

WP 05-WH1406

Revision 9

Conveyance Loading Car

Technical Procedure

EFFECTIVE DATE: 08/19/08

Randy Britain
APPROVED FOR USE

TABLE OF CONTENTS

INTRODUCTION 3

REFERENCES 3

PRECAUTIONS AND LIMITATIONS 3

PREREQUISITE ACTIONS 4

PERFORMANCE 4

1.0 PREOPERATIONAL CHECKS 4

2.0 LOADING FACILITY PALLET ONTO HOIST 7

3.0 UNLOADING FACILITY PALLET FROM HOIST 8

4.0 CONVEYANCE LOADING CAR SHUTDOWN 9

INTRODUCTION ¹

This procedure provides the required instructions for inspecting and operating the Conveyance Loading Car, 41-H-018, at the Waste Isolation Pilot Plant (WIPP).

This procedure generates quality records in the equipment logbook.

REFERENCES

BASELINE DOCUMENTS

- 40 *Code of Federal Regulations* §264.15, "General Inspection Requirements"
- Hazardous Waste Facility Permit , Waste Isolation Pilot Plant, Permit No. NM4890139088-TSDF, issued by New Mexico Environment Department
- Equipment No. 41-H-018, "Maintenance Manual for Conveyance Loading Car," West Mont Industries
- WP 04-AD3011, Equipment Lockout/Tagout

REFERENCED DOCUMENTS

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

PRECAUTIONS AND LIMITATIONS

- When connecting or disconnecting the 480 volt power cable to conveyance loading car, operators are required to wear a long-sleeve 100% cotton shirt , safety shoes/boots, safety glasses, and leather gloves over voltage rated gloves.
- Preoperational checks are required prior to first operation of conveyance loading car on any shift.
- In the event position sensor fails or is blocked, operator or spotter will continuously monitor conveyance loading car during operations.
- Only a qualified Waste Handling Technician/Engineer (WHT/WHE), or trainee operating under the direct supervision of a qualified WHT/WHE is authorized to perform the waste handling activities specified in this procedure.

- Conveyance loading car must be against stop in loading room prior to opening and closing Door #156.
- All personnel and equipment must be clear of marked operating radius of Door #156 prior to opening or closing.
- Door #156 should not be operated while conveyance loading car platform is being raised or lowered to allow for proper communication between operators/spotters.
- All personnel and equipment should remain clear of the area between conveyance loading car and Door #156 while car is in motion.

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 inspection.
 - 1.3 Document the following in a letter to SEC within five working days:
 - Schedule for inspection
 - Reason(s) why inspection was not performed
 - Any measures taken to offset negative impacts resulting from not performing 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).
- 3.0 **IF** any concerns of the safe condition of conveyance loading car exist, **THEN** notify WHE immediately.

PERFORMANCE

- 1.0 PREOPERATIONAL CHECKS
 - 1.1 Prior to moving car, verify the following:
 - 1.1.1 Conveyance car wheels are fully seated on tracks.

1.1.2 Perform the following:

- General Condition: **NO** damage, loose parts, oil leaks, grease, or trash.
- Gear Box Oil Level: Level is above LOWER LEVEL mark.
- Power cable on CABLE REEL 41-P-004C is properly wound on cable reel.
- Tracks are clear of obstacles.
- All guards are in proper place.
- Reflectors are attached to the following, if accessible:
 - Door #140
 - Facility pallet support stands in hoist cage
- Both light transmitters are attached to car.
- Reflectors are **NOT** blocked.

NOTE

Deficiencies that are corrected when discovered may be considered a satisfactory check.

- 1.2 **IF** any deficiencies **CANNOT** be corrected,
THEN notify WHE prior to operating conveyance car.
-

NOTE

Safety glasses and a long-sleeve 100% cotton shirt must be worn when opening and closing breakers.

- 1.3 If power cable is **NOT** connected to car, perform the following:

1.3.1 Verify 480V DISC. SW. 41P-SW04/39 is in OFF position.

1.3.2 Connect power cable and strain relief to car.

- 1.4 Place 480V DISC. SW. 41P-SW04/39 to ON position.

- 1.5 Turn system on, momentarily turn system On-Off key switch to the right.

- 1.6 Momentarily press SYSTEM START PUSH BUTTON.

- 1.7 Verify red POWER light illuminates.
- 1.8 Move UP-DOWN joy stick to UP.
 - Verify RAISE light illuminates.
 - Check upper limit.
- 1.9 Move UP-DOWN joy stick to DOWN.
 - Verify LOWER light illuminates.
 - Check lower limit.
- 1.10 Verify sensor selector is in tram.

NOTE

Once SENSOR BYPASS PUSH BUTTON has been released, button should return to NORMAL/OUT position.

- 1.11 Momentarily press SENSOR BYPASS PUSH BUTTON while holding FWD/REV joy stick in FWD position.
 - Verify FWD light illuminates.
 - Verify forward travel a minimum of two feet beyond stop.
- 1.12 Move FWD/REV joy stick to REV position.
 - Verify REV light illuminates.
 - Confirm reverse travel.
 - Verify sensor stops conveyance car.
- 1.13 Momentarily press SENSOR BYPASS PUSH BUTTON while holding FWD/REV joy stick in REV position.
 - Verify conveyance is against stop.
- 1.14 Initiate ARs to resolve any deficiencies that **CANNOT** be corrected by Waste Operations.
- 1.15 Notify WHE of the operational status of the conveyance loading car and of any deficiencies discovered during preoperational checks and status of each (e.g., deficiencies corrected and ARs generated).

- 1.16 Record the following information in equipment logbook:
 - 1.16.1 Deficiencies noted.
 - 1.16.2 Corrective actions taken (i.e., outstanding/newly generated ARs, oil added, etc.).
- 1.17 Record date, time, and signature in equipment logbook to document performance of preoperational checks.
- 1.18 If applicable, complete appropriate sections of WP 05-WH1101, Attachment 5, Preoperational Waste Handling Mode Checklist.
- 1.19 WHE, review equipment logs on a weekly basis (generally the last day of the work week).
 - 1.19.1 Submit completed equipment logbooks to the Records Coordinator.

2.0 LOADING FACILITY PALLET ONTO HOIST

- 2.1 Energize 411-CP04-20, if needed.
- 2.2 Using UP-DOWN joy stick, verify platform on car is fully lowered.
- 2.3 Verify Door #156 is closed.
- 2.4 Open Door #140 to fully OPEN position.
- 2.5 Load facility pallet on car.
- 2.6 Move forklift out of room.
- 2.7 Close Door #140.

NOTE

Once the SENSOR BYPASS PUSH BUTTON has been released, the button should return to the NORMAL/OUT position.

- 2.8 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON, position car against stops in loading room.

WARNING

In order to prevent injury to personnel or damage to equipment, all personnel and equipment **MUST** be clear of marked operating radius of Door #156 prior to opening.

- 2.9 Open Door #156.
- 2.10 Prior to loading facility pallet on hoist, verify west stop pins on hoist chairs are lowered and east stop pins are raised and pivot rails are lowered.
- 2.11 Using UP-DOWN joy stick, raise car platform to FULL UP position.
- 2.12 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON, if needed, move car and facility pallet onto hoist cage.
- 2.13 Using UP-DOWN joy stick, lower car platform to FULLY LOWERED position.
- 2.14 Verify car platform has cleared facility pallet.
- 2.15 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON, if needed, back car out of hoist and into loading room.
- 2.16 Verify west stop pins are raised.

WARNING

In order to prevent injury to personnel or damage to equipment, all personnel and equipment **MUST** be clear of marked operating radius of Door #156 prior to closing.

- 2.17 Close Door #156.

3.0 UNLOADING FACILITY PALLET FROM HOIST

WARNING

In order to prevent injury to personnel or damage to equipment, all personnel and equipment **MUST** be clear of marked operating radius of Door #156 prior to opening.

- 3.1 Open Door #156.

- 3.2 Verify west stop pins are lowered.
- 3.3 Using UP-DOWN joy stick, verify car platform is fully lowered.
- 3.4 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON if needed, move car onto hoist, lining up positioning pins on platform to facility pallet receptacles.
- 3.5 When car is correctly positioned, fully raise car platform, using UP-DOWN joy stick, to lift facility pallet off support stands.
- 3.6 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON, if needed, back car and facility pallet out of cage and into loading room.
- 3.7 Using UP-DOWN joy stick, once car clears hoist, fully lower car platform.

NOTE

Once SENSOR BYPASS PUSH BUTTON has been released, button should return to NORMAL/OUT position.

- 3.8 Using FWD-REV joy stick and SENSOR BYPASS PUSH BUTTON, position car against stops in loading room.

WARNING

In order to prevent injury to personnel or damage to equipment, all personnel and equipment **MUST** be clear of marked operating radius of Door #156 prior to closing.

- 3.9 Close Door #156.
 - 3.10 De-energize 411-CP04-20.
 - 3.11 Open Door #140 to fully OPEN position.
 - 3.12 Unload facility pallet from car.
- 4.0 CONVEYANCE LOADING CAR SHUTDOWN

NOTE

Once SENSOR BYPASS PUSH BUTTON has been released, button should return to NORMAL/OUT position.

- 4.1 Push system On-Off Key Switch "in" to turn system OFF.
- 4.2 Place 480V DISC. SW. 41P-SW04/39 in OFF position.
- 4.3 If desired, disconnect car power cable.