

Equipment Safety Overview

“Equipment” is defined as anything self-powered with wheels or tracks such as tractor, skid-steer, dozer, excavator, harvester, sprayer, forklift, mowers, ATV, UTV, golfcart, and the like. It does not include tagged cars, pickups, or tractor-trucks.

This material is intended to serve as a summary of basic safety precautions to assist supervisors and experienced equipment operators with training and evaluating new operators. This should be used in conjunction with the equipment manufacturer’s manuals, for the specific year/model.

Providing written material, watching videos, or giving verbal instruction cannot replace the necessity of allowing a new operator hands-on, seat time in a safe area with the coaching of an experienced operator. Document a new operator is trained and evaluated for safe operations.

General Precautions:

- * Daily pre-operation inspections must be carried out before the operator can use equipment. This is an assurance that everything is maintained in good operating condition. Report any damage to your supervisor immediately. Damage to some items may deem the equipment unsafe to operate and should be taken out of service until repairs are completed.

- * Be aware of what’s above – power lines, shop doors, overhangs.
Be aware of what’s below – water & gas lines, electrical – call before you dig; in MS dial 811 (or Facilities Management if on MSU main campus).
Be aware of what’s around – people, children, animals, ditches, washouts.

- * Prevent falls by facing the machine when getting on and off. Maintain 3-points of contact (2 feet/1 hand or 2 hands/1 foot) with the equipment when climbing in & out. Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

- * Operator (and passenger) must always wear the seat belt. This includes when loading onto or off a trailer.

- * Roll over protection (ROP) structures/cabs should never be modified. ROP must remain in upright position during use.

- * Keep speed reasonable with no horseplay! Speed appropriate for full control is dependent on vehicle/equipment setup, cargo load, terrain, weather, visibility & driver skill.

- * Every vehicle and piece of equipment is different & reacts differently; know & understand the capabilities of the one you are operating.

- * Operate controls smoothly. Avoid jerky starts, turns and stops that may cause the equipment to become unstable. No abrupt maneuvers; smooth & slow = predictable.

- * Stay off cell phones and avoid using earbuds. Anything that can be a distraction to operating the equipment and focusing on the task at hand and the surrounding increases the safety risk.
- * Keep hands, feet and clothing away from moving parts.
- * Refer to the operator's manual and your supervisor or experienced co-worker for instructions on hitching attachments/implements with hydraulics, a 3-point hitch or PTO shaft.
- * Be aware that a hydraulics system can fail without warning. Never stand or work under equipment/attachments that has been raised unless it is supported by a suitable support device.

Additions to equipment should include:

- An easily accessible fire extinguisher mounted, or stored inside a compartment.
- Slow moving vehicle triangles or flashing/strobe lights visible from the rear when used on or near public roadways (this includes farm roads with open access).

Safe shutdown procedures:

- Bring the equipment to a complete stop and park on a level surface.
- Lower all attached equipment to the ground.
- Move controls to neutral, Park or lock controls (if so equipped) and set the parking brake.
- Make sure the PTO or other accessory power is disengaged/off, if equipped.
- Idle down, then turn off the engine. (Remove the key when leaving it unattended.)
- Wait for all moving parts to stop before exiting operator's seat.
- Block the wheels or attached equipment, if parked on an incline.
- Remove the key (& lock door) if leaving unattended for a period of time.

Maintain the equipment:

- Keep operator's cab clean of trash & free of debris that could affect operation of controls.
- Ensure equipment is mechanically serviced as indicated in Operator's Manual.
- Keep equipment and attachments/implements clean of excessive debris.
- When exposed to hazardous chemicals/pesticides, clean equipment daily to keep free of the accumulation of residue.
- Control hazardous energy (lockout/tagout, block up, or secure components) during maintenance.

In case of a rollover:

- Never jump out.
- Grab hand holds or steering wheel/controls; keep arms inside.
- Plant feet firmly against floorboard.
- Ride it out until equipment comes to a complete stop.

Equipment operators re-evaluated every 3 years.

- A frequent operator who demonstrates continued proficiency can be renewed at the okay of their supervisor or evaluator.
- Refresher training will be provided to an operator who has been involved in an accident or near-miss incident, or who is observed to not be operating the equipment in a safe manner.

EQUIPMENT RESPONSIBILITIES

Supervisors:

- Ensure any person assigned to a job task involving the operation of equipment is competent and trained beforehand on each specific machine.
 - Hands-on instruction regarding specific job task & coached by an experienced operator while given seat time to practice operation and become comfortable with the equipment.
 - Operator Evaluation form signed & turned into MAFES Risk Management.
- Periodically check that equipment pre-operation inspections are being completed and issues are addressed in a timely manner.
- Take equipment out of service immediately when issues that could be a safety risk are recognized.

Equipment Operators:

- Operate equipment safely according to training, instruction, and manufacturer manual.
- Perform equipment pre-operation inspection as trained.
- Report any equipment problems or issues immediately to your supervisor.
- Do not operate equipment that poses an immediate safety risk.

MAFES/ES Risk Management:

- Provide training material and guidelines regarding equipment general safety precautions to supervisors/evaluators
- Assist supervisors and provide support as requested.
- Document training & maintain master list of Operator Evaluations submitted from supervisors.

Equipment Operator EVALUATION

Operator's name: _____ Dept. /Station: _____

Type of vehicle/equipment: _____ Date: _____

_____ Understands and follows general safety rules & specific controls for this vehicle/equipment.

_____ Can perform a pre-operation check of the equipment.

_____ Cautious and aware of surrounding activity.

_____ Overall, observed to be a competent operator.

Comments:

Operator signature: _____

Evaluated by: _____ Title: _____

Supervisor's signature (if different from above) _____

Date: _____