

ENGINEERING CHANGE NOTICE

1. ECN 654217

Page 1 of 2

Proj.
ECN

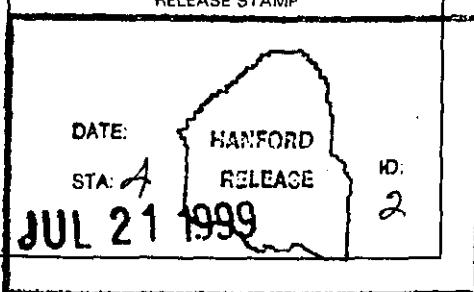
2. ECN Category (mark one) Supplemental Direct Revision Change ECN Temporary Standby Supersedure Cancel/Void	3. Originator's Name, Organization, MSIN, and Telephone No. Jack S. Hammers, TRS, R3-25, 372-2657		
	4. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	5. 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 ASB 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	
		Design Authority/Cog. Engineer/ Signature & Date	

13a. Description of Change 13b. Design Baseline Document? Yes No

- 1). Updated ECN's
- 2). Updated USQ's
- 3). Revised Documentation Required for ABU
- 4). Updated Calculations
- 5). Updated Drawings

14a. Justification (mark one)					
Criteria Change As-Found	<input type="checkbox"/>	Design Improvement Facilitate Const	<input checked="" type="checkbox"/>	Environmental Const. Error/Omission	<input type="checkbox"/>
Facility Deactivation Design Error/Omission					

14b. Justification Details Updated ABU's to reflect current Project status. <i>"This modification will not change collective dose since it has no impact on radiological sources, Contamination control, or shielding."</i> <i>USQ not required per HNF- IP-0842, VOL. II, section 5.4, rev 11 b. DBB 7/16/99</i>					
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15. Distribution (include name, MSIN, and no. of copies) See attached Distribution Sheet	RELEASE STAMP  HANFORD RELEASE DATE: JUL 21 1999 STA: A ID: 2
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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

CONSTRUCTION

18. Schedule Impact (days)

Additional

\$

Additional

\$

Savings

\$

Savings

\$

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

Design Authority D.E. Bowers D.E. Bowers

W-314 Startup Mgr. J.S. Hammers J.S. Hammers

W-314 Proj. Mgr. J.W. Lentsch

QA H.M. Chafin H.M. Chafin

S.E. Mgmt. D.L. McGrew D.L. McGrew

OPS. T.W. Bohan T.W. Bohan

Other

Safety O.M. Saka O.M. Saka

Env. T.A. Dillhoff T.A. Dillhoff

Date

7/16/99

6/28/99

7/12/99

7-12-99

7-12-99

7/12/99

7/19/99

7/16/99

Design Agent

PE

OA

Safety

Design

Environ.

Other

Signature

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: 65421 *7/20/99*

UC: 620

Org Code: 408

Charge Code: 106048

B&R Code: EW3130010

Total Pages: *70* *22*

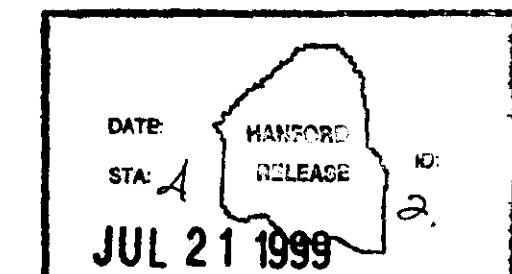
Key Words: AN-B Valve Pit Upgrade

Abstract: N/A

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Numatec *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

**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)	
<input type="checkbox"/> Engineering Task Plan - N/A		<input checked="" type="checkbox"/> Construction Specification	P.J. Bedell
<input checked="" type="checkbox"/> USQ Screening	C.W. Carlstrom	<input type="checkbox"/> Essential Material Specification - N/A	
<input type="checkbox"/> Activity Schedule		<input type="checkbox"/> Installation Work Plan - N/A	
<input type="checkbox"/> Final Safety Analysis Report - AB Amendment - N/A		<input checked="" type="checkbox"/> Design, As-built, IEDF (P&ID), System Drawings	P.J. Bedell
<input type="checkbox"/> Interim Safety Basis - AB (BIO) Amendment - N/A		<input type="checkbox"/> Installation Drawings - N/A	
<input type="checkbox"/> Safety Assessment - N/A		<input checked="" type="checkbox"/> CWP Construction Inspection Records	W.R. Swift
<input checked="" type="checkbox"/> Safety Equipment List	S.H. Rifaey	<input checked="" type="checkbox"/> Drawing Tree/Index	P.J. Bedell
<input type="checkbox"/> Operational Safety Document(s) - N/A		<input checked="" type="checkbox"/> As-Built Project Generated ECNs	P.J. Bedell
<input checked="" type="checkbox"/> Design Criteria (Project Development Specification (PDS)	M.A. Lane	<input checked="" type="checkbox"/> Void/Superseded, As-built, Essential, Facility Support Drawings	C.E. Shipley
<input checked="" type="checkbox"/> Requirements Verification Report for PDS	P.J. Bedell	<input checked="" type="checkbox"/> Master Equipment List Update	C.E. Shipley
<input type="checkbox"/> System Design Description-N/A		<input type="checkbox"/> Design Specifications/Report - N/A	
<input checked="" type="checkbox"/> Project Design Concept (PDC)	P.J. Bedell	<input type="checkbox"/> Equipment Specifications - N/A	
<input checked="" type="checkbox"/> Test and Evaluation Plan (TEP & STEP)	J.S. Hammers	ADP (all computer activities are on MPS ABU)	
<input checked="" type="checkbox"/> Acceptance Test Procedures	J.S. Hammers	<input type="checkbox"/> Software Configuration Management Plan - N/A	
<input checked="" type="checkbox"/> Acceptance Test Report	J.S. Hammers	<input type="checkbox"/> Systems Requirements Spec - N/A	
<input checked="" type="checkbox"/> Operational Test Procedures	J.S. Hammers	<input type="checkbox"/> Software Design Description - N/A	
<input checked="" type="checkbox"/> Operational Test Report	J.E. Andrews	<input type="checkbox"/> Software Validation/Verification - N/A	
<input type="checkbox"/> Environmental Impact Statement (TWRS) N/A	J.S. Hammers		
<input checked="" type="checkbox"/> NEPA Documentation	A.J. Eirich	TRAINING	
<input type="checkbox"/> Environmental Permit - N/A		<input checked="" type="checkbox"/> Training Plan	J.M. Morris
<input type="checkbox"/> Hazardous Waste Disposal Plan/Procedures - N/A		<input type="checkbox"/> Training Manuals/Certification Package - N/A	
<input type="checkbox"/> Solid Waste Disposal Plan/Procedure - N/A		<input checked="" type="checkbox"/> Training to Operating Crews	J.M. Morris
<input checked="" type="checkbox"/> Notice of Construction/Excavation	A.J. Eirich	<input checked="" type="checkbox"/> Training to Maintenance Crews	J.M. Morris
<input type="checkbox"/> Permit/Cultural Resource ES Review - N/A		<input type="checkbox"/> Training Mock-Up -N/A	
<input checked="" type="checkbox"/> Calculations	P.J. Bedell		
<input checked="" type="checkbox"/> Commercial Grade Item Dedication Documentation	P.J. Bedell		
<input type="checkbox"/> Stress/Seismic Analysis - N/A			
<input type="checkbox"/> Stress/Design Report - N/A			
<input checked="" type="checkbox"/> 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
		[X] Field Verification Plan	T.W. Bohan
		[X] ACW	M.A. Lane
QUALITY ASSURANCE			
[X] Inspection Plans	H.M. Chafin		
[X] Surveillance	H.M. Chafin/ J.W. Middleton H.M. Chafin		
[X] QAPP			
[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	<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 <u>TF-97-0560, Rev 5</u> , Nozzle Additions at 241-AN-A and 241-AN-B Valve Pits <u>TF-97-0800, Rev 8</u> , Project W-314 Valve Pit Manifold Design for 241-AN-A and 241-AN-B Valve Pit <u>TF-97-0835, Rev 3</u> , Special Protective Coating for Valve Pits Upgrade by Project W-314 <u>TF-97-0866, Rev 0</u> , W314 Leak Detection System Design for the 241-AN-A and 241-AN-B Valve Pits <u>TF-98-0020, Rev 0</u> , ECN 646103 New Gasket Material for Purex Connector per W-314 <u>TF-98-0183, Rev 0</u> , Electrical Power Supply for Leak Detection Relay Cabinets AN <u>TF-98-0214, Rev 0</u> , W314 Change Facility Installation and Gate Modification <u>TF-98-0215, Rev 3</u> , W314 Procurement Specification for Impact Wrench AN Valve Pit Upgrade <u>TF-98-0217, Rev 10</u> , W314 Electrical Design for Valve Pit Upgrade 241-AN-A,B <u>TF-98-0219, Rev 6</u> , Modifications of W-314 AN Valve Pit Jumper Drawings Due to Vendor Information from Valve Procurement <u>TF-98-0229, Rev 21</u> , ECN to Structural Drawings for 241-AN-A & 241-AN-B Valve Pit <u>TF-98-0237, Rev 1</u> , New Transfer Piping per Project W-314 <u>TF-98-0238, Rev 0</u> , ECN to Instrumentation Drawings for 241-AN-A and 241-AN-B Valve	D.F. Carlstrom, SAR Eng Services		

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	<p>Pit Upgrades</p> <p><u>TF-98-0244, Rev 1</u>, AN Valve Pit Preparation and Removal of Cover Blocks, Project W314</p> <p><u>TF-98-0259, Rev 0</u>, W314 Design Upgrades for the AN Pit Upgrade Package</p> <p><u>TF-98-0334, Rev 0</u>, Perform Excavation Activities in Support of Project W314</p> <p><u>TF-98-0459, Rev 0</u>, Design Upgrades for the AN Pit Upgrade Package</p> <p><u>TF-98-0483, Rev 8</u>, Project W-314 Valve Actuator Assembly Design Modification</p> <p><u>TF-98-0524, Rev 0</u>, Probe Dimension and Generic Leak Detection Assembly Part No. Changes</p> <p><u>TF-98-0560, Rev 1</u>, W-314 Nozzle Additions at 241-AN-A and 241-AN-B Valve Pits</p> <p><u>TF-98-0598, Rev 2</u>, ECN to Revise Instrumentation & Electrical Drawings for 241-AN-A and 241-AN-B Valve Pit Upgrades</p> <p><u>TF-98-0665, Rev 0</u>, Project W-314 AN Valve Pit Jumper Drawing Modifications to Facilitate Fabrication</p> <p><u>TF-98-0700, Rev 0</u>, Disconnection of Existing Leak Detection System at 241-AN-A and 241-AN-B Valve Pits</p> <p><u>TF-98-0718, Rev 0</u>, AN Valve Pit Upgrade Project Bypass Pipeline Modification</p> <p><u>TF-98-0993, Rev 0</u>, Leak Detection Relay Test Resistor and Safety Class Symbol Changes</p> <p><u>TF-98-1031, Rev 0</u>, Project W-314, New Leak Detection Contacts</p> <p><u>TF-98-1053, Rev 1</u>, Valves Hydrotest and Seat Leakage Tests Procedures Modifications</p>			

CHECKLIST ITEM (from ABU Checklist)	COMMENTS	RESPONSIBLE PERSON (or activity and its acceptance, or other definitive information) OPERATIONS NUMBER and TITLE SUPPORTING DOCUMENT Resistor and Safety Class Symbol Changes TF-98-1058, Rev 0, Leak Detection Relay Test Block Dimensions, Circular Protection and Valve Position Sensors Writing TF-98-1212, Rev 0, Rebar Replacement and Tolerance Changes to Construction Specification W-34-C1 Conduiter Box Mounting Bracket TF-98-1219, Rev 1, Valve Position Sensor Cabinet NEMA 4 Alarms TF-98-1279, Rev 0, Leak Detection Relay Pounding Concrete Change TF-99-0128, Rev 0, ECN 3144C-066 AN Breaker/Drain Fitting Change TF-99-0167, Rev 0, ECN 3144C-076 AN Valve Part Upgrade Leak Detection Panel Tag TF-99-0240, Rev 1, Miscellaneous Changes Associated with Nozzle Installation at 241-AN A and 241-AN-B Valve Parts Valve Part Upgrade Leak Detection Element Conduit Seal Addition and Associated Modifications
Program/Project Title: Project W-314, Tank Farm Restoration and Safe Operation, Phase 1 Component/System: AN-B Valve Part Upgrades June 28, 1999 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. 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.		

ABU INDEX - Recordings of Supporting Information

ABU INDEX – Roadmap of Supporting Information

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	<u>TF-99-0427, Rev 0, ECN 314-4C-104</u> Bypass Leak Detection Relays During W-314 Construction Activities at 241-An-A and 241- AN-B Valve Pits <u>TF-99-0480, Rev 0, ECN 314-4C-115</u> AN Valve Pit Upgrade Instrument Cable Shield Wire Termination Change <u>TF-99-489, Rev 0, ECN W314-4C-117</u> AN Valve Pit Upgrade Encasement Leak Detector Piping Connection Change			
Safety Equipment List	HNF-SD-WM-SEL-040, Rev 1	S.H. Rifaey, 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		

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	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 - Rundown of Supporting Information

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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		

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	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

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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 - Rundown of Supporting Information

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	<p>W314-P-020, Engineering Evaluation of Commercial Grade Items</p> <p>W314-P-021, Stresses Induced on Piping Due to Loads on Integral Attachments Class</p> <p>W314-P-022, Shielding Block of Handle Extension of Valve</p> <p>W314-P-032, Funnel Collar Pin Analysis</p> <p>W314-P-034, Hydraulic Analysis</p> <p>W314-P-038, Valve Nozzle Loads Analysis for Valve Manifolds in Valve Pits 241-AN-A&B</p> <p>W314-P-051, Pressure Design of 14" ENC. For WT-V-110</p> <p>W314-P-033, Pressure Design for Transfer Piping and Encasements</p> <p>W314-P-054, CGI Evaluation Encasement Valves</p> <p>W314-P-055, Valve Pit Ambient Temperature</p>			
Commercial Grade Item Dedication Documentation	<p>W-314-C1-2, Reinforcing Steel CGI Data</p> <p>W-314-C1-6, Chemical Resistant Decontaminatable Coatings, List of Materials</p> <p>W-314-C1-7, Chemical Resistant Decontaminatable Coatings, Installers Certificate</p> <p>W-314-C1-20, Chemical Process Piping Systems, Certified Material Test Reports</p> <p>W-314-C1-20-1, Chemical Process Piping Systems Weld Filler, Certified Material Test Reports</p> <p>W-314-C1-20-2, Chemical Process Piping Systems Weld Filler, Certified Material Test Reports</p> <p>W-314-C1-20-3, Chemical Process Piping Systems Weld Filler, Certified Material Test</p>	P.J. Bedell, Project Design		

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	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-GPBN-01 W-314-C1-22.2, CGI Data for Butt welded Fittings M26a, PO 501-5-GPBN-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			

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	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, IEFID (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. Shipley, Operations		

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Master Equipment List Update		C.E. Shipley, 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		

ITEM	DESCRIPTION	RESPONSIBLE PERSON	NUMBER and TITLE	OPERATIONS ACCEPTANCE	COMMENTS (from ABU Checklist)
ABU INDEX - Roadmap of Supporting Information					
Checklist Item	Comments	J.W. Comer, Procedures	J.W. FT-229-006, Performance Functional Test for AN Farm Leak Detectors	J.W. Comer, Procedures	3-LDD-042, Data Sheets Testing of Liquid Detector Element 3-LDD-055 Test Shoot & Repair of Liquid Detector (LDE & LLE) Detector (LDE & LLE)
Prepare/Maintainance	Comments	J.W. Comer, Procedures	J.W. FT-229-006, Performance Functional Test for AN Farm Leak Detectors	J.W. Comer, Procedures	3-LDD-042, Data Sheets Testing of Liquid Detector Element 3-LDD-055 Test Shoot & Repair of Liquid Detector (LDE & LLE)
Functional Check	Comments	S.H. Fraley, Equip	J.W. Bohan, Operations	T.W. Bohan, Operations	Final Joint Safety Walkdown by Operations, Maintenance, and Health Physics, as appropriate
PM/S Data Sheets	Comments	Design	P.J. Beedell, Project	Design	Vendor Information Files (CVI)
Spare Parts List	Comments	D.B. Smet, Equip	TWR-4732	D.B. Smet, Equip	Spare Parts in Stock / Order
Update TWRS SE Data	Comments	D.L. McGrath, Sys		Eng.	Base

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CHECKLIST ITEM (from ABU Checklist)		COMMENTS	
Project Interface Control Document	P.J. Beedell, Project Design	When all items in block are complete, the cover checklist can be signed off	
S.R.I.D.S. Assessment	HNP-3699, Rev 0	J.S. Hammers, Startup	2E-98-00760/W Generic Work Item, 241-AN- A&B Jumper Installation
Routing Board - 272AW	2E-98-00760/W Generic Work Item, 241-AN-	J.E. Andrews, Operations	
Miscellaneous	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 Impactors Installed by Project W-314 Tank Farm Restoration and Sate Operations, dated 12/18/97 3) Updation of Maintenance and Operating Procedures for Project W-314 Tank Farm Restoration and Sate Operations, dated 8/12/98 4) Post Test Control of Components During ACW and ABU Processes, dated 6/24/99	J.S. Hammers, Startup	Understandings of MOUs/MOAs
Field Verification Plan	T.W. Bohan, Operations	ACW	

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APPENDIX – Roadmap of Supporting Information

Program/Project Title: Project W-314, Tank Farm Restoration and Safe Operation Phase I
Component/System: AN-B Valve Pit Upgrades
Program/Project Title: Project W-314, Tank Farm Restoration and Safe Operation Phase I
June 28, 1999

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.	<i>Facility Manager</i>	<i>Date</i>
		<i>W-314 Operations Manager</i>	<i>Date</i>
		<i>Design Authority</i>	<i>Date</i>
		<i>TWRS Chief Engineer</i>	<i>Date</i>

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 delegate).