

CCP-TP-505

Revision 6

CCP Removable Lid Canister Loading

EFFECTIVE DATE: 11/16/2010

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PRINTED NAME

APPROVED FOR USE

RECORD OF REVISION

Revision Number	Date Approved	Description of Revision
0	12/13/2006	Initial issue.
1	03/15/2007	Revised to include 40 CFR part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in commerce, and use prohibitions: Marking of PCB's and PCB Items § 761.40 and 40 CFR 761.40, marking as references.
2	03/13/2008	Revised to incorporate Nonconformance Report (NCR) checks and editorial changes.
3	08/20/2008	Revised to incorporate addition for obtaining Removable Lid Canister (RLC) gross weights from facility specific documentation.
4	02/19/2009	Revised to align the Waste Certification Official (WCO) build list generation steps and editorial changes.
5	07/27/2009	Revised to clarify inspection steps, labeling sequencing, addition of rigging steps, and editorial changes.
6	11/16/2010	Revised to incorporate Gasket Shelf Life criteria and editorial changes.

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1.0 PURPOSE

This procedure provides technical requirements and instructions for loading remote-handed (RH) containers into the Removable Lid Canister (RLC) for shipment in the RH-Transuranic (TRU) 72-B Cask for the Central Characterization Project (CCP).

1.1 Scope

This procedure implements the requirements of Waste Isolation Pilot Plant (WIPP) Procedure (WP) 08-PT.07, *RH-TRU 72-B Cask Removable Lid Canister Handling and Operations Manual*.

2.0 REQUIREMENTS

2.1 References

Baseline Documents

- Title 40 *Code of Federal Regulations (CFR), Protection of Environment, Part 262, Standards Applicable to Generators of Hazardous Waste*
- Title 40 CFR Part 262 § 262.31, *Labeling*
- Title 40 CFR Part 262 § 262.32, *Marking*
- Title 40 CFR Part 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and use Prohibitions; § 761.40 Marking of PCB's and PCB Items*
- Title 49 CFR, *Transportation, Part 172, Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans Subpart D, Marking § 172.300 through 172.338*
- Title 49 CFR, Part 172, Subpart E, *Labeling § 172.400 through 172.450*
- CCP-PO-002, *CCP Transuranic Waste Certification Plan*
- CCP-TP-507, *CCP Shipping of Remote-Handled Transuranic Waste*
- DOE/WIPP 02-3283, *RH Packaging Program Guidance*

Referenced Documents

- Title 10 CFR, *Energy, Chapter III, Department of Energy, Part 835, Occupational Radiation Protection Appendix D*
- Title 40 CFR § 761.40 (*Subpart C-Marking of PCBs and PCB Items*)
- CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*
- CCP-QP-002, *CCP Training and Qualification Plan*

- CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*
- CCP-QP-008, *CCP Records Management*
- DOE/WIPP 02-3284, *RH Packaging Operations Manual*
- WP 08-PT.07, *Cask Removable Lid Canister Handling and Operation Manual*

2.2 Training Requirements

2.2.1 CCP 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 Recommended Tools

- Six or 12-point thin wall sockets (for filter vents and pipe plugs,)
- 5/16-inch (in.) hex drive (for pintle cap screws)
- 5/8-in. hex drive (for sealed spring plunger installation/removal)
- Ratchet drive wrench
- Calibrated torque wrench(es) of appropriate range
- RLC Lid installation/removal tool – in certain applications a manual tool or T-bar with a 1-inch hex drive may be used to open or close the RLC
- Grapple, lid latching tool, or appropriately rated slings (for lifting and maneuvering the RLC)
- Canister Storage Stand or equivalent
- Calibrated Load Cell
- RLC Inspection Stand or equivalent
- Flexible spatula, putty knife, or similar tool

2.4 Recommended Spare Parts

- Cap Screws
- O-ring, as applicable
- Gasket
- Pipe plugs
- Filter vents, as authorization in accordance with Step 2.6.9
- Sealed spring plungers

NOTE

Filter Vents and Pipe Plugs - for sealing the threads of the filter vents and pipe plugs, a thread sealant tape or compound is recommended. However, a liquid anaerobic thread sealant is acceptable.

2.5 Recommended Supplies (Commercially Available)

- Spray silicone, silicone grease, or other Washington TRU Solutions (WTS) approved lubricant for lubrication of gasket
- Petroleum jelly or other WTS approved rust inhibitor/assembly aid for lubrication of lid flange and body flange only
- Thread locking compound, LOCTITE® 243 (for sealed spring plungers) or approved equivalent
- Gasket joint splicing compound, LOCTITE® 598 or approved equivalent
- Spray adhesive (3M® 77 or WTS Engineering approved equivalent)
- Denatured Alcohol or general purpose adhesive remover (containing an approximate equal mixture of Naptha and Xylene)

2.6 Precautions and Limitations

2.6.1 Removable surface contamination on the outer surfaces of the RLC shall **NOT** exceed the values in Title 10 CFR, *Energy*, Chapter III, *Department of Energy*, Part 835, *Occupational Radiation Protection Appendix D* (20 disintegrations per minute [dpm]/100 square centimeters [cm²] alpha, 200 dpm/100cm² beta/gamma).

- 2.6.2 The Transportation Certification Official (TCO) shall be notified if any of the following items are exceeded:
- [A] Radiation dose rates exceed 1,000 roentgen equivalent man (rem) per hour at contact (beta+gamma+neutron).
 - [B] Alpha contamination survey results exceed 20 dpm/100 cm².
 - [C] Beta/gamma contamination survey results exceed 200 dpm/100 cm².
- 2.6.3 Each waste container to be canisterized shall be verified to meet RH packaging requirements before loading into the RLC.
- 2.6.4 If hardware replacement is required, replacement hardware shall meet the requirements of the assembly/manufacturing drawing.
- 2.6.5 If required, spring plungers will be installed/replaced using the instructions found in WP 08-PT.07, Removable Lid Canister Handling and Operation Manual.
- If the use of dunnage, blocking, or bracing has been determined to be applicable to the payload, the shipper shall assume the responsibility of ensuring that large, bulky, sharp, or heavy objects are blocked or braced appropriately on a case-by-case basis. This includes the blocking or bracing of objects inside drums. Dunnage drums shall be required when the RLC payload consists of one or two drums only. All dunnage, blocking, or bracing shall meet the requirements of CCP-PO-505, *CCP Remote-Handled Transuranic Waste Authorized Methods for Payload Control (CCP RH-TRAMPAC)*.
- 2.6.6 RLCs should be stored indoors whenever possible. If outdoor storage is unavoidable, then the RLCs should be covered and stored on blocks to prevent corrosion and the ingress of water. The user shall perform a pre-use inspection of the RLC to ensure packaging integrity has been maintained during outdoor storage.
- 2.6.7 All drums shall be closed in accordance with the intended function of the drum closure mechanism. The RLC clearance diameter is 24-5/8 inch. The maximum clearance dimension of the drum and locking mechanism must fit within this dimension.
- 2.6.8 The RLC requires a minimum of one 3/4 in. National Pipe Straight Mechanical (NPSM), gasketed filter vent; up to four filter vents may be used per RLC to achieve the minimum hydrogen diffusivity of 1.48E-5 (mols per second per mol [mols/s/mol] fraction at

25 degrees Celsius [$^{\circ}\text{C}$]) as specified in the Safety Analysis report for the RH-TRU 72-B Shipping Package and as authorized by the CCP RH-TRAMPAC.

2.6.9 When loading the RLC canister into RH-TRU 72-B Cask and limited crane hook heights are encountered, the RLC gross weight values obtained in this procedure may be transferred to the applicable attachments in DOE/WIPP 02-3284, *RH Packaging Operations Manual*. The load cell usage in DOE/WIPP 02-3284 for weighing the RLC a second time would be optional. The weighing of the RLC using a calibrated Load Cell meets the requirement for weighing the RLC in the DOE/WIPP 02-3284, thus a second weighing operation is redundant. This will also help to reduce additional radiation exposure to the operators As Low As Reasonably Achievable (ALARA).

2.6.10 Only qualified personnel shall be permitted to handle, rig, transport, or otherwise use the packaging. The user shall be responsible for determining qualifications of individuals.

2.7 Prerequisite Actions

2.7.1 Verify equipment pre-operational inspections have been completed using site-specific procedures.

2.7.2 Verify drums are not listed on the site-specific CCP Nonconformance Report (NCR) by checking the File Transfer Protocol (ftp) link. If a drum is found on the site-specific NCR, the TCO and Waste Certification Official (WCO) will be notified and the applicable loading operation on the specific RLC will be suspended, until the issue is resolved.

3.0 RESPONSIBILITIES

3.1 Host Site Supervisor

3.1.1 Supervises preparation of the loading area by Host site personnel.

3.1.2 Coordinates loading activities.

3.1.3 Reviews and signs Attachment 1, RLC Loading Form.

3.2 Canister Loading Operator

3.2.1 Prepares the waste canister for loading.

3.2.2 Loads the waste canister per WCO loading instructions.

3.2.3 Completes and signs Attachment 1.

3.3 Radiological Control Technician (RCT)

3.3.1 Performs radiation and contamination surveys of loaded waste canisters.

3.4 Peer Verifier

3.4.1 Verifies containers to be loaded into RLC match the container numbers listed on Attachment 1.

3.4.2 Reviews and signs Attachment 1.

3.5 Transportation Certification Official (TCO)

3.5.1 Interfaces with Host site personnel when listed radiation/contamination values are exceeded.

3.5.2 Interfaces with Host site personnel when container integrity issues arise.

3.5.3 Assists in NCR generation/resolution from issues arising from packaging issues.

- 3.6 Waste Certification Official (WCO)
 - 3.6.1 Selects waste containers for canisterization.
 - 3.6.2 Provides Host site personnel with loading instructions for waste canisters.
 - 3.6.3 Assists in disposition of NCRs.
- 3.7 Facility Records Custodian
 - 3.7.1 Receives, processes, and transmits records generated by this procedure in accordance with CCP-QP-008, *CCP Records Management*.

4.0 PROCEDURE

4.1 Preparing Waste Canister for Loading

NOTE

The RLC can be moved and stored horizontally while it is in the shipping crate. Once unpackaged, the RLC should be stored vertically and must be moved vertically with a grapple, slings, lifting tool, or snares attached to the pintle only.

NOTE

If during the unpacking operations damage is found on the exterior of the RLC, unpacking operations will be STOPPED and the supervisor/TCO will be contacted.

NOTE

Labels may be installed at anytime prior to step 4.1.3.

NOTE

During inspections, if damage is found that could affect the containment integrity of the packaging, then the supervisor/TCO will be contacted, and an NCR will be generated in accordance with CCP-QP-005, *CCP TRU Nonconforming Item Reporting and Control*.

Canister Loading Operator

4.1.1 RLC Unpacking

- [A] Obtain RLC Loading Instructions from WCO.
- [B] With the RLC crate positioned horizontally in a suitable location for unpackaging, remove the top and end panels of the crate to gain access to the RLC (if applicable).
- [C] Inspect the bottom of the RLC for damage.
- [D] Ensure the RLC lid is in the locked position.
- [E] Using an overhead hoist/crane and the appropriately rated rigging attached to the pintle, lift the RLC out of the crate.

NOTE

If using the silo as the inspection stand, the accessible exterior surfaces of the RLC are inspected for damage, prior to placing the RLC into the silo.

- [F] Place RLC into RLC Inspection Stand (or equivalent).

- [G] Secure the RLC to the RLC Inspection Stand (or equivalent).
- [H] Remove the grapple/rigging from lid (if applicable).
- [I] Verify absence of a HOLD TAG.
- [J] Inspect all accessible exterior surfaces of the RLC for damage.
- [K] Record RLC Canister ID on Attachment 1 (from WCO Loading Instruction).
- [L] Verify the RLC Lid and Body Serial Numbers match, **AND** record the RLC Serial Number on Attachment 1.
- [M] Retract the spring plungers to allow the lid to rotate.
- [N] Using the appropriate tool, rotate the lid counterclockwise approximately 22.5 degrees until the alignment mark on the lid lines up with the mark on the body labeled "U" indicating the lid is in the unlocked position and can be removed.
- [O] Ensure a grapple, lid latching tool, **OR** suitable rigging, capable of lifting 500 pounds (lbs)., is attached to the lid pintle cap.

WARNING

Fingers should be kept clear of the pinch points present between lid and body.

- [P] Lift the lid upward/off and clear of the RLC body shell flange.

WARNING

NO body part should extend under the suspended load (RLC lid).

- [Q] Inspect the bottom surfaces of the lid to ensure there is NO scratching or gouging of the metal.
- [R] Set the lid down in a manner that will protect the interfacing surfaces.
- [S] Ensure pipe plugs and filter(s) are removed from the lid.

NOTE

The quantity of filters installed, from one to four, is governed by the minimum specifications for total hydrogen diffusivity (See Step 2.6.8). The unused filter ports shall be sealed with 3/4-in. National Pipe Thread (NPT) socket recessed pipe plugs per the following:

- [T] Install filters and plugs per the following:
 - [T.1] Record Filter Type Number, Filter Serial Number(s), and Filter Installation Date on Attachment 1.
 - [T.2] Apply a generous amount of pipe thread sealant compound or sealant tape to the threads of the filter(s) to be installed.
 - [T.3] Install filter(s) into the threaded port(s) of the pintle base of the RLC lid.
 - [T.4] Torque each filter to 180 lbs-in (15 lbs-feet [ft]) or as specified by the manufacturer.
 - [T.5] Apply a generous amount of pipe thread sealant compound or sealant tape to the threads of each pipe plug(s).
 - [T.6] Install each pipe plug into the pintle base ports, **AND** torque to 300 ± 50 lbs-in (25 ± 4 lbs-ft).
 - [T.7] Remove all excess pipe plug sealant from the exterior of the container.
 - [T.8] Record Torque Wrench Serial Number(s) and Calibration Due Date(s) on Attachment 1.

NOTE

Steps in Section 4.1.2 can be performed in parallel.

4.1.2 Maintenance and Inspection of RLC

NOTE

During the inspection of the container, if defective parts or components are identified, the RLC shall **NOT** be used until components are replaced with materials meeting the original specification requirements to maintain U.S. Department of Transportation (DOT) 7A certification. The Replacement parts are available from the manufacturer.

[A] Inspect the pintle cap for damage **OR** signs of fatigue, **AND** replace if such signs are found in accordance with WP 08-PT.07.

[A.1] **IF** pintle cap screws are found to be loose, **THEN** torque pintle cap screws to 500+/- 50 lb-in (41.5 +/- 4 lb-ft).

[A.2] **IF** pintle cap screws were torqued, **THEN** record the Torque Wrench Serial Number, **AND** Calibration Due Date on Attachment 1.

[B] Inspect the retractable spring plungers for damage, **AND** replace as needed in accordance with WP 08-PT.07.

[C] Inspect the gasket for defects (uneven or deformed sealing surfaces due to cuts, gouges, or missing material), **AND** replace with a new gasket when needed per the following:

[C.1] Using a flexible spatula, putty knife, or similar tool; clean the lid flange gasket seating area thoroughly by removing any residual gasket components or adhesive.

[C.2] Apply a light coat of denatured alcohol or a general purpose adhesive remover to remove residual adhesive from the lid flange gasket seating area.

- [C.3] Verify that the gasket shelf life has not expired or is within the allowable shelf life range (See Attachment 3, Gasket Shelf Life, Storage, and Adhesive, of this procedure).
- [C.4] Place the new gasket in a circle around the lid with the self-adhesive/protective tape facing the lid flange.
- [C.5] Remove the self-adhesive protective tape from the gasket while seating the gasket against the lid flange.
- [C.6] Verify the gasket final installation to assure the gasket and lid sealing surfaces are clean, free of dirt, foreign particles, or other contaminants.
- [D] Inspect the body shell flange for cleanliness, **AND** clean if needed using denatured alcohol.
- [E] Inspect RLC interior and exterior surfaces for signs of damage, distortion, or signs of corrosion.
- [F] **IF** the lid/body interfaces are dry (without lubricant), **THEN** apply a light coat of spray silicone to the lid/body interfaces.
- [G] **WHEN** maintenance and inspections are completed satisfactorily, **THEN** print name, sign, and date Attachment 1.

4.1.3 Marking and Labeling

NOTE

Each canister shall be labeled with a unique payload canister identification (ID) number that includes a site identifier as a prefix. The characters composing the canister ID number shall be approximately two inches high and of a color contrasting with their background. Canister ID numbers shall be placed at approximately equal intervals around the circumference of the canister and within 18 inches of the top of the canister. Variances from these requirements require Carlsbad Field Office (CBFO) approval.

- [A] Mark and label the RLC as follows:
 - [A.1] Minimum of three canister ID numbers.
 - [A.2] Minimum of one Caution Radioactive Material label.

- [A.3] Minimum of one, when applicable, Hazardous Waste and U.S. Environmental Protection Agency (EPA) Hazardous Waste Number(s) label.
- [A.4] Minimum of one, when applicable, Polychlorinated Biphenyl (PCB) label in accordance with 40 CFR § 761.40 (*Subpart C-Marking of PCBs and PCB Items*).

NOTE

Section 4.2 is only required when the RLC is to be moved to another location for loading/storage and when other movements are required (i.e., movement of RLC into storage rack insert, hold areas, etc.).

NOTE

When movement of the RLC is required, some of the steps in Section 4.2 may have been completed previously during the process. Canister Loading Operators are to verify step completion prior to movement (i.e., verifying the lid is in the locked position, verifying the rigging is properly installed).

4.2 RLC Lid Installation/Removal for Movement in and out of Loading Area

4.2.1 RLC Lid Installation

- [A] Ensure the RLC is secured in the RLC Inspection Stand (or equivalent).

CAUTION

To prevent damage to the closure interfaces, the lid must be kept as level as possible during installation.

- [B] Ensure a grapple, lid latching tool, **OR** suitable rigging, capable of lifting 500 lbs., is attached to the lid pintle cap.

- [C] Lift the lid above the container.

- [D] Position the lid so the lid alignment mark is positioned over the mark on the body flange labeled "U."

NOTE

Sufficient time will be allowed for air to escape the RLC as the lid is lowered into the body.

- [E] Lower the lid slowly onto the body flange until fully seated on the gasket, keeping the mark on the lid aligned with the mark on the body flange.
- [F] Remove the grapple/rigging from lid (if applicable).
- [G] Using the appropriate tool, rotate the lid clockwise approximately 22.5 degrees until the mark on the RLC lid aligns with the mark on the RLC body labeled "L", and the spring plungers lock into the detents of the body flange.
- [H] Ensure a grapple, **OR** suitable rigging is attached to the lid pintle cap.
- [I] Ensure the securing device in the RLC Inspection Stand or equivalent is released.
- [J] If required, move the RLC to the loading area.

4.2.2 RLC Lid Removal

- [A] Ensure the RLC is secured in the RLC Inspection Stand (or equivalent).
- [B] Remove the grapple/rigging from lid (if applicable).
- [C] Retract the spring plungers to allow the lid to rotate.
- [D] Using the appropriate tool, rotate the lid counterclockwise approximately 22.5 degrees until the alignment mark on the lid lines up with mark on the body labeled "U" indicating the lid is in the unlocked position and can be removed.
- [E] Ensure a grapple, lid latching tool, **OR** suitable rigging, capable of lifting 500 lbs., is attached to the lid pintle cap.

WARNING

Fingers should be kept clear of the pinch points present between lid and body.

- [F] Lift the lid upward/off and clear of the RLC body shell flange.

- [G] Set the lid down in a manner that will protect the interfacing surfaces.
- [H] Remove the grapple/rigging from lid (if applicable).

4.2.3 Canisterization of Waste Containers

- [A] **IF** dunnage is part of the payload, **THEN** inspect to ensure the following, **AND** check appropriate blocks on Attachment 1:
 - Container is empty
 - Container is dry
 - Container vent port plug removed
- [B] **IF** dunnage is part of the payload, **THEN** record dunnage container weight in pounds (lbs) on Attachment 1.
- [C] Record RH Waste Container Numbers that are to be loaded into RLC on Attachment 1.

NOTE

The sealing surfaces of the RLC will be protected from damage while loading RH waste containers.

NOTE

For reducing excess radiation exposure to the RH-TRU 72-B Cask Operators ALARA, high dose rate drums may be loaded in the bottom of the RLC. ALARA issues take precedence over weight distribution.

NOTE

To prevent the RLC from being top-heavy, drums will be loaded in the RLC such that the weight is distributed as evenly as possible so that the center-of-gravity is close to center of the RLC.

NOTE

Peer verification can occur simultaneously as the drums are removed from shielding and placed into RLC.

Operator

- [D] Verify RH waste containers to be loaded into RLC match numbers on Attachment 1, **AND** initial Attachment 1.

Peer Verifier

- [E] Verify RH waste containers to be loaded into RLC match numbers on Attachment 1, **AND** initial Attachment 1.

Canister Loading Operator

- [F] Place specified RH waste containers and dunnage (if applicable) into the RLC using appropriate rigging.

Peer Verifier

- [G] Print name, sign, and date Attachment 1.

Canister Loading Operator

4.2.4 RLC Closure

CAUTION

To prevent damage to the closure interfaces, the lid must be kept as level as possible during installation.

- [A] Ensure the RLC is secured in the RLC Inspection Stand (or equivalent).
- [B] Attach a grapple, lid latching tool, **OR** suitable rigging, capable of lifting 500 lbs., to the lid pintle cap.
- [C] Lift the lid above the container.
- [D] Position the lid so that the lid alignment mark is positioned over the mark on the body flange labeled "U."

NOTE

Sufficient time will be allowed for the air to escape the RLC as the lid is lowered into the body.

- [E] Lower the lid slowly onto the body flange until fully seated on the gasket, keeping the marks on the lid aligned.
- [F] Remove the grapple/rigging from lid (if applicable).

- [G] Using the appropriate tool, rotate the lid clockwise approximately 22.5 degrees until the mark on the RLC lid aligns with the mark on the RLC body labeled "L" and the spring plungers lock into the detents of the body flange.
- [H] Record RLC closure date on Attachment 1.
- [I] Ensure a grapple, **OR** suitable rigging, and load cell (if applicable) are attached to the lid pintle cap.

NOTE

Steps 4.2.4[J] and 4.2.4[K] may be omitted if certified weights of the RLC, waste drums, and any packing material is available from the generator site. The generator site documentation, with the components, weights, and calibrated load-cell information, will be submitted to the WCO, TCO, and CCP Records as part of the data package. The gross weight obtained from the generator site documentation will be recorded on Attachment 1. The words "See Attached" will be written in the load cell serial number and calibration due date blanks, on Attachment 1.

- [J] Raise the RLC to obtain gross weight and record on Attachment 1.
- [K] Record Load Cell serial number and Calibration Due Date on Attachment 1.

RCT

- [L] Perform dose rate and contamination survey of RLC.
- [M] **IF** any of the following are exceeded, **THEN** notify the TCO:
 - [M.1] Radiation dose rate exceeds 1000 rem per hour (beta - gamma + neutron) at contact.
 - [M.2] Alpha contamination survey results exceed 20 dpm/100 cm².
 - [M.3] Beta/gamma contamination survey results exceed 200 dpm/100 cm².
- [N] Place RLC into canister storage stand, silo, or 72-B Cask (as required).

- [O] Document survey results on Radiation Survey Report (see Attachment 2, Radiological Survey Report for an example) per Host site procedure in accordance with Title 10 CFR 835.

Canister Loading Operator

- [P] Print name, sign, and date Attachment 1.

Supervisor

- [Q] Print name, sign, and date Attachment 1 signifying completion of Attachment 1.

Supervisor or Designee

NOTE

E-mail notifications can be made in lieu of Fax notifications. E-mail addresses can be obtained by contacting the WCO.

- [R] Fax copy of Attachment 1, Survey Report, and any Generator Site Documentation of RLC Gross Weight (if applicable) to WCO.
- [S] Provide copy of Attachment 1, Radiological Survey Report, and any Generator Site Documentation of RLC Gross Weight (if applicable) to TCO.
- [T] Submit copy of Attachment 1, Radiological Survey Report, and any Generator Site Documentation of RLC Gross Weight (if applicable) to the Facility Records Custodian.

Facility Records Custodian

- [U] Receive, process, and transmit records in accordance with CCP-QP-008.

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/Nonpermanent

[A] Attachment 1, RLC Loading Form

[A.1] Copy of Radiological Survey Report

[A.2] Copy of Generator Site Documentation of RLC Gross Weight (if applicable)

Attachment 1 – RLC Loading Form

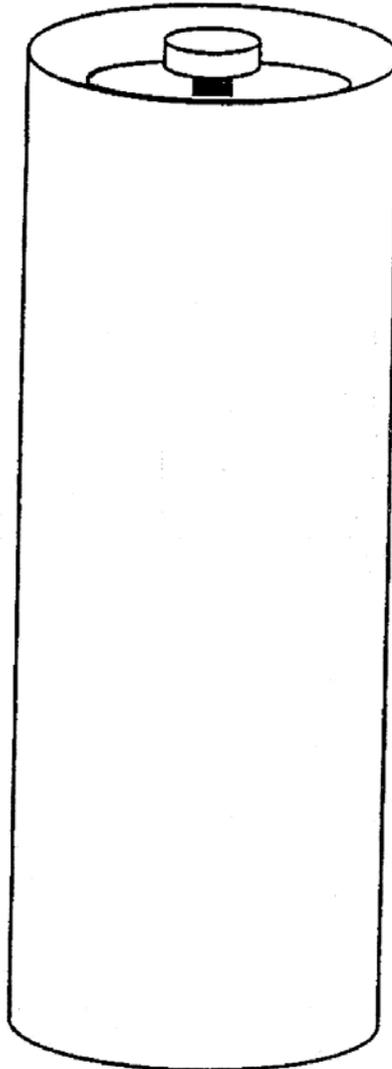
RLC Inspection		
RLC Canister ID: _____		
RLC Serial Number: _____		
Filter Type Number	Filter Serial Numbers	Date Filter Installed
1	1	1
2	2	2
3	3	3
4	4	4
Pintle Cap Screws		
Torque Wrench Serial Number: _____ Cal Due Date: _____		
Filters/Pipe Plugs		
Torque Wrench Serial Number: _____ Cal Due Date: _____		
Maintenance/Inspections Complete		
Canister Loading Operator		
Printed Name _____ Signature _____ Date _____		
Dunnage Container is empty? YES <input type="checkbox"/> NO <input type="checkbox"/> NA <input type="checkbox"/>		
Dunnage Container is dry? YES <input type="checkbox"/> NO <input type="checkbox"/> NA <input type="checkbox"/>		
Dunnage Container vent port plug removed? YES <input type="checkbox"/> NO <input type="checkbox"/> NA <input type="checkbox"/>		
Dunnage Container Weight in pounds (lbs) : _____		
RH Waste Container Numbers	Operator Initials	Peer Verifier Initials
Peer Verifier – Waste containers loaded into RLC match RH Waste Container Numbers listed above.		
Printed Name _____ Signature _____ Date _____		
RLC Closure Date: _____		
Gross Weight in pounds (lbs) : _____		
Load Cell Serial Number: _____ Calibration Due Date: _____		
Canister Loading Operator		
Printed Name _____ Signature _____ Date _____		
Supervisor		
Printed Name _____ Signature _____ Date _____		

Attachment 2 – Radiological Survey Report (Example)

Radiation & Contamination Survey Form

CM-P-RP-306 Rev. 4, Radiation/Contamination Surveys

SURVEY NO: 09-SUR-00423					PAGE 1 OF 2 PAGES	
Instruments Used					LOCATION / TYPE: RH 72-B Canister	
Instrument Type	Serial Number	Cal Due Date	Alpha Eff.	Beta Eff.	PURPOSE: Job Coverage	
LM 12-4 / LM 42-31	215331 / 215331	04/24/09	N/A	N/A		
LM-78 / LM-78	238300 / 238300	05/14/09	N/A	N/A		
Tennelec 5XLB	78474 - Unit 1	10/29/09	N/A	N/A		
FHT 6020 / FHZ 612	934 / 42540 925	03/03/09	N/A	N/A		
FHT 6020 / FHT 762-V	934 / 45540 100	03/03/09	N/A	N/A		
DATE/TIME: 02/20/09 20:13					RWP/ALARA: 09-TRU-012R0	



72-B Canister
OR-0001

Highest gamma dose rate
1,900 mR/hr

Highest neutron dose rate
750 mRem/hr

Total gamma+neutron
2,350 mRem/hr

COPY

*On Contact (OC) or $\frac{OC}{30cm}$ Smear LAS Direct

REMARKS: All dose rates in mR/hr gamma and mrem/hr neutron unless otherwise noted. LAS in dpm/probe, smears in dpm/100 sq. cm.

RCT SIGNATURE: J. Styre *J. Styre* RCO SIGNATURE: *S. Byers* Date: *2/20/09*

The signature(s) on this sheet are that of the responsible technician(s) who certify that the data recorded represent the readings, measurements, and/or observations at the time indicated.

Attachment 2 – Radiological Survey Report (Example) (Continued)

T-CM-FW-P-RP-306 Radiation/Contamination Surveys **Sample Report**
Survey Number: *09-SUR-00123*

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Batch ID:	Smears - 200902201930	Count Date:	2/20/2009
Group:	A	Count Minutes:	0.8
Device:	S5XLB, Unit 1-SN 78474	Count Mode:	Simultaneous
Batch Key:	8,421	Operating Volts:	1440
Selected Geometry:	5/16" Stainless Steel		

Background (cpm)		Efficiency (%)		Spillover (%)	
Alpha Rate:	0.21 ± 0.02	Alpha:	31.95 ± 0.26	Alpha to Beta:	6.10 ± 0.00
Beta Rate:	4.17 ± 0.09	Beta:	40.54 ± 0.14	Beta to Alpha:	0.07 ± 0.00

Sample ID	Sample Type	Alpha (dpm)	Unc	Alpha MDA (dpm)	Beta (dpm)	Unc	Beta MDA (dpm)
20090220193051-A1	Unknown	-0.66	0.06	16.75	-3.67	4.66	28.00
20090220193342-A2	Unknown	-0.66	0.06	16.74	-6.96	3.30	28.00
20090220193432-A3	Unknown	-0.66	0.06	16.74	-6.96	3.30	28.00
20090220193532-A4	Unknown	-0.66	0.06	16.76	-0.38	5.70	28.00
20090220193632-A5	Unknown	-0.65	0.06	16.73	-10.25	0.23	28.00
20090220193732-A6	Unknown	-0.66	0.06	16.74	-6.96	3.30	28.00
20090220193832-A7	Unknown	-0.66	0.06	16.74	-6.96	3.30	28.00
20090220193922-A8	Unknown	3.51	4.17	16.75	-3.87	4.66	28.20
20090220194022-A9	Unknown	3.52	4.17	16.74	-7.16	3.30	28.20
20090220194122-A10	Unknown	3.52	4.17	16.74	-7.16	3.30	28.20

Reviewed by:

J. STYRE / J. Styre *S. Byers Scott Byers*

Attachment 3 – Gasket Shelf Life, Storage, and Adhesive

The information in this section has been approved by the manufacturer of the RLC gaskets, and is intended to clarify the allowable shelf life of RLC gaskets based on the gasket material only, exclusive of the adhesive. Justification for use of gaskets beyond the shelf-life provided by the gasket manufacturer is based on the following:

The gasket shelf life is indicated on the Certificate of Conformance (C of C) provided by the gasket manufacturer. According to the gasket C of C, the shelf life for the RLC lid gasket is limited to two years due to the shelf life of the pressure sensitive adhesive (PSA). The RLC gasket material itself has a shelf life of up to five years, providing the gaskets have been stored in accordance with the conditions described in this section.

The PSA on the RLC gasket is used as an operational aid for holding the gasket in place during installation. The PSA serves no other purpose, and is not considered to be part of the containment boundary or the Type A packaging design.

To maximize the shelf life of RLC gaskets, the gaskets should be stored in a dry location where they are protected against light, radiation, humidity, and vapors. The ideal storage temperature is 70° Fahrenheit (F) ± 10°F although storage temperatures between 60°F and 90°F are acceptable.

RLC gaskets, whether installed or not may be used beyond the shelf life of the PSA, providing less than five years has elapsed from date of manufacture, and they meet the inspection criteria in Section 4.1.2 [C].

If the RLC gasket meets the shelf life criteria of this section and the inspection criteria in Section 4.1.2 [C], but the PSA adhesion is inadequate, spray adhesive, 3M[®] 77, (or WTS Engineering approved equal) may be used to adhere the gasket to the RLC lid.