MINNESOTA DEPARTMENT OF
AGRICULTURE
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Pesticide and Fertilizer Management Division, Ph: 651-201-6275, Fx: 651-201-6117 **FACT SHEET**

ANHYDROUS AMMONIA

ANHYDROUS AMMONIA (NH$_3$) TRANSFER
From Storage Tank to Nurse Tank

1. **SAFETY FIRST**. Keep and use all safety equipment readily available and in good condition:

   □ Wear NH3-rated goggles and gloves. Never wear contact lenses;

   □ 150 gallons of clean water in open top container; or emergency shower/ plumbed eye wash unit;

   □ Stand upwind while making transfers;

   □ Check for defects/leaks in hoses, piping, valves;

   □ Make sure riser pull-away protection devices function properly.

   □ Be familiar with your emergency response plan; and

   □ Keep unauthorized persons out of the NH3 handling area.

2. **CHOCK** nurse tank wheels and disconnect towing vehicle from nurse tank.

3. **CONNECT** all vapor and liquid hoses/hose end valve assemblies to nurse tank vapor and liquid valves. **Tighten all fittings by hand.** Do NOT use a wrench to tighten hose-end valves onto nurse tank valves.

4. **CLOSE** all bleeder valves on vapor and liquid hose end valves.

5. **OPEN** the nurse tank valves, THEN the hose end valves.

6. **SLOWLY** open the vapor riser valve to equalize pressure between nurse and storage tanks.

7. **SLOWLY** open liquid riser valves. Turn on pump or compressor.

8. **WHILE** filling tank check liquid level by using the float and 85% fixed liquid level gauges. Inspect nurse tank components (use the Quick Checklist).

9. **WHEN** the tank is **full** (80-85%), close the following in this order:

   □ Stop pump (if filling only one tank);

   □ Liquid riser valve;

   □ Vapor riser valve;

   □ Liquid and vapor hose end valves; and

   □ Nurse tank liquid and vapor valves.

10. **OPEN** bleeder valves to bleed off anhydrous ammonia in hose end valves.

11. **DISCONNECT** liquid and vapor hose end valves from liquid and vapor nurse tank valves.

12. **PLACE** hose/hose end valve assemblies in a secure place on the riser stand or platform.

13. **REPLACE** protective acme caps on nurse tank values.

14. **CONNECT** towing vehicle (including chains) to nurse tank and remove chocks before moving towing vehicles/nurse tank