

## Wheel Loader

### Objective

To establish safe operating practices of Wheel Loaders, ensuring the safety of personnel and efficient equipment function.

### Scope

This procedure applies to all Wheel Loaders operating in our operations.

### Procedure

#### 1. Responsibilities

- **Operators:** Follow this SOP and report any safety concerns or incidents.
- **Supervisors:** Ensure operators are trained and adhere to this SOP.

#### 2. Personal Protective Equipment (PPE)

- Hard hat
- High-visibility vest
- Safety boots
- Gloves\*
- Safety glasses\*
- Hearing protection\*

#### 3. Pre-Operation Checks

- **Visual Inspection:** Check for any visible damage or leaks.
- **Fluid Levels:** Ensure engine oil, hydraulic fluid, and coolant are at appropriate levels.
- **Tires:** Inspect for proper inflation and any signs of wear or damage.
- **Lights and Signals:** Verify all lights and signals are functioning.
- **Controls:** Test all controls for proper operation.
- **Safety Devices:** Ensure all safety devices, including fire extinguishers, are in place and functional.

#### 4. Climbing on and off Machines

- Use the 3-point contact method when climbing into and out of the machine.
- Always face the machine while mounting or dismounting.

*For more information refer to "CLIMBING ON AND OFF MACHINES- Policy & Procedure"*

## 5. Start-Up

- **Communication:** Confirm you are on the correct RT channel.
- **Comfort:** Seat position and air conditioning is set to operator preference.
- **Windows:** All windows clean for optimal visibility
- **Mirrors:** Align mirrors to operator preference.
- **Seatbelt:** Fasten the seatbelt.
- **Engine Start:** Turn the ignition key to start the engine.
- **Warm-Up:** Allow the engine to warm up for a few minutes.

## 6. Operation

- **Check Area:** Ensure the work area is clear of personnel and obstacles. Keep work area tidy and free of debris.
- **Communication:**
  - Call up other machine operators including Processor operator and vehicles when approaching.
  - Make sure to get RT or visual confirmation before passing other machines or vehicles.
  - Loader not to get closer than 20m to ground staff including QC MM1 unless RT or visual confirmation.
- **Travelling:**
  - Speed limit 30km – 15km around ground staff
  - Transport the logs at a safe speed.
  - Do not have the log head open so logs can fall out.
  - Close the log head when traveling empty.
  - Do not overload, Keep back wheels on the ground.
  - Do not travel with the grab obstructing the view of the travel path.
  - Maintain a clear line of sight.
  - Avoid excessive weight distribution to one side.
- **Weather:**
  - Restrict grabs to reduce logs slipping in wet weather.
  - Operate according to conditions.
- **Loading Logs:**
  - Approach the log pile slowly.
  - Position the log head at the base of the log pile.
  - Lift the logs carefully, ensuring the load is balanced.
  - Do not overload the grab.
- **Unloading Logs:**
  - Position the loader at the unloading area.
  - Lower the log head and tilt to release the logs.

- Ensure the area is clear before reversing.
- **Trucks:**
  - Log head must be closed when lifting the last grab off a truck.
  - Log head must be closed when loading the first grab onto a truck.

## 7. Shutdown

- **Parking:** Park in a safe area on a level surface.
- **Ground Hydraulics:** Lower boom so Log head is safely resting on the ground.
- **Neutral Gear:** Place the transmission in neutral.
- **Parking Brake:** Engage the parking brake.
- **Engine Shut down:** Turn off the engine and remove key. Wait for turbo timer to shut down.
- **Isolate:** Turn off battery isolation switch.
- **Inspection:** Conduct a final inspection and report any issues.
- **Fuel:** Fuel up at the end of the day.

## 8. Emergencies

- **Fire:** Shut down the machine safely, Report immediately, if it can be done safely use fire extinguisher to put out fire.  
*For more information refer to "ENVIRONMENTAL EMERGENCY Policy & Procedure"*
- **Spill:** Contain and report any fluid spills immediately.  
*For more information refer to "OIL LEAK & CHEMICAL SPILL Policy & Procedure"*
- **Injury:** Shut down the machine safely, provide first aid and contact emergency services if necessary.  
*For more information refer to "MEDICAL EMERGENCY Policy & Procedure 2024"*
- **Equipment Failure:** Shut down the machine safely and report the issue to Equipment Team.

## 9. Maintenance

**Daily:** Perform pre-operation checks and report any issues.

**Weekly:** Clean the loader and check for any wear and tear.

**Monthly:** Schedule a thorough inspection and maintenance with a qualified technician.

## 10. Training

All operators must complete training on the wheel loader and be familiar with this SOP.

## 11. Additional Resources

Having a good understanding of the machine operator manuals and safety guidelines is very important for safe and productive operations.

### Manuals:

- [Liebherr-L580-Wheel-Loader-Operators-Manual](#)
- [Volvo Load Assist Operators Manual](#)

### Safety Information:

- [NZ WorkSafe Forestry Safety Guidelines](#)

**Videos:**

- [Volvo Wheel Loader Basic Operations](#)

**12. Acknowledgment:**

*I acknowledge that I have read and understood this policy / procedure "Wheel Loader"*

**Name:**

**Sign:**

**Date:**