# Section 49 Towable Trailer Safety

#### 49.1 Scope

This section establishes safety requirements for towable trailer safety at all Reclamation facilities and operations.

This RSHS Section does not apply to contractors.

#### 49.2 General Requirements

Qualified personnel must operate towable trailers in compliance with this section, applicable Department of Transportation (DOT) regulations, and Occupational Safety and Health Administration (OSHA) Standards 1910 and 1926.

#### 49.3 Responsibilities

#### 49.3.1 Area, Facility, and Powerplant Managers

- **49.3.1.1** Shall ensure that competent personnel inspect all towable trailers as required by this section.
- **49.3.1.2** Shall designate competent personnel as towable trailer instructors.

#### 49.3.2 First-Line Supervisors

- **49.3.2.1** Shall ensure that training is provided to employees assigned to operate towable trailers and ensure that employees are proficient and qualified, as required by this section.
- **49.3.2.2** Shall have a process for ensuring only trained and qualified employees operate towable trailers.

#### 49.3.3 Employees

- **49.3.3.1** Shall obtain and complete all training and evaluations for all towable trailers the employee is assigned to operate, as required by this section.
- **49.3.3.2** Shall inspect and perform maintenance on all towable trailers, as appropriate and as required by this section.
- **49.3.3.3** Shall meet the DOT licensing requirements for on-highway operations and possess a current commercial driver's license (CDL) where applicable.
- **49.3.3.4** Shall comply with applicable operating instructions, limitations, regulations, and written safety programs and plans.

#### 49.4 Training Requirements

#### 49.4.1 Initial

The initial training program requirements must consist of the following:

- a review of the owner's manual or competent trainer-prepared operational manual/handout based on information from the manufacturer, instructions by lecture, discussions, interactive computer learning, videos, or written material,
- practical, hands-on training that includes demonstrations performed by the trainer, and
- practical hands-on exercises performed by the trainee under direct observation of the trainer. Trainers shall complete a proficiency evaluation of each operator after the training.

Training will be conducted on the type of towable trailer the trainee will operate.

#### 49.4.2 Required Towable Trailer Curriculum

All Bureau of Reclamation (BOR) employees who conduct trailer-related activities shall

complete, at a minimum, the areas listed below:

- correctly sizing tow trailers to tow vehicles
- gross vehicle weight rating (GVWR) and gross vehicle combined weight rating (GVCWR) calculations.
- matching trailer couplers with hitches on tow vehicles
- ensuring the shank of the hitch ball will handle the load of the trailer
- inspection requirements for towable trailers before use
- properly coupling the tow trailer to the hitch on the tow vehicle
- proper use of safety chains
- required towable trailer lighting (brake lights, turn signals, running lights) and reflector requirements, based on the length of the trailer
- proper connection of breakaway brakes (if the towable trailer is equipped as such)
- synchronizing brake systems between the brake-equipped towable trailer and the tow vehicle
- proper towable trailer loading and unloading
- proper cargo securement methods (tie downs, binders, ratchet binders, load locks, and other methods) for towable trailers and tow vehicles.
- proper driving techniques to consider when pulling a towable trailer
- hands-on driving and backing course with towable trailer and vehicle to demonstrate proficiency.

Note: Employees who have already completed the training outlined above, such as an employee with a current CDL who can produce a copy of the curriculum, are not required to re-accomplish the training.

#### 49.4.3 **Proficiency Qualification**

Towable trailer safety training shall follow the manufacturers' requirements for safe,

proficient operation.

#### 49.4.4 Lack of Proficiency

Anyone observing an operator who demonstrates a lack of proficiency when operating a towable trailer shall immediately intervene and notify the supervisor or their designee of the situation. Employees shall receive refresher training whenever an operator has been observed using a towable trailer unsafely.

#### 49.4.5 Recordkeeping

#### 49.4.5.1 Training Documentation

The training provider shall document initial training on all towable trailers to include the name of the training organization if one is used; instructor's name and signature; operator's name; date of the training; the type of towable trailer being used in the evaluation; proficiency of operation; and any attachments included in the training. This RSHS includes Attachment 49A, *Operator Training Documentation Form*, for use as training documentation. If the training provider uses another tool to document training, it shall capture the required information listed in this paragraph.

#### 49.4.5.2 Records

The first-line supervisor shall ensure that all records are kept in the Department of the Interior's approved repository and managed following the Information Management Handbook referenced in the Reclamation Manual Directive and Standard, Information Management (RCD 05-01).

## 49.5 Hazardous Environmental Conditions (Weather/Other)

Operators shall not operate towable trailers when hazardous environmental conditions (weather/other) will not allow for the safe operation of the equipment.

## 49.6 Personal Protective Equipment (PPE)

Operators shall wear appropriate PPE while utilizing towable trailers per the manufacturer's requirement or the hazard assessment.

#### 49.7 Other Safety Equipment

Any additional safety equipment used during the operation of towable trailers must not impede or restrict the operation of the original safety equipment installed by the manufacturer.

#### 49.8 Safe Practices

#### 49.8.1 Speeds

Operators will not operate towable trailers above posted speed limits or at speeds greater than those reasonable and safe, considering weather conditions, traffic, road conditions, type and condition of equipment, and manufacturer's recommendations. Operators must always maintain control of the towable trailer and be able to stop within the clear-sight distance.

#### 49.8.2 Attaching and detaching trailer

Employees shall not stand or walk between a towable trailer and the towing vehicle, except when hooking or unhooking the trailer or loading/unloading supplies in/out of the tow vehicle. Ensure the tow vehicle is in park with the parking brake set when hooking or unhooking the trailer or loading/unloading supplies in/out of the tow vehicle or trailer.

#### 49.8.3 Unattended at Night.

Towable trailers left on publicly accessible roadways overnight should comply with the respective elements of the Manual on Traffic Control Devices (MUTCD), 2009 Edition, which is incorporated by reference in 1926.200(g)(2). Where work is in progress off a roadway, equipment shall be delineated by signs, cones, lights, reflectors, or lighted/reflective barricades to identify the location of the equipment.

#### 49.8.4 Unauthorized Riding

Operators shall not allow employees to ride in or on towable trailers except for the launching and loading of watercraft.

#### 49.8.5 Securing Loads

Trained operators shall ensure that the towable trailer being used is rated to handle the weight of the cargo safely and shall properly distribute, chock, tie-down, or otherwise secure the load. Recheck the load periodically, but at a minimum in the first 50 miles of travel and then again, every three hours or 150 miles, whichever comes first. Road conditions may warrant more frequent inspections.

#### 49.8.6 Wheel chocks

Operators shall use 2-wheel chocks for each vehicle or trailer where there is a possibility that the vehicle will move or shift because of roadway conditions or loading or unloading of the vehicle or trailer.

#### 49.8.7 Trailer Lights

Operators shall ensure that all required towable trailer lights are operational and illuminated during travel to increase visibility.

#### 49.9 Inspection Requirements

#### 49.9.1 Initial Inspection

The towable trailer driver shall conduct a pre-trip inspection on the towable trailer and tow vehicle before use, following the operator's manual. Recheck these items periodically during stops on the trip, paying close attention to heat buildup in bearings, brakes, and tires. If no operator's manual exists for the trailer, use Appendix 49B, Operator's Towing Pre-Trip Safety Inspection Checklist, for your pre-trip inspection form.

#### 49.9.2 Annual Inspection

A qualified technician/mechanic trained to a competent level must inspect welds, structural components, and the general towable trailer for safety and serviceability at intervals not exceeding 12 months or sooner if the manufacturer requires a more frequent inspection process. Document trailer inspections on Reclamation Form 7-1776B Maintenance Requirements, Appendix 49C.

#### 49.9.3 Removal from Service

The operator or maintenance technician must remove towable trailers from service whenever an unsafe condition is detected. No employee may place the unsafe towable trailer back into service until it has been repaired, tested, or inspected to ensure that the equipment is safe to operate.

#### 49.9.4 Repair Shutdown

The operator must shut down and secure towable trailers from any accidental release of hazardous energy (see RSHS Section 15, Control of Hazardous Energy, Lockout/Tagout) while making repairs or adjustments unless the operation is essential to making the adjustments or repairs. All energy isolation devices shall be used during the repair process if required.

#### 49.9.5 Blocking

The operator or maintenance technician shall block, or crib towable trailer parts suspended or held aloft by cables, hydraulic cylinders, slings, ropes, hoists, jacks, or manufacturersupplied hazardous energy control devices, or lower the equipment or parts to a supporting surface before permitting employees to work in, under, or between pieces of equipment or parts.

#### 49.9.6 Brake Repair

The operator or maintenance technician shall use a vacuum with a high-efficiency particulate air filter to clean asbestos-lined brake assemblies. The operator or maintenance technician shall not use compressed air for cleaning asbestos-lined brake assemblies.

Operators shall refer to RSHS Section 36, Asbestos, paragraph 36.5.2.2, Prohibited Work Practices if working on asbestos-lined brake assemblies.

## 49.10 Definitions are located in Appendix K and References in Appendix L

# Appendix 49A: Operator Training & Proficiency Documentation Form

|                               | TRAINING DOCUME  | NTATION FORM                   |                                |                     |  |
|-------------------------------|--|--------------------------------|--------------------------------|---------------------|--|
| AME OF TRAINER:               |  | TRA                            | INING ORG NAME:                |                     |  |
| AME OF OPERATOR:              |  | TRA                            | INING DATE:                    |                     |  |
| EPARTMENT:                    |  | SUPERVISOR NAME:               |                                |                     |  |
|                               | Towable Trailer  | Specifics:                     |                                |                     |  |
| railer Dimensions: Widt       | h-Length-Height  |                                | Type of Trailer & Numb         | er of Axels         |  |
|                               |  |                                |                                |                     |  |
|                               |  |                                |                                |                     |  |
| TRAINING DETAILS Trailer Type | Description of Training  | Ready (R)<br>Not Ready<br>(NR) | Location / Area of<br>Training | Signature of Traine |  |
|                               |  |                                |                                |                     |  |
|                               |  |                                |                                |                     |  |
| Ready to opera                | (Proficiency): Trainer will describe t<br>te towable trailer<br>e training is required. Indicate what<br>specific. |                                |                                |                     |  |

| Operator Signature: | _Date: |
|---------------------|--------|
| Trainer Signature:  | Date:  |

## Appendix 49B: Operator's Towing Pre-Trip Safety Inspection Checklist

Trailer Towing Pre-Trip Safety Inspection Checklist

Date:

Operator:

Unit Serial /License Number:

| Review the following checklist and indicate<br>whether each item is satisfactory (SAT.),<br>unsatisfactory (UNSAT.) while including<br>applicable notes. All unsatisfactory issues<br>must be properly addressed before the trailer<br>can be towed.                                 | SAT. | UNSAT. | NOTES |
|--|------|--------|-------|
| I. Tow Vehicle   |      |        |       |
| 1. The tow vehicle has enough power to safely tow the trailer load.  |      |        |       |
| 2. The tow vehicle has received regular<br>Preventative maintenance work.  |      |        |       |
| 3. The tow vehicle has adequate fuel, battery power, oil, and engine coolant.  |      |        |       |
| 4. The tow vehicle tires are properly inflated<br>and balanced and do not show excessive<br>wear or damage.  |      |        |       |
| 5. The wheel fasteners (lug nuts) are present, tight, and rust-free.   |      |        |       |
| 6. Wheel rims are free from damage.  |      |        |       |
| 7. Tow vehicle is level when attached to the loaded trailer.   |      |        |       |
| <ol> <li>All lights (dash lights, headlights, taillights,<br/>clearance lights, brake lights, directional<br/>signals, hazard lights, high beams, reflectors)<br/>are in proper working order.</li> </ol>  |      |        |       |
| 9. All brakes are in proper working order.   |      |        |       |
| 10. Side view mirrors provide an unobstructed rear view on both sides of the vehicle.  |      |        |       |
| II. Hitching Apparatus   |      |        |       |
| 1. The receiver is properly mounted to the tow vehicle.  |      |        |       |
| 2. The receiver, drawbar, hitch ball, coupler,<br>sway control device, spring bars, safety chains,<br>and power connection wiring are all functional<br>and compatible with the tow<br>vehicle and trailer.  |      |        |       |
| <ol> <li>The power and brake control connections<br/>between the trailer and tow vehicle are<br/>compatible, provide enough slack for turning,<br/>and are in good working order.</li> </ol>   |      |        |       |
| 4. The landing gear (trailer jack) is functional.  |      |        |       |
| 5. The hitch ball and coupler are the same size.<br>When attached, the ball is firmly seated in<br>the coupler, and the latching mechanism is<br>locked. Ensure the shank of the ball is<br>compatible with the hitch and rated for the<br>weight of the trailer you will be towing. |      |        |       |

Unit Serial /License Number:

| Review the following checklist and indicate whether<br>each item is satisfactory (SAT.), unsatisfactory<br>(UNSAT.) while including applicable notes. All<br>unsatisfactory issues must be properly addressed<br>before the trailer can be<br>towed. |   | SAT. | UNSAT. | NOTES |
|--|---|------|--------|-------|
| 11. 1  | Hitching Apparatus (continued)  |      |        |       |
|  | The safety chains are securely attached to<br>the tow vehicle and trailer, crossing under<br>trailer tongue in an "X" pattern.  |      |        |       |
| 7.   | The safety chains connect the trailer and tow vehicle while providing enough slack for turning.   |      |        |       |
| 8.   | The eyelets holding the safety chains all have<br>their open-ended hooks facing the outside of<br>the hitch connection.   |      |        |       |
| 9.   | If using a fifth-wheel trailer hitch, the following<br>equipment is in good working order: fifth-<br>wheel plate, plate jaw and handle, hitch plate,<br>pin and pin box, and side<br>rails. |      |        |       |
| III.   | Trailer   | 1    | 1      |       |
| 1.   | The trailer frame is free of cracks, fractures,<br>Bends, and other signs of weakness.  |      |        |       |
| 2.   | All lights (taillights, clearance lights, brake<br>lights, directional signals, hazard lights,<br>reflectors) are in proper working order.  |      |        |       |
| 3.   | The trailer tires are properly inflated and balanced and do not show excessive wear or damage.  |      |        |       |
| 4.   | The trailer wheel fasteners (lug nuts) are present, tight, and rust-free.   |      |        |       |
| 5.   | Trailer wheel rims are free from damage.  |      |        |       |
| 6.   | Loaded trailer is level when attached to the tow vehicle.   |      |        |       |
| 7.   | Running boards (if present) are in good condition.  |      |        |       |
| 8.   | Winch (if present) is in working order.   |      |        |       |

#### IV. Load Distribution

| 1. | The trailer load has a center of gravity that t is<br>as low as possible, and there is no risk of<br>loose items falling off the trailer.   |  |  |
|----|---|--|--|
| 2. | Taken separately, the towing vehicle and<br>trailer have even weight distributions (front to<br>rear, left to right). This has been verified by<br>visual inspection and/or scale measurements. |  |  |

| <ol> <li>The trailer weight and its distribution are<br/>compatible with the tow vehicle and hitching<br/>system, as verified by conducting a vehicle-<br/>trailer compatibly check</li> </ol> |  |  |
|--|--|--|
|--|--|--|

Inspection Notes / Issues Found / Remedial Action Taken:

Appendix 49C: Reclamation Form 7-1776B - Trailer Annual Preventive Maintenance Checklist

7-1776B (8-06) Bureau of Reclamation

#### TRAILER ANNUAL PREVENTIVE MAINTENANCE INSPECTION

(PERIODIC) SAFETY AND SERVICABLE: Each trailer is required to be inspected by a qualified/competent technician/mechanic for safety at intervals not to exceed 12 months. The inspection shall comply with State and local safety criteria, as applicable. As a minimum, the tasks set forth below shall be completed at least annually. Each office shall establish procedures to ensure that all deficiencies which impair safety of trailer operations are corrected prior to returning the trailer to service. All offices are responsible for ensuring that manufacturer's maintenance recommendations are performed and annotated on the vehicle historical record. Fleet Managers shall ensure that all safety requirements prescribed in the Reclamation's Safety and Health Standards are met.

**NOTE TO VENDOR:** This is your authority to perform the inspection and services listed below. No corrections or repairs may be made until they are authorized by the local Fleet Manager. When billing for service rendered, cite tag number, show hereon.

| License (or MINIMUM EVERY 12 mont | hs Property Control Number): |                                      |
|-----------------------------------|------------------------------|--------------------------------------|
| Equipment ID                      | Description                  | Date                                 |
| MFG                               | Model                        | MFG Serial                           |
| Current hub meter reading         |                              | Capacity (tons, yards, gallons, lbs) |
| Name and Address of Firm:         |                              | ,                                    |

CONDITION CODE: Any deficiencies, repairs or adjustments should be described in detail in the remarks section.

|            |       | N/A (not applicable)<br>√ OK/Completed<br>X See Remarks   |                                    |
|------------|-------|---|------------------------------------|
|            |       | Inspect brake system (which may include hydraulic master cylinder, lines and slave cylinders, hoses, lines, fitting, air tanks, brake chambers, drums, adjusters, etc)  | , magnets, shoes, air brake system |
|            | 2.    | Inspect hub assemblies  |                                    |
|            |       | a. Lubricate and pack wheel bearings, as necessary  |                                    |
|            |       | <ul> <li>b. Inspect wheel seals, spindles, bearings and bearing races</li> <li>c. Replace cotter key or lock washer</li> </ul>  |                                    |
|            |       | <ul> <li>Inspect wheel bearing reservoirs for leaks and top off as necessary, if so equipped</li> </ul>   |                                    |
|            | 3.    | Inspect tires, rims lug nuts, caps, stems   |                                    |
|            |       | a. Inspect tire condition and check air pressure. (RECORD TREAD DEPTH (in 32nds) for  | each tire, if applicable, in MVHE  |
|            |       | Mechanic/Vendor section)  |                                    |
|            |       | <ul> <li>b. Inspect spare tire and rack (note tire pressure and condition, if applicable)</li> <li>c. Inspect chocks</li> </ul>   |                                    |
|            |       | Inspect frame, cross members and axles  |                                    |
|            |       | a Inspect springs and hangers, u-bolts, torque arms, bushings, etc. Note condition.   |                                    |
|            |       | b. Lubricate chassis  |                                    |
|            |       | c. Inspect fifth wheel king pin, tongue, landing gear, coupler or pintle hitch, safety chains, e Inspect interior and exterior body condition for dents, holes or rust. | etc.                               |
|            |       | a. Inspect mud flaps, fenders, ramps, bumpers, etc.   |                                    |
|            |       | <ul> <li>Inspect doors, hardware, etc.</li> </ul>   |                                    |
|            |       | c. Visual inspect license plate for deterioration.  |                                    |
|            | 6.    | Inspect Electrical systems  |                                    |
|            |       | a. Inspect lights and reflectors  |                                    |
|            |       | <ul> <li>b. Inspect electrical wiring harness, connector,</li> <li>c. Inspect ABS function light</li> </ul>   |                                    |
|            |       | BOAT additional items   |                                    |
|            |       | a. Inspect winch and safety chain   |                                    |
|            |       | b. Inspect rollers, side boards, runners, etc.  |                                    |
|            |       | c. Inspect tie downs  |                                    |
|            |       | d. Inspect transom motor support<br>TANKER additional items   |                                    |
|            |       | a. Inspect for appropriate placards   |                                    |
|            |       | b. Inspect for structural damage  |                                    |
|            |       | c. Inspect all auxiliary equipment such as pumps, motors, meters, hoses, connections, etc   |                                    |
|            |       | <b>d.</b> Inspect for all applicable safety equipment, e.g. fire extinguishers, etc.  |                                    |
|            |       | Condition of entire unit<br>Other (see below)   |                                    |
|            | 10.   |   |                                    |
| Completion | Data  | Completed Du  | Chaff Haura                        |
| completion | Date: | Completed By:   | Staff Hours:                       |

| <b>Reclamation Safety</b> | and | Health | Standards |
|---------------------------|-----|--------|-----------|
| December 2023             |     |        |           |

Section 49: Towable Trailer Safety

7-1776B (8-06) Bureau of Reclamation

MINIMUM EVERY 12 months

| MVHE/VENDOR COMMENTS: |                      |                                   |  |
|-----------------------|----------------------|-----------------------------------|--|
| ITEM NO               | RECOMMENDED COMMENTS | FLEET<br>MANAGER/MVHE<br>MECHANIC |  |
|                       |                      |                                   |  |
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