ANHYDROUS AMMONIA STORAGE FACILITY - INSPECTION CHECKLIST

NORTH DAKOTA DEPARTMENT OF AGRICULTURE
PESTICIDE AND FERTILIZER DIVISION
SFN 51230 (12-2020)

Date of Inspection	Date of Installation	AA Identification Number AA-	Facility License Number AA
Name of Owner			Telephone Number
Address		City	State / ZIP Code
FAX Number	Cell Phone Number	E-mail Address	
User Location		GPS Location	County
Contact Person		E-mail Address	Telephone Number
Name of Installer			
Name of Inspector			Retail ☐ Yes ☐ No

SAT	UNS	A) SITE - NDAC 7-12-01-05.1
		1) Approved by County Commission/Licensed by Commissioner of Agriculture
		2) Siting as per North Dakota Century Code
		Proper clearances; accessible to emergency vehicles; no weeds or clutter within 10 feet
		3) Identification sign with owner/emergency phone numbers and owner name and address
		4) License posted at facility

B) MAIN STORAGE CONTAINER - NDAC 7-12-01-05.2

Manufacturer		Water Gallon Capacity	Year Built	Flow Meter ☐ Yes ☐ No
National Board Number	Shell Thickness	OSA Square Feet	Manhole ☐ Yes ☐ No	Meter ☐ Yes ☐ No
Serial Number	Head Thickness	Percent Full	PSI at °F	Scale ☐ Yes ☐ No

		1) Manufacturer's Data Report provided (new installations)		
		2) Container is ASME constructed		
		3) Container is National Board registered (new installations)		
		4) Condition of paint ☐ Repaint required ☐ Spot repaint required		
		5) Proper container decals ☐ DOT 1005 ☐ Anhydrous Ammonia ☐ Inhalation Hazard		
		6) Post construction repairs or alterations		
		7) Welded seams, nozzles, and fittings		
		8) Supports/saddles satisfactory	Type of support?	
		9) Liquid level gauge		
		10) O-400 psi pressure gauge, NH3 rated		
		11) Safety valve manifolds installed	Number:	Brand:
		12) Safety valves ASME/NB	Number:	Brand:
		13) Safety valves date current	Replace Date:	
		14) Safety valve capacity in CFM	CFM Cap:	☐ UL ☐ ASME
		15) Safety valve rain caps in place		
		16) Container thermometer		

C) PIPING AND APPURTENANCES - NDAC 7-12-01-05.3

		1) Excess flow valves installed at container openings	Main Liquid:	GPM:
		2) Main stop valves installed and in satisfactory condition	Liquid Return:	GPM:
		3) Main stop valves labeled or color coded	Vapor:	GPM:
		4) Piping SCH 80 minimum where threaded; SCH 40 minimum where welded		
		5) Welded piping welded by current Section IX certified welder (new installations)		

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		6) Pipe and pipe fittings are correct (i.e. no cast iron, copper, brass, galvanized, zinc or A-53 Type F material)
		7) Flex piping and expansion joints used where necessary
		8) Underground piping corrosion protected
		9) No threaded piping used underground (new installations)
		10) Pressure test of system piping made (new installations)
		11) Underground piping leak test (existing installation) Test Date: Pressure: Duration: ☐ Pass ☐ Fail
		12) Bulkheads and/or breakaways provided at nurse tank stations
		Emergency shut-off valves in place (bulkhead systems)
		Cables attached for remote and installed location shutoff (bulkhead systems)
		Excess flow protection installed at risers
		Liquid Riser:
		Vapor Riser:
		13) Transfer hoses date current and in good condition Replace Date:
		14) Bulkheads and breakaways provided at truck unload stations
		Emergency shut-off valve on vapor line
		Back check valve on liquid line
		Cable attached for remote location shutoff
		Bleeder valve(s), bleeder hoses, container
		15) Date current hydrostatic relief valves installed Replace Date:
		16) Transfer pump rated for anhydrous ammonia Brand: Size:
		Isolation valve between transfer pump and container Flow Rate:
		Pressure Activated Bypass Size: Brand: Pressure Range:
		17) 0-400 psi pressure gauge on discharge side of transfer pump Pressure Differential:
		18) Compressor rated for anhydrous ammonia
		Proper gauges, safety valve, stop valves
		19) Approved locking devices and locks on valves (when facility is unattended)
		20) System is leak free in operation
		21) Piping and appurtenances protected from moving vehicles

D) SAFETY AND SAFETY EQUIPMENT - NDAC 7-12-01-05.4

		1) 150 gallons of clean water in an open container(s)
		2) Two full face gas masks with spare ammonia canisters
		3) Z87.1 rated goggles, and gloves impervious to ammonia for each employee plus one spare pair
		4) "Slicker suit" and boots impervious to ammonia
		5) Annual documented training provided for those handling ammonia
		6) Telephone (or other communication device) available during transfer operations
		7) Adequate fire extinguisher on site at facility
		8) Adequate loading platform

NOTES ON UNSATISFACTORY ITEMS

I declare this document is an accurate record of the official inspection under the authority of NDCC 4.1-37.

Name	Date of Inspection