million.

(b) For owners or operators of 101 or more petroleum underground storage tanks; $2 million.

(c) For the purposes of this subsection, a petroleum underground storage tank means a single containment unit and does not mean combinations of single containment units.

(3) Owners or operators of petroleum aboveground storage tanks covered in this subchapter shall demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from their operation in the amount of $1 million per occurrence.

(4) If the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility, the amount shall be in the full amount specified in subs. (1) to (3) for any of the following, except as provided in sub. (5):

(a) Taking corrective action.

(b) Compensating third parties for bodily injury and property damage caused by sudden accidental releases.

(c) Compensating third parties for bodily injury and property damage caused by non-sudden accidental releases.

(5) If an owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for different petroleum storage tank systems, the annual aggregate required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(6) (a) Owners or operators shall review the amount of aggregate assurance provided whenever additional petroleum storage tank systems are acquired or installed.

(b) If the number of petroleum storage tank systems for which assurance is needed exceeds 100, the owner or operator shall demonstrate financial responsibility in the amount of at least $2 million of annual aggregate assurance by the anniversary of the date on which the mechanism demonstrating financial responsibility became effective.

(c) If assurance is being demonstrated by a combination of mechanisms, the owner or operator shall demonstrate financial responsibility in the amount of at least $2 million of annual aggregate assurance by the first-occurring effective date anniversary of any one of the mechanisms combined, other than a financial test or guarantee, to provide assurance.

(7) The amounts of assurance required in this section exclude legal defense costs.

(8) The required per-occurrence and annual aggregate coverage amounts do not in any way limit the liability of the owner or operator.

Comm 10.707 Allowable mechanisms and combinations of mechanisms. (1) Subject to the limitations of subs. (3) and (4), an owner or operator may use any one or combination of the mechanisms listed in ss. Comm 10.710 to 10.735 to demonstrate financial responsibility under this subchapter for 1 or more storage tank systems.

(2) Subject to the limitations of subs. (3) and (4), a local government owner or operator may use any one or combination of the mechanisms listed in ss. Comm 10.727 to 10.735 to demonstrate financial responsibility under this subchapter for 1 or more storage tank systems.

(3) An owner or operator may use a guarantee or surety bond to establish financial responsibility only if "for value received" is included in the guarantee or surety bond mechanisms.

(4) An owner or operator may use self-insurance in combination with a guarantee only if, for the purpose of meeting the requirements of the financial test under this subchapter, the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor.

Comm 10.710 Financial test of self-insurance. (1) To use the financial test of self-insurance to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator, or guarantor, or both, shall meet the criteria of either sub. (2) or (3) based on year-end financial statements for the latest completed fiscal year.

(2) (a) The owner or operator, or guarantor, or both, shall have a tangible net worth of at least 10 times each one of the following:

1. The total of the applicable aggregate amount required by s. Comm 10.705, based on the number of storage tank systems for which a financial test is used to demonstrate financial responsibility to the department.

2. The sum of the corrective action cost estimates, the current closure and post-closure care cost estimates, and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to the department.

3. The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to the department.

(b) The owner or operator, or guarantor, or both, shall have a tangible net worth of at least $10 million.

(c) The owner or operator, or guarantor, or both, shall have a letter signed by the chief financial officer as specified in sub. (4).

(d) The owner or operator, or guarantor, or both, shall do one of the following:

1. File financial statements annually with the U.S. securities and exchange commission, energy information administration, or rural electrification administration.

2. Report annually the firm's tangible net worth to Dun and Bradstreet, if Dun and Bradstreet has assigned the firm a financial strength rating of 4A or 5A.

(e) The firm's year-end financial statements, if independently audited, may not include an adverse auditor's opinion, a disclaimer of opinion, or a going concern qualification.

(3) (a) The owner or operator, or guarantor, or both, shall meet the financial test requirements of 40 CFR 264.147(f)(1), substituting the appropriate amounts specified in s. Comm 10.705 (2) or (3) for the amount of liability coverage each time specified in that section.

(b) The fiscal year-end financial statements of the owner or operator, or guarantor, or both, shall be examined by an independent certified public accountant and be accompanied by the accountant's report of the examination.

(c) The firm's year-end financial statements may not include an adverse auditor's opinion, a disclaimer of opinion, or a going concern qualification.

(d) The owner or operator, or guarantor, or both, shall have a letter signed by the chief financial officer as specified in sub. (4).

(e) If the financial statements of the owner or operator or guarantor, or both, are not submitted annually to the U.S. securities and exchange commission, energy information administration or rural electrification administration, the owner or operator, or guarantor, or both, shall obtain a special report by an independent certified public accountant stating all of the following:

1. The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the latest year-end financial statements of the owner or operator, or guarantor, or both, with the amounts in such financial statements.

2. In connection with that comparison, no matters came to the attention of the accountant which caused him or her to believe that the specified data should be adjusted.

(4) To demonstrate that the financial test is met under sub. (2) or (3), the chief financial officer of the owner or operator, or guarantor, shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter worded exactly as found in 40 CFR 280.95(d) except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks.

2. Certification that wording is identical to the wording required in 40 CFR 280.95(d) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(5) If an owner or operator using the test to provide financial assurance finds that he or she no longer meets the requirements of the financial test based on the year-end financial statements, the owner or operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(6) The department may require reports of financial condition at any time from the owner or operator, or guarantor, or both. If the department finds, on the basis of such reports or other information, that the owner or operator, or guarantor, or both, no longer meet the financial test requirements of either sub. (2) or (3), and sub. (4), the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.

(7) If the owner or operator fails to obtain alternate assurance within 150 days of finding that he or she no longer meets the requirements of the financial test based on the year-end financial statements, or within 30 days of notification by the department that he or she no longer meets the requirements of the financial test, the owner or operator shall notify the department of such failure within 10 days.

Comm 10.713 Guarantee. (1) To use a guarantee to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator shall obtain a guarantee that conforms to the requirements of this section. The guarantor shall be a firm that is engaged in a substantial business relationship with the owner or operator and issues the guarantee as an act incident to that business relationship or the guarantor shall be a firm that meets at least one of the following requirements:

(a) The firm possesses a controlling interest in the owner or operator.

(b) The firm possesses a controlling interest in a firm described under par. (a).

(c) The firm is controlled through stock ownership by a common parent firm that possesses a controlling interest in the owner or operator.

(2) (a) Within 120 days of the close of each financial reporting year, the guarantor shall demonstrate that it meets the financial test criteria of s. Comm 10.710 based on year-end financial statements for the latest completed financial reporting year by completing the letter

from the chief financial officer described in s. Comm 10.710 (4), and the guarantor shall deliver the letter to the owner or operator.

(b) If the guarantor fails to meet the requirements of the financial test at the end of any financial reporting year, within 120 days of the end of that financial reporting year, the guarantor shall send by certified mail, before cancellation or non-renewal of the guarantee, notice to the owner or operator.

(c) If the department notifies the guarantor that he or she no longer meets the requirements of the financial test of s. Comm 10.710 (2) or (3), the guarantor shall notify the owner or operator within 10 days of receiving such notification from the department.

(d) Under either par. (b) or (c), the guarantee shall terminate no less than 120 days after the date the owner or operator receives the notification, as evidenced by the return receipt.

(e) The owner or operator shall obtain alternative coverage as specified in s. Comm 10.753.

(3) The guarantee shall be worded exactly as found in 40 CFR 280.96(c), except for the following:

(a) The instructions in brackets in the guarantee shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the guarantee to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.96(c) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(4) (a) An owner or operator who uses a guarantee to satisfy the requirements of s. Comm 10.705 shall establish a standby trust fund when the guarantee is obtained.

(b) Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee shall be deposited directly into the standby trust fund in accordance with instructions from the department under s. Comm 10.747.

(c) This standby trust fund shall meet the requirements for standby trust funds in s. Comm 10.725.

Comm 10.715 Insurance and risk retention group coverage. (1) To use insurance and risk retention group coverage to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator shall obtain liability insurance that conforms to the requirements of this section from a qualified insurer or risk retention group. Such insurance may be in the form of a separate insurance policy or an endorsement to a current insurance policy.

(2) "Termination," as used in the forms required under this section, means only those changes that would result in a gap in coverage as where the insured has not obtained required coverage or has obtained required coverage with a different retroactive date than the retroactive date of the original policy.

(3) Each insurance policy shall be issued by an insurer or a risk retention group that is licensed to transact the business of insurance or eligible to provide insurance as an excess or surplus lines insurer in 1 or more states.

(4) Each insurance policy shall be amended by an endorsement worded as specified in 40 CFR 280.97(b)(1), or evidenced by a certificate of insurance worded as specified in 40 CFR 280.97(b)(2), except for the following:

(a) The instructions in brackets in the endorsement or certificate shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the endorsement or certificate to underground tanks shall be amended to refer to aboveground tanks.

2. Certification that wording is identical to the wording required in 40 CFR 280.97(b)(1) or (2) shall be deleted.

Note: A link to 40 CFR 280 is available by accessing the following Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(5) (a) The owner of the property on which tanks are located has ultimate responsibility under this chapter and shall be listed as a co-beneficiary of any policy issued.

(b) This subsection shall take effect on the first policy renewal date or issuance date following [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE].

(6) (a) If the insurer or group terminates coverage for any reason, the insurer or group shall notify the department of such termination at the same time the insured is notified.

(b) If the insured allows coverage to lapse or changes insurers or groups, the insured shall notify the department within 10 days.

Comm 10.717 Surety bond. (1) To use a surety bond to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator shall obtain a surety bond that conforms to the requirements of this section. The surety company issuing the bond shall be listed as an acceptable surety on federal bonds in the latest Circular 570 of the U.S. department of the treasury.

(2) The surety bond shall be worded exactly as found in 40 CFR 280.98(b), except for the following:

(a) The instructions in brackets in the surety bond shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the surety bond to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.98(b) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(3) Under the terms of the bond, the surety shall be liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and annual aggregate penal sums.

(4) (a) The owner or operator who uses a surety bond to satisfy the requirements of s. Comm 10.705 shall establish a standby trust fund when the surety bond is acquired.

(b) Under the terms of the bond, all amounts paid by the surety under the bond shall be deposited directly into the standby trust fund in accordance with instructions from the department under s. Comm 10.747.

(c) This standby trust fund shall meet the requirements for standby trust funds in s. Comm 10.725.

Comm 10.720 Letter of credit. (1) To use a letter of credit to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator shall obtain an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution shall be authorized to issue letters of credit in each state where the letters are used and the institution's letter-of-credit operations shall be regulated and examined by a federal or state agency.

(2) The letter of credit shall be worded exactly as found in 40 CFR 280.99(b), except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.99(b) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(3) (a) An owner or operator who uses a letter of credit to satisfy the requirements of s. Comm 10.705 shall also establish a standby trust fund when the letter of credit is acquired.

(b) Under the terms of the letter of credit, all amounts paid pursuant to a draft by the department shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the department under s. Comm 10.747.

(c) This standby trust fund shall meet the requirements for standby trust funds in s. Comm 10.725.

(4) (a) The letter of credit shall be irrevocable with a term specified by the issuing institution.

(b) The letter of credit shall provide that credit be automatically renewed for the same term as the original term, unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit.

(c) Under the terms of the letter of credit, the 120 days shall begin on the date the owner or operator receives the notice, as evidenced by the return receipt.

Comm 10.723 Trust fund. (1) To use a trust fund to meet the financial responsibility requirements of s. Comm 10.705, an owner or operator shall establish a trust fund that conforms to the requirements of this section. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the trust agreement shall be identical to the wording specified in 40 CFR 280.103(b)(1), except for the following:

(a) The instructions in brackets in the agreement shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the agreement to underground tanks shall be amended to refer to aboveground tanks.

2. Certification that wording is identical to the wording required in 40 CFR 280.103(b)(1) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(3) The trust agreement shall be accompanied by a formal certification of acknowledgment as specified in 40 CFR 280.103(b)(2).

(4) The trust fund, when established, shall be funded for the full required amount of coverage, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining required coverage.

(5) If the value of the trust fund is greater than the required amount of coverage, the owner or operator may submit a written request to the department for release of the excess.

(6) If other financial assurance as specified in this subchapter is substituted for all or part of the trust fund, the owner or operator may submit a written request to the department for release of the excess.

(7) Within 60 days after receiving a request from the owner or operator for release of funds as specified in sub. (5) or (6), the department shall instruct the trustee to release to the owner or operator such funds as the department specifies in writing.

Comm 10.725 Standby trust fund. **(1)** (a) An owner or operator using any one of the mechanisms authorized by s. Comm 10.713, 10.717 or 10.720 shall establish a standby trust fund when the mechanism is acquired.

(b) The trustee of the standby trust fund shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal agency or an agency of the state in which the fund is established.

(2) The wording of the standby trust agreement, or trust agreement, shall be identical to the wording specified in 40 CFR 280.103(b)(1), except for the following:

(a) The instructions in brackets in the agreement shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the agreement to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.103(b)(1) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(3) The department shall instruct the trustee to refund the balance of the standby trust fund to the provider of financial assurance if the department determines that no additional corrective action costs or third-party liability claims will occur as a result of a release covered by the financial assurance mechanism for which the standby trust fund was established.

(4) An owner or operator may establish one trust fund as the depository mechanism for all funds assured in compliance with this section.

Comm 10.727 Local government bond rating test. (1) (a) To use the bond rating test to meet the financial responsibility requirements of s. Comm 10.705, a general purpose local government owner or operator or local government serving as a guarantor shall have a currently outstanding issue or issues of general obligation bonds of $1 million or more, excluding refunded obligations, with a Moody's rating of Aaa, Aa, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB.

(b) Where a local government has multiple outstanding issues, or where a local government's bonds are rated by both Moody's and Standard and Poor's, the lowest rating shall be used to determine eligibility.

(c) Bonds that are backed by credit enhancement other than municipal bond insurance may not be considered in determining the amount of applicable bonds outstanding.

(2) (a) A local government owner or operator or local government serving as a guarantor that is not a general purpose local government and does not have the legal authority to issue general obligation bonds may satisfy the requirements of s. Comm 10.705 by having a currently outstanding issue or issues of revenue bonds of $1 million or more, excluding refunded issues, and by also having a Moody's rating of Aaa, A, A, or Baa, or a Standard & Poor's rating of AAA, AA, A, or BBB as the lowest rating for any rated revenue bond issued by the local government.

(b) Where bonds are rated by both Moody's and Standard & Poor's, the lower rating for each bond shall be used to determine eligibility.

(c) Bonds that are backed by credit enhancement may not be considered in determining the amount of applicable bonds outstanding.

(3) The local government owner or operator or guarantor shall maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.

(4) To demonstrate that it meets the local government bond rating test, the chief financial officer of a general purpose local government owner or operator or guarantor shall sign a letter that is identical to the letter specified in 40 CFR 280.104(d), except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.104(d) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(5) To demonstrate that it meets the local government bond rating test, the chief financial officer of a local government owner or operator or guarantor other than a general purpose government shall sign a letter which is identical to the letter specified in 40 CFR 280.104(e), except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.104(e) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(6) The department may require reports of financial condition at any time from the local government owner or operator, or local government guarantor. If the department finds that the local government owner or operator or guarantor no longer meets the local government bond rating test requirements of this section, the local government owner or operator shall obtain alternative coverage within 30 days after notification of such a finding.

(7) If a local government owner or operator using the bond rating test to provide financial assurance finds that it no longer meets the bond rating test requirements, the local government owner or operator shall obtain alternative coverage within 150 days of the change in status.

Comm 10.730 Local government financial test. (1) To use a financial test to meet the financial responsibility requirements of s. Comm 10.705, a local government owner or operator shall pass the financial test specified in this section. To be eligible to use the financial test, the local government owner or operator shall have the ability and authority to assess and levy taxes or to freely establish fees and charges. To pass the local government financial test, the owner or operator shall meet the criteria of this section based on year-end financial statements for the latest completed fiscal year.

(2) The local government owner or operator shall have the following information available, as shown in the year-end financial statements for the latest completed fiscal year:

(a) Total revenues consisting of the sum of general fund operating and non-operating revenues including net local taxes, licenses and permits, fines and forfeitures, revenues from use of money and property, charges for services, investment earnings, sales of assets such as property and publications, restricted and unrestricted intergovernmental revenues, and total revenues from all other governmental funds including enterprise, debt service, capital projects, and special revenues, but excluding revenues to funds held in a trust or agency capacity. For purposes of this test, the calculation of total revenues excludes all transfers between funds under the direct control of the local government using the financial test, liquidation of investments and issuance of debt.

(b) Total expenditures consisting of the sum of general fund operating and non-operating expenditures including public safety, public utilities, transportation, public works, environmental protection, cultural and recreational, community development, revenue sharing, employee benefits and compensation, office management, planning and zoning, capital projects, interest payments on debt, payments for retirement of debt principal, and total expenditures from all other governmental funds including enterprise, debt service, capital projects and special revenues. For purposes of this test, the calculation of total expenditures excludes all transfers between funds under the direct control of the local government using the financial test.

(c) Local revenues consisting of total revenues, as defined in par. (a), minus the sum of all transfers from other governmental entities, including all monies received from federal, state or local government sources.

(d) Debt service consisting of the sum of all interest and principal payments on all long-term credit obligations and all interest-bearing short-term credit obligations. For purposes of this test, debt service includes interest and principal payments on general obligation bonds, revenue bonds, notes, mortgages, judgments and interest bearing warrants. For purposes of this test, debt service excludes payments on non-interest-bearing short-term obligations, interfund obligations, amounts owed in a trust or agency capacity and advances and contingent loans from other governments.

(e) Total funds consisting of the sum of cash and investment securities from all funds, including general, enterprise, debt service, capital projects and special revenue funds, but excluding employee retirement funds, at the end of the local government's financial reporting year. For purposes of this test, the calculation of total funds includes federal securities, federal agency securities, state and local government securities, and other securities such as bonds, notes and mortgages. For purposes of this test, the calculation of total funds excludes agency funds, private trust funds, accounts receivable, value of real property and other non-security assets.

(f) Population consisting of the number of people in the area served by the local government.

(3) The local government's year-end financial statements, if independently audited, may not include an adverse auditor's opinion or a disclaimer of opinion. The local government may not have outstanding issues of general obligation or revenue bonds that are rated as less than investment grade.

(4) To demonstrate that it meets the financial test of this section, the chief financial officer of the local government owner or operator, shall sign, within 120 days of the close of each financial reporting year, as defined by the 12-month period for which financial statements used to support the financial test are prepared, a letter which is identical to the letter specified in 40 CFR 280.105(c), except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.105(c) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(5) If a local government owner or operator using the test to provide financial assurance finds that it no longer meets the requirements of the financial test based on the year-end financial

statements, the owner or operator shall obtain alternative coverage within 150 days of the end of the year for which financial statements have been prepared.

(6) The department may require reports of financial condition at any time from the local government owner or operator. If the department finds that the local government owner or operator no longer meets the financial test requirements of this section, the owner or operator shall obtain alternate coverage within 30 days after notification of such a finding.

(7) If the local government owner or operator fails to obtain alternate assurance within 150 days of finding that it no longer meets the requirements of the financial test based on the year-end financial statements or within 30 days of notification by the department that it no longer meets the requirements of the financial test, the owner or operator shall notify the department of such failure within 10 days.

Comm 10.733 Local government guarantee. (1) To use a guarantee to meet the financial responsibility requirements of s. Comm 10.705, a local government owner or operator shall obtain a guarantee that conforms to the requirements of this section. The guarantor shall be either the state in which the local government owner or operator is located or a local government having a substantial governmental relationship with the owner and operator and issuing the guarantee as an act incident to that relationship.

(2) A local government acting as the guarantor shall do one of the following:

(a) Demonstrate that it meets the bond rating test requirement of s. Comm 10.727 and deliver a copy of the chief financial officer's letter as contained in s. Comm 10.727 (4) to the local government owner or operator.

(b) Demonstrate that it meets the worksheet test requirements of s. Comm 10.730 and deliver a copy of the chief financial officer's letter as contained in s. Comm 10.730 (4) to the local government owner or operator.

(c) Demonstrate that it meets the local government fund requirements of s. Comm 10.735 (1) and deliver a copy of the chief financial officer's letter as contained in s. Comm 10.735 (2) to the local government owner or operator.

(3) If the local government guarantor is unable to demonstrate financial assurance under any of ss. Comm 10.727, Comm 10.730 or Comm 10.735 (1) at the end of the financial reporting year, the guarantor shall send by certified mail, before cancellation or non-renewal of the guarantee, notice to the owner or operator. The guarantee shall terminate no less than 120 days after the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator shall obtain alternative coverage as specified in s. Comm 10.753.

(4) (a) The guarantee agreement shall be worded as specified in subs. (5) to (8) of this section, depending on which of the following alternative guarantee arrangements is selected:

1. If, in the default or incapacity of the owner or operator, the guarantor guarantees to fund a standby trust as directed by the department, the guarantee shall be worded as specified in subs. (5) or (6).

2. If, in the default or incapacity of the owner or operator, the guarantor guarantees to make payments as directed by the department for taking corrective action or compensating third parties for bodily injury and property damage, the guarantee shall be worded as specified in subs. (7) or (8).

(b) The local government guarantor shall sign a guarantee that is identical to the guarantee specified in the CFR section referenced in subs (5) to (8), except for the following:

1. The instructions in brackets in the guarantee shall be replaced by the relevant information and the brackets deleted.

2. If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

a. Reference in the guarantee to underground tanks shall be amended to refer to aboveground tanks**.**

b. Certification that wording is identical to the wording required in 40 CFR 280.106(d) or 40 CFR 280.106(e) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm. There are 2 different documents specified in 40 CFR 280.106.

(5) If the guarantor is a state, the local government guarantee with standby trust shall be identical to the wording found in 40 CFR 280.106(d), except as modified under sub. (4).

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(6) If the guarantor is a local government, the local government guarantee with standby trust shall be identical to the wording found in 40 CFR 280.106(d), except as modified under sub. (4).

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(7) If the guarantor is a state, the local government guarantee without standby trust shall be identical to the wording found in 40 CFR 280.106(e), except as modified under sub. (4).

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

(8) If the guarantor is a local government, the local government guarantee without standby trust shall be identical to the wording found in 40 CFR 280.106(e), except as modified under sub. (4).

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

Comm 10.735 Local government fund. (1) (a) To use a local government fund to meet the financial responsibility requirements of s. Comm 10.705, a local government owner or operator shall establish a dedicated fund account that conforms to the requirements of this section. A dedicated fund may not be commingled with other funds or otherwise used in normal operations, except as specified in par. (c). A dedicated fund shall be considered eligible if it meets the requirements in one of pars. (b), (c) or (d).

(b) The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks and is funded for the full amount of coverage required under s. Comm 10.705, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining coverage.

(c) 1. The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance, or order as a contingency fund for general emergencies, including taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum underground storage tanks, and is funded for 5 times the full amount of coverage required under s. Comm 10.705, or funded for part of the required amount of coverage and used in combination with other mechanisms that provide the remaining coverage.

2. If the fund is funded for less than 5 times the amount of coverage required under s. Comm 10.705, the amount of financial responsibility demonstrated by the fund may not exceed one-fifth the amount in the fund.

(d) 1. The fund is dedicated by state constitutional provision, or local government statute, charter, ordinance or order to pay for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum storage tanks.

2. A payment is made to the fund once every year for 7 years until the fund is fully funded. This 7-year period is hereafter referred to as the pay-in period.

3. The amount of each payment shall be determined by the formula (TF - CF)/Y, where TF is the total required financial assurance for the owner or operator, CF is the current amount in the fund, and Y is the number of years remaining in the pay-in period.

4. If the method in this paragraph is chosen, one of the following is also required:

a. The local government owner or operator has available bonding authority, approved through voter referendum if such approval is necessary prior to the issuance of bonds, for an amount equal to the difference between the required amount of coverage and the amount held in the dedicated fund. This bonding authority shall be available for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from the operation of petroleum storage tanks.

b. The local government owner or operator has a letter signed by the appropriate state attorney general stating that the use of the bonding authority will not increase the local government's debt beyond the legal debt ceilings established by Wisconsin statutes. The letter shall also state that prior voter approval is not necessary before use of the bonding authority.

(2) To demonstrate that it meets the requirements of the local government fund, the chief financial officer of the local government owner or operator or guarantor shall sign a letter worded exactly as specified in 40 CFR 280.107(d), except for the following:

(a) The instructions in brackets in the letter shall be replaced by the relevant information and the brackets deleted.

(b) If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

1. Reference in the letter to underground tanks shall be amended to refer to aboveground tanks**.**

2. Certification that wording is identical to the wording required in 40 CFR 280.107(d) shall be deleted.

Note: A link to 40 CFR 280 is available at the following U.S. EPA Web site: http://www.epa.gov/oust/fedlaws/cfr.htm.

Comm 10.737 Substitution of financial assurance mechanisms by owner or operator. **(1)** An owner or operator may substitute any alternate financial assurance mechanisms as specified in this subchapter, provided that at all times an effective financial assurance mechanism or combination of mechanisms is maintained which satisfies the financial responsibility requirements of s. Comm 10.705.

(2) After obtaining alternate financial assurance as specified in this subchapter, an owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance.

Comm 10.740 Cancellation or nonrenewal by a provider of financial assurance. (1) (a) Except as otherwise provided, a provider of financial assurance may cancel or fail to renew

an assurance mechanism by sending a notice of termination by certified mail to the owner or operator.

(b) Termination of a guarantee, a surety bond, or a letter of credit may not occur until 120 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(c) 1. Termination of insurance or risk retention group coverage or state-funded assurance, except for nonpayment or misrepresentation by the insured, may not occur until 60 days after the date on which the owner or operator received notice of termination, as evidenced by the return receipt.

2. Termination for nonpayment of premium or misrepresentation by the insured may not occur until a minimum of 10 days after the date on which the owner or operator receives the notice of termination, as evidenced by the return receipt.

(2) (a) If a provider of financial responsibility cancels or fails to renew for reasons other than incapacity of the provider as specified in s. Comm 10.743, the owner or operator shall obtain alternate coverage as specified in this section within 60 days after receipt of the notice of termination.

(b) If the owner or operator fails to obtain alternate coverage within 60 days after receipt of the notice of termination, the owner or operator shall notify the department of such failure and submit all of the following to the department:

1. The name and address of the provider of financial assurance.

2. The effective date of termination.

3. The evidence of the financial assistance mechanism subject to the termination maintained in accordance with s. Comm 10.745 (2).

Comm 10.743 Reporting by owner or operator. (1) GENERAL. The owner or operator of a petroleum storage tank subject to financial responsibility requirements under the scope of this subchapter shall submit a copy of the applicable forms listed in s. Comm 10.745 (2) documenting current evidence of financial responsibility to the department in accordance with this section.

(2) TIMING. (a) *Underground tanks.* Copies of the applicable forms listed in s. Comm 10.745 (2) shall be submitted to the department upon annual permit renewal as required in s. Comm 10.145, along with all of the following:

1. The specific location and designated regulated object number of tanks at each facility covered by the respective mechanism of financial responsibility.

2. If insurance and risk retention under s. Comm 10.715 is used, the insurance underwriter certificate of insurance, and schedule of covered locations and storage tanks as provided by the insurer, reflecting pollution coverage in the amounts required under s. Comm 10.705.

(b) *Aboveground tanks*. Copies of the applicable forms listed in s. Comm 10.745 (2) shall be submitted to the department within 30 days after the owner or operator identifies a release from an aboveground storage tank, that is required to be reported under s. Comm 10.585.

(c) *All tanks.* If the owner or operator of an underground or aboveground petroleum storage tank fails to obtain alternate coverage as required by this subchapter, copies of the applicable forms listed in s. Comm 10.745 (2) shall be submitted to the department within 30 days after the owner or operator receives notice of any of the following:

1. Commencement of a proceeding under Title 11, U.S. Code, naming a provider of financial assurance as a debtor.

2. Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism.

3. Failure of a guarantor to meet the requirements of the financial test.

4. Other incapacity of a provider of financial assurance.

(3) NEW TANKS. The owner or operator of an underground petroleum storage tank, or an aboveground petroleum storage tank used or intended for use over water, shall certify compliance with the financial responsibility requirements of this subchapter as specified in the new tank registration form when notifying the department of the installation of a new storage tank as required in s. Comm 10.140.

(4) ADDITIONAL SUBMITTALS. The department may require an owner or operator to submit evidence of financial assurance as described in s. Comm 10.745 (2) or other information relevant to compliance with this subchapter at any time.

Comm 10.745 Record keeping. (1) (a) Owners or operators shall maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this subchapter until released from the requirements of this subchapter under s. Comm 10.750.

(b) An owner or operator shall maintain such evidence at the storage tank site or the owner's or operator's place of business.

(c) Records maintained off-site shall be made available to the department or authorized agent upon request.

(2) An owner or operator shall maintain the following types of evidence of financial responsibility:

(a) An owner or operator using an assurance mechanism specified in ss. Comm 10.710 to 10.720, or in s. Comm 10.723, or in ss. Comm 10.727 to 10.735 shall maintain a copy of the instrument.

(b) An owner or operator using a financial test or guarantee, or a local government financial test or a local government guarantee supported by the local government financial test shall maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed financial reporting year. Such evidence shall be on file no later than 120 days after the close of the financial reporting year.

(c) An owner or operator using a guarantee, surety bond, or letter of credit shall maintain a copy of the signed standby trust fund agreement and copies of any amendments to the agreement.

(d) A local government owner or operator using a local government guarantee under s. Comm 10.733 (4) shall maintain a copy of the signed standby trust agreement and copies of any amendments to the agreement.

(e) A local government owner or operator using the local government bond rating test under s. Comm 10.727 shall maintain a copy of its bond rating published within the last 12 months by Moody's or Standard & Poor's.

(f) A local government owner or operator using the local government guarantee under s. Comm 10.733 where the guarantor's demonstration of financial responsibility relies on the bond rating test under s. Comm 10.727 shall maintain a copy of the guarantor's bond rating published within the last 12 months by Moody's or Standard & Poor's.

(g) An owner or operator using an insurance policy or risk retention group coverage shall maintain a copy of the signed insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreements.

(h) An owner or operator using a local government fund under s. Comm 10.735 shall maintain all of the following documents:

1. A copy of the state statute or provision or local government ordinance or order that dedicates the fund.

2. a. Year-end financial statements for the most recent completed financial reporting year showing the amount in the fund.

b. If the fund is established using incremental funding backed by bonding authority, financial statements showing the previous year's balance, the amount of funding during the year and the closing balance in the fund.

3. If the fund is established using incremental funding backed by bonding authority, documentation showing the required bonding authority, including either the results of a voter referendum or attestation by the Wisconsin attorney general**.**

(i) A local government owner or operator using the local government guarantee supported by the local government fund shall maintain a copy of the guarantor's year-end financial statements for the most recent completed financial reporting year showing the amount of the fund.

(j) 1. An owner or operator using an assurance mechanism specified in ss. Comm 10.710 to 10.735 shall maintain an updated copy of an affidavit of financial responsibility worded exactly as specified in 40 CFR 280.111(b)(11)(i), except as specified in subds. 2. and 3.

2. The instructions in brackets in the affidavit shall be replaced by the relevant information and the brackets deleted.

3. If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, all of the following changes shall be made:

a. Any reference in the affidavit to underground tanks shall be amended to refer to aboveground tanks.

b. Any certification that wording is identical to the wording required in 40 CFR 280.111(b)(11)(i) shall be deleted.

Note: A copy of the affidavit of financial responsibility required in 40 CFR 280.111(b)(11)(i) is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

4. The owner or operator shall update the affidavit referenced in subd. 1. annually and whenever the financial assurance mechanisms used to demonstrate financial responsibility change or when requested by the department.

Comm 10.747 Drawing on financial assurance mechanisms. **(1)** (a) The department shall require the guarantor, surety, or institution issuing a letter of credit to place the amount of funds stipulated by the department, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if the conditions under either par. (b) or (c) apply.

(b) 1. The owner or operator fails to establish alternate financial assurance within 60 days after receiving notice of cancellation of the guarantee, surety bond, letter of credit, or other financial assurance mechanism.

2. The department determines or suspects that a release from a storage tank covered by the mechanism has occurred and so notifies the owner or operator, or the owner or operator has

notified the department of natural resources pursuant to s. Comm 10.585 of a release from a storage tank covered by the mechanism.

(c) The conditions of sub. (2) (b) or (c) 1. or 2. are satisfied.

(2) (a) The department may draw on a standby trust fund when the conditions under either par. (b) or (c) apply.

(b) The department makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, and the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action in accordance with ss. Comm 10.570 to 10.585.

(c) The department has received one of the following:

1. Certification from the owner or operator and the third-party liability claimants and from attorneys representing the owner or operator and the third-party liability claimants that a third-party liability claim should be paid. The certification shall be worded exactly as specified in 40 CFR 280.112(b)(2)(i), except for the following:

a. The instructions in brackets in the certification shall be replaced by the relevant information and the brackets deleted.

b. If financial responsibility for aboveground tanks within the scope of this subchapter is demonstrated using this method, reference in the certification to underground tanks shall be amended to refer to aboveground tanks, and any certification that wording is identical to the wording required in 40 CFR 280.112(b)(2)(i) shall be deleted.

Note: A copy of the affidavit of financial responsibility required in 40 CFR 280.111(b)(2)(i) is available by accessing the Department's Web site at www.commerce.wi.gov., and searching under storage tank regulation, for technical guidance.

2. A valid final court order establishing a judgment against the owner or operator for bodily injury or property damage caused by an accidental release from a storage tank covered by financial assurance under this subchapter and the department determines that the owner or operator has not satisfied the judgment.

(3) If the department determines that the amount of corrective-action costs and third-party liability claims eligible for payment under sub. (2) may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The department shall pay third-party liability claims in the order in which the department receives certifications under sub. (2) (c) 1. and valid court orders under sub. (2) (c) 2.

Comm 10.750 Release from the requirements. An owner or operator is no longer required to maintain financial responsibility under this subchapter for a storage tank after the

tank has been permanently closed or, if corrective action is required, after corrective action has been completed and the tank has been permanently closed in accordance with ss. Comm 10.560 to 10.585 for underground tanks and ss. Comm 10.460 to 10.470 for aboveground tanks.

Comm 10.753 Bankruptcy or other incapacity of owner or operator or provider of financial assurance. (1) Within 10 days after commencement of a proceeding under Title 11, U.S. Code, naming an owner or operator as debtor, the owner or operator shall notify the department by certified mail of such commencement and submit the appropriate forms listed in s. Comm 10.745 (2) documenting current financial responsibility.

(2) Within 10 days after commencement of a proceeding under Title 11, U.S. Code, naming a guarantor providing financial assurance as debtor, such guarantor shall notify the owner or operator by certified mail of such commencement as required under the terms of the guarantee specified in s. Comm 10.713.

(3) (a) An owner or operator who obtains financial assurance by a mechanism other than the financial test of self-insurance shall be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of the provider of financial assurance to issue a guarantee, insurance policy, risk retention group coverage policy, surety bond, letter of credit, or state-required mechanism.

(b) The owner or operator shall obtain alternate financial assurance as specified in this subchapter within 30 days after receiving notice of such an event.

(c) If the owner or operator does not obtain alternate coverage within 30 days after such notification, he or she shall notify the department.

(4) Within 30 days after receipt of notification that the state fund or other state assurance has become incapable of paying for assured corrective action or third-party compensation costs, the owner or operator shall obtain alternate financial assurance.

Comm 10.755 Replenishment of guarantees, letters of credit, or surety bonds. (1) If at any time after a standby trust is funded upon the instruction of the department with funds drawn from a guarantee, letter of credit, or surety bond, and the amount in the standby trust is reduced below the full amount of coverage required, the owner or operator shall comply with either sub. (2) or (3) by the anniversary date of the financial mechanism from which the funds were drawn.

(2) The owner or operator shall replenish the value of financial assurance to equal the full amount of coverage required.

(3) The owner or operator shall acquire another financial assurance mechanism for the amount by which funds in the standby trust have been reduced.

(4) For purposes of this section, the full amount of coverage required is the amount of coverage to be provided under s. Comm 10.705. If a combination of mechanisms was used to provide the assurance funds that were drawn upon, replenishment shall occur by the earliest anniversary date among the mechanisms.

SECTION 3. Comm 14.01 (2) Note is amended to read:

Comm 14.01 (2) Note: The department and other state agencies may have additional rules that affect the design, construction, inspection, maintenance and use of public buildings, places of employment and premises, including chs. Comm 5, Licenses, Certifications, and Registrations; Comm 7, Explosives and Fireworks; Comm 10, Flammable, ~~and~~ Combustible and Hazardous Liquids; Comm 16, Electrical; Comm 18, Elevators, Escalators and Lift Devices; Comm 40, Gas Systems; Comm 41, Boilers and Pressure Vessels; Comm 43, Anhydrous Ammonia; Comm 45, Mechanical Refrigeration; Comm 60 to 66, Commercial Building Code; Comm 75 to 79, Buildings Constructed Prior to 1914; Comm 81 to 87, Plumbing; Comm 90, Public Swimming Pools; and Comm 91, Sanitation. The department's Safety and Buildings Division administers all of these listed codes except ch. Comm 5, which is jointly administered ~~by~~ with the department's Environmental and Regulatory Services Division, and ch. Comm 10, which is administered by that Division.

SECTION 4. Comm 47.015 (19) and Note are repealed and recreated to read:

Comm 47.015 (19) "Heating oil" has the same meaning as set forth in ch. Comm 10.

Note: The definition in chapter Comm 10 for heating oil reads as follows: " 'Heating fuel' or 'heating oil' means petroleum that is No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, and No. 6 technical grade grades of fuel oil; other residual fuel oils, including Navy Special Fuel Oil and Bunker C; and other fuels when used as substitutes for one of these, including used oil or used cooking oils when used in an oil burner to provide space heat or processing heat for consumptive use on the property."

SECTION 5. Comm 48.580 (1) (c) is created to read:

Comm 48.580 (1) (c) *Dual dispenser for ethanol.* A dispensing device which has existed since before [the effective date of this chapter…LEGISLATIVE REFERENCE BUREAU TO INSERT DATE], and which does not use a separate fueling nozzle and hose for dispensing ethanol-blended motor fuels of more than 10 percent ethanol by volume shall bear a label clearly warning any purchaser that the first gallon may have more than 10 percent ethanol by volume. This label shall be adjacent to the ethanol label that is required in par. (b), and shall comply with the requirements in par. (b) 3., 4., 7. and 8. Enforcement of this paragraph shall be in accordance with par. (b) 9.

SECTION 6. Comm 48.580 (2) (a) and Note are amended to read:

Comm 48.580 (2) (a) *Gasoline and similar products.* All containers for storing gasoline or any other product that has a flash point of less than 100°F when tested using either an ASTM D 56 or ASTM D 6450 closed tester shall be metal or equally sound nonflammable material

meeting the requirements of ch. Comm 10 or 14, shall have the common name of the contents clearly labeled or painted on the exterior, and shall be substantially a bright red color. These requirements do not apply to any of the following:

Note: Chapter Comm 14 generally regulates aboveground storage of flammable and combustible liquids in containers having a capacity of less than 110 gallons, while ch. Comm 10 regulates this storage ~~containers for flammable and combustible liquids, and adopts~~ in tanks that have a capacity of 110 gallons or more. Both of those chapters reference national standards that specify the materials which these containers or tanks must be constructed of – such as ASTM F 852, which addresses portable gasoline containers for consumer use.

(END)

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EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.) and (e), Stats., these rules shall become effective on the first day of the third month commencing after the date of publication in the Wisconsin Administrative Register.

File reference: Comm 10/rules 2007c,ac