

Working Copy

WP 05-WH1729

Revision 11

**RH-TRU 72-B Cask
Uprighting Trailer
Unloading**

Technical Procedure

EFFECTIVE DATE: 01/12/11

Craig Suggs
APPROVED FOR USE

TABLE OF CONTENTS

CHANGE HISTORY SUMMARY 3

INTRODUCTION..... 4

REFERENCES..... 4

EQUIPMENT 5

PRECAUTIONS AND LIMITATIONS 6

PREREQUISITE ACTIONS..... 8

PERFORMANCE 9

1.0 RH-TRU 72-B TRAILER HANDLING..... 9

2.0 RH-TRU 72-B IMPACT LIMITER REMOVAL 12

3.0 REMOVAL OF RH-TRU 72-B FROM TRAILER 17

4.0 PORTABLE HYDRAULIC PUMP STORAGE 21

5.0 REVIEW 22

Attachment 1 – RH TRU 72-B Uprighting Trailer Unloading Data Sheet..... 23

CHANGE HISTORY SUMMARY

REVISION NUMBER	DATE ISSUED	DESCRIPTION OF CHANGES
10	08/27/10	<p>Added Precautions and Limitations bullet requiring a spotter for the load cell in addition to the spotter for the equipment. This is in a Note prior to Section 2.0.</p> <p>Added Precaution and Limitation bullet requiring a spotter to visually verify readout on impact limiter.</p> <p>Added Steps 2.7 and 2.20 for spotter visual verification of readout on impact limiter.</p>
11	01/12/11	<p>Added to Equipment Section and Steps 2.4 and 2.17, Slings must be of the same type, length, and manufacturer.</p> <p>Added information for load cell without audible alarms.</p>

INTRODUCTION ^{1, 2, 3, 7, 9, 10}

This procedure provides instructions for unloading the remote-handled transuranic (RH-TRU) 72-B from the uprighting shipping trailer. This procedure is not used for unloading the mechanically operated trailer, which is unloaded with the use of the overhead bridge crane.

The Automated Job Hazard Analysis (AJHA) PROD-177 coincides with this procedure.

Performance of this procedure generates the following record(s), as applicable. Any records generated are handled in accordance with departmental Records Inventory and Disposition Schedules.

- Attachment 1, RH-TRU 72-B Uprighting Trailer Unloading Data Sheet

REFERENCES

BASELINE DOCUMENTS

- Title 10 Code of Federal Regulations (CFR) Part 71, "Packaging and Transportation of Radioactive Material"
- 10 CFR Part 835, "Occupational Radiation Protection"
- 40 CFR Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions"
- NRC-Docket-71-9212, RH-TRU 72-B Certificate of Compliance
- NRC-Docket-71-9212, Safety Analysis Report for the RH-TRU 72-B Waste Shipping Package
- DOE Order 5400.5, *Radiation Protection of the Public and the Environment*
- DOE Standard 1090-2007, *Hoisting and Rigging*
- DOE/WIPP-02-3283, RH Packaging Program Guidance
- DOE/WIPP-02-3284, RH Packaging Operations Manual
- DOE/WIPP-07-3372, Waste Isolation Pilot Plant Documented Safety Analysis
- DOE/WIPP-07-3373, Waste Isolation Pilot Plant Technical Safety Requirements
- DOE/WIPP-09-3427, Waste Data System User's Manual

- WIPP-023, Fire Hazards Analysis for the Waste Isolation Pilot Plant Carlsbad, New Mexico
- WI-RH.12, Replacement of Screws, Bolts, and Washers on RH-TRU 72-B Trailers
- WP 08-PT.03, WIPP Quality Assurance Program Plan for Type B Packaging
- WP 08-PT.13, RH-TRU 72-B Cask Uprighting Trailer Operation and Maintenance Manual
- WP 12-FP.01, WIPP Fire Protection Program
- WP 12-FP3003, Combustible Loading Controls for the Waste Handling Building and Underground
- WP 13-1, Washington TRU Solutions LLC Quality Assurance Program Description

REFERENCED DOCUMENTS

- WP 04-AD3001, Facility Mode Compliance
- WP 05-WH1701, Road Cask Transfer Car Operation
- WP 05-WH1741, 140/25-Ton Remote Handling Crane 41-T-001
- WP 05-WH1744, Surface RH Transuranic Mixed Waste Handling Area Inspections
- WP 05-WH4401, Waste Handling Operator Event Response
- WP 12-HP1100, Radiological Surveys
- WP 12-HP4000, Emergency Radiological Control Responses
- WI-RH.03, Replacement/Repair of Lid Closure and Impact Limiter Attachment Bolts

EQUIPMENT

- Appropriate rigging for handling the RH-TRU 72-B (Slings must be of the same type, length, and manufacturer.)
- Clean, dry rags, if applicable
- Water, if applicable

- Calibrated load cell capable of indicating a weight up to 5,000 lb
- GENIE manlift, if necessary
- Work assist vehicle (WAVE) manlift, if necessary
- Roll-around ladders
- Impact Limiter Stands
- Wheel chocks
- Trailer stands
- Brush, if applicable

PRECAUTIONS AND LIMITATIONS

The Technical Safety Requirements (TSRs) contain Limiting Conditions for Operation (LCOs) and Specific Administrative Controls (SACs) which provide specific preventative or mitigative limits and required actions for identified accident scenarios. Failure to comply with LCOs or SACs may constitute a violation and must be immediately reported to the Facility Shift Manager (FSM). The step affected by the LCO/SAC is followed by the LCO/SAC number in bold brackets (e.g., [LCO 3.X.X]). Applicable LCO/SAC Surveillance Data Sheets SHALL be completed as required by WP 04-AD3001.

- Only personnel qualified on the RH-TRU 72-B as a Waste Handling Technician/Engineer (WHT/WHE), or trainees operating under the direct supervision of a RH-TRU 72-B qualified WHT/WHE, are authorized to perform the waste handling (WH) activities specified in this procedure.
- If procedure cannot be performed as written, WHE shall be contacted.
- Liquid-fueled vehicles loading or unloading RH shipping containers in the RH Bay SHALL BE ATTENDED at all times. [LCO 3.4.1]
- If abnormal conditions are found during the performance of this procedure, WHE shall be contacted.
- When RH-TRU 72-B is being rotated, all personnel should stand clear of trailer.
- Roll-around ladders should be used when accessing the trailer.
- Hearing and eye protection must be worn when using impact wrench.
- When performing lift operations with 140/25-ton crane, a tag line or stabilizing bar should be used.

- RH waste shall be transferred into the Waste Handling Building (WHB) via the RH Bay Shield Door only.
- Trailer stands are required on free-standing trailers when loading/unloading packaging on the trailer.
- If WH activities are suspended or interrupted, the Transportation Engineer (TE) shall be contacted as determined by the WHE.
- Emergency Response events that require cessation of this procedure, such as a radiological event, are to be addressed in accordance with WP 05-WH4401 and WP 12-HP4000.
- Operator must wear safety glasses and leather gloves when using hydraulic control.
- Maximum allowable weight of loaded canister is 8,000 lb.
- Maximum allowable gross shipping weight for loaded packaging, including tractor and trailer, is 80,000 lb.
- A spotter must be used when the trailer jockey or transport tractor are used to position the trailer into, or remove a trailer from, the RH Bay.
- When using a load cell without an audible alarm to install or remove impact limiters on a RH-TRU 72-B, a separate spotter (other than the crane operator and/or equipment spotter) shall be designated to watch the load cell and ensure the lift does not violate lift limits.
- Load cell spotter shall maintain visual on the readout any time a load cell without an audible alarm is being used to install or remove impact limiters on a RH-TRU 72-B.
- Doors 145 and 146 must be closed prior to bringing the RH-TRU 72-B Trailer into the RH Bay or removing the trailer from the RH Bay with the trailer jockey or transport tractor.
- Maximum individual RH-TRU 72-B weight is 45,000 lb.
- Any step that results in N/A on Attachment 1, must be initialed by person performing step.
- Performers of procedure may print name, sign, initial, and place date on Attachment 1 at any time during the performance of this procedure, except for those steps which document compliance to an LCO.
- Prior to moving the trailer, the operator shall allow sufficient time (approximately 2 minutes) for the air pressure to stabilize after attaching the tractor air supply to the trailer.

- The storage limit in the RH Bay is two loaded RH packages and one site-derived waste drum.
- Loaded RH packages shall not be stored in the RH Bay for longer than 60 days.
- A minimum spacing of 44 in. shall be maintained between loaded RH packages in the RH Bay.
- All toolboxes/storage compartments on trailer must be inspected for prohibited items before staging trailer in RH Bay.

PREREQUISITE ACTIONS

NOTE

Prerequisite actions must be performed, but may be performed in any order and in parallel as long as radiological control sign-offs are not bypassed.

1.0 WHE, perform the following: ^{4,11}

- Ensure the applicable section of Surface RH Transuranic Mixed Waste Handling Area Inspections are completed, if necessary.
- Ensure 140/25-Ton Remote Handling Crane preoperational checks are completed.
- Ensure Road Cask Transfer Car preoperational checks are completed, if necessary.
- Ensure preoperational checks are completed on the GENIE and WAVE manlifts, if necessary.
- Ensure impact limiter stands are available in RH Bay.
- Obtain RH-TRU 72-B release for unloading from TE.
- Enter shipment arrival date into the Waste Isolation Pilot Plant (WIPP) Waste Information System (WWIS)/Waste Data System (WDS), as provided by TE.
- Obtain WWIS/WDS Shipment Summary Report.

2.0 WH, perform the following:

- Record Outer Containment Vessel (OC) serial number on Attachment 1.

- Record load cell identification number (ID) and calibration due date on Attachment 1.

SIGN-OFF WH**3.0 WASTE HANDLING MODE VERIFICATION**

3.1 WH, ensure adequate WH operations staff is available to support RH WH.

SIGN-OFF WH

3.2 WH, ensure RH Bay is in RH WH mode.

SIGN-OFF WH or N/A**PERFORMANCE****1.0 RH-TRU 72-B TRAILER HANDLING****WARNING**

Trailer wheels may be chocked anytime prior to the performance of Step 1.7, ensuring safety of personnel during the performance of this procedure.

- 1.1 Inspect any toolboxes/storage compartments for prohibited items.
- 1.2 Ensure V-groove and rollers on both sides of trailer are clean and lubricated.

CAUTION

A physical check must be made to ensure air bags on trailer have fully inflated before trailer is moved by a user-site trailer jockey. Failure to do so may damage the trailer.

CAUTION

A spotter must be used when backing trailer into RH Bay to avoid equipment damage.

- 1.3 **IF** transport trailer is not positioned in the RH Bay, **THEN** back trailer into RH Bay using the liquid-fueled tractor or trailer jockey **AND** document start of attendance. **[LCO 3.4.1]**

SIGN-OFF WH or N/A

- 1.4 Visually verify no sharp edges exist on the crank handles.

CAUTION

Although the trailer is equipped with landing gear, unloading the trailer on level ground is recommended. Trailer tires should never be lifted off the ground using the landing gear to avoid damage to the equipment.

NOTE

The Trailer Jockey fifth wheel may be used to assist the leveling of the trailer.

- 1.5 Ensure front landing gear is lowered and adjust until trailer is level.
- 1.6 Remove liquid-fueled tractor or trailer jockey from the RH Bay and document end of attendance. **[LCO 3.4.1]**

SIGN-OFF WH or N/A

- 1.7 WH, perform the following:
- Ensure trailer wheels are chocked.
 - Install trailer stands on free-standing trailers.
 - Lower the trailer landing gear (rear landing gear).

- Install upper and lower impact limiter work platform to access impact limiters, if necessary.

CAUTION

Although the trailer is equipped with landing gear, unloading the trailer on level ground is recommended. Trailer tires should never be lifted off the ground using the landing gear to avoid damage to the equipment.

- 1.8 If necessary, adjust landing gear until RH-TRU 72-B trailer is level, using a hand-held level on trailer.
- 1.9 Ensure Door 109 is closed.

NOTE

Work platforms may be moved as needed, or removed from trailer, in order to support unloading process.

- 1.10 If needed, clean RH-TRU 72-B using:
 - Damp wiping cloths
 - Brush and water
- 1.11 If needed, dry RH-TRU 72-B using dry rags.
- 1.12 Radiological Control Technician (RCT), record survey number/date on Attachment 1, if applicable.

SIGN-OFF RCT or N/A

NOTE

When using a load cell without an audible alarm to install or remove impact limiters on a RH-TRU 72-B, a separate spotter (other than the crane operator and/or equipment spotter) shall be designated to watch the load cell and ensure the lift does not violate lift limits.

2.0 RH-TRU 72-B IMPACT LIMITER REMOVAL ^{5,6}

NOTE

WH activities may be performed in parallel with other activities as long as radiological control steps are not bypassed.

NOTE

Trailer work platforms, both front and rear, may be removed or installed as necessary to accommodate impact limiter removal.

- 2.1 WH, for a loaded shipment, verify anti-tamper seal is in place. **IF NOT**, contact WHE for resolution, **AND** record findings in the Remarks section of Attachment 1, if applicable.

SIGN-OFF WH or N/A

- 2.2 For a loaded shipment, remove and dispose of security seal.
-

NOTE

Removal of bolt, flat washers, and nut may be performed out of sequence, as long as they are removed prior to attaching rigging.

- 2.3 Remove the bolt, flat washers, and nut from each lifting lug on **UPPER AND LOWER** impact limiters.
-

NOTE

At the discretion of the operator, the crane may be operated in **MICRO** mode at any performance step except when noted.

- 2.4 Attach rigging (two shackles and two slings, each rated to lift a minimum of 2,500 lb and of the same type, length, and manufacturer) and load cell to **LOWER** impact limiter.

CAUTION

Exceeding a pull limit of 4,000 lb may damage the RH-TRU 72-B impact limiter lifting lugs. Average weight of impact limiter is 2,560 lb.

- 2.5 Once rigging is attached to the impact limiter, ensure crane control is in **MICRO**.
- 2.6 **IF** using a load cell without an audible alarm, **THEN** ensure that a load cell spotter has been designated (other than the crane operator or equipment spotter) and has visual contact with the load cell readout.
- 2.7 Lift up on rigging until weight of impact limiter has been lifted.
 - 2.7.1 **IF** pull limit range is exceeded, STOP WORK, **THEN** contact WHE.

NOTE

Bolts may be left in the impact limiter access ports after being detached from the RH-TRU 72-B.

NOTE

Tension may be placed on rigging, as necessary, to assist with bolt removal.

- 2.8 De-tension the six attachment bolts from **LOWER** impact limiter, following the number sequence one at a time, until all bolts have been turned a maximum of one full turn.
- 2.9 **IF** bolt(s) will not unscrew, contact WHE, **THEN** use WI-RH.03 to remove stuck bolts.
- 2.10 Completely unscrew all **LOWER** impact limiter attachment bolts from inserts until all bolts are loose.
- 2.11 Ensure the **LOWER** impact limiter work platform is removed.
- 2.12 RCT, perform dose rate surveys during impact limiter removal, per WP 12-HP1100, if applicable.⁸

CAUTION

Exceeding a pull limit of 4,000 lb may damage the RH-TRU 72-B impact limiter lifting lugs. Average weight of impact limiter is 2,560 lb.

CAUTION

A spotter must be used when removing lower impact limiter to avoid damage to RH-TRU 72-B.

- 2.13 Remove LOWER impact limiter by using the crane to slide it off the RH-TRU 72-B body.

NOTE

When impact limiter is clear of RH-TRU 72-B, the crane may be operated in **MICRO** or **NORMAL** mode; utilized at the discretion of the operator.

NOTE

RCT contamination swipes may be performed in sequence with Steps 2.14 and 2.15.

- 2.14 Place **LOWER** impact limiter on storage cradle on trailer OR on the impact limiter stand.
- 2.15 Remove rigging from **LOWER** impact limiter.
- 2.16 RCT, perform the following, if applicable: ⁸
- 2.16.1 Perform contamination swipes on newly exposed areas of the inside of the impact limiter and RH-TRU 72-B.
- 2.16.2 Monitor swipes for gross levels of activity.
- 2.17 Attach rigging (two shackles and two slings, each rated to lift a minimum of 2,500 lb and of the same type, length, and manufacturer) and load cell to **UPPER** impact limiter.
- 2.18 Once rigging is attached to the impact limiter, ensure crane control is in **MICRO**.

CAUTION

Exceeding a pull limit of 4,000 lb may damage the RH-TRU 72-B impact limiter lifting lugs. Average weight of impact limiter is 2,560 lb.

- 2.19 **IF** using a load cell without an audible alarm,
THEN ensure that a load cell spotter has been designated (other than the crane operator or equipment spotter) and has visual contact with the load cell readout.
- 2.20 Lift up on rigging until weight of impact limiter has been lifted.
- 2.20.1 **IF** pull limit range is exceeded, **STOP WORK**,
THEN contact WHE.

NOTE

Tension may be placed on rigging as necessary to assist with bolt removal.

- 2.21 De-tension the six attachment bolts from the **UPPER** impact limiter, following the number sequence one at a time, until all bolts have been turned a maximum of one full turn.
- 2.22 **IF** bolt(s) will not unscrew, contact WHE,
THEN use WI-RH.03 to remove stuck bolts.

NOTE

Bolts may be left in the impact limiter access ports, after being detached from the RH-TRU 72-B.

- 2.23 Completely unscrew all UPPER impact limiter bolts from inserts until all bolts are loose.
- 2.24 Ensure the **UPPER** impact limiter work platform is removed.
- 2.25 RCT, perform dose rate surveys during impact limiter removal, if applicable.⁸

CAUTION

Exceeding a pull limit of 4,000 lb may damage the RH-TRU 72-B impact limiter lifting lugs. Average weight of impact limiter is 2,560 lb.

CAUTION

A spotter must be used when removing upper impact limiter to avoid damage to RH-TRU 72-B.

- 2.26 Remove **UPPER** impact limiter by using crane to slide it off the RH-TRU 72-B body.

NOTE

When impact limiter is clear of RH-TRU 72-B, the crane may be operated in **MICRO** or **NORMAL** mode; utilized at the discretion of the operator.

NOTE

RCT contamination swipes may be performed in sequence with Steps 2.27 and 2.28.

- 2.27 Place **UPPER** impact limiter on storage cradle on trailer OR on the impact limiter stand.
- 2.28 Remove rigging from **UPPER** impact limiter.
- 2.29 WH, perform the following:
- Remove rigging and load cell from the 140/25-ton crane.
 - Engage lifting yoke with the 140/25-ton crane.
- 2.30 RCT, perform the following, if applicable: ⁸
- 2.30.1 Perform contamination swipes on newly exposed areas of the inside of the impact limiter and RH-TRU 72-B.
- 2.30.2 Monitor swipes for gross levels of activity.
- 2.30.3 Verify on Attachment 1, that activity on swipes taken at Steps 2.16.1 and 2.30.1 are below the acceptable limits.

SIGN-OFF RCT or N/A

3.0 REMOVAL OF RH-TRU 72-B FROM TRAILER

- 3.1 Remove the tiedown closure bolt from each tiedown, and open the tiedowns, allowing the top journal to rest in the fully open position. Store bolts in the top journal bolt holes.
- 3.2 Ensure the rotating grapples are engaged and rotating grapple pins are installed.

WARNING

Proper Personal Protective Equipment (PPE), including a long-sleeve 100% cotton shirt and safety glasses, must be worn when operating power supply breaker or disconnect to prevent injury.

- 3.3 Ensure Circuit Breaker (CB) 14 and CB 16 on 41P-DP03/42 is in the **OFF** position.

CAUTION

To prevent personnel injury and damage to the equipment, all hydraulic system jumper hose connections must be properly coupled.

NOTE

The hose end hydraulic coupling (FF-501-8FP), and the hydraulic nipple (FC-502-8FP) on the trailer are marked with a tag to let the user know they are to be coupled together.

- 3.4 Ensure the following:
 - Circuit breaker in the **OFF/RESET** position.
 - Protective covers, if installed, are removed from trailer quick connections.
 - 220-volt AC power source is plugged into the recessed male receptacle of the electrical enclosure on the hydraulic pump.
 - Hydraulic valve operates freely and returns to middle position when released.
 - Hydraulic hoses are connected to pump by firmly pushing the male coupler into the female coupler and locking in place by turning the lock ring on the female coupler so that the indentation is no longer aligned with the alignment pin on the coupler.

- Hydraulic hoses are connected to trailer by firmly pushing the male coupler into the female coupler and locking in place by turning the lock ring on the female coupler so that the indentation on the lock ring is no longer aligned with the alignment pin on the coupler.
- Hydraulic power unit reservoir in operating range (approximately 50% – 70% full as indicated by the fluid level sight glass).

WARNING

Proper Personal Protective Equipment (PPE), including a long-sleeve 100% cotton shirt and safety glasses, must be worn when operating power supply breaker or disconnect to prevent injury.

- 3.5 Place CB 14 and CB 16 on 41P-DP03/42 in the **ON** position.

NOTE

The User has the option of turning the power **ON** and **OFF** on the hydraulics, as needed, to support the loading of the RH-TRU 72-B.

- 3.6 On the hydraulic system electrical enclosure, rotate the external circuit breaker from the **OFF/RESET** position clockwise to the **ON** position to activate the power unit.

WARNING

PPE, including safety glasses and leather gloves, must be worn when using hydraulic controls.

- 3.7 On the hydraulic system electrical enclosure, push the green button labeled START to activate the hydraulic pump.
- 3.7.1 **IF** hydraulic system sounds abnormal, **THEN** immediately push the red button labeled STOP to deactivate the hydraulic pump and contact WHE.
- 3.8 Verify there are **NO** visible leaks from hoses, coupling or fittings.

WARNING

Personnel not involved in RH-TRU 72-B rotation must stay clear of trailer while RH-TRU 72-B is rotating, as moving parts can cause bodily injury. User must keep hands clear of moving parts. All personnel must remain clear of load and load rotation path. A spotter must be used when rotating RH-TRU 72-B .

- 3.9 Rotate the RH-TRU 72-B to the vertical position by pushing the hydraulic system control lever UPWARD. (Spotter must verify the rollers are not binding while RH-TRU 72-B is rotating.)
- 3.10 When the RH-TRU 72-B is in the vertical position, release the hydraulic system control lever to stop rotation.
- 3.11 On the hydraulic system electrical enclosure, push the red button labeled STOP to deactivate the hydraulic pump.
- 3.12 On the hydraulic system electrical enclosure, rotate the external circuit breaker from the ON position counterclockwise to the **OFF/RESET** position to cut power to the hydraulic pump controls.

NOTE

De-energizing the power from the main AC power source is optional, if 220-volt power is to remain connected to the hydraulic power system.

- 3.13 When lifting yoke is aligned with the RH-TRU 72-B, ensure crane control is in **MICRO**.

WARNING

Crane must be centered on RH-TRU 72-B before attempting to lift RH-TRU 72-B off trailer. If not centered, it could cause the RH-TRU 72-B to lift off uneven and catch on the trailer.

NOTE

The hydraulic pressure will remain on the cylinders preventing movement of the RH-TRU 72-B while attaching the lifting yoke.

- 3.14 Engage RH-TRU 72-B top lifting trunnions with lifting yoke.

NOTE

It may be necessary to operate the hydraulics in order to free the rotating trunnion journals from the RH-TRU 72-B trunnions. Mechanical means may also be needed.

- 3.15 Remove the stainless steel clevis pin at the end of each of the rotating grapple journals.
- 3.16 Rotate grapple journal caps out of the way.
- 3.17 Remove the main trunnion pivot block cap bolts.
- 3.18 Move the main trunnion pivot block caps to the pivot block cap holders, and thread a 5/8-inch bolt into each of the nuts mounted on the under side of the holding shelf. Repeat for the other main trunnion journal cap.

CAUTION

The RH-TRU 72-B cannot be unloaded straight up from the main trunnion saddles. It must be moved forward of the trunnion tower until the lower handling trunnions clear the gussets directly below the main trunnion saddles before it can be unloaded from the trailer.

CAUTION

A spotter must be used when removing the RH-TRU 72-B from the trailer.

NOTE

When RH-TRU 72-B is clear of the RH-TRU 72-B trailer the crane may be operated in **MICRO** or **NORMAL** mode; utilized at the discretion of the operator.

- 3.19 Remove RH-TRU 72-B from the trailer, and place on the Cask Transfer Car or storage rack supported by main trunnion.
- 3.20 Disengage the lifting yoke from the RH-TRU 72-B.
- 3.21 If trailer is to be sent without a RH-TRU 72-B retract the rotating mechanism, install the main trunnion caps, close both tie-downs and torque associated bolts on trailer to 150 – 160 ft-lb.

3.22 WH, perform the following:

- If necessary, remove the lifting yoke from the 140/25-ton crane.
- If necessary, placard trailer for empty shipment.

3.23 Enter printed name, signature, date, and initials on Attachment 1.

NOTE

Section 4.0 does not have to be performed if the unloaded trailer is to be loaded prior to placing outside the RH Bay.

NOTE

Section 4.0 is used if not putting another RH-TRU 72-B onto trailer.

4.0 PORTABLE HYDRAULIC PUMP STORAGE

WARNING

Proper PPE, including a long-sleeve 100% cotton shirt and safety glasses, must be worn when operating power supply breaker or disconnect to prevent injury.

- 4.1 Ensure CB 14 and CB 16 on 41P-DP03/42 is in the **ON** position.
- 4.2 Place the pump external CB in the **ON** position.
- 4.3 Push the green button labeled START to activate the hydraulic pump.
- 4.4 Pull the hydraulic system control lever downward to retract the hydraulic arms.
- 4.5 When the hydraulic arms are fully retracted, release the lever.
- 4.6 On the hydraulic system electrical enclosure, push the red button labeled STOP to deactivate hydraulic pump.

WARNING

Proper PPE, including a long-sleeve 100% cotton shirt, safety glasses, and leather gloves must be worn when operating power supply breaker or disconnect to prevent injury.

- 4.7 On the hydraulic system electrical enclosure, rotate the external circuit breaker from the ON position counterclockwise to the OFF/RESET position.
- 4.8 Place CB 14 and CB 16 on 41P-DP03/42 in the OFF position.
- 4.9 Disconnect the 220-volt AC power source from the electrical box.
- 4.10 Cycle the control lever before removing the hydraulic hoses to relieve pressure.
- 4.11 If needed, disconnect the hoses from the connections on the trailer.
- 4.12 Install trailer quick connection covers, if available.
- 4.13 Back liquid-fueled tractor or trailer jockey into RH Bay, attach to trailer, and document start of attendance. **[LCO 3.4.1]**

SIGN-OFF WH or N/A

- 4.14 With liquid-fueled tractor or trailer jockey attached, remove from the RH Bay, and document end of attendance. **[LCO 3.4.1]**

SIGN-OFF WH or N/A

5.0 REVIEW

- 5.1 WHE, perform the following:
 - 5.1.1 Review/validate Attachment 1 for completeness.
 - 5.1.2 Enter printed name, signature, date and initials on Attachment 1, if necessary.
 - 5.1.3 Forward originals of Attachment 1 to Records Coordinator.

Attachment 1 – RH-TRU 72-B Uprighting Trailer Unloading Data Sheet

STEP	DESCRIPTION	INITIAL
PREREQUISITE ACTIONS		
2.0	OC Serial No.: _____ Load Cell ID No.: _____ Calibration due date: _____	WH WH WH
3.1	Adequate WHO staff available to support RH WH	WH
3.2	RH Bay is in RH WH mode	WH or N/A
PERFORMANCE		
1.3	IF transport trailer is not positioned in the RH Bay, THEN back trailer into RH Bay using the liquid-fueled tractor or trailer jockey AND document start of attendance. [LCO 3.4.1] Sign: _____ Date: _____ Time: _____	WH or N/A
1.6	Remove liquid-fueled tractor or trailer jockey from the RH Bay and document end of attendance. [LCO 3.4.1] Sign: _____ Date: _____ Time: _____	WH or N/A
1.12	Record survey number and date Number: _____ Date: _____	RCT or N/A
2.1	Anti-tamper seal is in place	WH or N/A
2.30.3	Activity is below acceptable limits	RCT or N/A
4.13	Back liquid-fueled tractor or trailer jockey into RH Bay, attach to trailer, and document start of attendance. [LCO 3.4.1] Sign: _____ Date: _____ Time: _____	WH or N/A
4.14	With liquid-fueled tractor or trailer jockey attached, remove from the RH Bay, and document end of attendance. [LCO 3.4.1] Sign: _____ Date: _____ Time: _____	WH or N/A

Print Name	Signature	Date	Initials
Print Name	Signature	Date	Initials
Print Name	Signature	Date	Initials
Print Name	Signature	Date	Initials

Attachment 1 – RH-TRU 72-B Uprighting Trailer Unloading Data Sheet

Remarks:

Review/Validation:

WHE (Print Name)

Signature

Date