



Anhydrous Ammonia Operator's Self Audit Checklist

- | | Yes | No |
|---|-------|-------|
| 1. Are the tanks and piping free of rust and leaks? | _____ | _____ |
| 2. Are the tank supports in good condition? | _____ | _____ |
| 3. Is the tank structure in good condition? | _____ | _____ |
| 4. Is the paint (white or light reflective color) in good condition? | _____ | _____ |
| 5. Are "Anhydrous Ammonia" labels (minimum of 4) on at least 2 sides of each tank or group of tanks? | _____ | _____ |
| 6. Are "Inhalation Hazard" labels (minimum of 2") on at least 2 sides of each tank or group of tanks? | _____ | _____ |
| 7. Is the dealer's name, address and telephone number to contact in an emergency on display (must be in at least 2" lettering)? | _____ | _____ |
| 8. Is the plant locked during non-business hours? A. Main valves locked? B. Hose end valves locked? | _____ | _____ |
| 9. Container locations shall comply with the following table: | _____ | _____ |

Line of adjoining property which may be built upon, highways & mainline of railroad	
Normal Capacity of Container (gallons):	Minimum Distances (feet) from container to:
Over 500 to 2,000	25
Over 2,000 to 30,000	50
Over 30,000 to 100,000	50
Over 100,000	50
Place of Public Assembly	
Normal Capacity of Container (gallons):	Minimum Distances (feet) from container to:
Over 500 to 2,000	150
Over 2,000 to 30,000	300
Over 30,000 to 100,000	450
Over 100,000	600
Institution Occupancy	
Normal Capacity of Container (gallons):	Minimum Distances (feet) from container to:
Over 500 to 2,000	250
Over 2,000 to 30,000	500
Over 30,000 to 100,000	750
Over 100,000	1,000

- | | | |
|---|-------|-------|
| 10. Does the container have a manufacturer's name plate showing it is a code container? | _____ | _____ |
| 11. Are the liquid and vapor valves labeled as such, or color coded? (red/orange for liquid and yellow for vapor) | _____ | _____ |



STORAGE TANKS (cont'd)

	Yes	No
12. Are all hoses within their current service life?	_____	_____
13. Are the hoses marked for anhydrous ammonia use?	_____	_____
14. Are the hoses in good condition; free from cuts, soft spots or bulges, blistering, kinking, flattening, or indications that the hose may have been stretched, or damaged at the coupling?	_____	_____
15. Does the storage tank have an operational pressure indicating gauge?	_____	_____
16. Are automatic back-check valves installed?	_____	_____
17. Are pressure relief valves installed and within five years of the manufacture date?	_____	_____
18. Are relief valves installed at correct height?	_____	_____
19. Are rain caps on pressure relief valves in place?	_____	_____
20. Does the tank have an operational pressure indicating gauge?	_____	_____
21. Does the tank have an operational fixed liquid level float gauge?	_____	_____
22. Is piping ASME schedule 80 (threaded) or ASME schedule 40 (welded)?	_____	_____
23. Is piping protected from vehicular damage?	_____	_____
24. Does the storage tank have an operational percentage fill gauge?	_____	_____
25. Are only approved NH3 valves installed?	_____	_____
26. Safety water container of sufficient size (50 gal) to immerse an employee body or drench shower available?	_____	_____
27. Full face gas mask with a current ammonia canister or a self-contained breathing apparatus available?	_____	_____
28. Rubber protective gloves available?	_____	_____
29. Rubber protective boots available?	_____	_____
30. Rubber protective rain suit, including both pants and coat, available?	_____	_____
31. Flexible fitting, splash proof pair of goggles available?	_____	_____
32. Does the storage facility have a valve suitable for venting ammonia from transfer hoses into water?	_____	_____



COLORADO

Department of Agriculture

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STORAGE TANKS (cont'd)

SAFE HANDLING STANDARDS FROM ANSI, DOT, EPA, OSHA

Emergency shut off valve with manually activated shutoff from a remote location and at the installed location.

Release Protection Devices (break away couplings) on risers to prevent the uncontrolled release of anhydrous ammonia at loading stations.

Transfer Instructions posted

First Aid Procedures posted



NURSE TANKS

	Yes	No
1. Are the containers, valves, and gauges free of rust and leaks?	_____	_____
2. Are "Anhydrous Ammonia" labels (minimum 4") on all 4 sides (exception: 3 sides for front fill tanks) in place?	_____	_____
3. Are "Inhalation Hazard" labels (minimum of 2") on right and left sides in place?	_____	_____
4. Are 1005 Placards on all 4 sides (exception: 3 sides for front fill tanks)?	_____	_____
5. Is the tank identification number evident?	_____	_____
6. Is the tank structure in good condition?	_____	_____
7. Is the paint in good condition?	_____	_____
8. Does the tank have the dealer's name, address and phone number (recommend 2" lettering)?	_____	_____
9. Are tires safe and in good operating condition?	_____	_____
10. Does the tank have an operational fixed liquid level float gauge?	_____	_____
11. Does the tank have an operational pressure indicating gauge?	_____	_____
12. Is the filling connection fitted with an approved combination back-pressure check valve and excess-flow valve or an internal excess flow valve?	_____	_____
13. Does the tank have an approved vapor return valve?	_____	_____
14. Does the tank have acme caps on vapor and liquid valves when not in use?	_____	_____
15. Are hoses within the service life?	_____	_____
16. Are the hoses in good condition; free from cuts, soft spots or bulges, blistering, kinking, flattening, or indications that the hose may have been stretched, or damaged at the coupling?	_____	_____
17. Are the liquid and vapor valves labeled as such, or color coded? (red/orange for liquid and yellow for vapor)	_____	_____
18. Is there a functional pressure relief valve, with a rain cap?	_____	_____
19. Is the pressure relief valve rusty or in need of replacement?	_____	_____
20. Have means to secure both ends of the hose during transit to prevent damage to either hose or connections been installed?	_____	_____
21. Has a decal been applied with the safety information detailed in the Anhydrous Ammonia Safety Rules section 4-10-6(d)(2)?	_____	_____



	Yes	No
22. Is the tongue of the trailer straight and in good condition?	_____	_____
23. Are adequate safety chains utilized any time the tank is in transit?	_____	_____
24. Is a five gallon container of fresh clean water attached to the nurse tank? Does it have one pair of safety goggles and one pair of rubber gloves?	_____	_____
25. Are any tanks parked within 50 feet of public streets?	_____	_____
26. Are people engaged in handling anhydrous ammonia wearing appropriate safety equipment?	_____	_____
27. Is an adequate area allocated for parking nurse tanks assigned to this location?	_____	_____

NURSE TANKS (cont'd)

SAFE HANDLING STANDARDS FROM ANSI, DOT, EPA, OSHA

Emergency shut off valve with manually activated shutoff from a remote location and at the installed location.

Release Protection Devices (break away couplings) on risers to prevent the uncontrolled release of anhydrous ammonia at loading stations.

Transfer Instructions posted

First Aid Procedures posted

Slow-moving vehicle emblem (if tank will be in transit at 25 mph or less)



APPLICATOR TANKS

	Yes	No
1. Is the tank free of rust and leaks?	_____	_____
2. Is the paint in good condition?	_____	_____
3. Are "Anhydrous Ammonia" labels (minimum 4") on all 4 sides? (Exception: no label required on the area occupied by valves and gauges)	_____	_____
4. Are "Inhalation Hazard" labels (min 2") affixed on 2 sides?	_____	_____
5. Is an identification number or letter evident?	_____	_____
6. Does the tank have the dealer's name, address and phone number? (We recommend 2" lettering be used)	_____	_____
7. Has a decal been applied with the safety information detailed in Colorado Anhydrous Ammonia Safety Rule 9 (d)(2)(a)-(k)?	_____	_____
8. Is the filling connection fitted with either an approved combination back pressure check valve or a positive shut off valve?	_____	_____
9. Does the tank have an operational pressure indicating gauge?	_____	_____
10. Does the tank have an operational liquid level float gauge?	_____	_____
11. Does liquid level gauge indicate product? (Vehicles used for application of anhydrous ammonia shall not be used for the transportation of the product on roads or highways).	_____	_____
12. Is a five gallon container of fresh clean water made available to each user? Does it have one pair of safety goggles and one pair of rubber gloves?	_____	_____
13. Are the anhydrous ammonia hoses on the applicator tool bar free from cuts, soft spots or bulges, blistering, kinking, flattening, or slippage at the coupling?	_____	_____
14. Has the applicator tool bar been equipped with a breakaway coupler?	_____	_____
15. Has the breakaway coupler been properly maintained?	_____	_____