

## On Farm Storage of Bulk Liquid Fertilizer

*This fact sheet was prepared by the Minnesota Department of Agriculture to provide guidance to agricultural commodity producers who store bulk liquid fertilizer at their farm sites. This guidance is intended to supplement – not replace – Federal and State laws*

In recent years there has been an increase of on farm storage of bulk liquid fertilizer. When precautions are taken spills or releases can be prevented or minimized by following several practices: a) containment for the tank(s), b) stainless steel plugs and connections to and including the first valve, c) stainless steel connections and valves for sight gauges that normally operate in a closed or locked position, d) adequate tank integrity.

A. Agricultural commodity producers who store greater than 6,000 gallons of bulk liquid fertilizer or who store fertilizer for distribution must have proper containment that is permitted by the Minnesota Department of Agriculture (MDA). This containment usually consists of concrete, metal, or synthetic lined earth, metal, wood, or concrete. The MDA does not recommend earthen clay liners due to a history of failure in Minnesota when the liners are not properly constructed and maintained.

The capacity of the containment area (dike) should be 125% of the largest tank plus the displacement of other tanks stored inside the dike. Applications to construct and permit bulk liquid fertilizer storage containment systems on farms are available on the MDA's website – [www.mda.state.mn.us/chemicals/fertilizers/blfstorage.htm](http://www.mda.state.mn.us/chemicals/fertilizers/blfstorage.htm).

The 2007 legislature amended Minnesota Statutes 2006, section 18C.305 by adding a subdivision to read as follows:

*Subd. 3. Exemption. A permit and safeguard is not required for agricultural commodity producers who store, on their own property, for their own use, no more than 6,000 gallons of liquid commercial fertilizer.*

Effective July 1, 2007 farmers can store up to 6,000 gallons of bulk liquid fertilizer (liquid commercial fertilizer) on their own property without having a permit or secondary containment. This requirement does not allow bulk liquid fertilizer to be stored at chemigation sites (using an irrigation system to apply fertilizer) without compliance

with Minnesota's chemigation regulations, which have requirements for setback to wells and required containment based on size of tank and duration of storage.

- A. MDA highly recommends stainless steel plugs, connections, and valves. Mild steel/black steel/galvanized steel plugs, connections, and valves have failed (without adequate containment) resulting in significant losses of product and extensive cleanups.
- B. Construct stainless steel sight gauge connections and valves using a valve type that normally operates in a closed position. This reduces the likelihood of a release due to a sight-gauge hose failure when the valve was not completely closed.
- C. Tanks used to store bulk liquid fertilizer must be in proper condition. Do not use or purchase 1. Previously used underground tanks (their construction was not designed to store product above ground); 2. Previously used above ground petroleum tanks (construction along with current condition may not be adequate to support bulk liquid fertilizer ;) 3. Poly tanks over 10 years old; 4. Any other tank being disposed of where the condition of the tank and future suitability for continued service is questionable.

As part of the permit process MDA will assist you in choosing the type of dike that works best for your situation and help, locate the dike to meet minimum well setback distances required by the Minnesota Department of Health.

### FOR MORE INFORMATION

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