

CCP-TP-042

Revision 11

CCP Bagging Out Process Waste and Replacing Glovebox Windows and Gloves

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APPROVED FOR USE

RECORD OF REVISION

Revision Number	Date Approved	Description of Revision
4	05/09/2002	Put in CCP-QP-010 format. Went from cloth tape to fiber tape. Deleted steps pertaining to labeling.
5	06/14/2002	revised sections 4.1 and Attachment 1 as part of the program review at ANL-E.
6	06/20/2002	Added Calibrated scale to the equipment list. Added Gross Weight to Scale uncertainty. Replaced balance with scale.
7	04/02/2003	Updated references, and added to Sections 2.4 and 4.1
8	05/17/2003	Removed from the TOC the Link to the FTP Site for Forms. Revised Steps 2.3 and 4.1 for clarification. Added page numbering to Attachment 1.
9	01/09/2004	Deleted form link, Attachment 1. Changes to Sections 4.1, 4.2, 4.3, and 4.4. Added additional Step 2.4.7. Added NOTE before 3.3. Added new section for Facility Records Custodian.
10	02/26/2004	Revised Sections 2.0, 3.0, and 4.0 in response to findings from the LLNL Contractor ORR.
11	07/14/2004	Revised to provide clarification of the output drum configuration for the DAC requirements for any subsequent HSG sampling and in response to CBFO CAR #04-026. Added new steps 4.1.1 and 4.1.2. Modified step 4.1.16 [A], [B], [E], [I], and [K]. Added new step 4.1.16 [J]. Revised Attachment 1.

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1.0 PURPOSE

This procedure provides guidance for bag-out operations after processing waste material in a glovebox and for the replacement of the glovebox windows and glovebox gloves.

1.1 Scope

This procedure applies to the Central Characterization Project (CCP) glovebox contained within the Mobile Visual Examination and Repackaging (MOVER) Facility, and gloveboxes utilized for visual examination (VE) by the CCP, as applicable.

2.0 REQUIREMENTS

2.1 References

Baseline Documents

- DOE/CBFO-94-1012, *U.S. Department of Energy Carlsbad Field Office Quality Assurance Program Document (QAPD)*
- CCP-PO-001, *CCP Transuranic Waste Characterization Quality Assurance Project Plan (QAPjP)*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan (WCP)*

Referenced Documents

- CCP-HSP-002, *CCP MOVER (VE) Health and Safety Plan*
- CCP-PO-005, *CCP Conduct of Operations*
- CCP-QP-008, *CCP Records Management*
- CCP-TP-041, *CCP Preparing and Handling Waste Drums for Visual Examination*
- CCP-TP-044, *CCP Startup and Shutdown of the MOVER*
- CCP-TP-105, *CCP Container Management at Lawrence Livermore National Laboratory*

2.2 Training Requirements

2.2.1 Personnel performing this procedure will be trained and qualified in accordance with CCP-QP-002, *CCP Training and Qualification Plan*, prior to performing this procedure.

2.3 Equipment List

2.3.1 Drum labels from Site Transportation Official as needed

2.3.2 Safety knife

2.3.3 Cheesecloth

2.3.4 Terry cloth

2.3.5 Vinyl tape

2.3.6 Fantastic™ cleaner or equivalent

2.3.7 Rubber mallet, ball-peen hammer or drum lid closer

2.3.8 Surgeon's gloves

2.3.9 Cloth tape

2.3.10 PVC pipe cutters

2.3.11 Wire cutters

2.3.12 Zip ties (plastic) used on the bag-out of empty drums that contain filtered bags which are prepped in accordance with CCP-TP-041, *CCP Preparing and Handling Waste Drums for Visual Examination*

2.3.13 15/16 open end wrench, 15/16 socket, and ratchet

2.3.14 Calibrated torque wrench

2.3.15 Cordless drill

2.3.16 Fiber tape

2.3.17 Calibrated scale

2.3.18 Plastic or paper sheeting

2.3.19 Cardboard or padding material

2.4 Precautions and Limitations

2.4.1 Routine operations involve two VE operators and a Radiological Control Technician (RCT). Two or more operators may be required for large, complex, or high-risk bag-outs. Throughout bag-on and bag-off at the glovebox, an RCT must be present to perform appropriate surveys of the glovebox operations.

2.4.2 The RCT will perform the duties in accordance with site-specific radiological procedures.

2.4.3 **IF** during the course of executing the requirements of this procedure, an off-normal situation occurs that causes deviation from the normal process, and this off-normal condition can **NOT** be corrected as directed in this procedure, **THEN** VE operators shall **IMMEDIATELY STOP WORK** and perform the following:

[A] Make notifications in accordance with CCP-HSP-002, *CCP MOVER (VE) Health and Safety Plan*.

2.4.4 The Two-Person Rule is in effect for the MOVER. Entrance to the MOVER requires at least two people, one of which must be a qualified MOVER operator.

- 2.4.5 The introductory box attached to the MOVER glovebox is used as a storage compartment only. The introductory box is secured with a restraint opening. If the introduction of any item is needed to be made into the glovebox it will be done by using one of the following options (normally Option 1):

Option 1: Perform a Bag-in in accordance with the most current procedure of CCP-TP-042, CCP Bagging Out Process Waste and Replacing Glovebox Windows and Gloves.

NOTE

A Lawrence Livermore National Laboratory (LLNL) Integration Worksheet (IWS) will be required as part of the specific work plan. In addition, a determination will need to be made as to whether a Unreviewed Safety Question (USQ) is needed for the work plan.

Option 2: If the introductory box must be used to introduce any item into the glovebox, a specific work plan will be developed which will indicate why this method is to be used, outline operational steps, discuss and detail decontamination steps, and identify radiological controls required. The specific work plan must be reviewed and approved by the CCP Vendor Project Manager (VPM) and Host Site Facility Management prior to any actual use of this option.

- 2.4.6 Prior to opening any door, assure that the green door light is illuminated, and the red door light is **NOT** illuminated. If a red door light is illuminated, **DO NOT** proceed into the MOVER. If entering through one of the MOVER exterior doors, assure the CAM and VENTILATION lights are **NOT** illuminated (flashing). If illuminated (red or yellow flashing), **DO NOT** enter the MOVER, immediately contact the VE Technical Supervisor (TS) or RCT and Host Site Technical Representative (STR).

NOTE

An exception is a drum in the MOVER that contains an item or items that are encountered that are safety concerns; the process is halted pending further evaluation to mitigate any potential hazards.

- 2.4.7 At LLNL, **NO** waste drum will be left in the MOVER overnight. Waste drums will be removed from the MOVER prior to the end of the shift unless arrangements have been made with the host facility to extend a shift to complete a particular VE/PIR (Prohibited Item Removal). Under **NO** circumstances will the VE/PIR of a particular drum exceed twelve hours.
- 2.4.8 **NO** vented TRU waste container is allowed in the MOVER which exceeds 45 Plutonium equivalent curies (PE/Ci) limitation.
- 2.4.9 **NO** non-vented TRU waste container is allowed in the MOVER which exceeds 12 PE/Ci limitation.
- 2.4.10 Personnel are required to don appropriate personal protective equipment (PPE) per specified IWS.
- 2.4.11 No spark-creating operations (e.g., welding, cutting, grinding, etc.) SHALL be allowed in the MOVER with waste in the glovebox. Repairs requiring the use of spark-creating tools (e.g., welder, grinder, cutting torch, etc.) will only be allowed with the prior approval of the Host STR and the CCP MOVER TS, **NO** TRU waste in the glovebox, and approved work authorization documentation (e.g., Hot Work permit, IWS, etc.).

NOTE

Use of non-sparking tools within the MOVER glovebox reduces the likelihood of a fire that could lead to a radiological release.

- 2.4.12 Non-sparking, spark-resistant, or spark-proof tools are those tools specifically manufactured as such or tools rendered spark-resistant by covering with tape or special coating and approved by the Host STR.

2.4.13 Non-sparking, spark-resistant, or spark-proof tools SHALL be used within the MOVER glovebox. Inspection of the glovebox tools will be performed daily prior to use. The inspection SHALL verify that only approved tools are available.

2.4.14 Only qualified CCP personnel may perform these functions.

2.5 Prerequisite Actions

2.5.1 Confirm that an approved IWS has been issued.

2.5.2 Verify that an approved IWS has been issued for this work, that operators are listed on, have read, and have signed the IWS.

2.5.3 All applicable Material Safety Data Sheets (MSDSs) must be reviewed prior to initial performance of this procedure and thereafter, as needed.

2.5.4 Confirm the MOVER Daily Pre-operational Checklist and Mover Logbook have been completed per CCP-TP-044, *CCP Startup and Shutdown of the MOVER* prior to starting work.

3.0 RESPONSIBILITIES

3.1 Technical Supervisor (TS)

3.1.1 Ensures that CCP personnel implement this procedure properly.

3.2 Visual Examination Operator (VEO)

3.2.1 Conducts bagging-out operations, and glove and window replacement in accordance with this procedure.

NOTE

At LLNL, the function of RCT is performed by the Hazards Control RCT.

3.3 Radiological Control Technician (RCT)

3.3.1 Performs duties in accordance with site-specific radiological procedures and approved IWS.

3.4 Vendor Project Manager (VPM)

3.4.1 Reviews and approves specific work plans for introduction of items into glovebox, as required.

3.5 Host Site Facility Management

3.5.1 Reviews and approves specific work plans for introduction of items into the glovebox, as required.

3.6 Facility Records Custodian

3.6.1 Transmits all records generated by this procedure in accordance with CCP-QP-008, *CCP Records Management*.

4.0 PROCEDURE

NOTE

The Visual Examination Operator (VEO) performs all steps in this procedure unless otherwise indicated.

4.1 Bag-Out of 55-Gallon Drum Through Vertical Port

4.1.1 Determine the percent full of the output drum as follows:

[A] Record the bar code drum ID number and initial and date
Step 1 of Attachment 1, Drum Closure Form.

NOTE

Items (e.g., pipe, scrap angle iron, etc.) which protrude above the bulk of the waste are not to be included in the fill percent. The fill percent is to be recorded in five percent increments (e.g., 35%, 40%, 45%).

[B] Determine the fill percent of the container based on the highest level of the bulk of the waste.

[C] Mark the level of the waste contained in the output drum on the outside of the drum.

[D] Measure the distance from the mark to the bottom of the drum **AND** record on Attachment 1, Step 2.

[E] Perform the calculation on Attachment 1, Step 2.

[F] Record the percent drum full to the nearest five percent on the percent full line of Attachment 1, Step 2.

[G] Initial and date Step 2 of Attachment 1.

[H] Update the drum percent full line on CCP-TP-105, *CCP Container Management at Lawrence Livermore National Laboratory*, Attachment 1, Container Traveler for the drum.

4.1.2 Verify that output drum liner has no lid and initial and date Attachment 1, Step 3.

4.1.3 Don appropriate PPE per specified IWS.

4.1.4 Remove the rigid plastic sleeve in the bag-out port.

- 4.1.5 Remove tape between bag-out bag and drum.
- 4.1.6 Push bag-out bag up and inside drum in position for twist and tape closure.
- 4.1.7 Cut pieces of tape 2" to 4" in length to have available for cuts, slits, and tears that may be found on the bag while doing the bag inspection.
- 4.1.8 Inspect bag-out bag for cuts, slits, or tears.
- 4.1.9 **IF** a cut, slit, or tear is found on the bag during the inspection, **THEN** perform the following:
 - [A] Cover the cut, slit, or tear with tape.
 - [B] Notify the RCT.
 - [C] Follow the RCT directions.

NOTE

Throughout bag-on and bag-off at the glovebox an RCT must be present to monitor the hands of the operators.

- 4.1.10 Twist the bag-out (horsetail) while performing the following:
 - [A] Set up the High Efficiency Particulate Air (HEPA) filtered local exhaust system to capture any airborne contamination at the site of the horsetail during the cutting operation.
 - [B] Squeeze as much air as possible out of the bag.
 - [C] Gather the bag by twisting, squeezing and turning drum as close to the bag-out item as possible.
 - [D] Tape the gathered area securely with fiber tape, forming a horsetail about 8 inches long, from the port side to the drum side and from the drum side to port side.
 - [E] Tape over the fiber tape with vinyl tape wrapping the tape securely, from the port side to the drum side and from the drum side to port side.
 - [F] Firmly attach two zip ties near the center of the horsetail about 2 inches apart.

[G] Cut the remainder of tie near buckle, assure remainder of tie is thrown in Rad trash.

[H] Tape the 8 inch horsetail securely with vinyl tape, from the port side to the drum side and from the drum side to port side.

[I] Don respiratory protection/PPE per specified IWS.

[J] Cut the bag through the tape between the two zip ties, using PVC pipe cutter.

[K] Place vinyl tape over cut stubs.

4.1.11 Remove tape placed over the filter during CCP-TP-041.

4.1.12 **IF** directed by the TS **NOT** to cut a slit in the filtered bag, **THEN GO TO** step 4.1.14.

4.1.13 **IF** directed by TS to cut a slit in the filtered bag, **THEN** perform the following:

[A] Set up the HEPA filtered local exhaust system to capture any potential airborne contamination during the bag slitting process.

[B] Cut a slit at least two inches long on the bag next to the filter and place the safety blade inside the plastic bag for disposal as radiological waste.

[C] Immediately mount drum lid and ring on the drum after the slit is made.

RCT

4.1.14 Survey drum and area.

4.1.15 **IF** drum or area is contaminated, **THEN** decontaminate per IWS or site-specific instructions.

NOTE

Instructions in step 4.1.16 prepare a drum for transportation as a Department of Transportation (DOT) Type A container. Drums must be prepared this way to exit the nuclear facility, but drums in process (e.g., loaded with waste but without sealed lids) may be moved within the building for further processing (e.g., for loading into Standard Waste Boxes [SWBs]).

- 4.1.16 Close a sleeved 55-Gallon Drum or Output Waste Drum by performing the following:
- [A] Record closure method and note whether a slit was made to filter bag. Initial and date Step 4 of Attachment 1.
 - [B] **IF** the drum lid is **NOT** mounted, **THEN** mount the drum lid.
 - [C] Install the bolt (closure) ring with the bolt positioned downward and the bolt placed directly over the drum seam.
 - [D] Complete Step 5 and initial and date Attachment 1.
 - [E] Seat the ring during tightening using one or more of the following, as needed:
 - [E.1] Mallet
 - [E.2] Hammer
 - [E.3] Drum Lid closer.
 - [F] Torque the bolt on the drum ring to 60 ± 4 ft.-lb.
 - [G] When torquing is complete, tighten the jam nut.
 - [H] Complete Step 6 and initial and date Attachment 1.
 - [I] Record the Torque Wrench ID Number and Calibration Due Date on Attachment 1, Step 7 **AND** initial and date.
 - [J] Weigh the drum using the calibrated scale.

[K] Record the following on Step 8 of Attachment 1 **AND** initial and date:

[K.1] Weight of the packaging (gross weight in kg)

[K.2] File or serial number of the calibrated scale

[K.3] Scale Gross Weight Uncertainty

[K.4] Scale calibration due date

[K.5] Write the weight and date in indelible ink on the drum lid.

[L] Transfer completed Attachment 1 to the Facility Records Custodian.

[M] Move drum to the designated storage area.

Facility Records Custodian

4.1.17 Transmit Attachment 1 in accordance with CCP-QP-008.

4.2 Bag-Out of 55-Gallon Drum Through the Horizontal Port

4.2.1 Don PPE per specified IWS.

WARNING

All personnel must be free of pinch points prior to a drum lift and/or move.

4.2.2 VEO in control of drum lift, must confirm all operators are free of pinch points and are aware the lift is about to move.

4.2.3 Using drum lift controls, move the drum out of the port into position for the bag-out.

4.2.4 Monitor drum movement to assure the drum ring bolt clears the port and the bag-out bag is not damaged.

4.2.5 **WHEN** drum is in position,
THEN place pendant controller in safe position where it cannot be accidentally activated.

- 4.2.6 Push the bag-out bag forward and into position for the twist and tape closure.
- 4.2.7 Cut pieces of tape 2" to 4" in length to have available for cuts, slits, and tears that may be found on the bag while doing the bag inspection.
- 4.2.8 Inspect bag-out bag for cuts, slits, or tears.
- 4.2.9 **IF** a cut, slit, or tear is found on the bag during the inspection, **THEN** perform the following:
 - [A] Cover the cut, slit, or tear with tape.
 - [B] Notify the RCT.
 - [C] Follow the RCT directions.

NOTE

Throughout bag-on and bag-off at the glovebox an RCT must be present to monitor the hands of the operators.

- 4.2.10 Twist the bag-out (horsetail) while performing the following:
 - [A] Set up the HEPA filtered local exhaust system to capture any airborne contamination at the site of the horsetail during the cutting operation.
 - [B] Squeeze as much air as possible out of the bag.
 - [C] Gather the bag by twisting or squeezing as close to the bag-out item as possible.
 - [D] Tape the gathered area securely with fiber tape, forming a horsetail about 8 inches long, from the port side to the drum side and from the drum side to port side.
 - [E] Tape over the fiber tape with vinyl tape wrapping the tape securely, from the port side to the drum side and from the drum side to port side.
 - [F] Firmly attach two zip ties near the center of the horsetail about 2 inches apart.

[G] Cut the remainder of tie near buckle, assure remainder of tie is thrown in Rad trash.

[H] Tape the 8 inch horsetail securely with vinyl tape, from the port side to the drum side and from the drum side to port side.

[I] Don respiratory protection/PPE per specified IWS.

[J] Cut the bag through the tape between the two zip ties, using PVC pipe cutter.

[K] Place vinyl tape over cut stubs.

4.2.11 Confirm the RCT has completed surveys.

WARNING

All personnel must be free of pinch points prior to a drum lift and/or move.

4.2.12 VEO in control of drum lift, must confirm all operators are free of pinch points and are aware the lift is about to move.

4.2.13 Lower the drum onto the drum dolly.

4.3 Bag-Out Through Smaller Ports

4.3.1 Don PPE per specified IWS.

4.3.2 Collect items to be removed from the glovebox in a can(s) or a bag(s).

4.3.3 Seal the can(s) or bag(s).

4.3.4 Wipe the inside of the glovebox, using cheese cloth or terry cloth moistened with Fantastic™, in the area of the bag-out to collect removable contamination.

4.3.5 Collect the used rags in a can or bag.

4.3.6 Seal the can or bag.

4.3.7 Remove the inner lid on the bag-out port.

- 4.3.8 Cut pieces of tape 2" to 4" in length to have available for cuts, slits, and tears that may be found on the bag while doing the bag inspection.
- 4.3.9 Inspect bag-out bag for cuts, slits, or tears.
- 4.3.10 **IF** a cut, slit, or tear is found on the bag during the inspection, **THEN** perform the following:
- [A] Cover the cut, slit, or tear with tape.
 - [B] Notify the RCT.
 - [C] Follow the RCT directions.
- 4.3.11 Insert cardboard or padding material into the bag before use if waste is likely to cut plastic bag.
- 4.3.12 Pass process waste through the bag-out port to the bag-out bag.
- 4.3.13 Replace the inner lid on the bag-out port.

NOTE

Throughout bag-on and bag-off at the glovebox an RCT must be present to monitor the hands of the operators.

- 4.3.14 Twist the bag-out (horsetail) while performing the following:
- [A] Set up the HEPA filtered local exhaust system to capture any airborne contamination at the site of the horsetail during the cutting operation.
 - [B] Squeeze as much air as possible out of the bag.
 - [C] Gather the bag by twisting or squeezing as close to the bag-out item as possible.
 - [D] Tape the gathered area securely with fiber tape, forming a horsetail about 8 inches long, from the port side to the drum side and from the drum side to port side.

[E] Tape over the fiber tape with vinyl tape wrapping the tape securely, from the port side to the drum side and from the drum side to port side.

[F] Firmly attach two zip ties near the center of the horsetail about 2 inches apart.

[G] Cut the remainder of tie near buckle **AND** assure remainder of tie is thrown in Rad trash.

[H] Tape the 8 inch horsetail securely with vinyl tape, from the port side to the drum side and from the drum side to port side.

[I] Don respiratory protection/PPE per specified IWS.

[J] Cut the bag through the tape between the two zip ties, using PVC pipe cutter.

[K] Place vinyl tape over cut stubs.

4.4 Bag-On of 55-Gallon Drum/Replacement of Bag-Out Bag

4.4.1 Don respiratory protection/PPE per specified IWS.

NOTE

Steps 4.4.2 through 4.4.6 apply to Horizontal Port Bag-On of 55-Gallon Drum.

4.4.2 Obtain a full prepped drum and move into MOVER Room 2.

WARNING

All personnel must be free of pinch points prior to a drum lift and/or move.

4.4.3 Securely fasten the drum lift straps around the drum.

4.4.4 Loosen bolt and jam nut.

4.4.5 VEO in control of drum lift, must confirm all operators are free of pinch points and are aware the lift is about to move.

- 4.4.6 Using the drum lift controls, move the drum to approximately 8 inches from the loading port stub.
- 4.4.7 Remove the retaining band carefully.
- 4.4.8 Slide old bag to bottom rib of drum port.
- 4.4.9 Slide the new bag over the old stub to top rib of the drum port.
- 4.4.10 Secure the new bag with the retaining band.
- 4.4.11 Cut pieces of tape 2" to 4" in length to have available for cuts, slits, and tears that may be found on the bag while doing the bag inspection.
- 4.4.12 Inspect bag-out bag for cuts, slits, or tears.
- 4.4.13 **IF** a cut, slit, or tear is found on the bag during the inspection, **THEN** perform the following:
 - [A] Cover the cut, slit, or tear with tape.
 - [B] Notify the RCT.
 - [C] Follow the RCT directions.
- 4.4.14 Remove the inner lid on the bag-out port (if applicable).

NOTE

Steps 4.4.15 and 4.4.16 apply to Horizontal Port.

- 4.4.15 Remove the old stub to the inside of the glovebox.
- 4.4.16 VEO in control of drum lift, must confirm all operators are free of pinch points and are aware the lift is about to move.
- 4.4.17 Using the drum lift control, move the drum into glovebox until drum clears drum port.

RCT

- 4.4.18 Monitor the area.

VEO

4.4.19 Decontaminate the area as necessary.

4.5 Replacing Gloves

NOTE

One VEO and one RCT are required for all the steps of this section.

VEO

4.5.1 Preparations

[A] Tape plastic (or paper) under the glove port and onto the floor area below it.

[B] Place supplies such as Fantastic™, Kimwipes, trash box, surgeons' gloves, and replacement gloves nearby.

NOTE

The following steps in this section replace the glove.

4.5.2 Don respiratory protection/PPE per specified IWS.

4.5.3 Remove the inner plastic glove ring.

4.5.4 Place the expander inside the new glove approximately 6 inches from the cuff bead.

4.5.5 Insert the new glove in the old glove.

4.5.6 Tighten the expander plug within the confines of the glove port.

4.5.7 Remove the outer glove clamp, hose clamp and rubber hose ring from the old glove.

4.5.8 Fold back the cuff of the old glove.

RCT

4.5.9 Survey the glove port and recommend any decontamination.

CAUTION

In steps 4.5.10 and 4.5.11 make sure the old glove is not caught between the new glove and the surface of the glove port in the area to be covered by the outer glove ring.

VEO

- 4.5.10 Fold the cuff of the new glove over the cuff of the old glove and onto the outer surface of the glove port ring.
- 4.5.11 Replace the rubber hose ring, and outer glove clamp around the new glove.
- 4.5.12 Remove the inner expansion plug.
- 4.5.13 Write the date of glove change on the outer layer of the glove with a permanent marker.
- 4.5.14 Push the old glove into the glovebox.
- 4.5.15 Replace the plastic inner ring on the inside of the new glove where it goes through the glove port.

4.6 Replacing Windows

NOTE

Two VEOs and one RCT are required to complete step 4.6.1 and substeps.

4.6.1 Preparations

[A] Tape plastic (or paper) under and around the window in question and extend it to cover the floor beneath the work area.

[B] Obtain the following supplies and place in work area:

- [B.1] Silicone high vacuum grease
- [B.2] Fantastic™ cleaner or equivalent
- [B.3] Rags
- [B.4] Surgeons' gloves
- [B.5] Trash box
- [B.6] Large plastic bags
- [B.7] 2 new windows

- [B.8] 2 new gaskets
- [B.9] Extra zipper material
- [B.10] Gasket tools
- [B.11] Other materials as needed

[C] Tape the glass to cover the surface and prevent broken glass from spreading contamination if breakage occurs.

NOTE

In the following step, a lower negative pressure may be advisable to reduce forces on the window during replacement.

[D] Adjust the glovebox exhaust to maintain a negative pressure of 0.5 in. of water as indicated on the photohelic.

4.6.2 Remove the old window as follows:

[A] Don respiratory protection/ PPE per specified IWS.

[B] Remove cap-nuts and fire guard from the glovebox's inner window frame.

[C] Pull out the zipper from the window gasket.

NOTE

In the next step the window removal action should start at the top and work down.

[D] Work the window out of the gasket with the gasket tools.

[E] Once the window is out, place it inside the glovebox.

RCT

[F] Monitor the area and recommend decontamination as needed.

VEO

4.6.3 Replace the new window as follows:

[A] Examine the inner and outer grooves in the gasket for any breaks or tears.

[B] **IF** breaks or tears are found,
THEN replace with new window gaskets.

[C] Run a light bead of vacuum grease inside the grooves.

[D] Work the replacement window into the groove using the gasket tool.

RCT

[E] Survey the area.

VEO

[F] **IF** the area is contaminated,
THEN decontaminate per IWS or Host site-specific procedures.

[G] Work the gasket zipper back into the gasket.

[H] Wipe off excess vacuum grease.

[I] Replace the glovebox's window fire guard.

RCT

4.6.4 Clean up as follows:

[A] Survey the area.

[B] **IF** the area is contaminated,
THEN decontaminate per IWS or Host site-specific procedures.

TS

[C] **IF** the old window was removed from the glovebox,
THEN determine whether it is TRU or low-level waste.

VEO and RCT

[D] **AFTER** the operation is completed,
THEN EXIT the area.

VEO

[E] **AFTER** the RCT gives authorization for re-entry per site-specific procedures,
THEN enter the area.

5.0 RECORDS

5.1 Records generated during the performance of this procedure are maintained as Quality Assurance (QA) records in accordance with CCP-QP-008. The records are the following:

5.1.1 QA/Lifetime

[A] Attachment 1 - Drum Closure Form

Attachment 1 - Drum Closure Form

Page ___ of ___

Step	Task	Operator Initials	Date
1.	Drum ID No.:		
2.	Measured Waste Depth _____ ÷ 32 x 100 = _____ Drum Percent Full		
3.	Output drum liner contains no lid.		
4.	Perform a "bag-off". Record closure method.		
5.	Mount the drum lid and install the bolt (closure) ring with the bolt positioned downward and bolt placed directly over drum seam.		
6.	Torque bolt on drum ring to 60 ± 4 ft-lbs. Seat the ring with a rubber mallet ring during tightening or use a drum lid closure. When torquing is completed, tighten jam nut.		
7.	Record the Torque Wrench ID Number and Calibration Due Date. Torque Wrench ID Number _____ Calibration Due Date: _____		
8.	Weight of the packaging (gross weight in kg): _____ File or serial number of the calibrated scale: _____ Scale Gross Weight Uncertainty: _____ Scale calibration due date: _____ Write the weight and date in indelible ink on the drum lid.		