

Safe Operation of Semi-tractors in Marine Terminals

Semi-tractors are a critical part of marine terminal operations. Operating these vehicles around heavy equipment, workers on foot, railcars, powered industrial trucks, and other over-the-road vehicles can pose a risk to workers. Employers must take measures to ensure a safe work environment for the operators of these vehicles.

Employers must:

- Ensure that equipment is safe and properly maintained by inspecting all vehicles prior to use.
- Provide training.
- Properly supervise workers.
- Provide rescue procedures in case of an emergency.

Ways to prevent tip-overs:

- Do not back up in the jackknife position. This will reduce the stability of the semi-tractor.
- Keep the fifth wheel as low as possible to the ground without hitting or grounding the landing legs. This will improve balance. To keep the fifth wheel low, the landing may be cranked up.
- Drive around corners at lower speeds.



Semi-tractor tip-over injuries can be prevented.

Safe vehicle operation and techniques include:

- **Vehicle inspection** — should include backup alarms, lights, seat belts, and horns. Safety equipment must not be removed (§1917.44(n)). Workers should immediately report any defects to the supervisor. Do not use vehicles that are not working properly.

For more information:



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- **Unobstructed view** — employers must instruct workers to slow down and sound the horn at cross-aisles and other locations where visibility is obstructed [§1917.43\(b\)\(8\)](#). Whenever possible, avoid backing up from the blind side. If you must back up from the blind side, check to ensure that the area is free from hazards and pedestrians. If necessary, use a spotter and radio communication to ensure that blind-side backing up is performed safely. If radio communication is not available, hand signals between the driver and the spotter may be used.
- **Distracted operators** — should not be allowed to use cell phones, two-way radios, eat, or do any other non-driving activities while operating equipment.
- **Impaired workers** — should not operate equipment when fatigued, using medications (prescription or non-prescription), alcohol, or illegal drugs. In addition, workers should:
 - Use the S-curve backing procedure.
 - Avoid sudden acceleration, jerking motions and sudden stopping when backing up.
 - Always back up slowly and carefully.
 - Obey speed limits, traffic signs and signals, and written traffic safety instructions as required in [§1917.44\(d\)](#).

For further information about semi-tractor safety in marine terminals see: Longshoring and Marine Terminals Fatal Facts: Section 1 — Vehicular Accidents, Summary #15 — [Semi Tractor Tip-Over](#) and [NMSA Safety Video #3](#).

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