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ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 649410

Proj. ECN

2. ECN Category (mark one) Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Change ECN <input checked="" type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. EJ Bitten/BWHC/L1-02/375-0709	4. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Date 07/01/98	
	6. Project Title/No./Work Order No. Certification That CsCl Powder and pellet Materials Meet WESF Acceptance Criteria	7. Bldg./Sys./Fac. No. NA	8. Approval Designator NA	
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) HNF-2928, Rev. 0	10. Related ECN No(s). NA	11. Related PO No. NA	

12a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 12b) <input checked="" type="checkbox"/> No (NA Blks. 12b, 12c, 12d)	12b. Work Package No. NA	12c. Modification Work Complete NA Design Authority/Cog. Engineer Signature & Date	12d. Restored to Original Condition (Temp. or Standby ECN only) NA Design Authority/Cog. Engineer Signature & Date
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13a. Description of Change
 Typo on page 3 - May 1989 should read May 1998

13b. Design Baseline Document? Yes No

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14a. Justification (mark one)

Criteria Change <input type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>
As-Found <input type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>

14b. Justification Details
 Correction to the body of the document.

15. Distribution (include name, MSIN, and no. of copies)

MM Pereira	S6-81	1	TG Beam	S6-51	1
EJ Bitten	L1-02	1	FN Simmons	S6-51	1
SD Landsman	L1-02	1	Central Files	B1-07	
DH Sandoz	L1-06	1			
DE Rasmussen	L1-04	1			

RELEASE STAMP

JUL 09 1998

DATE: HANFORD
 STA: 37 RELEASE ID: 20

Certification That CsC1 Powder and Pellet Materials Meet WESF Acceptance Criteria

S. D. Landsman
B&W Hanford Company, Richland, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

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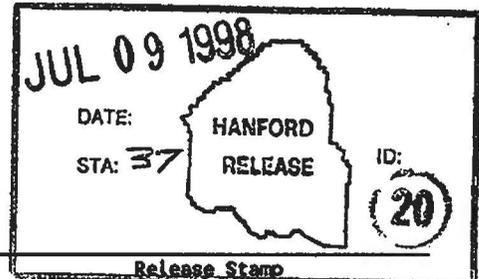
Key Words: Certification, CsC1 Powder and Pellet Materials, WESF Acceptance Criteria

Abstract: This document describes the CsC1 legacy material created by the Cesium Encapsulation Program (CEP) is acceptable for storage at WESF.

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Janis Aardal 7-9-98
Release Approval Date



Approved for Public Release

Outer Capsule and sectioning the WESF Inner Capsule, including the CsCl. Prior to sectioning of C-1502, C-1550 (a "sister" capsule to C-1502) was sectioned as practice. Sectioning of C-1502 occurred on September 29, 1992. After sectioning, the chunks of CsCl (approximately 80,000 Ci) were placed into release resistant containers and sealed.

The second group of CsCl is legacy material from the CEP. This physical form of this material is 13,400 Ci of pelletized CsCl (two sizes of pellets: 1-3/8" diameter x 5/8" and 5/16" diameter x 5/16") in release resistant containers, 10,800 Ci of powder in an unopened Type 4 shipping container (this material is presumed to be caked into a solid block), and 4400 Ci of small pellets in 10 singly-encapsulated Nordian capsules. Work with CsCl in South Cell in support of the CEP was initiated on October 9, 1991 and prematurely terminated on April 22, 1992. All handling of the CEP CsCl was performed in South Cell Compartment 1; the material has been stored in release resistant containers since the program was terminated. Material involved with the CEP was purified at Oak Ridge prior to shipment to the Shielded Materials Facility (SMF). Consequently, the CsCl associated with the CEP is purer than the CsCl that is encapsulated and stored at WESF. This material will be maintained and packaged separately from the material generated during destructive analysis of the WESF capsules.

Handling Cell Description

The SMF South Cell Compartment 1 was used for all handling activities associated with the powder and pellets. Compartment 1 was constructed in South Cell when the dose rates were low enough to allow personnel entry into the cell. Historically, South Cell has remained an alpha-free cell. As a result of the CEP, the dose rates in South Cell now average 11 rem/h and the dose rates in compartment 1 are 11,000 rem/h, all from CsCl contamination. Handling of unclad fuel or other material containing dispersible alpha-emitting radionuclides has not occurred in any of the compartments or in South Cell proper. A detailed contamination survey was performed in May 1998 which verified the SMF is free of alpha contamination. (Reference HNF-2849)

Comparison with WESF CsCl

The CsCl from Capsules C-1502 and C-1550 is consistent with the CsCl currently stored at WESF. Analytical data obtained as part of the CEP demonstrates that the CsCl from this program is of higher purity than WESF CsCl because the CsCl was water-washed at Oak Ridge National Laboratory (ORNL) prior to its shipment to the SMF. The analytical report for CsCl batch C-1542, which comprises the powder and pellets, is provided in Attachment 2 and demonstrates that material processing at ORNL reduced the amount of contaminants in the CsCl and did not add other contaminants. Therefore, the powder and pellets are bounded by the current WESF