

ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 654217

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. Jack S. Hammers, TRS, R3-25, 372-2657		4. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Date 6/7/99								
		6. Project Title/No./Work Order No. W-314, Tank Farm Restoration and Safe Operations/ W-314		7. Bldg./Sys./Fac. No. 241-AN-A & B	8. Approval Designator ESQ DEB 7/16/99								
		9. Document Numbers Changed by this ECN (includes sheet no. and rev.) HNF-SD-W314-ABU-003, Rev 1 HNF-SD-W314-ABU-002, Rev 1		10. Related ECN No(s). NONE	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								
13a. Description of Change 1). Updated ECN's 2). Updated USQ's 3). Revised Documentation Required for ABU 4). Udated Calculations 5). Udated Drawings													
13b. Design Baseline Document? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
14a. Justification (mark one) <table border="0"><tr><td>Criteria Change <input type="checkbox"/></td><td>Design Improvement <input checked="" type="checkbox"/></td><td>Environmental <input type="checkbox"/></td><td>Facility Deactivation <input type="checkbox"/></td></tr><tr><td>As-Found <input checked="" type="checkbox"/></td><td>Facilitate Const <input type="checkbox"/></td><td>Const. Error/Omission <input type="checkbox"/></td><td>Design Error/Omission <input type="checkbox"/></td></tr></table>						Criteria Change <input type="checkbox"/>	Design Improvement <input checked="" type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>	As-Found <input checked="" type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>
Criteria Change <input type="checkbox"/>	Design Improvement <input checked="" type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>										
As-Found <input checked="" type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>										
14b. Justification Details Updated ABU's to reflect current Project status. "This modification will not change collective dose since it has no impact on radiological sources, contamination control, or shielding." USQ not required per HNF-IP-0842, VOL. II, section 5.4, rev 11b. DEB 7/16/99													
15. Distribution (include name, MSIN, and no. of copies) See attached Distribution Sheet				RELEASE STAMP DATE: JUL 21 1999 STA: A HANFORD RELEASE ID: 2									

ENGINEERING CHANGE NOTICE

Page 2 of 2

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

654217

16. Design Verification Required

☒ Yes
☒ No *DEB 7/16/99*

17. Cost Impact

ENGINEERING

Additional ☐ \$
 Savings ☐ \$

CONSTRUCTION

Additional ☐ \$
 Savings ☐ \$

18. Schedule Impact (days)

Improvement ☐ None
 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	<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"/>	NA	<input checked="" type="checkbox"/>
Environmental Permit	<input type="checkbox"/>	Inventory Adjustment Request	<input type="checkbox"/>		<input type="checkbox"/>

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

N/A

21. Approvals

Signature

Date

Signature

Date

Design Authority D.E. Bowers

*DE Bowers**7/16/99*

Design Agent

W-314 Startup Mgr. J.S. Hammers

*J.S. Hammers**6/23/99*

PE

W-314 Proj. Mgr. J.W. Lentech

*J.W. Lentech**7/12/99*

QA

QA H.M. Chafin

*H.M. Chafin**7-12-99*

Safety

S.E. Mgmt. D.L. McGrew

*D.L. McGrew**7-12-99*

Design

OPS. T.W. Bohan

*T.W. Bohan**7/12/99*

Environ.

Other

Other

Safety O.M. Saka m. Saka

7/19/99

Env. T.A.D. Hoff

7/16/99

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval
 Signature

ADDITIONAL

Project W-314 241-AN-B Valve Pit Upgrade Acceptance For Beneficial Use

Jack S. Hammers

Numatec Hanford Company, Richland, WA 99352

U.S. Department of Energy Contract DE-AC06-96RL13200


EDT/ECN: 654216 ⁷ 4/6/99 UC: 620
Org Code: 408 Charge Code: 106048
B&R Code: EW3130010 Total Pages: ~~178~~ 22
4/6/99

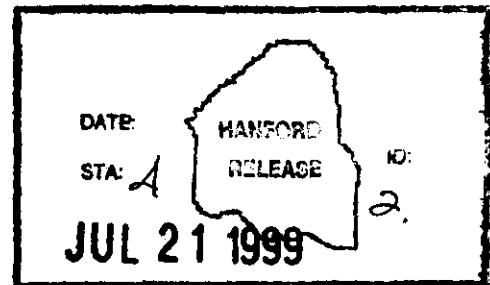
Key Words: AN-B Valve Pit Upgrade

Abstract: N/A

TRADEMARK DISCLAIMER. 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 or its contractors or subcontractors.

Printed in the United States of America. To obtain copies of this document, contact: Document Control Services, P.O. Box 950, Mailstop H6-08, Richland WA 99352, Phone (509) 372-2420; Fax (509) 376-4989.

 7/20/99
Release Approval Date



Release Stamp

Approved for Public Release

RECORD OF REVISION

(1) Document Number

HNF-SD-W314-ABU-
003, Rev 2

Page 1

(2) Title

Project W-314 241-AN-B Valve Pit Upgrade, Acceptance for Beneficial Use

CHANGE CONTROL RECORD

[illegible]

**PROJECT W-314
241-AN-B VALVE PIT UPGRADE
ACCEPTANCE FOR BENEFICIAL USE**

This listing identifies the responsibilities and requirements, applicable to the 241-AN-B Valve Pit Upgrades portion of Project W-314, for Acceptance for Beneficial Use in accordance with HNF-IP-0842, Vol IV, Sec 3.12.

At project turnover, the end user accepts the affected Structures, Systems, and Components (SSCs) for beneficial use. This checklist is used to help the end user ensure that all documentation, training, and testing requirements are met prior to turnover.

This checklist specifically identifies those items related to the upgrading of the 241-AN-B valve pit. The upgrades include: the installation of jumper/valve manifolds with position sensors, replacement pit leak detection systems, construction of replacement cover blocks, and electrical upgrades to support the instrumentation upgrades.

DOCUMENTATION REQUIRED for ACCEPTANCE FOR BENEFICIAL USE

DESCRIPTION	RESPONSIBILITY	DESCRIPTION	RESPONSIBILITY
ENGINEERING		ENGINEERING (cont'd)	
[] Engineering Task Plan - N/A		[X] Construction Specification	P.J. Bedell
[X] USQ Screening	C.W. Carlstrom	[] Essential Material Specification - N/A	
[] Activity Schedule		[] Installation Work Plan - N/A	
[] Final Safety Analysis Report - AB Amendment - N/A		[X] Design, As-built, IEFD (P&ID), System Drawings	P.J. Bedell
[] Interim Safety Basis - AB (BIO) Amendment - N/A		[] Installation Drawings - N/A	
[] Safety Assessment - N/A		[X] CWP Construction Inspection Records	W.R. Swift
[X] Safety Equipment List	S.H. Rifaey	[X] Drawing Tree/Index	P.J. Bedell
[] Operational Safety Document(s) - N/A		[X] As-Built Project Generated ECNs	P.J. Bedell
[X] Design Criteria (Project Development Specification (PDS)	M.A. Lane	[X] Void/Superseded, As-built, Essential, Facility Support Drawings	C.E. Shieler
[X] Requirements Verification Report for PDS	P.J. Bedell	[X] Master Equipment List Update	C.E. Shieler
[] System Design Description-N/A		[] Design Specifications/Report - N/A	
[X] Project Design Concept (PDC)	P.J. Bedell	[] Equipment Specifications - N/A	
[X] Test and Evaluation Plan (TEP& STEP)	J.S. Hammers	ADP (all computer activities are on MPS ABU)	
[X] Acceptance Test Procedures	J.S. Hammers	[] Software Configuration Management Plan - N/A	
[X] Acceptance Test Report	J.S. Hammers	[] Systems Requirements Spec - N/A	
[X] Operational Test Procedures	J.S. Hammers	[] Software Design Description - N/A	
[X] Operational Test Report	J.E. Andrews J.S. Hammers J.E. Andrews	[] Software Validation/Verification - N/A	
[] Environmental Impact Statement (TWRS) N/A		TRAINING	
[X] NEPA Documentation	A.J. Eirich	[X] Training Plan	J.M. Morris
[] Environmental Permit - N/A		[] Training Manuals/Certification Package - N/A	
[] Hazardous Waste Disposal Plan/Procedures - N/A		[X] Training to Operating Crews	J.M. Morris
[] Solid Waste Disposal Plan/Procedure - N/A		[X] Training to Maintenance Crews	J.M. Morris
[X] Notice of Construction/Excavation	A.J. Eirich	[] Training Mock-Up -N/A	
[] Permit/Cultural Resource ES Review - N/A			
[X] Calculations	P.J. Bedell		
[X] Commercial Grade Item Dedication Documentation	P.J. Bedell		
[] Stress/Seismic Analysis - N/A			
[] Stress/Design Report - N/A			
[X] Procurement Specifications	P.J. Bedell		

DOCUMENTATION REQUIRED FOR ACCEPTANCE FOR BENEFICIAL USE (cont'd)			
DESCRIPTION	RESPONSIBILITY	DESCRIPTION	RESPONSIBILITY
OPERATIONS/MAINTENANCE		PROCUREMENT	
[] Operating Manuals – N/A		[X] Vendor Information Files (CVI)	P.J. Bedell
[X] Operating Procedures	J.W. Comer	[] Comprehensive Equipment List - N/A	
[] Surveillance Procedures – N/A		[X] Spare Parts List	D.B. Smet / J.S. Hammers
[] Maintenance Manuals – N/A		[] Identify/ Submit Spare Parts for Excess - N/A	
[] Calibration Procedures – N/A		[X] Spare Parts in Stock or on Order	D.B.Smet
[] Preventative Maintenance Procedures – N/A		OTHER	
[X] Repair/Maintenance Procedures	J.W. Comer	[X] Update TWRS SE Data Base	D.L. McGrew
[X] Functional Check Procedures	J.W. Comer	[X] Project Interface Control Document	P.J. Bedell
[X] PM/S Data sheets	S.H. Rifaey	[X] S.R.I.D.S. Assessment	J.S. Hammers
[] Emergency Response – N/A		[X] Routing Board 272-AW	J.E. Andrews
[X] Final Joint Safety Walkdown by Operations, Engineering, Maintenance, and Health Physics, as appropriate	T.W. Bohan	[X] Miscellaneous Memorandums of Understanding/Agreement (MOUs/MOAs)	J.S. Hammers
QUALITY ASSURANCE		[X] Field Verification Plan	T.W. Bohan
[X] Inspection Plans	H.M. Chafin	[X] ACW	M.A. Lane
[X] Surveillance	H.M. Chafin/ J.W. Middleton		
[X] QAPP	H.M. Chafin		
[X] Non Conformance Reports	J.W. Middleton		

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
USQ Screening	<p><u>TF-97-0558, Rev 1</u>, New Cover Block Design for the 241-AN-A and 241-AN-B Valve Pits Per W-314</p> <p><u>TF-97-0560, Rev 5</u>, Nozzle Additions at 241-AN-A and 241-AN-B Valve Pits</p> <p><u>TF-97-0800, Rev 8</u>, Project W-314 Valve Pit Manifold Design for 241-AN-A and 241-AN-B Valve Pit</p> <p><u>TF-97-0835, Rev 3</u>, Special Protective Coating for Valve Pits Upgrade by Project W-314</p> <p><u>TF-97-0866, Rev 0</u>, W314 Leak Detection System Design for the 241-AN-A and 241-AN-B Valve Pits</p> <p><u>TF-98-0020, Rev 0</u>, ECN 646103 New Gasket Material for Purex Connector per W-314</p> <p><u>TF-98-0183, Rev 0</u>, Electrical Power Supply for Leak Detection Relay Cabinets AN</p> <p><u>TF-98-0214, Rev 0</u>, W314 Change Facility Installation and Gate Modification</p> <p><u>TF-98-0215, Rev 3</u>, W314 Procurement Specification for Impact Wrench AN Valve Pit Upgrade</p> <p><u>TF-98-0217, Rev 10</u>, W314 Electrical Design for Valve Pit Upgrade 241-AN-A,B</p> <p><u>TF-98-0219, Rev 6</u>, Modifications of W-314 AN Valve Pit Jumper Drawings Due to Vendor Information from Valve Procurement</p> <p><u>TF-98-0229, Rev 21</u>, ECN to Structural Drawings for 241-AN-A & 241-AN-B Valve Pit</p> <p><u>TF-98-0237, Rev 1</u>, New Transfer Piping per Project W-314</p> <p><u>TF-98-0238, Rev 0</u>, ECN to Instrumentation Drawings for 241-AN-A and 241-AN-B Valve</p>	D.F. Carlstrom, SAR Eng Services		

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	Pit Upgrades <u>TF-98-0244, Rev 1</u> , AN Valve Pit Preparation and Removal of Cover Blocks, Project W314 <u>TF-98-0259, Rev 0</u> , W314 Design Upgrades for the AN Pit Upgrade Package <u>TF-98-0334, Rev 0</u> , Perform Excavation Activities in Support of Project W314 <u>TF-98-0459, Rev 0</u> , Design Upgrades for the AN Pit Upgrade Package <u>TF-98-0483, Rev 8</u> , Project W-314 Valve Actuator Assembly Design Modification <u>TF-98-0524, Rev 0</u> , Probe Dimension and Generic Leak Detection Assembly Part No. Changes <u>TF-98-0560, Rev 1</u> , W-314 Nozzle Additions at 241-AN-A and 241-AN-B Valve Pits <u>TF-98-0598, Rev 2</u> , ECN to Revise Instrumentation & Electrical Drawings for 241- AN-A and 241-AN-B Valve Pit Upgrades <u>TF-98-0665, Rev 0</u> , Project W-314 AN Valve Pit Jumper Drawing Modifications to Facilitate Fabrication <u>TF-98-0700, Rev 0</u> , Disconnection of Existing Leak Detection System at 241-AN-A and 241- AN-B Valve Pits <u>TF-98-0718, Rev 0</u> , AN Valve Pit Upgrade Project Bypass Pipeline Modification <u>TF-98-0993, Rev 0</u> , Leak Detection Relay Test Resistor and Safety Class Symbol Changes <u>TF-98-1031, Rev 0</u> , Project W-314, New Leak Detection Contacts <u>TF-98-1053, Rev 1</u> , Valves Hydrotest and Seat Leakage Tests Procedures Modifications			

ABU INDEX - Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	TF-98-1058, Rev 0, Leak Detection Relay Test Resistor and Safety Class Symbol Changes TF-98-1144, Rev 0, ECN W314-4C-041 Leak Detection Power Supply Part Number Change TF-98-1210, Rev 0, Modifications to Cover Block Dimensions, Cathodic Protection and Valve Position Sensor Wiring TF-98-1212, Rev 0, Rebar Replacement and Tolerance Changes to Construction Specification W-314-C1 TF-98-1219, Rev 1, Valve Position Sensor Conduit Box Mounting Bracket TF-98-1279, Rev 0, Leak Detection Relay Cabinet NEMA 4 Alarms TF-99-0121, Rev 0, ECN 314-4C-062 AN Valve Pit Upgrade Instrument Terminal Box Footing Concrete Change TF-99-0128, Rev 0, ECN 314-4C-066 AN Valve Pit Upgrade Leak Detection Panel Breather/Drain Fitting Change TF-99-0167, Rev 0, ECN 314-4C-076 AN Valve Pit Upgrade Leak Detection Panel Tag Number and Wiring Change TF-99-0240, Rev 1, Miscellaneous Changes Associated with Nozzle Installation at 241-AN- A and 241-AN-B Valve Pits TF-99-0248, Rev 0, ECN 314-4C-085 AN Valve Pit Upgrade Leak Detection Panel Selector Switch Contact Block Change TF-99-0422, Rev 0, ECN 314-4C-105 AN Valve Pit Upgrade Leak Detection Element Conduit Seal Addition and Associated Modifications			

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	TF-99-0427, Rev 0, ECN 314-4C-104 Bypass Leak Detection Relays During W-314 Construction Activities at 241-An-A and 241- AN-B Valve Pits TF-99-0480, Rev 0, ECN 314-4C-115 AN Valve Pit Upgrade Instrument Cable Shield Wire Termination Change TF-99-489, Rev 0, ECN W314-4C-117 AN Valve Pit Upgrade Encasement Leak Detector Piping Connection Change			
Safety Equipment List	HNF-SD-WM-SEL-040, Rev 1	S.H. Rifacy, Equipment Eng		
Design Criteria (Project Development Specification (PDS))	HNF-SD-W314-PDS-001, Rev 1, Project Development Specification – Transfer Piping HNF-SD-W314-PDS-002, Rev 1, Project Development Specifications for Valve Pit Manifold HNF-SD-W314-PDS-003, Rev 1, Project Development Specifications for Pit Leak Detection HNF-SD-W314-PDS-005, Rev 1, Project Development Specification for Special Protective Coating	M.A. Lane, Project Management		
Requirements Verification Report for PDS (Design/Field)	HNF-1534, Rev 0, Requirements Verification Report for AN Valve Pit Upgrades for Project W-314 Tank Farm Restoration and Safe Operations	P.J. Bedell, Project Design		
Project Design Concept	HNF-SD-TI-010, Rev 1, Requirements Analysis Study for Valve Pit Manifold Project Development Specification HNF-SD-TI-011, Rev 1, Requirements Analysis	P.J. Bedell, Project Design		

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	Study for Pit Leak Detection Project Development Specification HNF-SD-TI-012, Rev 2, Requirements Analysis Study for Master Pump Shutdown System Development Specification HNF-SD-TI-013, Rev 1, Requirements Analysis Study for Special Protective Coating Project Development Specification			
Test and Evaluation Plans (TEP & STEP)	HNF-SD-W314-TEP-001, Rev 2, Test & Evaluation Plan HNF-1733, Rev 3, Specific Test and Evaluation Plan for 241-AN-A Valve Pit	J.S. Hammers, Startup		
Acceptance Test Procedures	HNF-4644, Rev 0, 241-AN-B Valve Pit Manifold Valves & Position Indication ATP HNF-4646, Rev 0, 241-AN-B Pit Leak Detection ANA-WT-LDSTA-331 ATP	J.S. Hammers, Startup		
Acceptance Test Reports	HNF-4647, 241-AN-B Valve Pit Leak Detectors Acceptance Report HNF-4645, 241-AN-B Valve Pit Manifold Valves Acceptance Report	J.S. Hammers, Startup		
Operational Test Procedure	OTP-314-002	J.S. Hammers, Startup		
Operational Test Report	OTR-314-002	J.S. Hammers, Startup		
NEPA Documentation	DOE/EIS-0189-SA1	A.J. Eirich, Project Management		
Notice of Construction/Excavation	Radioactive Air Emissions Notice of Construction Tank Farm Restoration and Safe Operations Project W-314 (12/97)	A.J. Eirich, Project Management		

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
Calculations	W314-C-001, AN Valve Pit Structural Evaluation W314-C-002, AN Valve Pit Wall Evaluation W314-C-003, Cover Block Lifting Balls W314-C-006, Evaluation – Safety Class Items W314-C-007, Deviations 6430.1A & ACI Codes W314-C-008, AN – Misc. Equipment Supports W314-C-009, Shielding Blocks W314-C-010, Commercial Grade Evaluation – RE Bar W314-C-011, Commercial Grade Evaluation – Concrete W314-C-012, Commercial Grade Evaluation – Plate Steel W314-C-013, Commercial Grade Evaluation – Expansion Anchors W314-C-031, AN Misc. Equipment Wind Missile Shield W314-E-001, AN Farm VPU/EDS-DP-105 W314-E-009, CGI Design Analysis – Control/Power Wire W314-E-010, CGI Design Analysis – Wire Connectors W314-E-012, CGI Design Analysis for Rigid Steel Conduit W314-E-013, CGI Design Analysis for Conduit Fittings/ Outlet Boxes W314-E-014, CGI Design Analysis for Molded Case Circuit Breakers W314-E-021, Cathodic Protection Analysis 241-AN-A & 241-AN-B Pit Mods W314-I-001, Amount of Liquid/Waste Present	P.J. Bedell, Project Design		

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	in the bottom of AN Valve Pit at time of detection W314-I-002, Human Factors Analysis Pit Leak Detection Warning Lights W314-I-003, Pit Leak Detection System Reliability/Probability of Failures W314-I-004, Solar Effects on Relay Cabinet Enclosure W314-I-005, Solar Effects on Valve Position Sensor Enclosure W314-I-006, Safety Class Instrumentation Analysis W314-I-007, Commercial Grade MTL 2313 Trip Amplifier Dedicated to Safety Class W314-I-008, Commercial Grade B/W Leak Detection Relay Dedicated to Safety Class W314-I-009, Commercial Grade Stainless Steel Probes Dedicated to Safety W314-I-010, Commercial Grade Warning Light Transformer Dedicated to Safety Class W314-I-011, Commercial Grade Edwards Strobe Local Warning Light Dedicated to Safety Class W314-I-012, Commercial Grade Potter & Brumfield Latch Relay Dedicated to Safety Class W314-I-013, Commercial Grade Potter & Brumfield General Purpose Relay Dedicated to Safety Class W314-I-014A, Leak Detection Relay Cabinet Heater Sizing W314-I-015, Commercial Grade Power Supply Dedicated to Safety Class			

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	W314-I-036, Commercial Grade Relay Cabinet Enclosure Dedicated to Safety Class W314-I-037, Commercial Grade Terminal Block Dedicated to Safety Class W314-I-038, Commercial Grade II Pin Relay Socket Dedicated to Safety Class W314-I-039, Commercial Grade Socket Dedicated to Safety Class W314-I-049, Commercial Grade Disconnect Switch Dedicated to Safety Class W314-I-050, Oper/Train & Tank Farm Instr Bldg PLC Cabinet Heat Dissipation/Fan Sizing (Typical) W314-I-051, Oper/Train & Tank Farm Instr Bldg PLC Cabinet 24VDC Power Supply Sizing (Typical) W314-I-052, UPS Runtime W314-P-001, Jumper Calculation Critical Dimensions (AN-A) W314-P-003, Jumper Calculation Balance Sheets (AN-A) W314-P-005, Shielding Analysis W314-P-006, Inside Pit and Buried Pipeline Heat Loss Calc. W314-P-007, Jumper Stress Analysis (AN-A-B) W314-P-008, 24 Hours Detectable Leakage Rate W314-P-017, 6 -in. Encasement Closure Design in accordance with ASME B31.3 W314-P-018, 4-in. Encasement Closure Design per ASME B31.3 W314-P-019, Failure Modes and Effects Analysis for Project W-314			

ABU INDEX - Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	W314-P-020, Engineering Evaluation of Commercial Grade Items W314-P-021, Stresses Induced on Piping Due to Loads on Integral Attachments Class W314-P-022, Shielding Block of Handle Extension of Valve W314-P-032, Funnel Collar Pin Analysis W314-P-034, Hydraulic Analysis W314-P-038, Valve Nozzle Loads Analysis for Valve Manifolds in Valve Pits 241-AN-A&B W314-P-051, Pressure Design of 14" ENC. For WT-V-110 W314-P-053, Pressure Design for Transfer Piping and Encasements W314-P-054, CGI Evaluation Encasement Valves W314-P-055, Valve Pit Ambient Temperature			
Commercial Grade Item Dedication Documentation	W-314-CI-2, Reinforcing Steel CGI Data W-314-CI-6, Chemical Resistant Decontaminatable Coatings, List of Materials W-314-CI-7, Chemical Resistant Decontaminatable Coatings, Installers Certificate W-314-CI-20, Chemical Process Piping Systems, Certified Material Test Reports W-314-CI-20.1, Chemical Process Piping Systems Weld Filler, Certified Material Test Reports W-314-CI-20.2, Chemical Process Piping Systems Weld Filler, Certified Material Test Reports W-314-CI-20.3, Chemical Process Piping Systems Weld Filler, Certified Material Test	P. J. Bedell, Project Design		

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	Reports W-314-C1-21, Pipe Code M-26a, CGI Data W-314-C1-22, Fittings Pipe Code M-26a CGI Data PO 501-5-GPBF-02 W-314-C1-22.1, CGI Data for Butt welded Fittings M26a, PO 501-5-GPJN-01 W-314-C1-22.2, CGI Data for Butt welded Fittings M26a, PO 501-5-GPJN-02 W-314-C1-30, Intrinsically Safe Control Relay W-314-C1-31, Trip Amplifier W-314-C1-32, Strobe Light W-314-C1-33, General Purpose Relay W-314-C1-34, Latching Relay W-314-C1-35, Transformer W-314-C1-36, Power Supply W-314-C1-37, Heater W-314-C1-38, Terminal Block W-314-C1-39, Disconnect Switch W-314-C1-40, Intrinsically Safe Control Relay W-314-C1-41, Trip Amplifier W-314-C1-42, Dual Coil Latch Relay W-314-C1-43, General Purpose Relay W-314-C1-44, Intrinsically Safe Switch Operated Relay W-314-C1-45, Transformer W-314-C1-46, Power Supply W-314-C1-47, Heater W-314-C1-48, Terminal Block W-314-C1-49.1, Disconnect Switch W-314-C1-100, Reinforcing Steel Drawing W-314-C1-101A, Valve Position Indicator W-314-C1-102, Valve Actuator W-314-C1-103, National Laboratory			

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
	Certification Documentation for UL508 Leak Detection Panels & OSHA Certification of ETL			
Procurement Specifications	W-314-P1, Rev 0, Ball Valves AN Valve Pit Upgrades	P.J. Bedell, Project Design		
Construction Specification	W-314-C1, Rev 1, Tank Farm Restoration and Safe Operations AN Valve Pit Upgrades	P.J. Bedell, Project Design		
Design, As-built, IEFD (P&ID), System Drawings	See MOU – “Drawing ECNs and As-builts for Project W-314 Phase 1 Design Packages” dated 5/27/99	P.J. Bedell, Project Design		
CWP Construction Inspection Records	W-314-AN-02, 241-AN-B Valve Pit Modification W-314-AN-03, 241-AN-A&B Valve Pit Cover Block Fabrication W-314-AN-04, 241-AN-A&B Valve Jumper Fabrication W-314-AN-05, Installation of Electrical Components for the 241-AN-A & AN-B Valve Pit Upgrades	W.R. Swift, Construction		
Drawing Tree Index	See MOU: “Drawing ECNs and As-Builts for Project W-314-Phase I Design Packages” dated 5/27/99	P.J. Bedell, Project Design		
As-Built Project Generated ECNs	All ECNs against drawings listed in MOU - “Drawing ECNs and As-Builts for Project W-314-Phase I Design Packages” dated 5/27/99	P.J. Bedell, Project Design		
Void/Superseded, As-built, Essential, Facility Support Drawings	See MOU: “Drawing ECNs and As-Builts for Project W-314-Phase I Design Packages” dated 5/27/99	C.E. Shiplier, Operations		

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
Master Equipment List Update		C.E. Shipler, Operations		
Training Plan	79600-98-004	J.M. Morris, Training		
Training to Operating Crews		J.M. Morris, Training		
Training to Maintenance Crews		J.M. Morris, Training		
Inspection Plans		H.M. Chafin, QA		
Surveillance's	QS-98-004, "Design Verification for AN Design Package QS-98-018, "Control of Measuring and Test Equipment" QS-98-029, "Evaluation of Koon-Hall-Adrian Testing" QS-99-017, "Project W-314 Fabrication/Installation of Safety Class Reinforcement Steel for Cover Blocks" QS-99-025, "Construction on Work Package Completion"	H.M. Chafin, QA J.W. Middleton, QA		
QAPP	HNF-SD-W314-QAPP-001, Rev 2	H.M. Chafin, QA		
Non Conformance Reports		J.W. Middleton, QA		
Operating Procedures	TO-020-610, Manual Operation of Gear Actuated Ball Valves TO-020-003, Removal and Installation of Gear Actuated Valve Pit Operator Assemblies	J.W. Comer, Procedures		

ABU INDEX -- Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
Repair/Maintenance Procedures	3-LDD-042, Data Sheets Testing of Liquid Detector (Liquid Level Element and Leak Detector Element) 3-LDD-055 T-Shoot & Repair of Liquid Detector (LDE & LLE)	J.W. Comer, Procedures		
Functional Check Procedures	TF-FI-229-006, Perform Functional Test for AN Farm Leak Detectors	J.W. Comer, Procedures		
PM/S Data Sheets		S.H. Rifaey, Equip Eng.		
Final Joint Safety Walkdown by Operations, Maintenance, and Health Physics, as appropriate		T.W. Bohan, Operations		
Vendor Information Files (CUI)		P.J. Bedell, Project Design		
Spare Parts List	TWR-4732	D.B. Smet, Equip Eng J.S. Hammers, Startup		
Spare Parts in Stock /Order		D.B. Smet, Equip Eng.		
Update TWR/S SE Data Base		D.L. McGrew, Sys Eng		

ABU INDEX – Roadmap of Supporting Information

This section of the index identifies all of the specific documents, activities, or other deliverables that must be completed to satisfy the Checklist Item corresponding to the ABU Checklist. When signed by the Responsible Person, it indicates completion and incorporation of W-314 requirements in the specific item. Operations Acceptance indicates completion of the Checklist Item for the specific facility.

CHECKLIST ITEM (from ABU Checklist)	SUPPORTING DOCUMENT NUMBER and TITLE (or activity and its acceptance, or other definitive information)	RESPONSIBLE PERSON (by name & org)	OPERATIONS ACCEPTANCE (for specific, discreet portions) When all items in block are complete, the cover checklist can be signed off	COMMENTS
Project Interface Control Document	P. J. Bedell, Project Design			
S.R.I.D.S. Assessment	HNF-3699, Rev 0	J.S. Hammers, Startup		
Routing Board – 272AW	2E-98-00760/W Generic Work Item, 241-AN- A&B Jumper Installation	J.E. Andrews, Operations		
Miscellaneous Memorandums of Understanding/Agreement (MOUs/MOAs)	1) Training, for Structures, Systems, and Components Installed and/or Constructed during Phase One of Project W-314, dated 12/12/97 2) Leak Testing, of Jumpers Installed by Project W-314 Tank Farm Restoration and Safe Operations, dated 12/18/97 3) Updating of Maintenance and Operating Procedures for Project W-314 Tank Farm Restoration and Safe Operations, dated 8/12/98 4) Post Test Control of Components During ACW and ABU Processes, dated 6/24/99	J.S. Hammers, Startup		
Field Verification Plan	TWR-4385	T. W. Bohan, Operations		
ACW		M.A. Lane, Project Management		

ABU INDEX FINAL ACCEPTANCE SIGNATURES

ABU-002 for AN-A Valve Pit Upgrades	All deliverables under "Supporting Document Number and Title above are complete, signed, and acceptable or is on the approved punchlist. Tank Farm Operations accepts full responsibility for systems, structures, and components covered by this ABU.	Facility Manager	Date
		W-314 Operations Manager	Date
		Design Authority	Date
		TWRS Chief Engineer	Date

June 28, 1999

ABU INDEX - Post Acceptance Punch List

This section of the index identifies items still requiring completion or closure after acceptance of the segment/system per the ABU.
Note: Items affecting Readiness may not be on the punch list without documented justification, an approved plan to correct the deficiency, and written concurrence from the Director of Tank Farms (or his delegee).

[illegible]