

ANHYDROUS AMMONIA EQUIPMENT INSPECTION CHECKLIST

Minnesota Department of Agriculture • Pesticide & Fertilizer Management Division • 625 Robert St. N, St. Paul, MN 55155-2538

PAGE:
OF

FIRM NAME:	PLANT LOCATION	DATE	Initials of Inspector
------------	----------------	------	-----------------------

INSTRUCTIONS: UNLESS OTHERWISE NOTED, specify deficiencies/violations by entering ("X") in boxes

EQUIPMENT IDENTIFICATION/TYPE/GALLON CAPACITY/SERVICE STATUS

Equipment Unit Identification: Firm (F), MDA Tag (MT), Mfr. Serial # (MS)					
Applicator(AP),Nurse Tank(NT),Dual Nurse Tank(D), Toolbar (TB)					
Gallon Capacity of Tank(s) - at or less than 3000 gallons on a single running gear					
Service Status: In Service (IS); Out of Service (OS); or Zero Product/Pressure Out of Service (ZP)					
Compliant to Service Status Policy (Tagging/Lock Outs, etc.)					

TANK PAINTING/MARKINGS/PLACARDING/SMV EMBLEM/REFLECTIVE STRIPS

1. Tank painting (white or aluminum per Federal Regulations)					
2. "Anhydrous Ammonia" in 2-inch letters on both ends and sides					
3. "Inhalation Hazard" in 2-inch letters on 2 sides					
4. Class 2.2 placards with 1005 ID number on both ends and sides					
5. Reflective tape on sides, rear, rear axle of tank(s). [80+inches & 10,000 # GVW]					
6. Applicator tank legible ammonia transfer instructions					
7. Slow-Moving Vehicle (SMV) emblem					

SAFETY CHAINS/RUNNING GEAR ANCHORING/CRADLE FRICTION/TIRES/BRAKES

8. Two independently-operating safety chains					
9. Applicator and Nurse tank anchoring to running gear					
10. Applicator Tank Cradle friction					
11. Tires and running gear					
12. Nurse tank brakes (gross vehicle weight of more than 12,000 pounds)					

TANK NON-CODE WELDING/DEFECTS/NAMEPLATE

13. Tank not NH3 or 250 psi rated					
14. Tank non-code/documented welding (NCW), Dent (D), or Leak (L)					
15. Tank nameplate absent (AB); illegible (IL); DOT Certification Required (DOT) or Cleaning Required (C). What's required: (1) Name of Manufacturer; (2) Manufacturer Serial No.; (3) "U" Stamp; (3) 250 psi rating; (4) Year Built; and (5) Min. Design Metal Temp or MDMT (MDMT required for tank built from January 1, 1989 to present).					
16. DOT SP-13554 markings – preferably in front side area of each tank: What's required: (a) DOT SP-13554 in .24-inch wide by 2-inch high lettering, (b) Month/Year V, T, P in 1-1/4-inch lettering; and (c) Unique ID for each tank in 1/2-inch lettering;					

NURSE TANK VALVE GUARD (ROLLCAGE) PROTECTION

17. Valve guard protecting valves and piping (no piping allowed outside confines of valve guard)					
--	--	--	--	--	--

POSITIVE SHUT-OFF VALVE/EXCESS FLOW VALVES

18. Withdrawal (WD), Liquid fill (L), Vapor (V) tank valves					
19. Anchored excess-flow valve or equivalent flow protection for dual nurse tanks at junction where withdrawal hoses merge.					

TANK PRESSURE GAUGES/LIQUID LEVEL GAUGES/NH₃ LIQUID LEVEL

20. 0-400 (tank) or 0-60/150 (TB manifold) psi/NH ₃ -rated gauge					
21. Float/mechanical liquid level gauge					
22. Filled greater than 85% @ 5°F or 90.6% @ 60°F (Equal to 56% filling density at respective temperatures)					
23. 85% fixed liquid level gauge					

ANHYDROUS AMMONIA EQUIPMENT INSPECTION CHECKLIST

Minnesota Department of Agriculture • Pesticide & Fertilizer Management Division • 625 Robert St. N, St. Paul, MN 55155-2538

PAGE:
OF

FIRM NAME:	PLANT LOCATION	DATE	Initials of Inspector
------------	----------------	------	-----------------------

INSTRUCTIONS: UNLESS OTHERWISE NOTED, specify deficiencies/violations by entering ("X") in boxes

EMERGENCY WATER TANKS & HOISING

24. Five gallon emergency water tank & hosing: Accessibility (IA); Cap (B); Cleaning (C); Hosing (H); Repair (R); Replacement (RP)							
--	--	--	--	--	--	--	--

TANK 250 PSI/AMMONIA-RATED PRESSURE RELIEF VALVE (PRV)

25. PRV installation records maintained							
26. Replace Out-of-date / Out-of-condition PRV							
27. PRV Cleaning (C); Rain cap (RC); and/or Periodic (annual) Inspection (PI)							

HOISING/PIPING/HOSE-END VALVES/HOSE SECURED/CONTROL VALVE

28. Hose & connections out of condition							
29. Hose-end (HS) or bleeder valve (BV) out of condition							
30. Secure hose and hose end valve(s) on tank or application unit							
31. Ammonia-rated piping/fittings (i.e. black forged steel fittings)							
32. Control valve between regulator/break-away coupling device must indicate whether the valve is open or closed.							

AMMONIA-RATED HYDROSTATIC RELIEF VALVES (HYDROSTATS)

33. In withdrawal valve (WD) and between each pair of shut-off valves (SV)							
34. Toolbar: Hose-end valve or female section of coupling device when withdrawal hose is permanent attached – to protect withdrawal hose.							
35. Toolbar: Hydrostat(s) in heat transfer unit–check psi rating specified by manufacturer							
36. Clean (C), Replace (RP) hydrostat, Rain cap (RC); and/or Periodic (annual) Inspection (PI)							

AUTOMATIC BREAK-AWAY, SELF-CLOSING COUPLING DEVICE

37. Coupling Device (CD) or Bleeder Valve (BV) (Bleeder valves must be installed on both side of coupling device)							
38. Coupling device DOUBLE SWIVEL (DS) & FLAT BAR (FB) or other approved (i.e. BlueJet Supershooter [®] approved by Parker Hannifin-Pioneer & Squibb Taylor)							
39. Connect/disconnect information readily visible near coupling device							

Comments:
