

WP 05-WH1405

Revision 11

Trailer Jockey

Technical Procedure

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APPROVED FOR USE

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This procedure provides the required instructions for operating the Trailer Jockey at the Waste Isolation Pilot Plant (WIPP). This procedure generates records in the Equipment Logbook.

REFERENCES

BASELINE DOCUMENTS

- 40 *Code of Federal Regulations* (CFR) §264.15, "General Inspection Requirements"
- DOE Standard 1090-2007, *Hoisting and Rigging*
- Hazardous Waste Facility Permit, Waste Isolation Pilot Plant, Permit No. NM4890139088-TSDF, issued by the New Mexico Environment Department
- 41-H-030, *Capacity Trailer Jockey Operator's Manual*
- 41-H-046, *Capacity Trailer Jockey Operator's Manual*
- WP 04-AD3011, Equipment Lockout/Tagout
- WP 08-PT.04, CH Packaging Trailer Operation and Maintenance Manual
- WP 08-PT.13, RH 72-B Cask Uprighting Trailer Operation and Maintenance Manual
- WP 12-IS.01, Industrial Safety Program - Structure and Management

REFERENCED DOCUMENTS

- WP 04-IM1000, Issues Management Processing of WIPP Forms
- EA04IM1000-1-0, WIPP Form
- WP 05-WH1101, Surface Transuranic Mixed Waste Handling Area Inspections

PRECAUTIONS AND LIMITATIONS

- [Preoperational Checks are required prior to operating Trailer Jockey on each shift.](#)³

- Only personnel qualified as Waste Handling Technician/Engineer (WHT/WHE), or trainees under the direct supervision of a qualified WHT/WHE, are authorized to perform the activities specified in the procedure.
- When conducting on-the-job training, the trainer and trainee must utilize 2-way radios to ensure adequate communication. A radio check/communications check shall be performed prior to any training evolutions.
- During load movements that impair the Operator's view, a Spotter shall be used.
- Transmission **MUST NOT** be shifted from forward to reverse (or vice-versa) while Trailer Jockey is in motion.
- Transmission **MUST NOT** be downshifted if engine speed is above 2,100 rpm.
- Trailer **MUST NOT** be moved until air-ride system is fully inflated.
- During tilting of trailer cab, safety latch must be released until lock pins clear (if applicable).
- Prior to moving a trailer, allow approximately two minutes for the air pressure to stabilize after attaching the tractor air supply to the trailer. Failure to allow the brake system air pressure to stabilize before moving the trailer can damage the trailer air suspension system, brake system, and tires.
- Prior to moving a trailer, allow approximately two minutes for air pressure to stabilize anytime the trailer jockey fifth wheel is raised or lowered.
- Debris entering the brake system air lines can clog the relay valves. To prevent debris from entering the brake system air lines when a trailer is disconnected from the tractor, "glad-hand" covers shall be used on both the tractor and trailers that are equipped with them.

PREREQUISITE ACTIONS

- 1.0 If a required inspection goes delinquent, perform the following:
 - 1.1 Immediately notify Site Environmental Compliance (SEC) of the delinquent inspection.
 - 1.2 Schedule and complete the inspection.

1.3 Document the following in a letter to SEC within five working days:

- Schedule for inspection
- Reason(s) why the inspection was not performed
- Any measures taken to offset negative impacts resulting from not performing the inspection
- Actions to prevent further delinquencies

1.4 SEC, **GO TO** WP 04-IM1000, and ensure a WIPP Form (EA04IM1000-1-0) is initiated.

2.0 [Review Equipment Logbook for outstanding deficiencies and Action Requests \(ARs\).](#)⁴

3.0 Record Hour Meter reading and Equipment Number in Equipment Logbook.

PERFORMANCE

1.0 [PREOPERATIONAL CHECKS](#)⁴

1.1 Tilt cab up to gain access to engine compartment, as follows:

1.1.1 Ensure all loose items are secured or removed from cab.

CAUTION

Lock pins must clear to prevent damage to lock mechanism.

1.1.2 Release cab safety latch (top of cowl) by pulling up toward right side of cab and holding until lock pins clear (41-H-030).

1.1.3 Push down and hold Raise Lever (under battery box) until cab is in position.

1.1.4 Lock safety ratchet by pushing the holding rod (behind battery box) toward front of the Trailer Jockey and into one of the ratchet holding positions (41-H-030).

1.1.5 Lower cab slightly **AND** ensure safety ratchet is engaged.

1.2 Ensure the following:

- Engine Oil Level: Normal range
- Power Steering Fluid Level: Cold range
- Radiator Coolant: Visible in upper tank
- Belts: **NOT** loose, worn, or cracked
- Transmission Oil Level (cold): Above high mark
- Air Cleaner: **NOT** in red (41-H-046)

1.3 Lower cab as follows:

- 1.3.1 Ensure all tools and personnel are clear.
- 1.3.2 Push down on Raise Lever to release safety ratchet.
- 1.3.3 Release safety ratchet with left hand by pulling and holding rod toward back of Trailer Jockey until cab is down.
- 1.3.4 Push up and hold Raise Lever (under battery box) until cab is fully down.
- 1.3.5 Ensure spring-loaded latch lever is engaged to lock pins (41-H-030).
- 1.3.6 Ensure pins are in (41-H-046).

1.4 Ensure the following:

- Fifth Wheel: Clean and greased
- General Condition: **NO** damage, loose parts, oil leaks, grease, oil, or trash
- Seat Belts: In good condition
- Tires: In good condition, **NOT** excessively worn or cracked, all wheel lugs tight
- Hydraulic Oil Tank Level: Normal range in sight glass
- Battery: Free from acid spills; **NO** loose or missing caps or cables
- Fuel: Sufficient for intended operation

- Pedals and levers: Operate properly
- Wheels: Chocks removed

1.5 Start engine as follows:

- 1.5.1 Adjust seat to provide easy access to all controls.
- 1.5.2 Ensure seat locking mechanism engages.
- 1.5.3 Fasten seat belt.

NOTE

The engine will not start unless the transmission is in neutral.

- 1.5.4 Shift transmission to "N" (neutral).
- 1.5.5 Ensure parking brake is engaged.
- 1.5.6 Turn key to **ON**.
- 1.5.7 Press and hold starter button (41-H-030).
- [A] If engine fails to start within 30 seconds, release starter button and allow starter motor to cool 2 to 3 minutes before another start attempt.
- [B] If engine fails to start within four attempts, notify WHE.
- 1.5.8 Release starter button after engine starts (41-H-030).
- 1.5.9 **IF** engine oil pressure fails to indicate within 15 seconds, **THEN** immediately stop engine.

CAUTION

Running a cold engine at high speed (rpms) may cause damage to internal engine parts.

- 1.5.10 Slowly increase engine speed to 1,000 rpm.
- 1.5.11 Allow engine to idle for 3 to 5 minutes.

1.6 Ensure the following:

- Engine Oil Press: Normal
- Water Temp: Normal
- Transmission Oil Press: Normal (41-H-030)
- Transmission Oil Temp: Normal (41-H-030)
- Voltage: 13-14 volts
- Air Press: 90-120 psig
- Horn: Sounds
- Driving lights: Illuminate

1.7 Ensure the following Power Take Off (PTO) functions:

- Fifth Wheel Engage
- Fifth Wheel Raise
- Fifth Wheel Lower
- Fifth Wheel Disengage

CAUTION

Air brakes will automatically set if air pressure <60 psig.

1.8 Shift into gear and ensure Trailer Jockey does **NOT** move.

1.9 Shift transmission to "N" (neutral).

1.10 Press service brake pedal.

1.11 Release parking brake.

1.12 Place transmission in gear.

1.13 Release service brake pedal.

- 1.14 Press accelerator pedal to move Trailer Jockey forward and backward, and ensure the following:
- Steering operates smoothly without pulling
 - Service brakes operate properly without dragging
 - Backup alarm sounds
- 1.15 Engage parking brake.
- 1.16 Notify WHE of the operational status of the trailer jockey, and of any deficiencies discovered during Preoperational Checks and the status of each (e.g., deficiencies corrected and ARs generated).²
- 1.17 Record the following in Equipment Logbook:¹
- 1.17.1 Deficiencies noted.
 - 1.17.2 Addition of oil, water, or other fluids including amount added.
 - 1.17.3 Corrective action taken (outstanding/newly generated ARs, etc.).
- 1.18 Initiate ARs to address any deficiencies that **CANNOT** be corrected by Waste Handling Operations.²
- 1.19 Enter date, time, and signature in Equipment Logbook to document performance of Preoperational Checks.
- 1.20 If applicable, complete appropriate sections of the WP 05-WH1101, Attachment 5, Preoperational Waste Handling Mode Checklist.
- 1.21 WHE, review Equipment Logbook on a weekly basis, generally the last day of the work week.
- 1.21.1 Submit completed Equipment Logbooks to the Records Coordinator.

2.0 OPERATION

NOTE

Transmission will not shift out of neutral unless service brake is pressed.

2.1 Trailer Coupling

NOTE

The user shall report any deficiencies to the WIPP Transportation Scheduler before using the trailer.

2.1.1 Before using a trailer, perform a pre-use visual inspection to include the following:

- Tires in good condition, not excessively worn or cracked
- Tires have no flat spots
- Lights are not broken
- No obvious visual damage to trailer and components

2.1.2 Back under trailer and raise fifth wheel to pick up trailer slightly.

2.1.3 Continue backing under the trailer until the fifth wheel latches securely.

2.1.4 Raise trailer until landing gear dollies are just off the ground.

2.1.5 Pull forward slightly to ensure fifth wheel is securely latched.

2.1.6 Shift transmission to "N" (neutral).

2.1.7 Engage parking brake.

2.1.8 Visually verify fifth wheel and king pin are properly engaged.

2.1.9 Hook up air connection.

CAUTION

To prevent damage to equipment, the operator shall allow a minimum of two minutes for the air pressure to build and stabilize after attaching the trailer jockey air supply to the trailer. Failure to allow the brake system air pressure to stabilize before moving the trailer can damage the trailer air suspension system, brake system, and tires.

- 2.1.10 Release trailer brakes to ensure air connections do not leak.
- 2.1.11 Ensure all wheel chocks and obstructions are clear of trailer wheels.
- 2.1.12 Prior to moving trailer, allow approximately two minutes
- 2.1.13 Raise fifth wheel to clear any obstacles.

CAUTION

To prevent damage to equipment, prior to moving trailer, the operator shall allow sufficient time (approximately two minutes) for the air pressure to stabilize after attaching the tractor air supply to the trailer. The air system must be fully charged and the air suspension fully inflated before picking up the trailer with a hydraulic fifth wheel, releasing the brakes, or retracting the landing gear.

- 2.1.14 Release parking brake.
 - 2.1.15 Before moving, look in all directions.
 - 2.1.16 Begin pulling the trailer forward while ensuring all trailer tires are turning freely.
- 2.2 Trailer Uncoupling
- 2.2.1 Shift transmission to "N" (neutral).
 - 2.2.2 Engage trailer brake.
 - 2.2.3 Lower trailer onto landing gear dollies.
 - 2.2.4 Chock trailer wheels as necessary.
 - 2.2.5 Uncouple air connection.

- 2.2.6 Press service brake pedal.
 - 2.2.7 Push and hold Fifth Wheel Control Knob.
 - 2.2.8 Shift transmission and pull forward enough to clear trailer.
- 2.3 Shutdown
- 2.3.1 Park at designated parking area.
 - 2.3.2 [Apply parking brake.](#)⁵
 - 2.3.3 Place transmission in "N" (neutral).
 - 2.3.4 Allow engine to idle for 3 to 5 minutes.
 - 2.3.5 To stop engine, turn key **OFF**.
 - 2.3.6 [Chock wheels.](#)⁵