

## CONDUCTING FARM SAFETY INSPECTIONS

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**Why conduct a safety inspection?** The most important responsibility of any farm owner or manager is to ensure the safety and health of his or her employees and family members. Not only is it the right thing to do, but a safe farm protects the farm owner or manager by limiting the likelihood of costly accidents. Safe farms protect co-workers, children, other family members, and animals from accidental injuries that can destroy a livelihood and devastate a family. Most farm accidents are completely preventable. The smart farm owner or manager takes a proactive approach to farm safety by conducting regularly scheduled and thorough inspections of the entire farmstead.

What should be inspected? Farming is an inherently dangerous occupation primarily because of the number and variety of hazards that exist. Tractor-related accidents account for over half of farm fatalities. Other dangers include farm machinery, equipment, grain handling facilities, animals, chemicals, and environmental factors. Young children, family members, and farm visitors are injured and killed each year from poisoning, drowning, electrocution, and falling from farm structures and equipment. Consequently, it is essential that farm owners and managers assess the entire farm for hazards. At a minimum, the following facilities should be inspected:

- Barns and buildings
- Animal facilities
- Grain storage and handling facilities
- > Workshops
- Chemical storage and handling facilities
- > Farm machinery
- Fuel storage and handling facilities
- General farmstead

**Who should do the inspection?** The most obvious choice to conduct the inspection is the farm owner or manager, because they are most familiar with the operation. However, one disadvantage is the tendency to overlook or ignore problems that have become an acceptable risk over the years. A farm worker or family member may offer a more unbiased assessment. Safety professionals or inspectors with experience in detecting visible and invisible hazards may provide the most comprehensive assessment.

**How long will an inspection take?** The length of time required to conduct an inspection will vary with the size and variation of farming facilities. A small farm safety inspection may only require 30 minutes to an hour. Large farms with several operations may require several days.

When should the inspection take place? General farmstead inspections, as well as inspections of barns, buildings, and animal facilities, may be conducted at any time. Inspection of farm machinery, grain

handling, chemical, and fuel facilities should be conducted before the planting and harvesting seasons. It's important to establish a regular safety inspection schedule. Farm workers and family members will likely come to respect your commitment to maintaining a safe workplace and buy in to safety-first attitude.

What should I do with inspection results? The reason for conducting a farm safety inspection is to identify and remove hazards. Failure to remediate obvious problems can cost lives and property, and result in low-employee moral. The following checklist provides guidance on conducting farm inspections but does not necessarily cover all potential hazards encountered on a farm.

	PART A: BARNS AND BUILDINGS	Yes	No
	Is a first aid kit available and placed in a prominent location?		
	Are emergency phone numbers (fire station, policy station, EMS) listed and posted in a prominent location?		
	Are smoke detectors installed in appropriate locations and operating properly?		
	Is the building free of unnecessary accumulations of trash, litter, junk, and other things that could start or fuel a fire?		
	Is the building free from any highly flammable liquid such as gasoline?		
۶	Are stairs and permanent ladders in good condition?		
۶	Do stairs have handrails?		
	Are stairs clear of objects and slippery substances?		
	Are passageways clear of tools, buckets, or slippery substances. that could cause falls?		
$\triangleright$	Are protrusions such as nails removed from walls or railings to prevent contact?		
	Is the building properly lighted, especially in common work areas?		
$\triangleright$	Does electrical wiring appear to be in good condition?		
	Can the main electrical power source be locked out if necessary?		
	Are portable equipment power cords in good condition?		
	Are materials and supplies stored and secured so as to not present a falling object hazard?		
	Is power equipment properly shielded? Are shields in place during equipment operation?		
	Are "head-bumpers" such as low ceilings, beams, low doors, and hanging objects marked with warnings?		
	Are doors and gates to hazardous areas (silos, manure storage, chemical storage, animal quarters, etc.) kept closed and secured to keep out children and visitors?		
	Are the correct size and type of fire extinguishers mounted at building entrances and exits?		

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Are "No Smoking" signs posted? Where smoking is permitted, are plenty of ashtrays or safe receptacles available?		
Are toxic products locked up out of reach of children?		

	PART B: ANIMAL FACILITIES	Yes	No
	Are pens, gates, chutes, and lot fences in good condition?		
$\triangleright$	Are children forbidden to play in or around barns, pens, and feedlots?		
	Are feeding, grinding, and materials handling equipment properly shielded and all shields in place when used?		
	Are loading chutes on augers, elevators, and conveyors covered with grating?		
	Are animal medicines kept in a secure area stored in the original containers?		
	Are electrical stock water heaters grounded?		
	Are all heat lamps for farrowing and brooding well secured and placed at least two feet from combustible materials?		
$\blacktriangleright$	Are animal working pens free from sharp projections such as nails and metal objects that might endanger animals or workers?		
$\succ$	Are head gates and animal confinement equipment in good working condition?		
	Are walking surfaces in work areas and passageways kept clear of manure, mud, and spilled grain?		
۶	Are all electrical outlets in animal handling area properly covered, protected from moisture, and equipped with ground fault circuit interrupters (GFCIs)?		
	Are there at least two exits from each area used for working livestock?		
	Have milking parlor steps and walkways been roughened to prevent slips and falls?		
	Are children kept away from stock watering tanks and manure pits?		
	Are ventilation fans and vents in confinement housing in good working condition?		
	Is newly stored hay monitored for the possibility of overheating?		
	Are barn chemicals, fly sprays, disinfectants, or medications kept in their original containers and stored out of the reach of children?		

	PART C: GRAIN STORAGE AND HANDLING FACILITIES	Yes	No
>	Are entrances to grain and silage storage areas closed to keep out children?		
	Are rotating augers, belts, pulleys, and chains on loading and unloading equipment properly shielded?		
	Are silo or grain bin ladders sound and caged from 12 feet and higher when more than 20 feet tall?		
	Do grain bins have both inside and outside permanently affixed ladders?		
	Does each grain bin have a "Do Not Enter" warning sign posted at the entrance of the bin?		
	Is there an emergency response plan for rescuing workers that may become entrapped in flowing grain bins?		
	Is a lifeline available when working inside the grain bin?		
	Are there overhead power lines where movable elevators or conveyors are used?		
	Can power be locked out so that the unloading mechanism cannot be started when someone is in the bin?		
	Is breathing protection available for use when handling dusty or moldy grain, and when cleaning inside a bin?		
	Is a supplied air or self-contained breathing device available for use when entering a grain bin that has been fumigated?		
۶	Is hearing protection worn by a worker tending a noisy crop drying operation?		
	Are electrical panels and wiring in good condition?		

	PART D: WORKSHOPS	Yes	No
≻	Are electrical outlets three-hole grounded with GFCIs?		
$\triangleright$	Are all stationary power tools properly grounded?		
	Are portable power tools either double insulated or three-wire grounded?		
	Are there ample circuits so power tools can be operated without blowing fuses or tripping current breakers?		
	Are portable power tools unplugged and stored away when not in use?		
	Are equipment switchboxes locked out to keep children from starting machinery?		
	Are stationary tools such as grinders or saws properly shielded during use?		
	Is a fire extinguisher of at least a 10-pound ABC rating readily available?		
	Is the shop floor kept clean? Are benches tidy and drawers kept shut?		
	Are tools, chemical products, and paints put away after use?		
	Are cutting tools such as saws, axes, and knives properly stored so they cannot fall on someone?		
	Is the welding area well ventilated?		
	Are flammable or combustible materials kept or moved a safe distance when welding?		
	Is personal protective equipment such as goggles, bump cap, filter respirator or dust mask, gloves, ear muffs, shop apron, and welding helmet kept ready in the shop?		
	Are flammable liquids stored in approved containers and kept away from heat sources?		
	Are oily cleaning rags stored in a covered metal container and kept away from other combustibles?		
	Is the shop well lit with extra light for the workbench area?		

	PART E: CHEMICALS STORAGE AND HANDLING FACILITIES	Yes	No
	Are agricultural chemicals stored in a building, room, or cabinet that cannot be entered by children or animals?		
	Are agricultural chemicals stored in a building, room, or cabinet away from feeds, seeds, and animal living quarters?		
	Are non-compatible chemicals in storage physically isolated from one another?		
$\triangleright$	Is a sign posted at the entrance to warn others of the chemical hazards inside?		
$\triangleright$	Is the chemical storage area vented to the outside?		
	Are chemicals stored in their original containers with the labels clearly visible?		
	Do you have a written plan posted for disposing of empty containers and left-over chemicals?		
	Is there a designated chemical mixing area outside or in an open, well ventilated part of the building?		
	Is the chemical storage area well lit so chemicals can be identified and labels easily read?		
	Is the storage building sound, and weather- and water-tight?		
	Is spill containment equipment available?		
$\triangleright$	Is there a Material Safety Data Sheet (MSDS) for each chemical stored?		
	Is there adequate personal protection equipment such as gloves, boots, respirator, and goggles available to workers who mix chemicals?		
	Is a source of fresh water available for emergency flushing?		

	PART F: FARM MACHINERY	Yes	No
	Is farm equipment maintained according to instruction manual recommendations?		
	Are keys removed from motorized equipment when not in operation to prevent children or intruders from starting them?		
≻	Is there a first aid kit mounted on tractors?		
	Is there a fire extinguisher mounted on tractors?		
	Is there a master shield in place where the power take-off meets the tractor?		
	Are riders prohibited on farm equipment?		
	Are shields and guards in place when machinery is being operated?		
	Is the power turned off and locked out before adjusting, unclogging, or servicing a power-drive machine?		
	Are children and non-workers kept off and away from machinery and wagons?		
۶	Are farm equipment instruction and safety manuals available to workers?		
	Are safety start switches enabled to keep workers from starting the tractor while standing on the ground?		
	Are all guards and shields securely affixed to tractors and equipment to protect workers from rotating shafts, belts, chains, and pulleys?		
	Are all steps, ladders, and platforms on farm equipment clear of mud and other material that may cause slipping and falling?		
	Are warning signs and labels clean and legible on farm equipment?		
	Are towed loads hitched to the drawbar set in the designated towing position and never to the tractor's axle, frame, or raised three-point hitch?		
	Are tractors equipped with rollover protection structures?		
	Are safety belts in working condition and worn when operating tractors with rollover protection structures?		
	Are tractors and self-propelled machines equipped with dry chemical fire extinguishers and first aid kits?		
	Are slow-moving vehicle emblems mounted on farm equipment that is transported on public roads?		
	Are slow-moving vehicle emblems kept clean and replaced when faded or damaged?		
۶	Is equipment lighting adequate to warn other drivers of your presence?		

	PART F: FARM MACHINERY (CONT.)	Yes	No
	Are flashing lights mounted on all farm equipment transported on public roads?		
	Are reflectors kept clean and replaced when damaged?		
	Is protective clothing and equipment appropriate for the chemical worn by sprayer operators and loaders?		
	Have duster or sprayer operators been told to change clothes daily and to wash before eating or smoking?		
$\triangleright$	Are transport wheels or support jacks locked in position before disconnecting hydraulic cylinders to avoid sudden shocks to the machine?		
$\triangleright$	Are jack stands placed under elevated equipment?		
	Are tractor and equipment tires properly inflated?		
$\triangleright$	Are hitches sturdy and safety chains used when on public roads?		
	Is all trailing equipment fitted with safety chains and locking devices to keep hitch pins from falling out?		
	Are hydraulic couplings from the tractor to implements or machines connected properly and checked for security?		
۶	Are hydraulic lines and fittings inspected and immediately repaired if found faulty?		
۶	Is mounted equipment lowered before leaving the tractor?		

	PART G: FUEL STORAGE AND HANDLING FACILITIES	Yes	No
A	Are above ground tanks solidly supported, vented, and located at least 50 feet from the nearest structure?		
	Are fuel tanks and pumps barricaded or guarded to protect them from vehicles and equipment?		
$\blacktriangleright$	Is a 10-pound or larger ABC fire extinguisher readily available?		
	Are fuel hoses, nozzles, and pumps in good condition, and vents kept clean and free of dirt and debris?		
4	Are the following safe refueling rules posted near the fuel tank: turn off the engine; if hot, let it cool; extinguish smoking materials; remove the gas cap carefully; avoid spills; and, return the nozzle to its holder?		
	Are areas around fuel tanks and pumps free of weeds, trash, and other combustible materials?		
	Are liquid petroleum (LP) storage tanks located at least 50 feet from the nearest building, and protected where they will not be struck by passing vehicles or machinery?		
	Are workers alert for leaks in the LP system?		
	Are LP system regulators and gauges protected from weather and dirt?		
	Are small quantities of gasoline, kerosene, or diesel fuel stored in UL or FM labeled metal containers?		
	Are "No Smoking" signs posted in the fuel storage area?		

	PART H: GENERAL FARMSTEAD	Yes	No
	Are all tractors and equipment stored in a location away from children's play areas?		
	Are overhead power lines clearly marked and measured to prevent accidental contact from tractors, implements, irrigation pipe, and portable grain moving equipment?		
	Are all abandoned wells, cisterns, and underground storage tanks sealed off to prevent children and animals from falling in them?		
	Have trees been trimmed or removed from alongside driveways and lanes to avoid interference when machinery is moved, and to prevent children who climb in trees from contacting power lines?		
	Are keys removed from all vehicles, tractors, and farm equipment that may be accessed by children?		
	Are all tractor front end loaders and three-point hitch implements lowered when not in use?		
	Is there a written list of all fuels, chemicals, and hazardous substances, and their locations on the farm?		
۶	Are ponds and lagoons fenced off and marked to keep children away?		
	Are all ponds, irrigation ditches, and large water troughs located away from children's play areas?		
$\triangleright$	Are irrigation pumps and engine drivelines properly shielded?		
۶	Is there a designated safe area on the farm for children to play?		
	Are perimeter fences in good condition to protect livestock and children from public or private roadways?		
۶	Are firearms kept unloaded except when actually in use?		
۶	Is a first aid kit maintained in a central location on the farm?		
۶	Does the farm or ranch have an emergency response plan?		
	Do farm workers and family members know how to access and operate fire extinguishers?		
	Are all outside power outlets weather protected and installed with GFCIs?		
	Is someone trained in emergency first aid and CPR?		

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