

**MINNESOTA DEPARTMENT OF TRANSPORTATION
SAFETY DIRECTIVE: Motor Vehicle and Equipment Backing**

Subject:

Motor Vehicle and Equipment Backing

Objective:

Ensure that safe operating procedures are followed when backing a motor vehicle or motorized self-propelled equipment.

Directive:

- A. When feasible, park or plan the flow of operations so that backing of a motor vehicle or motorized self-propelled equipment is minimized or not required to continue operation.
- B. All requirements of this directive apply regardless of whether a vehicle is equipped with a backup camera or other backing assist technology. These technologies are aids in backing safely, but are not a substitute for the requirements of this directive.
- C. For backing equipment with a restricted view to the rear, one of the following must be provided:
 1. A reverse signal alarm, audible above surrounding noise level.
 2. An observer to signal it is safe to back the equipment.
- D. No backing movement of a motor vehicle or motorized self-propelled equipment will be made until the area to the rear of the equipment has been checked to make sure the area is free of personnel or obstructions. Also, side clearance for vehicle swing when backing shall be checked. Anytime another employee is available in the immediate area, they shall act as a spotter to assist in safely backing the equipment.
 1. Guide assisted backing of equipment.
 - a. Position the guide at the left rear corner of the equipment to give the equipment operator the best line of sight.
 - b. Never permit the guide to get directly behind the equipment or in the path of intended travel.
 - c. Establish eye contact with the guide prior to backing and maintain eye contact while backing. If you lose sight of the guide, immediately **STOP** until eye contact

is re-established and signaled that it is safe to continue backing.

2. Backing of equipment without a guide.
 - a. Prior to entering the equipment, walk to the rear of the equipment and visually check for personnel or obstruction in the planned area of backward travel.
 - b. When backing, constantly use the side and rear view mirrors to make sure the area is clear. Don't rely on checking just one side mirror.
 - c. Always back slowly and cautiously. If you have backed a long distance, substantial time has elapsed or you are unsure where you are backing, stop and re-check your path of travel by getting out of the equipment and visually re-checking the area to the rear of the equipment for personnel or obstructions.
 - d. Assure adequate overhead clearance is available when backing in areas with potential overhead obstructions.

Responsibilities:

- A. Employee
 1. As a motor vehicle or motorized self-propelled equipment operator, follow this directive to ensure no personnel or property damage occurs as a result of a backing operation.
 2. Act as a guide to assist an equipment operator when backing equipment.
- B. Supervisor
 1. Review and implement this directive with employees under their supervision. Address the directive's application to the work area.
 2. Ensure compliance of this directive.
- C. Safety Administrator

1. Provide consultation to managers and supervisors on the application of this directive.

Exceptions:

- A. Exceptions to this directive must be requested in writing through the District/CO Safety Administrator to the MnDOT Safety Director.

Legal References: 29 CFR 1926.601
29 CFR 1926.602
MN Rules 5205.0750

I recommend this directive be approved:

Michael Barnes, P.E.
Assistant Commissioner, Operations Division
MnDOT

Susan M. Mulvihill, P.E.
Deputy Commissioner/Chief Engineer
MnDOT