



NWO Well Services Ltd.

176 Clavet Street
Thunder Bay, Ontario
P7A 2M4
1-807-707-7000
info@nwowellservices.ca
www.nwowellservices.ca

NWOWS OH&S Book: Part 2: Heavy Machinery

NWO Well Services regularly operates 3 types of heavy machinery: a backhoe (power shovel/excavator), a T66 Truck mounted rig, and a B57 ATV mounted rig. However, the same procedures for these machines also applies to road vehicles when they are being driven at a work site.

Good communication is essential. A standardized set of hand signals should be used by the operator and signal person. Operators should always know exactly where all ground based workers are located, and the wearing of high visibility vests will help the operator to locate them quickly.

Never jump onto or off the equipment. Operators should always use the three-point contact rule when climbing onto or off heavy equipment. The three-point rule means having both feet and one hand, or one foot and both hands in contact with the ladder access at all times.

Inspect and service the equipment regularly. Complete equipment service in accordance with the manufacturer's recommendation. Periodic safety inspections on all components of the equipment should be done regularly by qualified personnel. Inspect the steering system and brake systems carefully. A pre-shift walk around inspection by the operator is highly recommended.

Safety Rules

The agency should also establish a set of safety rules and expectations for operators when operating heavy equipment. The following is a partial list of rules and safe work practices that should be observed by employees. The agency should add to this list to ensure that all aspects of safety are addressed for heavy equipment operators.

Before operating:

1. Provide operator manuals for equipment operators and vehicle maintenance employees to review
2. Ensure that operators wear appropriate clothing and protective equipment (hearing protection, work gloves, sturdy work shirt and pants, safety footwear, reflective vests, hard hat, etc.)
3. Establish hand signals (if ground workers are present)
4. Conduct regular vehicle inspections (use a daily sign in/inspection sheet)
5. Make sure equipment has a rollover protective structure (ROPS)
6. Fill tank with fuel when the equipment is cool with the engine off (no smoking)
7. Inspect steps, handrails, pedals, grab irons, and cab floor for debris or defects

During operation:

1. Always wear seatbelts
2. Check controls for proper operation (including backup alarms)
3. Check the work area for obstacles, holes, overhead utility lines, etc.
4. Have the utility service provider identify underground cables and supply lines before digging
5. When working on slopes, operate up and down the face of the slope instead of across the face
6. Never jump off of or onto the equipment (use 3-point contact rule)
7. Never exit a running vehicle (turn the vehicle off if the operator must leave the cab)

8. Check and monitor Blind spots and or areas of limited visibility

Exiting the vehicle:

1. Park on level ground
2. Relieve pressure from all hydraulic controls
3. Wait for all motions to stop, then safely dismount the vehicle using 3-point contact rule
4. Remove the key from unattended vehicles

Working around or near Heavy Equipment:

- Unless it is essential to the task, all personnel should stay away from all sides of heavy equipment while it is in use.

The Danger zones include but is not limited to:

1. Blind spots and or areas of limited visibility
2. Swing radius
3. Travel path
4. Overhead hazards
5. Close proximity of moving equipment.

Only qualified and authorized personnel are permitted to operate heavy equipment.

Anyone entering the danger zone must first establish communication, preferably eye contact, with the operator.

Supervisors are to prevent unauthorized workers or bystanders from entering a danger zone. When appropriate, install pylons or barricades.

Wear high visibility clothing and other appropriate personal protective equipment.

Back up procedures:

T660 and B57:

1. Driver is not to backup on a work site without a spotter. The Spotter is to perform a circle check of the vehicle starting in the rear right or left side BUT NOT BEHIND THE RIG, the spotter MUST ALWAYS be in site of the driver - EVEN during the circle check.
2. When the spotter signals that the truck is clear, the spotter will signal all reverse movements to the driver.
3. The driver is to immediately stop the rig if he loses sight or does not understand the spotter signals.

All other vehicles:

1. Driver is to perform quick circle check before moving the vehicle.
2. Always use caution and proceed slowly when in reverse.