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ENGINEERING CHANGE NOTICE

Page 1 of 21 ja

1. ECN 647568

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] Direct Revision [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	R. L. Bogart BWHC 324 Building 376-3904 L1-02	[] Yes [X] No	April 3, 1998
	6. Project Title/No./Work Order No.	7. Bldg./Sys./Fac. No.	8. Approval Designator
	300 Area Stabilization	324 Building	Q
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.)	10. Related ECN No(s).	11. Related PO No.
	HNF-2398 Rev, 0	NA	NA

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks. 12b, 12c, 12d)	NA	NA Design Authority/Cog. Engineer Signature & Date	NA Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

13b. Design Baseline Document? [] Yes [N] No

Complete revision of document. Added table #23 "Activity Matrix for Fabrication of WESF Outer Capsules." All changes are either single lines through and/or indicated in teh left margin.

TBD Hold Number HNF-2593, Pg. 10.

14a. Justification (mark one)

Criteria Change	[X]	Design Improvement	[]	Environmental	[]	Facility Deactivation	[]
As-Found	[]	Facilitate Const	[]	Const. Error/Omission	[]	Design Error/Omission	[]

14b. Justification Details

Added the sections and tables to show the fabrication of the WESF Outer Capsule.

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

J. S. Durham L1-02 2
E. J. Bitten L1-02 1
D. H. Sandoz L5-65 1
* R. L. Bogart L1-02 2
Central Files, B1-07 (Orig. + 1)

RELEASE STAMP

APR 21 1998
DATE:
STA: 37
HANFORD RELEASE
ID: 24

A-7900-013-2 (05/96) GEF095

ENGINEERING CHANGE NOTICE

1. ECN (use no. from pg. 1) 647568

16. Design Verification Required	17. Cost Impact				18. Schedule Impact (days)	
	ENGINEERING		CONSTRUCTION			
[] Yes	Additional	[] $	Additional	[] $	Improvement	[X]
[X] No	Savings	[] $	Savings	[] $	Delay	[]

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]		[]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number Revision

21. Approvals

Signature	Date	Signature	Date
Design Authority NA		Design Agent NA	
Cog. Eng. J. S. Durham	4-13-98	PE NA	
Cog. Mgr. E. J. Bitten	4/13/98	QA NA	
QA D. H. Sandoz	4/14/98	Safety NA	
Safety NA		Design NA	
Environ. AN		Environ. AN	
Other		Other NA	
		DEPARTMENT OF ENERGY NA	
		Signature or a Control Number that tracks the Approval Signature	
		ADDITIONAL	

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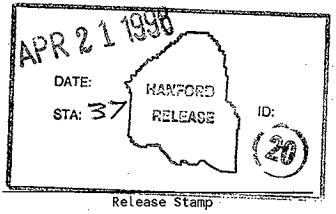
Cesium Legacy Safety Project Management Work Plan

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

EDT/ECN: 647568 UC: 2000
Org Code: 19350 Charge Code: K4C25 (HAN98400)
B&R Code: EW7050000 Total Pages: 22 ja

Key Words: Project, Management, Work Plan

Abstract: This document describes the porcess flow, quality assurance controls and the environment, Safety & Health requirements for the Cesium Legacy Safety Project.



Release Approval Date

Release Stamp

Approved for Public Release

RECORD OF REVISION	(1) Document Number HNF-2398	Page 1

(2) Title: Cesium Legacy Safety Project Management Work Plan

CHANGE CONTROL RECORD

(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr. Date
0	(7) EDT-623078, 3/18/98	JS Durham	EJ Bitten
1 RS	Complete revision, per ECN-647568.	J. S. Durham for Tolleson - J. Garfield Otto 37	E. J. Bitten 4/21/98
		JS Durham	EJ Bitten

Cesium Legacy Safety Project Management Work Plan

1.0 PURPOSE

This Management Work Plan (MWP) describes the process flow, quality assurance controls, and the Environment, Safety, & Health requirements of the Cesium Legacy Safety Project. This MWP provides an overview of the project goals and methods for repackaging the non-conforming Type W overpacks and packaging the CsCl powder and pellets. This MWP is not intended to apply to other activities associated with the CsCl Legacy Safety Program (i.e., clean out of South Cell).

2.0 PROCESS PLAN AND SCOPE

The scope for this project can be divided into the following work segments: 1) Cut, machine, and dedicate Type W overpack tubes and end caps; 2) Perform cleaning and cold welding activities; 3) Fabricate WESF Outer Capsules; 4) Design ~~and fabricate Inner Containers~~ and fabricate ~~WESF Outer Capsules~~Inner Containers; 5) Package powder and pellets; 6) Remove noncompliant Type W overpacks; 7) Install WESF Outer Capsules over the Inner Containers; 8) Install compliant Type W overpacks on all packages; and ~~8~~9) Ship all overpacked containers to WESF. This MWP describes ~~segment~~segments 1 and 3.

3.0 OVERVIEW

This section provides a brief description of the activities associated with this MWP. More detailed information is included in Table 1, the Activity Matrix.

Cut, machine, and dedicate Type W tubes and end caps: The estimate for this project will require 21 Type W overpacks. Only 7 acceptable Type W overpacks currently exist; therefore, additional Type W overpacks must be fabricated. Type W overpacks will be fabricated by Site Fabrication Services (SFS) in the 200W Area. Prior to machining, the component material (plate and tubing) will undergo ultrasonic testing (UT). The UT equipment will be operated by PNNL under the oversight of DynCorp Nondestructive Evaluation (NDE). Accepted material will be green-tagged and rejected material will be rendered unusable for Type W overpack installation.

Perform cleaning and cold welding activities: The acceptable Type W components will be transferred to the Equipment Development Laboratory in the 306E facility. The

bottom end caps will then be welded onto the tubes.

~~**Design and fabricate Inner Containers and fabricate**~~**Fabricate WESF Outer Capsules**: Attachment A-1 shows a schematic of the CsCl containers. This project will require ~~12 Inner Containers and~~ 9 WESF Outer Capsules. The WESF Outer Capsules will be fabricated from existing WESF outer capsule stock.

Design and fabricate Inner Containers: Attachment A-1 shows a schematic of the CsCl containers. This project will require 12 Inner Containers. The Inner Container designed by BWHC will provide the primary package for the powder and pellets that can be readily decontaminated. The Inner Containers will be fabricated from existing WESF Inner Capsule stock and function tested to ensure leak tightness during water wash decontamination. The Inner Containers will be placed into WESF Outer Capsules and the WESF Outer Capsules will be circumferentially welded ~~into WESF Outer Capsules~~ prior to installation of Type W overpacks. ~~The WESF Outer Capsules will be fabricated from existing WESF outer capsule stock.~~

Package powder and pellets: The Inner Containers will be loaded with the powder and pellets in the 324 Facility Shielded Materials Facility (SMF) in South Cell. One Inner Container will house 10 singly-encapsulated Nordian capsules. The remaining 8 Inner Containers will contain the powder, chunks, and pellets. After loading, the Inner Containers will be decontaminated and transferred to East Cell in the SMF for packaging.

Remove noncompliant Type W overpacks: The 7 packages containing noncompliant Type W overpacks will be returned in the BUSS cask from WESF and downloaded into East Cell. The overpacks will be removed using a metal separation device that renders the overpack unusable for reinstallation. The off-specification WESF capsules will then be staged in shielded storage.

Install WESF Outer Capsules over Inner Containers: WESF outer capsules will be installed over the 9 Inner Containers that house the powder, pellets, and Nordian capsules. After the WESF Outer Capsules are installed, the Inner Container packages will be staged to allow hands-on adjustment of the remote welder.

Install compliant Type W overpacks on all packages: Type W overpacks will be installed over the 9 Inner Container packages and the 7 off-specification WESF capsules. After the overpacks are installed, the overpack packages will be staged until the BUSS cask is prepared for shipping and the documentation associated with this project is completed.

Ship all overpacked containers to WESF: The overpack packages will be loaded into the BUSS cask, and the cask will be shipped to WESF in a single shipment.

4.0 ENVIRONMENT, SAFETY AND HEALTH IMPLEMENTATION

This work does not conflict with the safety basis established for work in any of the associated facilities. This work is expected to result in collective dose of less that 20 person-mrem and no additional precautions are necessary to ensure personnel safety.

Table 1. ACTIVITY MATRIX TO CUT, MACHINE, AND DEDICATE TYPE W TUBES AND END CAPS

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Write Statement of Work for Fabricating Tubes to Site Fabrication Services (SFS)	Completed SOW for SFS Fabrication of Type W Overpack Tubes (SOW #1)	N/A		BWHC Project Engineer	BWHC Project Manager, Engineering, and QA approval of SOW #1
Write Statement of Work for Fabricating End Caps to SFS	Completed SOW for SFS Fabrication of Type W Overpack End Caps (SOW #2)	N/A		BWHC Project Engineer	BWHC Project Manager, Engineering, and QA approval of SOW #2
Issue Work Package (J-10) to SFS	SFS JCS Package 3I98-00080	N/A	300 Area Procedures	BWHC Project Engineer	BWHC Project Manager, QA and Engineering approval of JCS Package

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
SFS Write Work Instructions for Fabricating Tubes	SFS work instruction 2H9802255F	SFS JCS Package 3I98-00080	SFS procedures, SOW #1, SFS JCS Package 3I98-00080	SFS, DynCorp	BWHC Project Manager and QA approval~~, WESF QA Approval~~
Select Certified Tubing Material from Single Heat Lot	Documented heat lot number	SFS work instruction 2H9802255F	SFS Procedures, SOW #1	SFS, DynCorp	SFS QC verification
Label 22" lengths of tubing	Labeled, uncut tubing	SFS work instruction 2H9802255F	SFS Procedures, SOW #1	SFS, DynCorp	SFS QC verification
Cut tubing into 22" lengths	Unmachined tubing	SFS work instruction 2H9802255F	SFS Procedures, SOW #1	SFS, DynCorp	SFS QC verification
Label tubes per Attachment 2	Tagged tubes, labeled tubes	SFS work instruction 2H9802255F	SFS procedures, SOW #1	SFS, DynCorp	SFS QC verification
Perform pre-machining inspection of tubing	Inspection report and NCR group #1, if necessary	SFS work instruction 2H9802255F	SFS Procedures, SOW #1	SFS, DynCorp	SFS QC verification
SFS Write Work Instructions for End Cap Fabrication	SFS work instruction 2H9802256F	SFS JCS Package 3I98-00080	SFS procedures, SOW #2, SFS JCS Package 3I98-00080	SFS, DynCorp	BWHC Project Manager and QA approval~~, WESF QA Approval~~
Select certified plate material from single heat lot	Documented heat lot number	SFS work instruction 2H9802256F	SFS Procedures, SOW #2	SFS, DynCorp	SFS QC verification

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Write SOW to DynCorp to evaluate UT inspections	SOW for DynCorp Support for Ultrasonic Inspection (SOW #3)	N/A	300 Area Procedures	BWHC Project Engineer	BWHC Project Manager, Engineering, and QA approval of SOW #3
Write SOW to PNNL to perform UT inspections	SOW for PNNL Ultrasonic Inspection (SOW #4)	N/A	300 Area Procedures	BWHC Project Engineer	BWHC Project Manager, Engineering, and QA approval of SOW #4
Transfer tubing and plate to 2400 Stevens for UT	Completed Material Transfer Form(s)	Material Transfer Form (Attachment 3)	SOW #1, SOW #2, SOW #4	BWHC Project Engineer	BWHC QC verification
Obtain UT data for tubing and plate, including calibration data	UT inspection report	SOW #3, SOW #4	HNF-CM-4-38 NDT-UT 9000 UT 9001-3 UT 9002-3	NDT Operator (PNNL), NDE Level 2 (DynCorp)	None
Transfer tubing and plate to SFS for machining	Completed Material Transfer Form(s)	Material Transfer Form	SOW #1, SOW #2, SOW #4	BWHC Project Engineer	BWHC QC verification
Evaluate CMM and UT data against specification	Inspection report and NCR group #2, if necessary	SFS work instruction 2H9802255F, SFS work instruction 2H9802256F	SFS procedures, SOW #1, SOW #2, SOW #3	SFS, DynCorp	SFS QC verification

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Reconcile NCR group #1 and #2	Identification of acceptable and reject tubes, Identification of unacceptable areas of plate	N/A	N/A	BWHC Project Engineer	BWHC QA approval~~, WESF QA approval~~
Label acceptable tubes	Tagged tubes, labeled tubes	SFS work instruction 2H9802255F	SFS procedures, SOW #1	SFS, DynCorp	SFS QC verification
Destroy rejected tubes	Destroyed tubes	SFS work instruction 2H9802255F	SFS procedures, SOW #1	SFS, DynCorp	SFS QC verification, BWHC Engineer oversight
Machine tubes	Machined tubing	SFS work instruction 2H9802255F	SFS procedures, SOW #1, drawing H-3-307504	SFS, DynCorp	None
Perform Post-machining inspection on tubes	Inspection report and NCR group #3, if necessary	SFS work instruction 2H9802255F	SFS Procedures, SOW #1, drawing H-3-307504	SFS, DynCorp	SFS QC verification
Reconcile NCR group #3	Identification of acceptable and reject tubes	N/A	SOW #1	BWHC Project Engineer	BWHC QA approval~~, WESF QA approval~~
Label acceptable tubes	Tagged tubes, labeled tubes	SFS work instruction 2H9802255F	SFS procedures, SOW #1	SFS, DynCorp	SFS QC verification
Destroy rejected tubes	Destroyed tubes	SFS work instruction 2H9802255F	SFS procedures, SOW #1	SFS, DynCorp	SFS QC verification, BWHC Engineer oversight

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Label plate for end caps per NCR group #2	Labeled uncut plate	SFS work instruction 2H9802256F	SFS procedures, SOW #2	SFS, DynCorp	SFS QC verification
Cut plate to nominal size	Unmachined plate	SFS work instruction 2H9802256F	SFS procedures, SOW #2, drawing H-3-307504	SFS, DynCorp	SFS QC verification
Machine end caps	Machined end caps	SFS work instruction 2H9802256F	SFS procedures, SOW #2, drawing H-3-307504	SFS, DynCorp	None
Label end caps per Attachment 1	Tagged end caps, labeled end caps	SFS work instruction 2H9802256F	SFS procedures, SOW #2	SFS, DynCorp	SFS QC verification
Perform Post-machining inspection on end caps	Inspection report and NCR group #4, if necessary	SFS work instruction 2H9802256F	SFS procedures, SOW #2, drawing H-3-307504	SFS, DynCorp	SFS QC verification
Reconcile NCR group #4	Identification of acceptable and reject end caps	N/A	N/A	BWHC Project Engineer	BWHC QA approval~~, WESF QA approval~~
Label acceptable end caps	Tagged end caps, labeled end caps	SFS work instruction 2H9802256F	SFS procedures, SOW #2	SFS, DynCorp	SFS QC verification
Destroy rejected end caps	Destroyed end caps	SFS work instruction 2H9802256F	SFS procedures, SOW #2	SFS, DynCorp	SFS QC verification, BWHC Engineer oversight

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Assemble and Review Records	Completed Records and verification of labeling	~~N/A~~N/A	~~Engineer, BWHC~~N/A	BWHC Project Engineer	BWHC QA approval (separate from work instructions)

Table 2. ACTIVITY MATRIX FORPERFORM CLEANING AND COLD WELDING ACTIVITIES

TBD Hold Number HNF-2593.

Table 3. ACTIVITY MATRIX FOR FABRICATION OF WESF OUTER CAPSULES

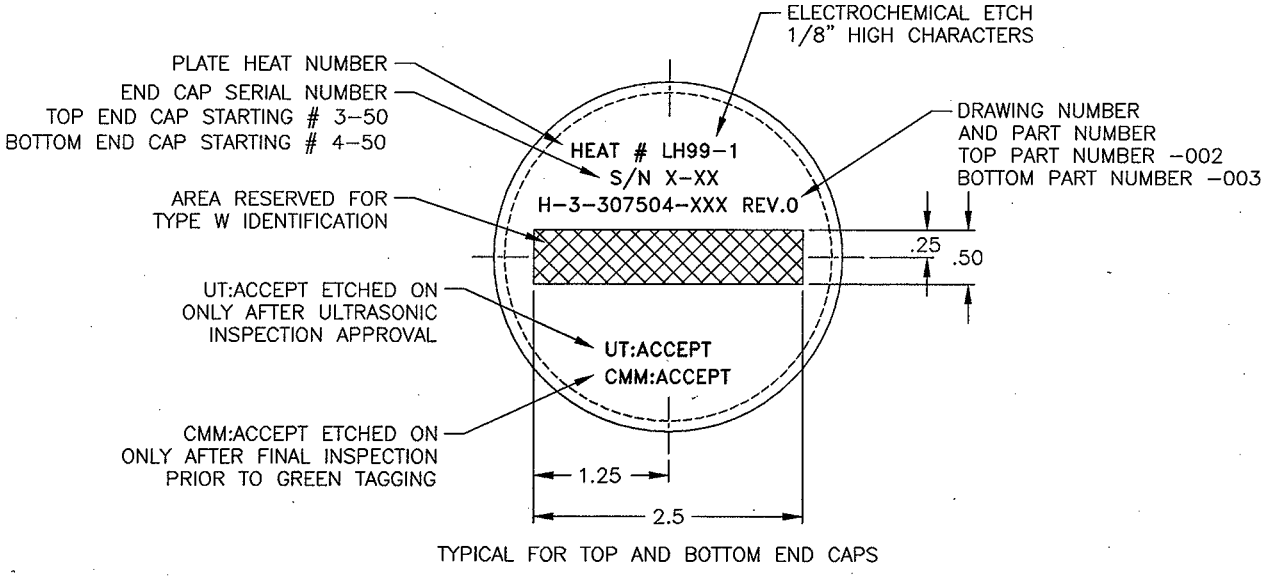
Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Write Statement of Work for Fabricating WESF Outer Capsules to COGEMA	Completed SOW for COGEMA Fabrication of WESF Outer Capsules (SOW #7)	N/A	300 Area Procedures	~~CsCl Cognizant~~ BWHC Project Engineer	BWHC Project Manager, Engineering, and QA approval of SOW #7
Prepare Engineering Change Notice (ECN) to relieve dimensional tolerances on WESF Outer Capsule Drawing	ECN 647567	N/A	HNF-PRO-440	BWHC Project Engineer	BWHC Project Manager, QA, Engineering, and WESF Design Authority approval of ECN
TUBING					
Engineering Development Laboratory to write EDL traveler to control fabrication of WESF Outer Capsule tubes	EDL Traveler #1	N/A	SOW #7	COGEMA	BWHC Project Manager and QA approval
Verify Tubing Material comes from Heat Lot number K6117E-1	Documented heat lot number	EDL Traveler	EDL Traveler #1	COGEMA	Project Engineer verification

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Visually Inspect Tubing	Inspected tubing	EDL Traveler	EDL Traveler #1	COGEMA	Project Engineer verification
Label identification on WESF Outer Capsule Tubing per Attachment B-1	Labeled, unmachined tubing	EDL Traveler	EDL Traveler #1, Attachment B-1	COGEMA	Project Engineer verification
Machine tubes	Machined tubing	EDL Traveler	EDL Traveler #1, ECN 647567	COGEMA	None
Perform Post-machining inspection on tubes	Inspected tubing and tube NCR, if necessary	EDL Traveler	EDL Traveler #1,ECN 647567	COGEMA	QC witness inspection
Reconcile tube NCR, if necessary	Identification of acceptable and reject tubes	N/A	SOW #7	BWHC Project Engineer	BWHC Project Manager and QA approval
Destroy rejected tubes	Destroyed tubes	EDL Traveler	EDL Traveler #1	COGEMA	QC apply red tags
END CAPS					
Engineering Development Laboratory to write EDL traveler to control fabrication of WESF end caps	EDL Traveler #2	N/A	SOW #7	COGEMA	BWHC Project Manager and QA approval

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Verify Plate Material comes from Heat Lot number LH99-1	Documented heat lot number	EDL Traveler	EDL Traveler #2	COGEMA	Project engineer verification
Visually inspect plate for defects	Unmachined plate	EDL Traveler	EDL Traveler #2	BWHC Project Engineer	Project engineer inspection
Layout plate to nominal size	Unmachined plate	EDL Traveler	EDL Traveler #2	COGEMA	Project Engineer verification
Machine top and bottom end caps	Machined end caps	EDL Traveler	EDL Traveler #2, ECN 647567	COGEMA	None
Perform Post-machining inspection on top and bottom end caps	Inspection report and end cap NCR, if necessary	EDL Traveler	EDL Traveler #2, ECN 647567	COGEMA	QC witness inspection
Reconcile end cap NCR, if necessary	Identification of acceptable and reject end caps	N/A	SOW #7	BWHC Project Engineer	BWHC Project Manager and QA approval
Label acceptable top and bottom end caps	Labeled end caps	EDL Traveler	EDL Traveler #2, Attachment B-1	COGEMA	Project Engineer verification
Destroy rejected end caps	Destroyed end caps	EDL Traveler	EDL Traveler #2	COGEMA	QC apply red tags

Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
WELDING					
Engineering Development Laboratory to write EDL traveler to control Cleaning and Welding of WESF Outer Capsules	EDL Traveler #3	N/A	SOW #7	COGEMA	BWHC Project Manager and QA approval
Clean all components	Cleaned Components	EDL Traveler	EDL Traveler #3, ASTM A380	COGEMA	None
Conduct a pre-job briefing to discuss welding activities	Identification of job assignments	N/A	EDL Traveler #3	BWHC Operations	N/A
Verify tube and end cap are acceptable material	Matched tube and end cap	EDL Traveler	EDL Traveler #3	BWHC Operations	Project Engineer verification
Complete isometric drawing per Attachment B-2 to document tube and end cap serial number	Completed isometric drawing	EDL Traveler	EDL Traveler #3	BWHC Operations	Project Engineer verification
Weld bottom end cap to tube	Completed tube subassembly	EDL Traveler	EDL Traveler #3	BWHC Operations	None

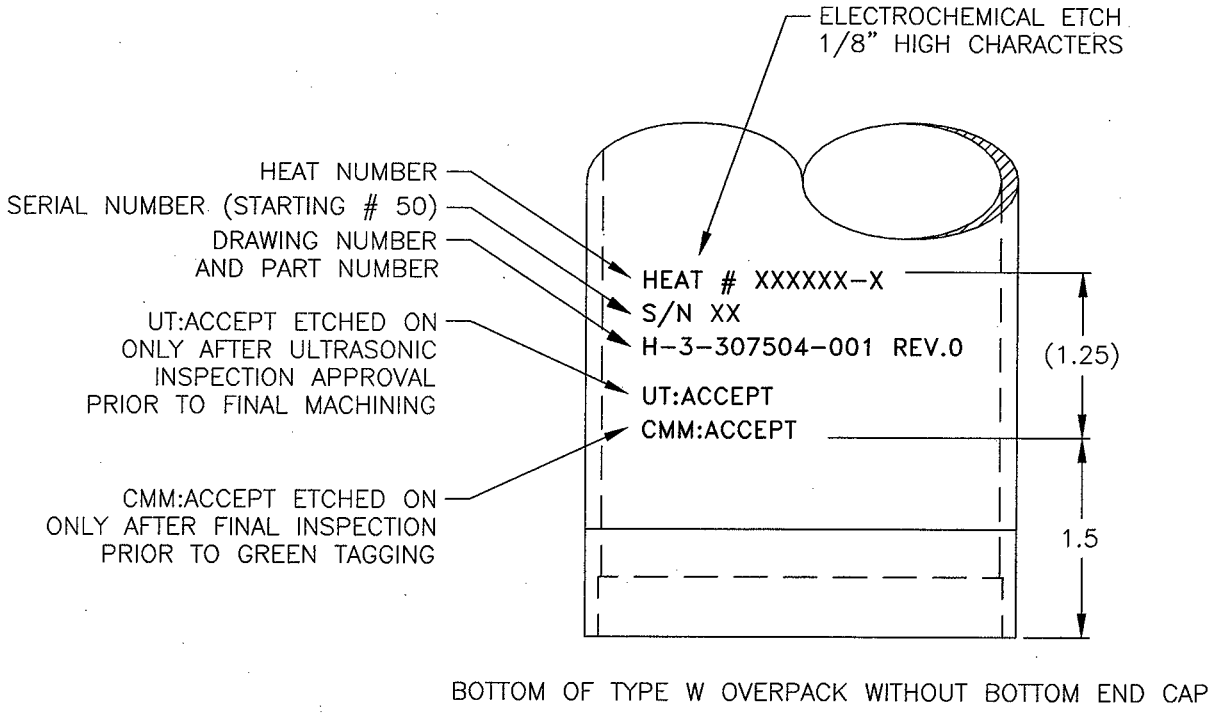
Activity	Product	Work control method	Applicable procedures and instructions	Lead Individual and Company	QA requirements
Visually inspect (VT) weld	Inspected weld	EDL Traveler	EDL Traveler #3, HSVS-0013	BWHC Operations	QC inspection
Label tube subassembly with WESF Capsule number	Labeled tube subassembly	EDL Traveler	EDL Traveler #3	COGEMA	QC verification
Label top end cap with WESF Capsule number	Labeled top end cap	EDL Traveler	EDL Traveler #3	COGEMA	QC verification
Place green tag on acceptable tube subassembly	Tagged tube subassembly	EDL Traveler	EDL Traveler #3	COGEMA	QC apply tag
Place green tag on acceptable top end caps	Tagged top end caps	EDL Traveler	EDL Traveler #3	COGEMA	QC apply tag
Transfer tube subassemblies and top end caps to 324 Facility	Completed Material Transfer Form(s)	Material Transfer Form (Attachment 3)	SOW #7	BWHC Project Engineer	QC verification
Assemble and Review Records	Completed Records and verification of labeling	N/A	N/A	BWHC Project Engineer	QA approva (separate from traveler)



TYPICAL FOR TOP AND BOTTOM END CAPS

OVERPACK END CAP SFS IDENTIFICATION

ATTACHMENT # 1 REV. 1 TO J-10 31-98-80



BOTTOM OF TYPE W OVERPACK WITHOUT BOTTOM END CAP

OVERPACK TUBING SFS IDENTIFICATION

ATTACHMENT #2 TO J-10 31-98-80

MATERIAL TRANSFER FORM

DRIVER/CARRIER _____ **DATE** _____

MATERIAL/ITEM NO.

_____

_____

_____

_____

_____

RECEIVED FROM _____ **DATE** _____

DELIVER TO _____ **DATE** _____

ACCEPTED BY _____ **DATE** _____

REMARKS _____

_____

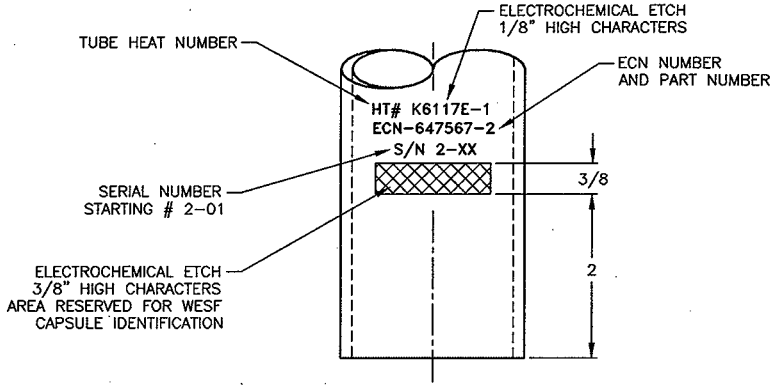
_____

_____

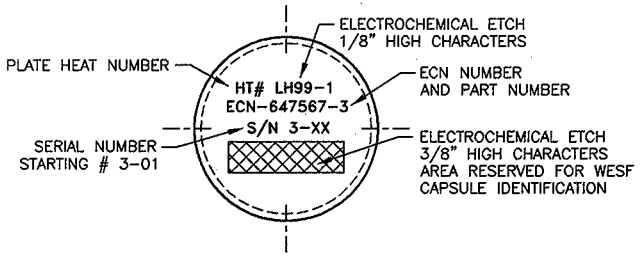
QC VERIFICATION BY _____ **DATE** _____

2/11/98

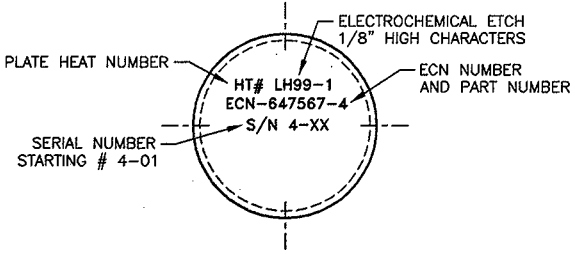
ATTACHMENT # 3 TO J-10 31-98-80



TUBE BOTTOM



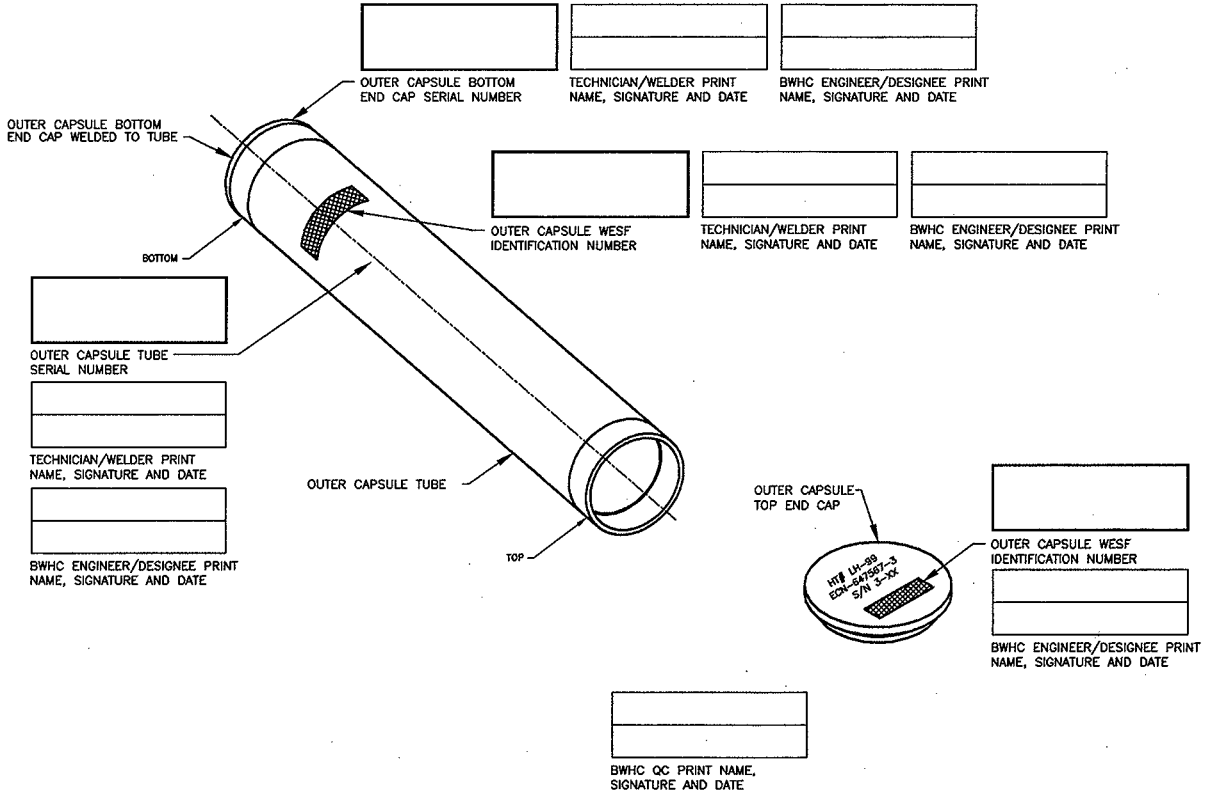
TOP END CAP



BOTTOM END CAP

WESF OUTER TUBE AND END CAP IDENTIFICATION

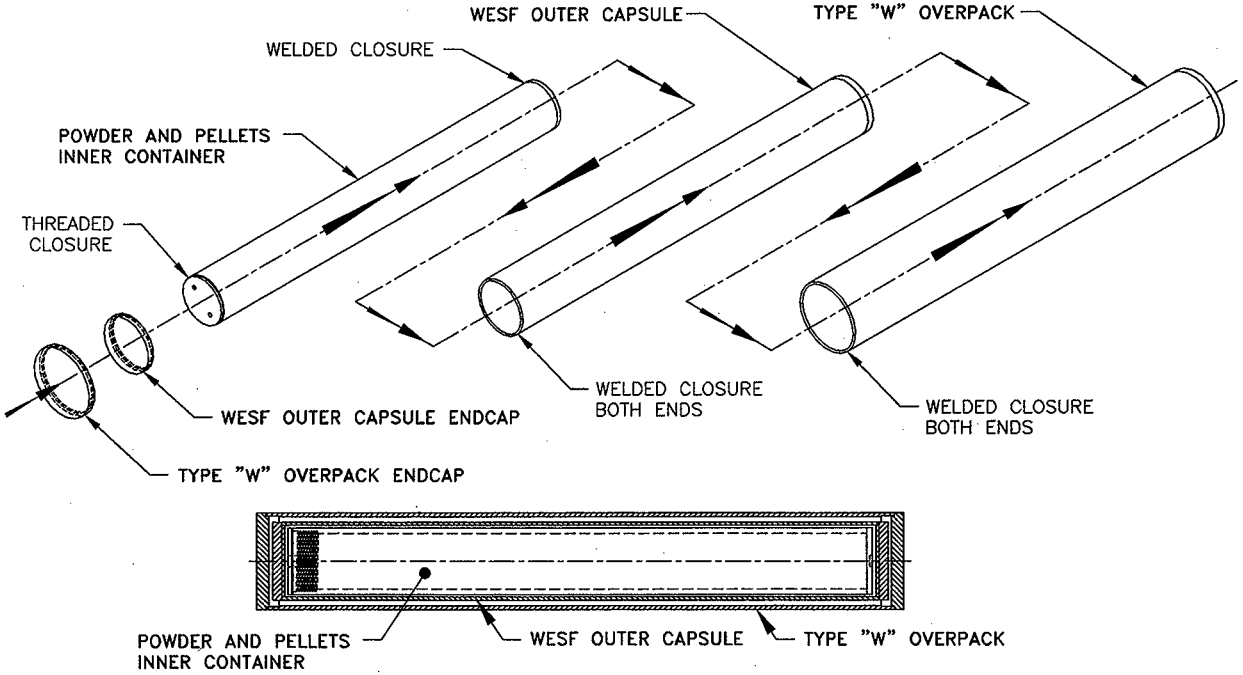
ATTACHMENT # B1 TO SOW # 7



WESF OUTER CAPSULE SUB-ASSEMBLY ISOMETRIC VIEW AND IDENTIFICATION

ATTACHMENT # B2 TO SOW # 7

CESIUM POWDER AND PELLETS ENCAPSULATION



ATTACHMENT A1