Oak Ridge National Laboratory (ORNL)
Transportation and Packaging Management (TPM)
Container Preparation and Filling Instructions/Checklist

UN Double-Wall Corrugated Fiber Box	ORNL-CHK-41, Rev. 1

INSTRUCTIONS: Complete the activities below following the instructions in Section A. Activities should be checked off as performed. The completed checklist should then be signed by the Operating Personnel completing the checklist and submitted to the Operations Supervisor for approval for shipment.

NOTE 1: The UN marked double-wall corrugated fiber boxes are authorized for use as single packagings only of solid hazardous materials.

NOTE 2: The maximum allowable gross weight is printed on the side of each corrugated box in kilograms [ex., 125kg (275 lbs)]. Allowable weight applies to Packaging Group II or III solid materials [PG I is not authorized.]

NOTE 3: UN double-wall corrugated fiber boxes are not authorized to be used as a *DOT 7A Type A RAD* packaging.

NOTE 4: Refer to Appendix A, UN Double-Wall Corrugated Fiber Boxes, for sizes, markings, and catalog numbers of double-wall corrugated fiber boxes.

A. UN 4G/Y Double-Wall Corrugated Fiber Box
Stores Catalog No. 02-114-xxxx

Operating Personnel

_____ 1. Inspect the corrugated box to be filled to ensure it is in good physical condition and there are no critical damages, fiberboard tears/cuts, etc. that could develop into a leak or cause box failure during normal storage or in transportation.

_____ 2. Ensure the material to be filled into the corrugated box is compatible with (will not wet, deteriorate, or generate fumes that will attack) the corrugated box's internal fiber surface.

_____ 3. Assemble the corrugated box by folding all box flaps, top, and bottom along the score line and sealing the bottom flaps of the box securely with tape as specified below:

   a. The boxes must be sealed with 3-inch wide, reinforced, water reactive-glue tape or tape of an equivalent or greater strength.

   b. The outer bottom box flaps must touch when folded together (no gaps between flap edges).

   c. The tape must overlap both ends of the box, at least 2.5-inches (minimum) on the side of the box.

**A. UN 4G/Y Double-Wall Corrugated Fiber Box
Stores Catalog No. 02-114-xxxx (cont'd)**

Operating Personnel

_____ 4. **IF** the material being filled into the corrugated box has a moisture content such that it could penetrate/wet through the fiber of the box or weaken the box closures, **THEN**
   Ensure that a polyethylene bag liner is inserted into the corrugated box prior to filling.

_____ 5. **IF** the corrugated box is to be filled with solid hazardous materials/wastes, **THEN**
   Fill the box according to the requirements/limitations specified in **NOTE 2** on page one.

_____ 6. **IF** the box contains a plastic inside liner, **THEN**
   Ensure that the liner (bag) is securely closed (tied off with knot, band, string, etc.--no wire) and is still in good condition (no tears, punctures, etc.) PRIOR to closing the top box flaps of the double-wall corrugated box.

_____ 7. Close and seal the top flaps of the double-wall corrugated fiber box in the same manner as the bottom flaps under **Step A.3** on page one.

_____ 8. Label and mark the corrugated box in accordance with current ORNL/Department of Transportation (DOT) requirements.

_____ 9. **IF** the corrugated box is scheduled for off-site shipment, **THEN**
   Contact the ORNL Transportation and Packaging Management organization for appropriate DOT markings and labeling.

_____ 10. Sign and date the checklist in the appropriate signature block verifying the activities have been performed and the checklist has been completed.

_____ 11. Submit this completed checklist to the Operations Supervisor for approval for shipment.

A. UN 4G/Y Double-Wall Corrugated Fiber Box
Stores Catalog No. 02-114-xxxx (cont'd)

Operations Supervisor

_____ 12. Verify that all defined activities have been successfully completed.

_____ 13. Sign and date the checklist in the appropriate signature block, approving the corrugated fiber box for shipment.

APPROVED FOR SHIPMENT:

Operating Personnel:	**Date:**
Operations Supervisor:	**Date:**

Prepared by: ORNL TPM Organization

Approved by: *Jeff Shelton*   *August 20, 2002*
Jeff Shelton, Manager (576-6401)
ORNL TPM - Packaging Operations

A. UN 4G/Y Double-Wall Corrugated Fiber Box
Stores Catalog No. 02-114-xxxx (cont'd)

APPENDIX A

UN Double-Wall Corrugated Fiber Boxes

SIZE	MARKINGS	CATALOG NUMBER
12 X 12 X8	UN 4G/Y 45/S	02-114-5883
12 X 12 X 12	UN 4G/Y 45/S	02-114-5884
16 X 16 X 16	UN 4G/Y 65/S	02-114-5886
18 X 18 X 12	UN 4G/Y 60/S	02-114-5887
22 X 22 X 20	UN 4G/Y 75/S	02-114-5765
24 X 24 X 24	UN 4G/Y 70/S	02-114-5890
28 X 18 X 16	UN 4G/Y 65/S	02-114-5760
40 X 20 X 18	UN 4G/Y 65/S	02-114-5850
48 X 24 X 24	UN 4G/Y 80/S	02-114-5891

Table updated 8/20/2002 to reflect only those DW Corrugated Fiber Boxes stocked at ORNL.