

July 2010

Amnesty Period for Aboveground Motor Fuel Tanks on Farms

The farming community is not typically in the Comm 10 – Flammable, Combustible and Hazardous Liquids Code spotlight. However, recent events have required some regulatory follow-up which brought attention to aboveground motor fuel storage tank installation practices on some farms that are not acceptable due to the potential environmental and fire safety risk.

Tanks on farms have been regulated by the flammable and combustible liquids code since 1982. Some farm tanks must also comply with Federal EPA SPCC requirements <http://www.bleyhl.com/images/E0197001/SpillPreventionFarms.pdf>. Comm 10 technical code requirements apply to any aboveground tank 110 gallon capacity or larger. The requirements for aboveground tanks exceeding 1,100 gallons are more comprehensive, including, but not limited to:

- ◆ Setback distance from property line, building, other combustible structures, hay stacks and similar hazards.
- ◆ Spill control (secondary containment such as a dike) that is also a primary component of Federal SPCC requirements.
- ◆ Normal and emergency venting.
- ◆ Approved pump with anti-siphon device.

In 1991 a major code revision was implemented which included fuel storage on farms, but to a lesser degree of construction and operational requirements than commercial systems. Shortly thereafter issues with contaminated wells on farms as a result of leaking storage tanks surfaced and generated another code revision in 1993. That revision required all aboveground tanks on farms to be upgraded no later than February 1, 1995. The department communicated the new requirements to farm organizations and various news media, but pursued farm compliance with this requirement only on specific complaint or inquiry.

We have become aware of underground storage tanks (USTs) used on farms as aboveground tanks (ASTs). “Used” underground storage tanks are typically taken out of service and removed as a result of questionable tank integrity. Since 1991 the code required that USTs that are no longer in-use be “closed” by removal. It was assumed that these tanks would be scrapped rather than moved into a second life use, such as moving to farm motor fuel or liquid fertilizer storage. USTs are designed and listed for underground use only. USTs are designed under construction standards that factor in the inward pressure of the surrounding earth. USTs are also typically filled via gravity flow delivery, whereas aboveground tanks are filled via a pressure pumped delivery that exerts outward pressure on the tank wall.



The dynamics of the design has been demonstrated several times over the years when USTs used aboveground have ruptured spilling their contents resulting in an emergency response and environmental contamination.

Any new or reused tank has to meet current day code requirements for its new use. Effective

with the November 2008 code is the requirement that USTs had to be scrapped unless recertified for specific use under the Comm 10 code. They cannot be used as underground septic tanks or aboveground liquid storage of any type. The Department of Commerce will take action against contractors who violate this scrapping requirement. Because many of the USTs that were not scrapped have moved into the farm community we have become aware of the numerous non compliant motor fuel systems located on farms.

Because tanks on farms do not have the public exposure and farms typically are not faced with tank setback logistics and distances that tanks at commercial property have to comply with, the department believes that a relative level of safety can be achieved on farms within some existing tank system technical areas. The department has decided to implement an amnesty period for certain tanks to allow them to be upgraded to provide for increased safety. However, release prevention and groundwater protection is vital with no room for flexibility.

This amnesty applies only to tanks larger than 1,100 gallons that have been purchased prior to April 1, 2010 used to store diesel fuel. Gasoline storage is not under an amnesty and must be upgraded to current day code requirements. Proof of date purchased may be required. The amnesty applies to farms notifying Commerce of their respective situation by December 31, 2010. Commerce will determine the compliance deadline based upon farm specific situations. To find the Commerce contact person for the respective counties go to the web page: commerce.wi.gov/ER/pdf/bst/Forms_FM/ER-BST-Fm-9687TankerMap.pdf

Because liquid fertilizer is outside the scope of Comm 10, Commerce will not address how liquid fertilizer is stored.

Many of the subject tanks are listed for underground use, but are being used as an aboveground storage tank. The tables at the end of this document contain the technical requirements for farms contacting Commerce and modifying systems under the amnesty. The following items are key elements in the amnesty process:

- * Secondary containment for existing tanks must be concrete; or earthen with an approved synthetic liner (for farm purposes this generally isn't practical due to the small area and liner engineering requirement).
- * The setback for tanks under the amnesty must be at least 40 feet to any building. Silos and grain bins are considered structures, not buildings. A pole type shelter with a roof to protect equipment or hay from the weather is considered a building. In certain situations with existing tanks this setback may be waived.
- * Pre-installation plan submittal (typically prepared and submitted by the certified installer) is not waived and is still required.
- * Installation under the supervision of a Wisconsin Comm 5 certified installer is not waived and is still required. (If you are performing some of the work yourself there are specific milestones that must be under the direct supervision of the certified installer.)
- * Registration of the tank is not waived and is still required.

USTs have been required to be registered in the state tank database since 1985 and ASTs 110 gallon and larger have been required to be registered since 1991. There is NO FEE for tank registration. You can check to see if your tank(s) are registered at: http://apps.commerce.state.wi.us/ER_Tanks/ER-EN-TankSearch.htm

Tank registration forms may be downloaded from the following web sites:

AST registration form: commerce.state.wi.us/ER/pdf/bst/Forms_FM/ER-BST-Fm-8731-AstReg.pdf

UST registration form: commerce.state.wi.us/ER/pdf/bst/Forms_FM/ER-BST-Fm-7437-UstReg.pdf

If purchasing a new AST in lieu of the amnesty, consider a listed double-wall tank that will meet the secondary containment requirement.

Plan submittal requirements (Note – Tanks storing gasoline have more restrictive requirements). Plan submittal fees:

Tank System Category	Plan Review	Installation Inspection	Plan Revision	Reinspection
Aggregate capacity 1,101 gallons through 48,000 gallons capacity	\$125	\$250	\$100	\$100
Aggregate capacity 48,001 gallons through 80,000 gallons capacity	\$150	\$300	\$100	\$100
Aggregate capacity 80,001 gallons through 120,000 gallons capacity	\$180	\$450	\$120	\$150
Groundwater fee all submittals	\$100			

Plan review / installation requirements (AST \geq 1,100 gallon capacity)

Comm 10 Technical Components:	Under amnesty program		New tank / containment construction
	Existing tank already in containment	Existing tank not in containment	
	"Containment" is via a dike or double-wall tank		
Listed tank (e.g. UL 142 or API 650 label)	Waived	Waived	Yes
Listed dispenser / pump	Yes	Yes	
Secondary containment calc. & material	100% Containment	125%	125%
Containment water removal	Yes	Yes	Yes
Horizontal tank - supports (Stand / saddle)	Yes	Yes	Yes
Spill containment under fill connection unless fill is within containment	Collection or containment	Spill box	Spill box
Check valve in fill line	Yes	Yes	Yes
Gate or ball valve at fill connect	Yes	Yes	Yes
Audible / visual overfill alerting at 90%	Req. Waived	Req. Waived	Yes
Automatic shutoff at 95%	Req. Waived	Req. Waived	Yes
Product level gauge	Yes	Yes	Yes
Allow a product gauge via bottom opening to vertical tube	Yes	Yes	No
Working vent size	Yes	Yes	Yes
Emergency vent size	Yes	Yes	Yes
Pressure regulating valve (suction system)	Yes	Yes	Yes
Grounding rod	Yes	Yes	Yes
Tank marking / signage	Yes	Yes	Yes
Emergency shut off (E stop)	Farm option	Farm option	Farm option
Fire Extinguisher	Farm option	Farm option	Farm option
Electrical to code	Yes	Yes	Yes
Well location / Distance from well	Req. Waived	Yes	Yes
Transfer containment	Req. Waived	Yes	Yes
Tank – containment wall setback	Req. Waived	Yes	Yes
Tank – dispenser setback	NA	NA	NA
Tank – bldg / property setback	Yes	Yes	Yes
Hose length	NA	NA	NA

Hose storage rack / reel	Yes	Yes	Yes
Tank openings allowed below product level	Yes	Yes	No
Setback distance from property line, building, combustible structures, hay stacks and similar hazards	40 ft.	40 ft	Table Comm 10.630 (5 – 20 ft)

Link to Wisconsin Certified Aboveground Tank Installer listing (Click on “Search By Tank Specialty” bar and then click on the arrow in the “Specialty Type” box and select “Aboveground Tank System Installer) to find approved contractor companies:

http://apps2.commerce.wi.gov/SB_Credential/SB_CredentialApp/SearchByCredType

Note: Some companies may only install small tanks.

Sincerely,



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