

# WP 05-WH1101

Revision 14

## CH Surface Transuranic Mixed Waste Handling Area Inspections

Technical Procedure

EFFECTIVE DATE: 02/10/11

Randy Britain  
APPROVED FOR USE

**CONTINUOUS USE PROCEDURE**

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**CHANGE HISTORY SUMMARY**

<b>REVISION NUMBER</b>	<b>DATE ISSUED</b>	<b>DESCRIPTION OF CHANGES</b>
13	12/17/10	Added 13 Ton Forklifts 41-H-012D and 41-H-012E to Attachment 5  Added Trailer Jockeys 41-H-151A and 41-H-151B to Attachment 5
14	02/10/11	Changed wording in Bullet 1 of the Precautions and Limitations  Removed 2 <sup>nd</sup> and 3 <sup>rd</sup> bullets of the Precautions and Limitations  Added Shaft Access Area Checkboxes to Attachment 5

## **INTRODUCTION** <sup>1,2</sup>

This procedure provides directions for performing inspections of Surface Contact-Handled (CH) Transuranic (TRU) Mixed Waste Handling and Storage areas.

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, Surface CH TRU Mixed Waste Handling Area Preoperational Inspection
- Attachment 2, Trailer Parking Area and CH Bay Container Storage Area Weekly Inspection
- Attachment 3, CH Bay Surge Storage Area Preoperational/Weekly Inspections
- Attachment 4, TRU Mixed Waste Decontamination Equipment Annual Inspection
- Attachment 5, Preoperational Waste Handling Mode Checklist

## **REFERENCES**

### **BASELINE DOCUMENTS**

- Title 40 Code of Federal Regulations (CFR) §264.15, "General Inspection Requirements"
- 40 CFR Part 761, Subpart C, "Marking of PCBs and PCB Items"
- 40 CFR Part 761, Subpart D, "Storage and Disposal"
- Hazardous Waste Facility Permit, Waste Isolation Pilot Plant, Permit No. NM4890139088-TSDF, issued by the New Mexico Environment Department
- DOE/WIPP-07-3372, Waste Isolation Pilot Plant Documented Safety Analysis
- DOE/WIPP-07-3373, Waste Isolation Pilot Plant Technical Safety Requirements
- WP 04-AD3001, Facility Mode Compliance

- WP 10-2, Maintenance Operations Instruction Manual

#### REFERENCED DOCUMENTS

- WP 04-IM1000, Issues Management Processing of WIPP Forms
- WP 05-WH1011, CH Waste Processing
- EA04AD3001-2-0, Facility TSR Administrative Controls Checklist CH Waste Handling Mode
- EA04AD3001-4-0, Return to Storage or Standby Modes Upon Completion of Waste Handling
- EA04IM1000-1-0, WIPP Form
- EA10-2-1-0, Action Request

#### PRECAUTIONS AND LIMITATIONS

- Only personnel qualified as a CH Floor, Yard and Emplacement Technician/CH Waste Handling Technician/Engineer (FY&E/WHT/WHE) or trainees operating under direct supervision of a qualified CH FY&E/WHT/WHE are authorized to perform CH Waste Handling activities specified in this procedure.
- Waste containers shall not be stored in the Waste Handling Building (WHB) for longer than 60 days.

- WHB Unit Storage Capacities:

<b>Description</b>	<b>Area</b>	<b>Maximum Capacity</b>	<b>Container Equivalent</b>
CH Bay Storage Area	26,151 ft <sup>2</sup> (2,430 m <sup>2</sup> )	4,800 ft <sup>3</sup> (135.9 m <sup>3</sup> )	13 loaded facility pallets and 4 CH packages at the TRUDOCKS
CH Bay Surge Storage Area	Included in CH Bay Storage Area	1,600 ft <sup>3</sup> (45.3 m <sup>3</sup> )	5 loaded facility pallets
Derived Waste Storage Area	Included in CH Bay Storage Area	66.3 ft <sup>3</sup> (1.88 m <sup>3</sup> )	1 Standard Waste Box
Total for CH Waste	26,151 ft <sup>2</sup> (2,430 m <sup>2</sup> )	6,466.3 ft <sup>3</sup> (183.1 m <sup>3</sup> )	

- The following restrictions apply at all times in the CH Bay:
  - No more than seven facility pallets loaded with CH waste (stored in the northeast corner).
  - No more than seven facility pallets loaded with CH waste (stored in the southwest corner).
  - Only one facility pallet loaded with CH waste may be in the shielded storage room.
  - No more than five facility pallets loaded with CH waste (stored near Airlock 107), when surge storage area is in use per WP 05-WH1011.
  - TRUPACT-IIs or HalfPACTs loaded with CH waste may be stored at a TRUDOCK location.

- Parking Area Unit (PAU) Storage Capacities:

Description	Area	Maximum Capacity	Container Equivalent
Parking Area	137,050 ft <sup>2</sup> (12,730 m <sup>2</sup> )	6,734 ft <sup>3</sup> (191 m <sup>3</sup> )	40 CH packages containing waste (The total number of CH packages containing waste in the PAU cannot exceed 50.)
Parking Area Surge Storage	Included in Parking Area	2,129 ft <sup>3</sup> (60 m <sup>3</sup> )	12 CH packages (The total number of CH packages containing waste in the PAU cannot exceed 50.)

### PREREQUISITE ACTIONS

- 1.0 Review previous inspection results for outstanding Action Requests (ARs) (see electronic attachment EA10-2-1-0) and outstanding deficiencies.
- 2.0 If required inspection goes delinquent, perform the following:
  - 2.1 Immediately notify the Facility Shift Manager and Site Environmental Compliance (SEC) of delinquent inspection.
  - 2.2 Schedule and complete inspection.
  - 2.3 Document the following in a letter to SEC within five working days:
    - The schedule for inspection
    - The reason(s) why inspection was not performed
    - Any measures taken to offset negative impacts resulting from not performing the inspection
    - Actions to prevent further delinquencies
  - 2.4 SEC, **GO TO** WP 04-IM1000 and initiate a WIPP Form, EA04IM1000-1-0.

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**NOTE**

This procedure is written in sections. This procedure may be executed on a section by section basis, as specified by the crew manager.

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**PERFORMANCE****1.0 SURFACE CH TRU MIXED WASTE HANDLING AREA PREOPERATIONAL INSPECTION (ATTACHMENT 1)**

1.1 **IF** waste is scheduled to be handled in CH TRU Mixed Waste Handling Area(s),  
**THEN** at beginning of each shift, inspect applicable areas per Attachment 1 and perform the following:

1.1.1 Enter date and time of inspection in appropriate blocks.

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**NOTE**

Steps 1.1.2 and 1.1.4 may be done concurrently.

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1.1.2 Inspect applicable items/conditions listed on Attachment 1 and enter ✓ for satisfactory items/conditions, **U** for any unsatisfactory items/conditions, and **N/A** for not applicable.

1.1.3 Enter initials in block provided.

1.1.4 **IF** any inspection result is **NOT** satisfactory,  
**THEN** perform the following:

- Describe approximate location and nature of deficiency in Remarks section.
- Notify WHE.
- Initiate and record ARs for corrective action, as applicable.

1.1.5 Inspector, print name, signs, and enter initials when inspection completed.

1.1.6 Submit inspection sheet to reviewer upon completion of Preoperational Inspection.

1.1.7 Reviewer, proceed to Section 5.0.

## 2.0 TRAILER PARKING AREA AND CH CONTAINER STORAGE AREA WEEKLY INSPECTION (ATTACHMENT 2)

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### NOTE

Weekly inspections are not required if waste is not stored in applicable areas.

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2.1 **IF** waste is stored in Trailer Parking, CH Bay Container, CH-Derived, and/or Shielded Room Storage Areas, **THEN** on the last day of work week, inspect applicable areas per Attachment 2 and perform the following:

2.1.1 Enter date and time of inspection in appropriate blocks.

2.1.2 Inspect the applicable items/conditions listed on Attachment 2 and enter **✓** for satisfactory items/conditions, **U** for any unsatisfactory items/conditions, **N/A** for not applicable.

2.1.3 Enter initials in block provided.

2.1.4 **IF** any inspection result is **NOT** satisfactory, **THEN** perform the following:

- Describe exact location and nature of deficiency in Remarks section.
- Notify WHE.
- Initiate and record ARs for corrective action, as applicable.

2.1.5 If asphalt/concrete parking areas where TRUPACT-II/HalfPACT is temporarily stored is **NOT** in good condition, move TRUPACT-II/HalfPACT to another location.

2.1.6 Inspector, print name, signs, and enter initials when inspection completed.

2.1.7 Submit inspection sheet to reviewer upon completion of Weekly Inspection.

2.1.8 Reviewer, proceed to Section 5.0.

### 3.0 CH BAY SURGE STORAGE AREA PREOPERATIONAL/WEEKLY INSPECTION (ATTACHMENT 3)

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#### NOTE

Areas of WHB (west end of CH Bay) used for Surge Storage due to off-normal events **MUST** be inspected prior to use and at least once per week thereafter, as long as waste containers remain in area.

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3.1 **IF** CH waste containers are to be stored in surge storage area of CH Bay, **THEN** perform Preoperational Inspection per Attachment 3.

3.1.1 Enter date and time of inspection in appropriate blocks.

3.1.2 Enter ✓ for satisfactory, **U** for unsatisfactory, or **N/A** for not applicable in appropriate block.

3.1.3 Enter initials in block provided.

3.1.4 **IF** any inspection result is **NOT** satisfactory, **THEN** perform the following:

- Describe exact location and nature of deficiency in Remarks section.
- Notify WHE.
- Initiate and record ARs for corrective action, as applicable.

3.1.5 Inspector, print name, signs, and enter initials when inspection completed.

3.1.6 Submit inspection to reviewer upon completion of Preoperational Inspection.

3.1.7 Reviewer, proceed to Section 5.0.

3.2 **IF** CH waste containers **ARE** stored in surge storage area of CH Bay, on last day of work week, **THEN** inspect applicable area per Attachment 3, **AND** perform the following:

3.2.1 Enter date and time of inspection in appropriate blocks.

3.2.2 Enter ✓ for satisfactory, **U** for unsatisfactory, or **N/A** for not applicable in appropriate block.

3.2.3 Enter initials in block provided.

3.2.4 **IF** any inspection result is **NOT** satisfactory, **THEN** perform the following:

- Describe exact location and nature of deficiency in Remarks section.
- Notify WHE.
- Initiate and record ARs for corrective action, as applicable.

3.2.5 Inspector, print name, signs, and enter initials, when inspection completed.

3.2.6 Submit inspection sheet to reviewer upon completion of Weekly Inspection.

3.2.7 Reviewer, proceed to Section 5.0.

#### 4.0 TRU MIXED WASTE DECONTAMINATION EQUIPMENT ANNUAL INSPECTION (ATTACHMENT 4)

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##### **NOTE**

TRU Mixed Waste Decontamination Equipment Inspection may be performed more frequently at the request of the Facility Shift Manager.

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4.1 Perform Annual Inspection during last work week in December per Attachment 4, and document as follows:

4.1.1 Enter date and time of inspection in appropriate blocks.

4.1.2 Inspect applicable items/conditions on Attachment 4 and enter ✓ for satisfactory, **U** for unsatisfactory, or **N/A** for not applicable in appropriate block.

4.1.3 Enter initials in block provided.

4.1.4 **IF** inventory check is **NOT** satisfactory, **THEN** perform the following:

- Describe type and quantity of equipment not available.
- Notify WHE.

- Initiate and record Purchase Requisition for equipment replacement (if applicable).

4.1.5 Inspector, print name, signs, and enter initials when inspection completed.

4.1.6 Submit inspection sheet to reviewer upon completion of Annual Inspection.

## 5.0 REVIEW

5.1 Review attachments for unsatisfactory conditions, corrective actions taken, and outstanding or newly generated ARs.

5.2 Enter initials in block provided for specific inspection.

5.3 Reviewer, print name, signs, and enter initials when review completed.

## 6.0 PREOPERATIONAL WASTE HANDLING MODE CHECKLIST (ATTACHMENT 5)

6.1 Operator, after equipment preoperational checks are successfully completed, perform the following:

6.1.1 Ensure date has been entered.

6.1.2 Enter applicable information (Initials/OOS/N/A, etc) in applicable block.

6.1.3 Performer, enter printed name, signature, and initials on Attachment 5 when preoperational checks are completed.

6.1.4 After all applicable blocks are completed; notify surface WHE for mode (surface CH WH). Initial block and enter time.

6.1.5 WHE, complete applicable block of EA04AD3001-2-0, and deliver to Central Monitoring Room Operator (CMRO), either by hand or fax (234-6049).

6.1.6 WHE, upon completion of Surface CH Waste Handling activities for shift, complete applicable block of EA04AD3001-4-0, for appropriate mode being requested, and deliver to CMRO, either by hand or fax (234-6049).

6.1.7 Upon completion of last CH preoperational mode checklist, forward Attachment 5 to WHE for validation.

7.0 VALIDATION

7.1 WHE, perform following:

7.1.1 Upon completion of last inspection to be documented on Attachments 1 through 5, verify correctness of form. Validate inspection(s) by printing name, signing, and dating inspection sheets in spaces provided.

7.1.2 Review Attachments 1 through 5 weekly, and forward completed attachments to Records Coordinator.

Attachment 1 – Surface CH TRU Mixed Waste Handling Area Preoperational Inspection

AREA/EQUIPMENT PREOPERATIONAL INSPECTIONS								
	DATE							
	TIME							
East TRUDOCK	✓/U*							
No Combustible Materials Stored Underneath the East TRUDOCK	✓/U*							
West TRUDOCK	✓/U*							
No Combustible Materials Stored Underneath the West TRUDOCK	✓/U*							
Facility Pallets	✓/U*							
East TRUDOCK Storage Areas	✓/U*							
West TRUDOCK Storage Areas	✓/U*							
CH Bay Container Storage Area	✓/U*							
Shielded Room Storage Area	✓/U*							
CH-Derived Waste Storage Area	✓/U*							
Conveyance Loading Room (if applicable)	✓/U*							
INSPECTOR INITIALS	xxxxx							
REVIEWER INITIALS	xxxxx							

\* ✓ = Satisfactory U = Unsatisfactory N/A = Not Applicable

**TRUDOCK/Facility Pallet Checks:**

- Structural fatigue, deformation, wear (obvious cracks, bends or breaks), rust
- Loose or deformed decking
- Missing hardware such as nuts and bolts

**Storage Area Checks:**

- Floor coating in good condition - at least one layer intact, and no bubbles in coating
- Concrete floor in good condition - free of cracks and gaps
- No evidence of spills or leaks from waste containers
- 44 - inch minimum aisle space between facility pallets loaded with CH waste
- Containers in good condition/no visible deterioration
- Area free of debris and refuse
- Warning signs posted in area
- Telephone/Internal Communications - proper working order
- Waste containers elevated ≥ 6 inches above floor
- Polychlorinated biphenyl (PCB) warning signs posted on all entrances into CH Bay and radiological areas

**Conveyance Loading Room Checks:**

- Area free of debris and refuse
- Warning signs posted in area
- PCB warning signs posted on all entrances into Conveyance Loading Room
- Telephone/Internal Communications - proper working order



**Attachment 2 – Trailer Parking Area and CH Bay Container Storage Area Weekly Inspection**

TRAILER PARKING/CONTAINER STORAGE AREA WEEKLY INSPECTIONS						
	DATE					
	TIME					
Trailer Parking Area	✓/U*					
East TRUDOCK Storage Areas	✓/U*					
West TRUDOCK Storage Areas	✓/U*					
CH Bay Container Storage Area	✓/U*					
CH-Derived Waste Storage Area	✓/U*					
Shielded Room Storage Area	✓/U*					
INSPECTOR INITIALS	xxxxx					
REVIEWER INITIALS	xxxxx					

\* ✓ = Satisfactory U = Unsatisfactory N/A = Not Applicable

**Trailer Parking Area Checks:**

- Warning signs posted in area
- PCB warning signs posted on Controlled Area surrounding building 411 and 412
- Asphalt/concrete parking areas free from cracks/gaps that could create hazard to forklift operation
- Minimum 4-foot aisle space between trailers with TRUPACT-II(s)/HalfPACT/Road Cask(s) loaded with CH/RH waste
- TRUPACT-II(s) and Road Cask(s) in good condition/no visible deterioration
- No evidence of spills or leaks from TRUPACT-IIs or Road Cask(s)

**Storage Area Checks:**

- Floor coating in good condition - at least one layer intact, and no bubbles in coating
- Concrete floor in good condition - free of cracks and gaps
- No evidence of spills or leaks from waste containers
- 44 - inch minimum aisle space between facility pallets loaded with CH waste
- Containers in good condition/no visible deterioration
- Area free of debris and refuse
- Warning signs posted in area
- PCB warning signs posted on all entrances to CH Bay and radiological areas
- Telephone/Internal Communications - proper working order
- Verify first date, on WP 05-WH1011 Attachment 1, for all payloads does not exceed 60 calendar days
- Waste containers elevated ≥ 6 inches above floor

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<b>Inspector Name (print)</b>	<b>Signature</b>	<b>Initials</b>
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**Attachment 3 – CH Bay Surge Storage Area Preoperational/Weekly Inspections**

CH BAY SURGE STORAGE AREA PREOPERATIONAL/WEEKLY INSPECTION						
	DATE					
	TIME					
Preoperational	✓/U*					
Weekly	✓/U*					
Inspector Initials	xxxxxxx					
Reviewer Initials	xxxxxxx					

\* ✓ = Satisfactory    U = Unsatisfactory    N/A = Not Applicable

**Preoperational Checks:**

- Floor coating in good condition - at least one layer intact, and no bubbles in coating
- Concrete floors in good condition, free of cracks and gaps
- Storage area has been appropriately designated

**Weekly Checks:**

- No evidence of spills/leaks from waste container(s)
- 44 - inch minimum space between pallets loaded with CH waste
- Container(s) in good condition, no visible deterioration
- Waste containers elevated ≥ 6 inches above floor
- Area free of debris and refuse
- Warning signs posted in area
- PCB warning signs posted on all entrances to CH Bay and radiological areas
- Verify first date, on WP 05-WH1011 Attachment 1, for all payloads does not exceed 60 calendar days

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<b>Inspector Name (print)</b>	<b>Signature</b>	<b>Initials</b>
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**REMARKS:** \_\_\_\_\_

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**VALIDATION:** \_\_\_\_\_

<b>WHE Name (print)</b>	<b>Signature</b>	<b>Date</b>
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Attachment 4 – TRU Mixed Waste Decontamination Equipment Annual Inspection

TRU MIXED WASTE DECONTAMINATED EQUIPMENT ANNUAL INSPECTIONS							
Equipment	Quantities	DATE					
		TIME					
85-gallon drums	14	✓/U*					
SWBs	4	✓/U*					
HEPA Filtered Vacuum	2	✓/U*					
Aquaset or Cement	100 lb	✓/U*					
Polyvinyl Alcohol	1-5 gallon bucket	✓/U*					
Nonhazardous Decontaminating Agent	4-1 gallon bottles	✓/U*					
Inspector Initials	xxxxxx	xxxxxx					
Reviewer Initials	xxxxxx	xxxxxx					

\* ✓ = Satisfactory U = Unsatisfactory N/A = Not Applicable

- Equipment Inventory Check

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<b>Inspector Name (print)</b>	<b>Signature</b>	<b>Initials</b>
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**REMARKS:** \_\_\_\_\_

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**VALIDATION:** \_\_\_\_\_

<b>WHE Name (print)</b>	<b>Signature</b>	<b>Date</b>
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Attachment 5 – CH Preoperational Waste Handling Mode Checklist

PREOPERATIONAL SURFACE WASTE HANDLING MODE CHECKLIST					
Date					
EAST TRUDOCK 41-T-153					
Crane 41-T-151A & ACGLF					
Crane 41-T-151C & ACGLF					
WEST TRUDOCK 41-T-152					
Crane 41-T-151B & ACGLF					
Crane 41-T-151D & ACGLF					
13 Ton Forklifts:					
41-H-012A					
41-H-012B					
41-H-012C					
41-H-012D					
41-H-012E					
6 Ton Forklift *74-H-010B					
3 Ton Forklift *41-H-009					
Trailer Jockeys: *					
41-H-030					
41-H-046					
41-H-151A					
41-H-151B					
Conveyance Loading Car 41-H-018 **					
Surface Area Inspection					
Delivered EA04AD3001-2-0 to CMRO requesting CH Waste Handling Operations(CH Bay) Initials / Time					
Delivered EA04AD3001-2-0 to CMRO requesting CH Waste Handling Operations (Shaft Access Area) Initials / Time					

N/A = Not applicable    OOS = Out of Service    \* = Not required for mode    \*\* = Needed for downloading

Remarks:

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