

# Regulation 642: On-Farm Fertilizer Bulk Storage

## SUMMARY Sheet

This regulation applies to farms with bulk liquid fertilizer storage tanks.

### Bulk storage tanks are defined as:

- Having a capacity greater than 2,500 gallons OR
- Having a combined capacity of all tanks greater than 7,500 gallons OR
- Mobile containers that store fertilizer on site for more than 30 days

### Deadline for Containment: **August 13, 2008**

New farm storage facilities (no tanks/storage before August 2003) must comply immediately

**Siting:** All farm bulk storage facilities must comply with the setbacks laid out in: Water Supply Setback Requirements for Bulk Storage Facilities Regulated through Regulations 640, 641, 642.

### FARMS WITH BULK STORAGE TANKS MUST HAVE:

#### 1. Secondary Containment

Dike must be designed to withstand a full hydrostatic head of any discharged liquid and weight load of material.

Dike Materials: reinforced concrete, precast concrete modules, steel, earthen berm

Liner Materials: synthetic liners (min 30 mils), clay (min 6"), concrete, and steel. Liner must be watertight.

- Secondary containment not protected from rainfall:  
110% largest tank volume + displacement volume of other tanks below dike wall + volume of a 6" rainfall
- Secondary containment protected from rainfall (located under a roofed structure):  
110% largest tank volume + displacement volume of other tanks below dike wall

#### Tanks

- Keep locked/secured when not in use; close valves on empty tanks
- Label as fertilizer with a minimum 4" lettering

#### Appurtenances (valves, gauges, pumps, hoses, plumbing, etc.)

- Must be within the containment area and above ground
- Support to prevent sagging and protect to prevent damage
- Keep locked/secure when not in use

#### Containment Area Management of Accumulated Liquid

- Liquids must be removed by a manually activated pump
- Liquids with fertilizer – apply at agronomic rates to sites where fertilizer can still be utilized as intended
- Liquids without fertilizer – may be discharged as surface runoff– but not directly into surface water waterways, storm drains or field tile

#### 2. Operational Pad

Supervise loading and unloading at all times.

Three Options:

- Concrete Pad – holds at least 750 gallons, 10' by 20' minimum size dimensions
- Portable Pad – holds at least 750 gallons, 10' by 20' minimum size dimensions
- Closed Containment System – Dry couplers, hoses under manufacturer warranty, anti-overflow devices, and 150-gallon container under point of transfer

#### 3. Discharge Response Plan – **MDARD Spill Hotline: 1-800-405-0101**

Contains: emergency contact numbers, product list and site plan depicting all structures and nearby water sources

- *Completing Emergency Planning on the Farm (MSU Bulletin E-2575) will meet this requirement*
- *Local Groundwater Technician assistance is available at no cost (emergency tube program)*

Copies of Regulation 642 are available by contacting:  
**Michigan Department of Agriculture & Rural Development**  
Pesticide & Plant Pest Management Division  
Phone: (517) 284-5644  
Web: [www.michigan.gov/mdard-bulkstorage](http://www.michigan.gov/mdard-bulkstorage)

This document is provided as a guideline.  
Full compliance must be in accordance with Regulation 642

