DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	Packaging Engineering	Date 05/12/95
Project Title/Work Order		EDT No. 608484
Safety Evaluation for Packaging CPC Metal Boxes (WHC-SD-TP-SEP-034)		ECN No. NA

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

608484

2. To: (Receiving Organization) Packaging Engineering	3. From: (Originating Organization) Packaging Engineering	4. Related EDT No.: NA
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8. Originator Remarks: For approval.		9. Equip./Component No.: NA
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11. Receiver Remarks:		12. Major Assm. Dwg. No.: NA
		13. Permit/Permit Application No.: NA
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1	WHC-SD-TP-SEP-034		0	Safety Evaluation for Packaging CPC Metal Boxes	SQ	1	1	1

16. KEY											
Approval Designator (F)		Reason for Transmittal (G)				Disposition (H) & (I)					
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(G)	(H)	17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)								(G)	(H)
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
1	/	Cog.Eng.: T Romano	<i>T. Romano</i>	5/15/95	G2-02						
1	/	Cog. Mgr.: JG Field	<i>JG Field</i>	5/15/95	G2-02						
1	/	QA: CR Hoover	<i>CR Hoover</i>	5/15/95	H4-16						
1	/	Safety: DW McNally	<i>DW McNally</i>	5-15-95	G2-03						
1	/	Rev. Review: R.J. Smith	<i>R.J. Smith</i>	5/15/95	G2-02						
1	/	Tank Farm: MD Ellefson	<i>MD Ellefson</i>	5/15/95	S6-30						
1	/	HMO: EF Votaw	<i>EF Votaw</i>	5/15/95	G2-02						
18.		19.				20.		21. DOE APPROVAL (if required)			
T. Romano <i>T. Romano</i> 5/15/95 Signature of EDT Originator		Authorized Representative Date for Receiving Organization				<i>JG Field</i> 5/15/95 Cognizant Manager Date		Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments			

RELEASE AUTHORIZATION

**Document
Number:**

WHC-SD-TP-SEP-034, Rev. 0

**Document
Title:**

Safety Evaluation for Packaging CPC Metal Boxes

Release Date:

May 15, 1995

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

V.L. Birkland
V.L. Birkland

May 15, 1995

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SUPPORTING DOCUMENT		1. Total Pages 4
2. Title Safety Evaluation for Packaging CPC Metal Boxes	3. Number WHC-SD-TP-SEP-034	4. Rev No. 0
5. Key Words SEP, CPC, Container Products Corporation, Type A, Interarea, Metal, Box	6. Author Name: Tino Romano Signature Organization/Charge Code 84100/N134D	
7. Abstract This Safety Evaluation for Packaging (SEP) provides authorization to use Container Products Corporation (CPC) metal boxes for onsite, Type A shipments. Use of the boxes is authorized until November 30, 1995.		
		8. RELEASE STAMP <div><div>OFFICIAL RELEASE BY WHC DATE MAY 15 1995 </div><div>20</div></div>

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LIST OF TERMS

CFR	Code of Federal Regulations
CPC	Container Products Corporation
CWC	Central Waste Complex
DOT	U.S. Department of Transportation
SEP	Safety Evaluation for Packaging

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This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

1.0 GENERAL INFORMATION

This Safety Evaluation for Packaging (SEP) provides authorization for the use of Container Products Corporation (CPC) metal boxes, as described in this document, for the interarea shipment of radioactive contaminated equipment and debris for storage in the Central Waste Complex (CWC) or T Plant located in the 200 West Area. Authorization is granted until November 30, 1995.

The CPC boxes included in this SEP were originally procured as U.S. Department of Transportation (DOT) Specification 7A Type A boxes. A review of the documentation provided by the manufacturer revealed the documentation did not adequately demonstrate compliance to the 4 ft drop test requirement of 49 CFR 173.465(c). Preparation of a SEP is necessary to document the equivalent safety of the onsite shipment in lieu of meeting DOT packaging requirements until adequate documentation is received.

The equivalent safety of the shipment is based on the fact that the radioactive contents consist of contaminated equipment and debris which are not dispersible. Each piece is wrapped in two layers of no less than 4 mil plastic prior to being placed in the box which has an additional 10 mil liner. Pointed objects and sharp edges are padded to prevent puncture of the plastic liner and wrapping.

Should an accident occur resulting in containment being breached, the consequences would be consistent with that of a DOT Type A packaging. In addition, the shipment is onsite and will not be on public highways. The boxes have been used onsite for a number of years without incident. The box design is not expected to change when corrected documentation is received. The contents could be shipped in a Type A plywood box; however the metal box offers better protection and is required for storage at CWC because of fire loading concerns.

2.0 PACKAGING DESCRIPTION

The boxes are constructed of metal per the requirement of specification HS-V-P-0046. Sizes of the boxes are 24 in. x 24 in. x 72 in., 36 in. x 36 in. x 72 in., 60 in. x 60 in. x 108 in. Also included are Model SSB-38.9-12-7A-BRF with approximate dimensions of 24 in. x 54 in. x 97 in. and a 360 in. x 24 in. x 24 in. box constructed per CPC specification 7A-101 and Drawing 01-1276-2-01. The closure system consists of a gasketed lid which is secured to the body by use of nuts and bolts.

3.0 CONTENTS

Authorized contents are Type A quantities of solid mixed waste consisting of tank sampling and maintenance equipment, auger parts, and miscellaneous debris such as paper, plastic, and cloth. In some instances, lead shielding may be used. The waste will be non-transuranic and limited to less than 15 g of fissile material.

The payload weight is limited to manufacturer specification.

4.0 OPERATING REQUIREMENTS

1. All DOT 7A Type A markings shall be removed or painted over prior to shipment.
2. The speed of the transport vehicle shall not exceed 35 mph.
3. Closure of the boxes shall be per the manufacturer's instructions.
4. The boxes shall be lined with a minimum 10 mil plastic liner.
5. Payload weight shall be as specified by the manufacturer.
6. Large items and shielding shall be blocked and braced or filler material added to prevent movement of the contents during transport.
7. Pointed objects and sharp edges shall be padded.
8. Written operating procedures shall be followed when packaging and transferring payloads in the CPC boxes. These procedures shall provide instructions to ensure that the container is being used in accordance to this SEP and manufacturer's instructions.

5.0 REFERENCES

- 49 CFR 173, 1994, "Packaging and Transportation of Radioactive Materials," *Code of Federal Regulations*, as amended.