Safeguarding fertilizer storage structures



Annual fertilizer storage building

Sample checklist

The following information may be collected and verified for each fertilizer storage building on the property and stored in a centralized location.

Designation/name of structure	
Date of construction	
Date of last re-roof	
Vendors	General contractor Purchase agreement Concrete engineer Concrete contractor Building erector Geotechnical firm Equipment installation contractor
Plans	Foundation plans Building plans Warehouse diagram Bunker capacities Commodity types
Equipment	Flow diagram Equipment list Equipment age Equipment capacities
Operations	Structure erector/designer operational manual
Inspections	Photo documentation building during construction Photo documentation of last significant remodel Date of last inspection Previous inspection report
Maintenance	Record of past maintenance
Site training	Site plan map and evacuation route clearly posted Topic of last site training Number of previously trained employees still at location

Annual inspection when empty

The following information may be collected and verified for each fertilizer storage building on the property annually at a time when the building is empty.

Designated/name of structure	
Date of inspection	
Roof outside	Straight and uniform in appearance
	No areas of sagging, deformation, or movement
	Roof covering in good condition
Roof inside	No indications of past structural repairs
	No visible wood rot and/or deterioration
	No missing or damaged framing members
	No significant rusting of steel splice/connection plates
Exterior walls	Straight, plumb and uniform in appearance
	No visible indications of past movement or cracking
Interior walls	Straight, plumb and uniform in appearance
	No visible indications of past movement or cracking
	Bulkhead door hangers, catches and latches in good condition
	Bracing rods in place
	Bracing rods properly tensioned
	Product not able to flow into void area between framing members
Anchorage	Anchor bolts in place
	No visible indications of past movement
	No significant rusting and/or deterioration
	No visible indications of impact damage
Foundation	No visible indications of past movement
	No significant cracking or deterioration
	No visible reinforcing steel
	No visible indications of impact damage
	Grade positively drains water down and away from foundation
Interior columns	No visible indications of past movement or bowing
	No visible indications of impact damage
Equipment	Guarding in place
	Hazard monitoring equipment in place
	Hazard monitoring equipment operational
	No hammer damage to spouting and/or hoppers
	Greasing of rotating parts complete
	No rusting at base of leg boot
	Guy cables adequately adjusted



Handrails in good structural condition
Ladder cages and landings as needed
Walk surfaces free of debris
No excessive rusting and/or deterioration
Swing gates and applicable safety guarding
Handrails and guarding in place
Handrails and guarding in place Anchorage free of significant rusting or deterioration
Free of accumulated/spilled product
Free of accumulated/spilled product
Handrails and guarding in place
Anchorage free of significant rusting or deterioration
Free of accumulated/spilled product
Free to raise/fall with water level (if applicable)
Product bins are not being overfilled
Update and review written greasing and lubrication plan to assure it is appropriate and
being adequately implemented
Where bearings require sufficient greasing to cause grease to be expelled from the
bearing assembly assure that all expelled grease is cleaned away to prevent build-up
near rotating components
Fall protection structure is sound



Annual inspection when full

The following information should be collected and verified for each fertilizer storage building on the property annually after they have been filled as a follow-up to the inspection when empty.

Date of inspection	
Foundation movement	The foundation and any foundation cracking or movement that may have been present prior to filling look generally the same after filling with product
	Visible indications of differential settlement (tipping or leaning) are not observed
Building walls and openings	No visible indications of new cracking or widening of existing cracking
	No visible wall bulging or deformation
Equipment operation	All previously tested equipment operates functions as desired after loading
Roof	Check the roof for leaks
Housekeeping	Verify that grain is not actively leaking from the structure
	Verify that grain is not actively leaking from grain handling equipment
Falls protection (if applicable)	Fall protection structure is sound
	Fall protection lanyard and harness inspections are current



For assistance with risk management services or safety resources, contact us at RMSolutions@nationwide.com or 1-800-260-1356.



