Ontario

On-Site Orientation

Fuel Truck Operator

Ministry of Training, Colleges and Universities

On-Site Orientation

Fuel Truck Operator

Program/Programme #P600107

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PREFACE

The Workplace Training Branch of the Ministry of Training, Colleges and Universities (MTCU) developed this equipment-specific orientation/training document, in consultation with representatives from the logging industry. It is intended to be used by employers for on-site orientation/training of their workers/trainees before registration to the on-the job training or operating the machine related to their duties.

The care and maintenance of this document is the joint responsibility of the worker/trainee and the employer. The document is an official record of a worker's/trainee's orientation/training.

Employers or designates and workers/trainees are required to attest to successful on-site machine specific orientation by filling their names and signing on the appropriate lines.

NOTICE/DECLARATION FOR COLLECTION OF PERSONAL INFORMATION

1. This information is collected under the authority of the Order-In-Council Number 701/85.

2. The information is collected for the purpose of administering this modular training program within the Province of Ontario.

3. Questions regarding collection and use of this information may be directed to:

Director
Ministry of Training, Colleges and Universities
Service Delivery Branch
33 Bloor St. E 2nd Floor
Toronto, Ontario
M7A 2S3
(416) 326-5605

FUEL TRUCK

NOTE
This guide and checklist is designed to refer employers and employees to the most obvious and critical component in each skill area. However, since machine model and make vary greatly, the primary reference material for specific machine safety related operating requirements should be the operator's manual supplied by the manufacturer of the particular machine in question.

Employer Information:

Company: _____

Address: _____

_____

Telephone: _____

Completed On-site Orientation Checklist: Worker and Employer/Designate Verification:

- □ Inspect workplace for hazardous and/or potential hazardous conditions
- □ Verify zero energy state
- □ Identify fuel truck components and terminology
- □ Conduct circle check
- □ Perform visual and operational checks of attachments and moving components for fluid leaks and damage
- □ Plan and organize fuelling procedures
- □ Travel with fuel truck
- □ Observe fuel truck limitations
- □ Observe danger zone
- □ Shut down fuel truck
- □ Refuel fuel truck
- □ Perform minor maintenance and adjustments

Worker Name (Please Print): _____

Worker Signature: _____

Date of Completion: _____

Employer/Designate (Please print): _____

Employer/Designate Signature: _____

INSPECT WORKPLACE FOR HAZARDOUS AND/OR POTENTIAL HAZARDOUS CONDITIONS

Performance Objective

Inspect workplace for hazardous and/or potentially hazardous conditions. Take corrective action by removing and/or addressing hazard according to legislative requirements, manufacturers' specifications and recommendations.

Guidelines for Performance Objective:

1. Ensure that there is no unauthorized personnel in the work area. Access to the entire area must be guarded and controlled

2. Review potential hazards such as under cut, overburden, angle of repose, and height of face. Height of working face of gravel pit or sand pit presents a risk to workers even if they are not working on top of it. Absolutely no undercutting of the working face is permitted. If the sand or gravel is being removed by powered equipment, the working face must be sloped at its angle of repose and the vertical height of the face must not be more than 1.5 metres above the maximum reach of the equipment. Identify and report hazards to supervision.

Component Checklist:

- Unauthorized personnel and equipment
- Undercut
- Overburden
- Angle of repose
- Height of face

VERIFY ZERO ENERGY STATE

Performance Objective

Verify zero energy state, by ensuring fuel truck is parked on level ground disconnecting power supply to pumping components, turn electrical switches and engine off, according to legislative requirements and manufacturer specifications and established lockout procedures, in order to protect self and others during inspection and maintenance.

Guidelines for Performance Objective:

1. The fuel truck must be immobilized and all moving parts de-energized before an operator can begin to work close to the truck and its components (wheel chocks if required). Follow lockout procedure.

   NOTE: Check with your manufacturer supplied operator's manual and immediate supervisor regarding correct procedures to apply the step-by-step lockout and verification procedure for your operation. Machines of different model or manufacturer may have different steps and requirements. The above is essential to ensure the safety of the operator and co-workers, as well as to confirm zero energy state prior to initiating the circle check procedures and other maintenance and trouble shooting functions. Operators must have proper out-of-the-cab PPE *e.g.* -safety boots laced to the top, hard hat, high visibility vest or clothing, as well as hand, hearing, and eye protection where required.

Component Checklist:

- ❑ Disconnect power to pumps
- ❑ Put engine in idle (cool down)
- ❑ Activate transmision interlock and braking system
- ❑ Wheel chocks if required
- ❑ Turn engine off
- ❑ Follow lockout procedure

IDENTIFY FUEL TRUCK COMPONENTS AND TERMINOLOGY

Performance Objective

Identify fuel truck components and terminology, visually and verbally, as described in the operator's manual, in order to ensure safe and efficient operation and maintenance.(Employer, supervisor or trainer refer to manufacturer supplied operator's manual to provide specifics regarding each component identified)

Guidelines for Performance Objective:

1. Having an understanding of the terminology used to describe major components is a vital part of using the manufacturer supplied owner's manual effectively and ensuring that such things as safety information, maintenance schedules, machine capacities and operating directions are understood and correctly applied. Review the major (key) components from the manufacturer supplied machine owner's manual that will assist the operator in identifying the key components, knowing their location on the machine and describing their purpose. (See appropriate pages in manufacturer supplied manual for specific terminology and diagrams)

Component Checklist:

- Tires
- Air tanks & brakes
- Cab & operator controls
- Engine
- Transmission
- Pumps and hoses/nozzle
- Emergency shut off valve (open and close valves)
- Differential
- Fire suppression equipment

CONDUCT CIRCLE CHECK

Performance Objective

Perform visual and operational checks of attachments and moving components according to manufacturer specifications, in order to ensure safe and efficient operation. The fuel truck must be properly shut down prior to initiating the circle check procedure. All substandard conditions and problems must be reported to the immediate supervisor. The circle check must be conducted at the beginning of each shift.

NOTE: Operators must have proper out-of-the-cab PPE e.g. - safety boots laced to the top, hard hat, high visibility vest or clothing, as well as hand, hearing, and eye protection where required.

Guidelines for Performance Objective:

1. Visible damage*:* Explain how to check for visible damage. Explain that repairs must be done as soon as possible to prevent costly breakdowns and to prevent even further damage or the potential of injury to the operator and others.

2. Leaks: Point out the locations where leaks (hydraulic fluid, brake fluid, fuel, air) can occur. Explain that leaks can lead to further more serious problems, cause fires or damage the environment. Leaks can also cause slip & fall injuries to operator and others due to fluid on machine. Explain the danger of checking for leaks where fluid is under high pressure (e.g. hydraulic fluid) and the proper method for checking.

3. Grease fittings: Identify the location (including remote connections), condition and purpose of grease fittings as described in the routine maintenance section of the owner's manual. Check to ensure they are in good condition and connected properly. Excessive grease build-up should be cleaned regularly to prevent the potential of slips, falls and fire.

4. Tires, wheels*:* Explain the requirements for correct pressure, adequate tread, no punctures or defects, rim in good condition, cap on valve stem. Follow the manufacturer guidelines and legaslative requirments when inflating/deflating tires. Also check for loose or missing wheel lugs and obstacles between wheels.

5. Nozzle/hoses/valves: Examine nozzle, hoses and valves to ensure that they are not damaged or leaking.

6. Check engine compartment*:* Check engine compartment and exhaust manifold/turbo for debris. Check and remove debris from engine compartment to reduce the potential for fire, paying particular attention to the exhaust manifold/turbo/radiator areas.

7. Check fluid levels*:* Identify the location of site glass and/or dip stick/cap and filler locations and examine each for proper levels. Keep these areas clean of debris, spilled fluids and grease build-up. Determine and confirm the type of fluid at each filling location. Follow the manufacturer guidelines for proper checking procedures of pressurized systems and know the hazards of hot fluids. No smoking during these procedures.

8. Condition of guards, catwalks, handholds & steps: Examine all guards to ensure that they are properly installed and in good condition. Do not operate without guards installed. Check the condition of all handholds, steps and walkways to ensure they are not damaged, free from debris, ice, snow, grease and oil.

9. Fire extinguisher and/or fire suppression system: The operator must know how to access this equipment and how to use it. It should be checked daily to ensure a proper charge, maintenance tag updated, the pin is in place and the device is properly secured in the cab. A full water pack in working condition may be required for fire season. For machines equipped with a fire suppression system, the operator must know the location(s) of activation plungers and ensure that they are in good condition and check outlets for good condition.

10. Seat belt: Examine the seat belt to ensure that it is in good working condition (wear, anchors, frayed, buckle works freely).

11. Lights*:* Turn on all lights/beacons to check that they are in good working order. Make sure the guards are in place (if equipped), and the lenses are cleaned and wiring harnesses are intact.

12. Windows/doors*:* Examine the windows and doors to ensure they are clean and in good condition. Broken or missing windows must be reported and repaired. Check to see doors open and close properly. Make sure the wipers and wiper blades are in working order, and that window guards/screens (if equipped) are properly installed.

13. Housekeeping & loose equipment in cab: Keep all tools outside the cab or properly secured in the cab. No loose items in the cab. Keep floor clean and air conditioning/heater filters clear of materials. Aerosol containers should be secured and away from heat sources.

14. Radio communications*:* Check the radio to ensure that it is in good working order and equipped for channels used in your area (if applicable).

15. First aid kit*:* Know the location, condition and required contents of the first aid kit. It should be easily accessible. Know trained first aid caregivers on-site.

16. Spill Kit*:* Know the location, condition, how to use it, required contents of the spill kit. It should be easily accessible.

17. Reflective/flare kit*:* Know the location, condition, how to use the required contents. It should be easily accessible.

18. Back-up Alarm: Check back-up alarm to ensure that it is in good working order and audible.

19. Transportation of Dangerous Goods (TDG***):*** plaque cards, way bills, neoprene gloves and emergency contact numbers

Component Checklist:

- ❑ Check for visible damage and leaks
- ❑ Identify grease fittings
- ❑ Check tire condition/wheel lugs
- ❑ Check nozzle/hoses/valves
- ❑ Check engine compartment
- ❑ Check fluid levels
- ❑ Check condition of guards, handholds, catwalks and steps
- ❑ Check condition of fire extinguisher and/or fire suppression system
- ❑ Check condition of seat belt
- ❑ Check lights/beacons
- ❑ Check condition of windows, wipers and doors
- ❑ Check housekeeping & stow any loose equipment in cab
- ❑ Check radio communications (if applicable)
- ❑ Check first aid kit
- ❑ Check spill kit
- ❑ Check Reflective/flare kit
- ❑ Check back-up alarm
- ❑ Check TDG requirements

PERFORM VISUAL AND OPERATIONAL CHECKS OF ATTACHMENTS AND MOVING COMPONENTS FOR FLUID LEAKS AND DAMAGE

Performance Objective

Check attachments for proper operation, fluid leaks and damage, according to manufacturer specifications, in order to ensure safe and efficient operation of equipment

Guidelines for Performance Objective:

1. Activate parking brake and/or hydraulic/transmission interlocks: Check the danger zone to ensure it is free of co-workers or other equipment prior to activating the system. Check for proper operation of components. If defects are detected, report immediately to supervisor.

2. Check attachments for damage*:* Make sure the attachments are not damaged and that no leaks are apparent.

3. With the transmission locked or in neutral, all controls in the rest position, engine running, lights turned on and emergency braking applied, dismount from cab using 3-point contact, complete one more walk around the fuel truck, checking for fluid leaks or other obvious damage.

Component Checklist:

- Activate parking brake and/or hydraulic/transmission interlocks
- Check attachments for damage and leaks
- Visual inspection, when walking around fuel truck, with engine running

PLAN AND ORGANIZE FUELLING PROCEDURES

Performance Objective

Plan and organize the loading, hauling and distribution of fuels by observing terrain, ground conditions and machine load limitations to facilitate safe and efficient transportation distribution of fuels, according to TDG requirements, manufacturer specifications and recommendations, in order to protect self and others and to prevent equipment damage.

Guidelines for Performance Objective:

1. Identify loading/hauling/distribution of fuels: Check with your immediate supervisor to determine loading location, hauling and distribution of fuels and any environmental or other concerns. Be aware of any potential hazards in the immediate area (*i.e.* traffic or other equipment in the immediate area).

2. Identify travel route*:* Check with your immediate supervisor and/or cross shift operator regarding hazardous terrain that must be taken into consideration (*i.e*. rough terrain, slopes and inclines, drop off, wet areas).

3. Minimize rutting and ground disturbances: Adjust load size to reduce site damage or determine alternate routes. Be aware of ground conditions/disturbance guidelines for your operation. If unsure check with your immediate supervisor.

4. Maintain a safe operating distance between equipment*:* Be aware of other equipment working in your immediate work area. Check with your immediate supervisor and co-workers to identify appropriate danger zones for your operation.

5. Procedure for accessing top of fuel tank*:* When working at the height of over 3 metres, fall/travel restraint systems must be used. Maintain 3-point contact on access ladders.

6. Procedure for fueling equipment*:* Maintain 3-point, mounting and dismounting. No smoking, equipment being fuelled must be shut down, ensure adequate ventilation; attend nozzle at all times.

7. Seasonal concerns (winter, summer) requires extra caution to be exercised due to poor visibility and hidden hazards. Be aware of these hidden hazards due to seasonal conditions (*i.e.* hidden culverts, hidden areas of concerns such as recently planted areas, hidden rock outcrops/cliffs)

Component Checklist:

- ❑ Identify loading/hauling/distribution of fuels
- ❑ Identify travel route (considering hills)
- ❑ Minimize rutting and ground disturbance
- ❑ Maintain a safe operating distance between equipment
- ❑ Procedure for accessing top of fuel tank, fall/travel restraint systems
- ❑ Procedure for fueling equipment
- ❑ Seasonal concerns

TRAVEL WITH FUEL TRUCK

Performance Objective

Travel with fuel truck by selecting appropriate speed, placing components in the travel position and disengage pump according to manufacturer specifications, in order to protect self and others and to prevent equipment damage.

Guidelines for Performance Objective:

1. Disengage pump: The pump shall be disengaged when traveling.

2. Select a speed appropriate to ground conditions*:* While maintaining control of the truck. Maintain a speed and engine RPM that allows the operator to maintain full control of the truck at all times taking into consideration ground conditions, weather, shifting load.

3. Maintain control, travel at a safe speed*:* Keep right while travelling on roadways or on route to load/distribution site to ensure public safety. Be aware of local traffic and observe traffic and warning signs posted within your work area. Keep speed appropriate to road condition, weather, concentration of traffic, seasonal conditions (dust/snow) and be aware of soft shoulders.

4. Maintain communication with other equipment operators: Check to ensure your radio is in good working order and proper channel is used. Monitor the local channel for traffic (if applicable). Check with your immediate supervisor for communication protocol within your work area.

Component Checklist:

- ❑ Disengage pump
- ❑ Select a speed appropriate to ground conditions while maintaining control of the machine
- ❑ Maintain control, travel at a safe speed and keep right while traveling on the roadway or on route to and from the work site while maintaining radio communication to ensure public safety
- ❑ Maintain communication with other equipment operators/personnel

OBSERVE FUEL TRUCK LIMITATIONS

Performance Objective

Observe fuel truck limitations according to manufacturer specifications by identifying equipment load chart, recognizing conditions that affect fuel truck capabilities such as steep terrain in order to protect self and others and prevent equipment damage.

Guidelines for Performance Objective:

1. Apply the manufacturer standards for fuel truck capacity and limitations in determining the size of load keeping in mind road conditions.

2. While turning be aware of obstacles that may cause a roll over. Also when turning, be aware of other personnel and nearby machines.

Component Checklist:

- Understand the load limitations of the fuel truck according to road conditions
- While turning be aware of obstacles which may cause the fuel truck to roll over

OBSERVE DANGER ZONE

Performance Objective

Observe danger zone by keeping a safe distance between self, others and equipment, taking into consideration limited visibility and blind spots, according to legislative requirements and manufacturer specifications and established procedures, in order to protect self and others and prevent damage to equipment.

Guidelines for Performance Objective:

1. Review danger zone requirements and identify site-specific hazards. Know the danger zone as it applies to other equipment and operating equipment near other workers. Consult operator's manual for recommended danger zone for this equipment.

Component Checklist:

- ❑ Review dangers zones requirements and identify site-specific hazards

SHUT DOWN FUEL TRUCK

Performance Objective

Shut down and immobilize fuel truck in a normal and emergency situation, according to manufacturer specifications and requirements.

Guidelines for Performance Objective:

1. Fuel truck shut down*:* Park fuel truck on level bare mineral soil and, engage transmission lock or park braking system and shut off master ignition/switch when completing shutdown procedure. Maintain 3-point contact during dismount.

Component Checklist*:*

- Shut down procedures
- Safe dismount, maintaining 3-point contact

REFUEL FUEL TRUCK

Performance Objective

Refuel fuel truck in a well ventilated area; shutting off engine; maintaining the area free of smoking; and preventing spills or damage to the environment; according to legislative requirements, manufacturer specifications and recommendations.

Guidelines for Performance Objective:

1. Position fuel truck to prevent damage to the fuel tank.

2. Shutdown fuel truck: Follow previously noted shutdown procedures.

3. Dismount using 3-point contact.

4. Fuelling procedures: Follow local fuelling procedures, no smoking, never leave the nozzle unattended; properly store the hose after use.

Component Checklist:

- ❑ Position fuel truck to the fuel tank
- ❑ Shut down procedures
- ❑ Safe dismount, maintaining 3-point contact
- ❑ Fuelling procedures

PERFORM MINOR MAINTENANCE AND ADJUSTMENTS

Performance Objective

Perform minor maintenance and adjustment on the fuel truck, after immobilizing (locking out) machine, lubricating equipment and attachment, maintaining fluid levels, ensuring replacement of belts and hoses, and checking and completing maintenance and/or deficiencies report, according to legislative requirements, manufacturer specifications and recommendations,

Guidelines for Performance Objective:

1. Shut down and iimmobilize fuel truck, using 3-point contact and following lock out procedures.

2. Dismount using 3-point contact.

3. Lubricate/maintain fluid levels: following manufacturers' specifications for greasing. It is a good opportunity to check for cracks, leaks.

4. Report deficiencies: Complete report according to local procedures, perform repairs that you are qualified to do and/or report to the supervisor/ mechanic/service person.

5. Drain air tanks according to manufacturer specifications.

Component Checklist*:*

- Shut down fuel truck and lock out
- Safe dismount, maintaining 3-point contact
- Lubricate/maintain fluid levels
- Report deficiencies
- Drain air tanks

NOTE: All skill areas in the Modular Training Standards book will be continuously discussed during the training process.