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Accession #: D196002433

Document #: SD-GN-ICD-001

Title/Desc:

INTERFACE AGREEMENT FOR THE MGMT OF 308 BLDG SNF

Pages: 11

ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN No **618532**

Proj.
ECN

2. ECN Category (mark one) Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedeure <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. A. D. Danko, FFFTP, N1-41, 376-4080	3a. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Date 12/6/95	
	5. Project Title/No./Work Order No. Interface Agreement for the Management of 308 Building Spent Nuclear Fuel	6. Bldg./Sys./Fac. No. N/A	7. Approval Designator N/A	
	8. Document Numbers Changed by this ECN (includes sheet no. and rev.) WHC-SD-GN-ICD-001, Rev. 0	9. Related ECN No(s). None	10. Related PO No. None	

11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package No. N/A	11c. Modification Work Complete N/A Cog. Engineer Signature & Date	11d. Restored to Original Condition (Temp. or Standby ECN only) N/A Cog. Engineer Signature & Date
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12. Description of Change

- Page 2: As is: Prior to shipment of the 308 Building SNF to the 400 Area, the FFFTP Project will supply the following to the FFFTP Transition Project:

Should be: FFFTP will supply the following to the SNF Project.
- Page 2: As is: A data package for the 308 Building SNF in each cask/container...

Should be: A data package for the 308 Building SNF for each cask/container...
- Page 3: Delete: The data package will be transferred from the FFFTP Transition Project to the SNF Project at the time that FFFTP is transferred to the ERC for D&D or when the 308 Building SNF is removed from the 400 Area, whichever comes first. The content of the data packages will be approved by the SNF Project. . .

13a. Justification (mark one)

Criteria Change <input checked="" 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"/>


13b. Justification Details
 A decision was made by SNF Project and FFFTP Transition Project to ship the data package directly to SNF Project since they are the owners of the 308 NRF TRIGA fuel. The requirement to send the data package prior to fuel shipment to the ISA has been removed.

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

J. C. Fulton (1)	R3-11
E. W. Gerber (1)	R3-86
E. F. Loika (1)	N2-51
R. L. McCormack (1)	R3-86
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Central Files (1)	A3-88
OSTI (2)	

RELEASE STAMP

DEC 22 1995

DATE: 

STA: 22 RELEASE ID: 43

ENGINEERING CHANGE NOTICE

15. Design Verification Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	16. Cost Impact <table style="width: 100%;"> <tr> <th style="width: 50%;">ENGINEERING</th> <th style="width: 50%;">CONSTRUCTION</th> </tr> <tr> <td>Additional <input type="checkbox"/> \$</td> <td>Additional <input type="checkbox"/> \$</td> </tr> <tr> <td>Savings <input type="checkbox"/> \$N/A</td> <td>Savings <input type="checkbox"/> \$N/A</td> </tr> </table>	ENGINEERING	CONSTRUCTION	Additional <input type="checkbox"/> \$	Additional <input type="checkbox"/> \$	Savings <input type="checkbox"/> \$N/A	Savings <input type="checkbox"/> \$N/A	17. Schedule Impact (days) Improvement <input type="checkbox"/> Delay <input type="checkbox"/>
ENGINEERING	CONSTRUCTION							
Additional <input type="checkbox"/> \$	Additional <input type="checkbox"/> \$							
Savings <input type="checkbox"/> \$N/A	Savings <input type="checkbox"/> \$N/A							

18. 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 12. Enter the affected document number in Block 19.

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

19. 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
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20. Approvals

Signature	Date	Signature	Date
<u>OPERATIONS AND ENGINEERING</u>		<u>ARCHITECT-ENGINEER</u>	
Cog. Eng. R. L. McCormack <i>R. L. McCormack</i>	<u>12/6/95</u>	PE	_____
Cog. Mgr. E. W. Gerber <i>E. W. Gerber</i>	<u>12/8/95</u>	QA	_____
QA N/A	_____	Safety	_____
Safety N/A	_____	Design	_____
Environ. N/A	_____	Environ.	_____
Other J. M. Steffen <i>J. M. Steffen</i>	<u>12/8/95</u>	Other	_____
E. F. Loika <i>E. F. Loika</i>	<u>12/8/95</u>		_____
J. C. Fulton <i>J. C. Fulton</i>	<u>12/8/95</u>		_____
	_____	<u>DEPARTMENT OF ENERGY</u>	_____
	_____	Signature or a Control Number that tracks the Approval Signature	_____
	_____	<u>ADDITIONAL</u>	_____
	_____		_____
	_____		_____
	_____		_____

Interface Agreement for the Management of 308 Building Spent Nuclear Fuel

A. D. Danko

Westinghouse Hanford Company, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-87RL10930

EDT/ECN: ECN 618531 UC: 2050
Org Code: 19200 Charge Code: B6DD4
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Key Words: Spent Nuclear Fuel, Fast Flux Test Facility, Fuel Fabrication Facilities Transition Project, Interface Agreement

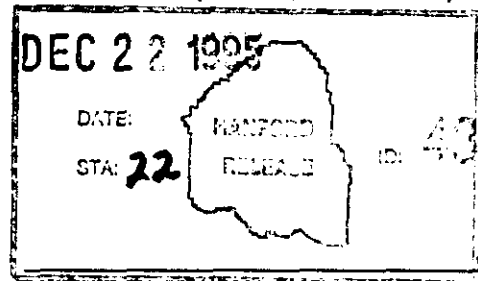
Abstract: The Hanford Site Spent Nuclear Fuel (SNF) Project was formed to manage the SNF at Hanford. Specifically, the mission of the SNF Project on the Hanford Site is to "provide safe, economic, environmentally sound management of Hanford SNF in a manner which stages it for final disposition."

The current mission of the Fuel Fabrication Facilities Transition Project (FFFTP) is to transition the 308 Building for turn over to the Environmental Restoration Contractor for decontamination and decommissioning.

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J. C. Perkins 12/22/95
Release Approval Date

Approved for Public Release

RECORD OF REVISION

(1) Document Number

WHC-SD-GN-ICD-001

Page 1

(2) Title

INTERFACE AGREEMENT FOR THE MANAGEMENT OF 308 BUILDING SPENT NUCLEAR FUEL

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) Initial Release EDT-160173		
RS 1	Editorial changes to reflect current status	RL McCormack <i>RL McCormack</i>	A. D. Danko 12-20-95 <i>A. D. Danko</i>

INTERFACE AGREEMENT FOR THE MANAGEMENT
OF 308 BUILDING SPENT NUCLEAR FUEL

The Hanford Site Spent Nuclear Fuel (SNF) Project was formed to manage the SNF at Hanford. Specifically, the mission of the SNF Project on the Hanford Site is to "provide safe, economic, environmentally sound management of Hanford SNF in a manner which stages it for final disposition."

An interface agreement between the SNF Project and the Fuel Fabrication Facilities Transition Project (FFFTP) is needed to ensure that FFFTP and SNF Project requirements are satisfied, and that a path forward for the management of 308 Building SNF is clearly defined. This document provides the formal interface agreement between the SNF Project and FFFTP.

Because planned pre-interim storage of the 308 Building SNF is at a location currently managed by the Fast Flux Test Facility (FFTF) Transition Project, the FFTF Transition Project requirements must be also be assured. As such, this agreement also establishes the formal interface agreement with the FFTF Transition Project specific to 308 Building SNF management.

The management approving this agreement will each appoint a representative to organize and conduct at least monthly interface meetings. Funding for these interface activities and for the others who will serve on the interface committee is to be obtained by the respective management.

Background

In November 1993, the U.S. Department of Energy (DOE) directed the defueling of the 308 Building Training Research and Isotope Production General Atomics (TRIGA®) reactor for eventual decontamination and decommissioning (D&D). The current mission of FFFTP is to transition the 308 Building for turnover to the Environmental Restoration Contractor for D&D.

In response to the direction from DOE, plans have been made to move the 308 Building TRIGA SNF from water pool storage in the 308 Building to dry cask storage to complete facility deactivation. Current plans are for most of the 308 Building SNF to be transferred into Neutron Radiography Facility (NRF) TRIGA casks for storage at the 400 Area. Fuel-followed control rods will be stored in U.S. Department of Transportation (DOT) Specification 6M containers because of their physical length. The NRF TRIGA casks and DOT-6M containers will be co-located with the FFTF SNF interim storage casks.

A SNF technical baseline document has been issued to support and coincide with a Site Systems Engineering U.S. Department of Energy, Richland Operations Office milestone to baseline the Hanford Site system. The SNF Project mission, as stated, above, fits within the following Hanford Site-wide systems engineering functions:

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- 4.1 - Deactivate Facilities, and
- 4.7 - Store, Treat, and Disposition of Special Nuclear Material/Nuclear Material/Nuclear Fuel Materials.

Function 4.1 includes the safe and compliant operation of current, temporary storage of SNF and transfer and stabilization of the SNF during deactivation. The mission of the 308 Building is deactivation and not continued SNF storage. Function 4.7 includes the operation of the facilities that have a mission to receive, stabilize, and/or store SNF in a safe and compliant manner.

Functions, requirements, and interfaces are being developed within the framework of systems engineering for the management of both complex-wide and Hanford SNF. Programmatic and technical requirements from the U.S. Department of Energy-Headquarters and the National Environmental Policy Act process are evolving for SNF management. With many of the requirements for management of SNF at Hanford originating from multiple sources, it is essential that close coordination and cooperation be maintained between the SNF Project and the facilities which are currently storage SNF. Interfaces between the SNF Project and these facilities are complex because the paths forward to interim storage need to be sensitive to the requirements associated with both the 4.1 and 4.7 functions.

Specific Agreement

The following interface agreements are accepted by the SNF, Project, FFFTP, and the FFTF Transition Projects.

- FFFTP will be responsible for continued management of the 308 Building SNF until receipt of the 308 Building SNF at the 400 Area Interim Storage Area (ISA).
- SNF Project will establish requirements for SNF management at the Hanford site, including pre-interim storage, interim storage, and final disposition of 308 Building SNF. FFFTP will have review and approval authority for requirements developed by the SNF Project which affect FFFTP.
- FFFTP will supply the following to the SNF Project:
 - A data package for the 308 Building SNF for each cask/container that meets program requirements (e.g., criticality, safety, safeguards, etc.) for all foreseeable needs, up to and including storage at the ISA. The data package will also include all existing information that could be necessary to manage the SNF through final disposition (e.g., irradiation history, etc.).
 - A hazard category analysis of all the 308 Building SNF per DOE Order 5480.23.
- Prior to 308 Building SNF receipt at the ISA, all FFFTP actions which could affect pre-interim storage, the path forward for interim storage, and/or final disposition of the 308 Building SNF will be preapproved by both FFFTP and the SNF Project. This includes, but is not limited to,

approval of storage cask/container drawings and specifications and documents which change prior authorized actions.

- The storage of the 308 Building SNF at the ISA will be compatible with FFTF Transition Project requirements for SNF storage. The FFTF Transition Project must approve of any actions that could impact compatibility with FFTF Transition Project requirements.
- FFTF Transition Project must validate readiness to receive the 308 Building SNF prior to shipment to the 400 Area.
- The funding of activities necessary for placement of the 308 Building SNF in dry storage casks/containers at the ISA in compliance with DOE orders and technical requirements of 10 CFR 71 and 10 CFR 72 will be obtained by FFFTP. Development and issuance of the safe authorization basis for storage of the TRIGA fuel in the 400 Area ISA will be funded by the SNF Project. Activities that will be funded by FFFTP include procurement of NRF TRIGA casks and DOT-6M containers; completion of the Environmental Assessment for Relocation and Storage of TRIGA Reactor Irradiated Fuel and associated Finding of No Significant Impact; readiness assessment for activities to transfer and store the SNF at the 400 Area; transport and placement of the 308 Building SNF at the ISA; procurement of a storage module for the casks; and any area upgrades needed at the ISA for receipt and storage of the 308 Building SNF.
- The safety authorization basis for storage of the 308 Building SNF at the 400 Area will be accomplished by an Engineering Change Notice (ECN) to the safe authorization basis for storage of the FFTF SNF at the ISA. The ECN, including supporting documentation, will be prepared and funded by the SNF Project. The FFTF Transition Project will have approval authority for the ECN and responsibility for incorporating the ECN into the existing safety authorization as is.
- FFFTP will maintain technical cognizance and engineering responsibility for the 308 Building SNF, the casks, and containers prior to emplacement at the ISA. The SNF Project will assume and maintain technical cognizance and engineering responsibility for the 308 Building SNF, NRF TRIGA casks, and DOT-6M containers after emplacement at the ISA.
- FFTF Transition Project will provide operations, maintenance, and surveillance support for the 308 Building SNF, including casks and containers, per the requirements stated in Appendix A from receipt at the ISA until transfer of the FFTF SNF custody to the SNF Project. Operations, maintenance, and surveillance support required beyond that identified in Appendix A will be attained by the SNF Project. SNF Project will provide funding for the operations, maintenance, and surveillance support after emplacement of the casks at the ISA.
- FFFTP has responsibility for nuclear material safeguards of the 308 Building SNF until receipt at the 400 Area ISA. FFTF Transition Project will have responsibility for nuclear material safeguards at the 400 Area ISA until transfer of the FFTF SNF custody to the SNF Project. FFTF Transition Project will provide qualified nuclear material custodians to assure special nuclear material accountability and inventory requirements are met. The SNF Project will provide incremental funding

to the FFTF Transition Project to cover costs for nuclear material safeguard activities associated with the TRIGA fuel. SNF Project will assume responsibility for nuclear material safeguards of the 308 Building SNF after transfer of the FFTF SNF custody to the SNF Project.

- SNF Project has responsibility for interface with the DOE Integrated SNF Program and the Idaho National Engineering Laboratory Environmental Impact Statement Project and transmittal of DOE guidance and requirements affecting management of the 308 Building SNF by FFTP and the FFTF Transition Project.
- Unresolved disputes which need resolution will be resolved with the help of higher level management.
- This interface agreement document may be modified with the concurrence of FFTP, FFTF Transition Project, and SNF Project.

Approvals:

Approved per ECN 618532

J. M. Steffen, Manager
Fuel Fabrication Facilities
Transition Project

Approved per ECN 618532

J. C. Fulton, Director
Spent Nuclear Fuel Project

Approved per ECN 618532

E. F. Loika, Director
Fast Flux Test Facility
Transition Project

APPENDIX A: OPERATIONS, MAINTENANCE,
AND SURVEILLANCE SUPPORT

Operations, maintenance, and surveillance support will be required for the NRF TRIGA casks, DOT-6M containers, and storage vault in order to assure safe operations during storage at the 400 AREA ISA and safe transport during transfer from the ISA. The level of support to be provided by FFTF personnel will be minimal due to the passive nature of the dry storage operation and the relatively low risk associated with the 308 Building SNF inventory.

The anticipated level of support required during storage at the ISA is as follows:

- Annual inspections of the stored casks containing the NRF TRIGA SNF consists of visual inspection:
 1. Visually inspect casks for deterioration around lid closure, lid bolts, and welds
 2. Determine individual cask surface contamination levels
 3. Determine individual cask surface dose rates
 4. Visually inspect package markings for deterioration
 5. Verify that the tamper proof seals of each cask are intact.
- Annual inspection of the vault consists of visual inspection both outside and inside to the extent possible:
 1. Visually inspect the vault for damage or deterioration
 2. Visually inspect for water intrusion.

Inspections will be documented with quality assurance verification and the record will be maintained for the duration of FFTF's administrative control of the ISA. At the time that the administrative control of the ISA is turned over to the SNF Project, or if the NRF TRIGA SNF is removed from the ISA pad, the records will be turned over to the designated representative of the SNF Project.

If visual inspection yields doubt of any cask's seal integrity or prior to shipment after storage, a determination will be made by the SNF Project whether a helium mass spectrometer leak test of the storage seal(s) will be required. Leak testing arrangements will be the responsibility of the SNF Project. Reasonable testing access to the vault will be provided by the FFTF Transition Project management, logistics to be determined jointly between FFTF Transition Project and SNF Project management.

The above described cask inspection requirements have been extracted from WHC-SD-TP-SARP-008, *Safety Analysis Report for Packaging (Onsite) NRF TRIGA Packaging*. The maintenance/storage inspection requirements for the DOT-6M packages have not been formalized as yet, but will be considered to be the same as for the NRF TRIGA casks unless a formal change is made to this

Appendix with concurrence from both SNF Project and FFTF Transition Project.

Inspections of the two NRF TRIGA overpacks by FFTF personnel will not be required as the overpacks will not be stored in any FFTF facilities.