



SAFE WORK PRACTICE ***Equipment Loading and Unloading***

Equipment Loading and Unloading

Equipment which is used on Ledcor projects must be mobilized to or from the project sites. At various times during project execution, equipment may also be transferred from one right-of-way location to another.

There are hazards associated with the loading and unloading of any equipment. The purpose of this Safe Work Practice (SWP) is to assist those workers who are involved in this activity, so that the commonly known hazards which they may encounter are addressed through either elimination, reduction or other procedural control.

This SWP does not eliminate the need for workers to actively assess their assigned task and associated work area for any potential hazards including changing conditions and to adjust their actions accordingly.

Potential Hazards

- Moving equipment and vehicles in or near the work area
- Congested right-of-way, 'bone' yard, lay-down area and work space
- Noise, creating a potential barrier to communication
- Extreme temperature and weather conditions
- Slips/trips/falls
- Equipment and work area pinch points
- Limited traction, maneuverability and handling control at the 'balance point' where the trailer ramps meet the trailer deck
- Overhead power lines
- Buried pipelines/facilities and identified 'buffer zones'
- Potential for equipment to slide off trailer and potentially to roll over during loading and unloading
- Potential for trailer bed to tip to one side during loading – due to load not being centered on the trailer and/or the trailer wheels parked on 'soft' ground on one or both sides
- Potential for trailer bed to rock forward or backward or to be pushed forward or backward during loading or unloading
- Reduced visibility due to equipment 'blind spots' – Including during loading/offloading equipment operator may not be able to see trailer deck or ramp area
- Winch line recoil danger zone – in the case where there is a failure of a winch line or any of it's components
- Excessive slope to climb or descend due to location chosen to park the trailer, incorrect trailer selection, incorrect ramp/selection or improper use of 'beaver tail'
- Ineffective, inoperative defective equipment braking
- Potential for equipment to slip off deck, roll off deck or fall through deck due to any damaged trailer deck boards or ramps
- Equipment or material/item to be loaded does not meet normal operational standards due to equipment damage or the equipment may have maintenance or other repair concerns it may not load in the anticipated manner



SAFE WORK PRACTICE Equipment Loading and Unloading

Responsibility

- Transportation Manager: It is the responsibility of the Transportation Manager to ensure that this SWP has been reviewed, is understood and adhered to by all Truck Drivers, prior to their loading and unloading of any equipment.
- Project Superintendent: It is the responsibility of the Project Superintendent to ensure the appropriate manpower and equipment is at the work site.
- Trucking Foreman: It is the responsibility of the Trucking Foreman to ensure that this SWP has been reviewed, is understood and adhered to by all Truck Drivers and Designated Labourers, prior to their loading and unloading of any equipment.
- Truck Drivers: It is the responsibility of all Truck Drivers to have reviewed this SWP and to follow the requirements as they are listed. Truck Drivers must inspect their trucks and trailers each day, prior to undertaking any work activities. Any defects must be noted to the Transportation Manager prior to any loading or unloading operations. Truck Drivers must also complete a documented inspection of the equipment they are assigned to load or unload and to review the contents of the equipment's log book and sign in acknowledgement.
- Designated Labourer: It is the responsibility of Designated Labourer to adhere to this SWP. The Designated Labourer must be familiar in the use of proper hand signals. All ground personnel including the Designated Labourer must remain within the operator's line of vision when within the 6 meter hazard zone.

Personal Protective Equipment

- High visibility striping on outer clothing,
- Long pants and minimum quarter length sleeves
- CSA approved hard hat
- CSA approved boots (green triangle, grade 1 with 6" upper)
- CSA approved safety glasses with approved side shields or over glasses
- Hearing protection as required. >85db requires earmuff style protection
- Gloves as required, of appropriate type for task

Tools and Equipment

- Loading rims and skids
- Dunnage
- Tire chains
- Ratchet style boomers
- Equipment window covers
- Rubber matting for decks
- Grade 70 (or higher) chains



SAFE WORK PRACTICE ***Equipment Loading and Unloading***

SAFE WORK PRACTICE

1. Only competent Truck Drivers or competent Equipment Operators shall be allowed to load and unload equipment without direct supervision.
2. A labourer shall be designated to assist where high ambient noise levels or poor visibility interferes with a Truck Driver's ability to see objects on all sides of the equipment during the loading /unloading process.
3. Designated Labourers are to ensure that eye contact and confirmed communication is carried out with the Truck Driver PRIOR to entering the 6 meter equipment "danger zone".
4. Truck Drivers must not park their truck or trailer in an area where equipment will enter within 15 meters of any power line during the loading or unloading process.
5. Equipment shall be lined up with the trailer and ramps so that no turning shall be necessary during loading & unloading.
6. For any loading and unloading the trailer must be secure from movement, the load must be balanced (side to side) and the trailer wheels must be parked on hard, level and stable ground so as to further ensure the deck in remains level.
7. The truck and trailer shall have their parking brakes applied during loading and unloading.
8. If a trailer is equipped with an air ride system, the system must be deflated prior to loading and unloading.
9. Equipment tracks must be appropriately clear of snow, ice and mud prior to loading and unloading.
10. No one shall be allowed to stand to either side of the trailer deck, in the potential fall zone of equipment during the loading or unloading process.
11. Sidebooms, tack rigs, rubber tired equipment as well as equipment with less than 12' 6" of track contacting the ground shall NOT be loaded or unloaded over 'Beaver tails'. This equipment is to be loaded or unloaded over the front of 'drop deck' or 'scissor-neck' style trailers.
12. The ***only*** exceptions to the above shall be in circumstances where the site conditions or access conditions are such that it is unsafe or unreasonable to utilize a 'drop-deck' trailer ***or*** where a set of ramps that are approved for use by the Transportation Manager are used. ***In either circumstance this task will be carried out only after consultation between the Transportation Manager and the assigned Truck Driver OR the Transportation Manager and the Trucking Foreman.***



SAFE WORK PRACTICE

Equipment Loading and Unloading

13. If the 'beaver tail' ramp of a trailer is to be used for loading or unloading of any equipment, a Designated Swamper shall be present for the duration of the task.
14. When loading or unloading is to be carried out over the 'beaver tails', the trailer must be hooked to a truck and the truck and trailer must be in alignment with each other. ***Exceptions to this practice shall be carried out only after consultation between the Transportation Manager and the assigned Truck Driver OR the Transportation Manager and the Trucking Foreman.***
15. If the condition or design of the equipment is such that there may be insufficient braking, acceleration or handling capability to maintain adequate control during loading or unloading, the equipment must be assisted by the use of the winch line of the truck.
16. Leather palmed gloves shall be worn when handling wire rope cable. No person shall allow wire rope cable to slide through their hands, regardless of the type or thickness of gloves being worn.
17. The winch, its operating components and its wire rope line shall be properly maintained and shall be inspected prior to use.
18. Wire rope shall be securely fastened to the winch drum and at least five full turns of wire rope shall be kept on the winch drums at all times.
19. No person shall be allowed to stand in the potential recoil area in case of a failure of the winch line or any of its components when it is under tension.
20. When the winch line is under tension no one shall be allowed to pass between the equipment and the trailer or the equipment and the winch.
21. All Truck Drivers must carefully inspect the equipment that they intend to load or unload. Equipment deficiencies which may affect loading or unloading are to be reported to the Transportation Manager immediately. Do not operate equipment, which is in an unsafe condition.
22. Three-point contact is to be used when mounting and dismounting equipment, including truck cabs and trailer decks.
23. Only the person operating the controls is to be on the equipment when it is being loaded or unloaded.
24. Seat belts which are supplied by the equipment manufacturer shall be worn when equipment is being loaded or unloaded.
25. When loading and unloading dozers, the blade is to be kept as low as possible on ascent or descent from the trailer, so as to ensure a low centre of gravity. The same consideration shall be made for any powered mobile equipment which has attachments (booms etc).



SAFE WORK PRACTICE

Equipment Loading and Unloading

26. When crossing any balance point, progress is to be kept slow and steady. Any sudden movements, stopping, acceleration, decelerating and turning are to be avoided.
27. Unnecessary movement of the equipment while on the trailer deck shall be avoided.
28. Upon completion of loading or unloading all ground engaging attachments shall be lowered.
29. Chains are not to be used for lifting or towing. They are difficult to visually inspect and as such have the potential to unexpectedly break while under tension. Chain is only to be used for securement purposes and only grade 70 chains (or higher) shall be employed.
30. Lever-style boomers are not to be used. Levers have the high potential to snap unexpectedly to the open position when tension is being applied which could result in serious injury. Only ratchet style boomers are to be used.
31. Prior to transport, decks, platforms, steps, ramps and equipment shall be cleared of any oil, grease, ice, snow, dunnage, loose tools, gravel as well as any other loose items.
32. All loads must be fully secure, regardless of the distance being travelled.

