#### TRACTOR TRAILER

This Evaluation Guide for Skills Demonstration is to be used in the evaluation of an operator for certification on the specific piece of equipment stated above. It is intended that this Guide be followed closely during an evaluation, and the operator is expected to demonstrate competency in each of the items listed. However, variances may be made in some situations when, in the opinion of an evaluator, site conditions, operational constraints or the demonstrated skill of the operator requires that an item(s) be deleted or added to ensure a comprehensive evaluation.

# 1. Holds a valid Class A Commercial Driver's License, if applicable

# 2. Performs a thorough pre-use inspections and preventive maintenance, as needed

- a. Removes keys from ignition for safety
- b. Checks that parking brake is on Checks that warning and safety decals are in place
- c. Distinguishes when vehicle should not be operated
- d. Verifies vehicle is safe to operate
- e. States all safety warnings for machine
- f. Inspects the following machine components:
  - i. Engine
    - (1) Checks oil, coolant, power steering, and window washer levels. Fills as needed
    - (2) Checks the radiator fins of cracks, distortion, debris and any signs of leakage
    - (3) Checks fans for presence and distortion
    - (4) Checks air restriction indicator (monometer) and cleans dust valve daily
    - (5) Checks that oil and fuel filters are in good condition, secured tight, and without leaks
    - (6) Checks batteries for corrosion and to be properly secured
    - (7) Checks that shutters are not bent and are free from debris, if applicable
    - (8) Inspects condition and tightness of belts
    - (9) Checks air induction and cooling tubes for presence and tightness, if applicable
    - (10) Checks turbo charger for leaks and cracks, if applicable
  - ii. Steering and Suspension
    - (1) Checks springs and spring hangers for presence, condition and damage
    - (2) Checks that shocks are properly attached, are not damaged and are not leaking
    - (3) Inspects pitman arm, drag link and tie rod ends for tightness
    - (4) Checks power steering assist cylinder, if applicable, and steering box for leaks and that it is secured to frame
    - (5) Checks tires for tread depth, proper inflation and obvious defects

- (6) Checks wheels/rims for tightness, cracks, valve stem alignment, slippage or any damaged, broken or missing parts
- (7) Checks wheel hub for proper lube levels

## iii. Rear Axle and Suspension

- (1) Checks springs and spring hangers for presence, condition and damage
- (2) Inspects drive shaft visually for damage, debris or any sign of failure
- (3) Checks differential and wheel seals for leaks
- (4) Checks for presence and condition of axle vent
- (5) Checks tires for tread depth, proper inflation and obvious defects
- (6) Checks wheels/rims for tightness, cracks, valve stem alignment, slippage or any damaged, broken or missing parts
- (7) Checks between dual wheels for any foreign materials, misalignment or any hidden damage
- (8) Checks fenders and mud flaps for presence and condition

#### iv. Exterior

- (1) Checks fuel tank for damage or leaks and fuel levels
- (2) Checks that lights, warning lights, and reflectors are clean and intact, properly attached, and operating correctly
- (3) Checks exhaust system for damage or leaks
- (4) Checks fifth wheel to be secure, intact and lubricated
- (5) Checks that lifting blocks are with trailer
- (6) Checks decking on trailer for any broken or missing planks and that it is free of all debris
- (7) Checks pintle hitch for proper operation, if applicable
- (8) Checks that truck tool box is secure and also for presence of safety triangles, emergency equipment, chains and binders
- (9) Checks air tanks and dryers for any broken, loose, or damaged parts
- (10) Checks power take off (PTO) system visually for leaks and any broken, damaged or missing parts

#### v. Cab Interior

- (1) Enters cab using steps and grab handles for safety (3 point climbing procedure)
- (2) Performs general safety check including unsecured objects
- (3) Describes functions of controls
- (4) Inspects presence and condition of seat belts and other safety equipment, including horn, fire extinguisher and first aid kit
- (5) Inspects for excessive free play in the steering wheel
- (6) Inspects for 1 ½ inch clutch free play (if applicable)
- (7) Inspects for clean and undamaged glass and mirrors, working wipers/washers and heater/defroster
- (8) Checks two-way radio for proper adjustment and operation
- (9) Demonstrates an entire air brake check of the system, including how to check parking and service brakes (ie: low air warning maximum air loss for service brake, automatic parking brake application)

# 3. Starts and idles the vehicle properly

- a. Opens garage doors as required
- b. Enters cab using steps and grab handles for safety (3 point climbing procedure)
- c. Adjusts seat, mirrors and fastens seat belt
- d. Starts engine
- e. Checks instrument readings and verifies proper ranges
- f. Allows engine to warm up in proper range of RPMs (never above yellow on tachometer)
- g. Yields right-of-way
- h. Performs brake system check
- i. Rechecks instrument readings

## 4. Puts vehicle in motion safely and smoothly

- a. Looks around before putting vehicle in motion
- b. Properly engages the clutch using the clutch brake to eliminate grinding
- c. Prevents vehicle rollback
- d. Accelerates smoothly
- e. Tests brakes after putting vehicle in motion, including trailer tug
- f. Does not "ride" clutch
- g. Does not slip clutch unnecessarily
- h. Does not stall engine
- i. Does not "slip" the clutch to start the truck in motion, change gears or prevent rollback
- j. Does not start moving while in high range

# 5. Uncouples and couples trailer from gooseneck

- a. Ensures gooseneck is straight and surface is relatively level
- b. Stops, applies parking brake on tractor and trailer
- c. Shuts off engine
- d. Engages power take off (PTO)
- e. Restarts engine
- f. Exits vehicle using 3 point procedure
- g. Blocks trailer wheels
- h. Disconnects air and electrical lines from gooseneck
- i. Removes safety link pins
- j. Lowers hydraulic cylinder to raise trailer
- k. Unlocks safety latch
- 1. Inserts blocking between truck frame and gooseneck
- m. Raises hydraulic cylinder to lower trailer
- n. Re-enters tractor, releases parking brake on tractor, pulls away
- o. Exits tractor using 3 point procedure and lowers ramps on trailer
- p. Reverses steps a o

# 6. Couples and uncouples trailer from 5<sup>th</sup> wheel

a. Couples and uncouples trailer from 5<sup>th</sup> wheel

c. Uses safety latching devices

# 7. Loads and secures equipment to be transported

- a. Aligns equipment to trailer
- b. Moves equipment onto trailer, checking for overhead hazards
- c. Ensures attachments are high enough to clear flatbed of trailer, if applicable
- d. Secures equipment using appropriate tie-down procedure
- e. Uses proper chains and binders
- f. Applies any transport features particular to the specific equipment being transported, such as the safety bar on a front end loader
- g. Checks for proper clearance of load (width and height)
- h. Backs vehicle and trailer approximately 100 feet in straight line without excessive
- i. maneuvering
- j. Communicates with spotter and follows spotter's directions

# 8. Shifts transmission smoothly and efficiently

- a. Does not "ride" clutch
- b. Does not stall engine
- c. Shifts each gear with proper RPM range
- d. Synchronizes transmission by double-clutching smoothly
- e. Accelerates vehicle by up-shifting properly and in sequence
- f. Decelerates vehicle by down-shifting properly and in sequence
- g. Does not coast vehicle
- h. Selects proper gear, ascending grade
- i. Selects proper gear, descending grade
- j. Keeps vehicle under engine-governed speed
- k. Keeps vehicle under control while shifting gears
- Keeps eyes on road when shifting gears

# 9. Drives on roadway safely and properly, observing all traffic laws

- a. Maintains safe following distance (3 second rule) when applicable
- b. Maintains uniform speed
- c. Keeps vehicle centered in lane
- d. Does not change lanes unnecessarily
- e. Maintains proper hold on steering wheel
- f. Avoids obstructions on highway
- g. Keeps vehicle in the driving lane on hills and curves
- h. Obeys traffic and speed laws
- i. Takes note of weight limits, overhead clearances and other hazards to large trucks
- i. Takes note of traffic ahead, behind and on either side
- k. Anticipates stops well in advance (slows down, downshifts as necessary)
- 1. Applies brakes when required and in a smooth motion
- m. Does not ride brake pedal
- n. Uses engine Jake brake properly

o. Uses proper speed for existing road conditions

# 10. Passes other vehicles safely, legally, and only when necessary

- a. Maintains proper distance
- b. Checks conditions ahead, behind and blind spots
- c. Properly signals to pass
- d. Moves smoothly into passing lane
- e. Sounds horn when necessary
- f. Uses lights to signal passing maneuver if visibility is poor
- g. Checks conditions behind before moving into right lane
- h. Signals change from passing lane to right lane
- i. Moves smoothly into passing lane
- j. Sounds horn when necessary
- k. Uses lights to signal passing maneuver if visibility is poor
- 1. Checks conditions behind before moving into right lane
- m. Signals change from passing lane to right lane
- n. Moves smoothly into right lane
- o. Resumes normal driving speed
- p. Does not pass unnecessarily
- q. Does not pass in illegal zone

# 11. Properly turns vehicle

- a. Positions vehicle in proper lane
- b. Gives proper signal
- c. Selects proper gear to negotiate turn
- d. Selects proper speed prior to turn
- e. Checks traffic and conditions on all sides
- f. Yields right-of-way
- g. Wheels remain on pavement by properly judging turning distance
- h. Maintains proper position during turn
- i. Negotiates turn smoothly
- j. Steers the front end wide enough around corner so rear end does not run over the curb, pedestrians and other vehicles
- k. Keeps rear of vehicle close to curb to keep other drivers from passing on the right
- Makes right hand turns
- m. Does not turn wide to the left when starting a right hand turn
- n. Turns slowly and maintains control of vehicle when turning

## 12. Proceeds through intersections properly

- a. Approaches intersection in proper gear and at proper speed
- b. Uses correct lane; follows all lane markings
- c. Anticipates signal light changes
- d. Obeys traffic rules
- e. Compensates for size of vehicle, size of load and allows room accordingly

- f. Yields to pedestrians
- g. Yields to other vehicles having right of way
- h. Checks conditions in all directions
- i. Stops smoothly
- j. Starts smoothly

# 13. Proceeds through railroad crossing properly

- a. Obeys signs and signals
- b. Looks in both directions of track in time to stop, if necessary
- c. Stops when required
- d. Stops at proper distance (15 to 50 feet), if applicable
- e. Stops in proper lane
- f. Crosses tracks at proper speed
- g. Crosses tracks in proper gear
- h. Does not shift in the crossing area

### 14. Follows safe backing procedure

- a. Avoids backing whenever possible
- b. States backing policy
- c. Avoids backing onto highway whenever possible
- d. Positions truck correctly before backing
- e. Exits vehicle and checks area around vehicle prior to backing
- f. Asks for a "backer" to assist in the backing maneuver
- g. Gets out and re-checks behind the truck when in doubt, if necessary
- h. Sounds horn three times
- i. Steers smoothly
- i. Backs to driver's side, if possible
- k. Backs slowly, correcting steering or stopping if necessary
- Pulls forward to reposition vehicle as needed
- m. Backs vehicle and trailer approximately 100 feet in straight line without excessive maneuvering
- n. Ability to communicate and follow directions from spotter
- o. Maintains clearance on both sides and overhead while backing
- p. Does not slip clutch unnecessarily
- q. Uses all mirrors when backing

#### 15. Parks and shuts down vehicle

- a. Parks in proper location
- b. Places transmission in proper gear
- c. Sets parking brake
- d. Uses proper engine shutdown procedure (idles vehicle 3-5 minutes)
- e. Exits cab properly using 3 point contact and grab handles for safety
- f. Cleans and secures vehicle as appropriate

g.	Completes post operational check according to local policy
	The below signatures indicate the operator has successfully completed the skills demonstration.
	Signature of Evaluator:Date:
	Evaluator:Date:
	Signature of Operator:Date:
	Reference: New State Department of Transportation