ENGINEERING DATA TRANSMITTAL

Page 1 of 1
1. EDT 629685

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) Plant Support Engineering		4. Related EDT No.: N/A							
5. Proj./Prog./Dept./Div.: Annulus Leak Detectors		6. Design Authority/Design Agent/Cog. Engr.: C. C. Scaief, III		7. Purchase Order No.: N/A							
8. Originator Remarks: This EDT is for approval and release of RPP-6269				9. Equip./Component No.: N/A							
				10. System/Bldg./Facility: 241-SY							
				12. Major Assm. Dwg. No.: N/A							
11. Receiver Remarks: N/A		11A. Design Baseline Document? ☐ Yes ☒ No		13. Permit/Permit Application No.: N/A							
				14. Required Response Date: N/A							
15. DATA TRANSMITTED											
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition			
1	RPP-6269			Project Turnover	N/A	1					
				Deliverables for the SY		2					
				Farm Enraf Annulus Leak Detectors							
16. KEY											
Approval Designator (F)		Reason for Transmittal (G)				Disposition (H) & (I)					
E, S, Q, D OR N/A (See WHC-CM-3-5, Sec. 12.7)		1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)				1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged					
17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)											
(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN
		Design Authority				1	1	D. C. Larsen	<i>D.C. Larsen</i>	9/14/00	T4-08
		Design Agent	<i>C.C. Scaief</i>			1	1	M. H. Brown	<i>M.H. Brown</i>		T4-07
1	1	Cog. Eng. C. C. Scaief, III	<i>C.C. Scaief</i>	9/11/00		1	1	J.T. Hickman	<i>J.T. Hickman</i>		T4-07
1	1	Cog. Mgr. D. B. Smet	<i>D.B. Smet</i>	9-11-00							
		QA									
		Safety									
		Env.									
18.		19.			20.		21. DOE APPROVAL (if required)				
<i>C.C. Scaief</i> 9/11/00					<i>D.B. Smet</i> 9-11-00		Ctrl No. _____				
Signature of EDT Originator		Authorized Representative for Receiving Organization			Design Authority/Cognizant Manager		☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments				

[illegible]

Project Turnover Deliverables for the SY Farm Enraf Annulus Leak Detectors

C. C. Scaief, III

CH2M HILL Hanford Group, Inc.

Richland, WA 99352

U.S. Department of Energy Contract DE-AC06-99RL14047

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Abstract: This document identifies the deliverables that ensure the end user of the SY Farm Enraf Annulus Leak Detectors (ALD) has all the documentation and training required for operating and maintaining the new system.

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9/19/00
Release Approval Date

Release Stamp

Approved For Public Release

**PROJECT TURNOVER DELIVERABLES FOR THE
SY FARM ENRAF ANNULUS LEAK DETECTORS**

C. C. Scaief, III

**PROJECT TURNOVER DELIVERABLES FOR THE SY FARM ENRAF
ANNULUS LEAK DETECTORS**

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PROJECT TURNOVER DELIVERABLES FOR THE SY FARM ENRAF ANNULUS LEAK DETECTORS

1.0 INTRODUCTION

This document identifies the deliverables that ensure the end user of the SY Farm Enraf Annulus Leak Detectors (ALD) has all the documentation and training required for operating and maintaining the new system. All deliverable items checked on the Acceptance For Beneficial Use (ABU) form have been completed and are available to the end user. This document was written as required by HNF-IP-0842, Volume IV section 3.12 Acceptance of Structures, Systems, and Components for Beneficial Use.

2.0 SCOPE

This document applies to the deliverable documentation required to operate and maintain the SY Farm Enraf ALD System. Appendix A provides a copy of the ABU form as listed in the appendix of TWR-4092, Engineering Task Plan for the New SY Farm Annulus Leak Detectors. This document attests that all required deliverable items checked on the ABU have been completed and are available to the end user.

3.0 DELIVERABLES

The following are the deliverable items on the ABU form with the document title.

Engineering Task Plan

TWR-4092, Engineering Task Plan For the New SY Farm Annulus Leak Detectors

Drawings

H-14-103761, Sheet 1-3, Rev.0 Installation Annulus Leak Detector Electrical

SY Farm ECNs

ECN-655929 SY Annulus LDT (modifies H-14-103761, sheets 1 and 3)

ECN-655940 Annulus Leak Detectors (modifies H-14-103761, sheet 1, 2 and 3)

ECN-647464 Annulus Leak Detectors (Installs SY-102, Riser -033 ALD)

ECN-647475 Annulus Leak Detectors (Changes ECN-647464)

ECN-647466 Annulus Leak Detectors (Changes ECN-647464)

ECN-647470 Annulus Leak Detectors (As-Builds H-2-72378, Sheet 1, Rev. 0)

ECN-649073 Enraf Annulus Leak Detector (Adds ALD displacer to H-2-817634)

ECN-647473 Annulus Leak Detectors (Installs riser adapters and ball valves on the eight remaining risers)

ECN-655930 Annulus Leak Detectors (Changes ECN-647473)

ECN-647472 Annulus Leak Detectors (Installs conduit for the nine ALD risers)

ECN-651866 Annulus Leak Detectors (Supersedes ECN-647472)

ECN-647474 Installs the eight ALDs on the risers and connects them to TMACS and the alarm circuits.

ECN-655948 Annulus Leak Detectors (Changes ECN 647474)

ECN-655946 Annulus Leak Detectors (Adds auxilliary ground connection for portable generator)

ECN-655931 Reconfigures the alarm circuit and modifies the SEL

Authorization Basis

LMHC 2000a, *Tank Waste Remediation System Final Safety Analysis Report*, HNF-SD-WM-SAR-067, Rev. 1-G, Lockheed Martin Hanford Corporation, Richland, Washington

LMHC 2000b, *Tank Waste Remediation System Technical Safety Requirements*, HNF-SD-WM-TSR-006, Rev. 1-G, Lockheed Martin Hanford Corporation, Richland, Washington

SY Farm Procedures

TO-040-590, LEAK DETECTION WELLS ANULUS LEAK DETECTION SYSTEMS

ARP-T-431-101, RESPOND TO ALARMS IN THE 241-SY-271 INSTRUMENT BUILDING

TF-OR-WST-01-D, 242-S, 244-S, 241-S AND 241-SX DAY AND NIGHT SHIFT ROUNDS

TF-FT-439-009, PERFORM FUNCTIONAL TEST OF 241-SY PRIMARY TANK

LEAK DETECTION SYSTEM ANNULUS ENRAF LEAK DETECTORS

6-LDD-485, CALIBRATE PRIMARY TANK ENRAF (SERIES 854) LEAK DETECTION GAUGES LOCATED IN ANNULUS TANKS AND CHECK DISPLACER WEIGHT

5-LDD-468, ANNULUS TANK LEAK DETECTION ENRAF SERIES 854 INITIAL INSTALLATION AND OPERATIONAL CHECK

SY Farm Data Sheets

Activity #	Component Number	Procedure
WT-06636	241-SY-ANN-LDT	TF-FT-439-009
WT-06522	SY101-WSTA-LDT-151	6-LDD-485
WT-06523	SY101-WSTA-LDT-152	6-LDD-485
WT-06524	SY101-WSTA-LDT-153	6-LDD-485
WT-06525	SY102-WSTA-LDT-151	6-LDD-485
WT-06526	SY102-WSTA-LDT-152	6-LDD-485
WT-06527	SY102-WSTA-LDT-153	6-LDD-485
WT-06528	SY103-WSTA-LDT-151	6-LDD-485
WT-06529	SY103-WSTA-LDT-152	6-LDD-485
WT-06530	SY103-WSTA-LDT-153	6-LDD-485

Acceptance Test Procedure (ATP) and Test Report (ATR)

<u>Acceptance Test Procedure (ATP) and Test Report (ATR)</u>	<u>Description</u>
HNF-4634, Rev. 0, Test Plan for SY Farm Annulus Leak Detector	Overall test plan
HNF-4328, Rev. 0, Test Report for ENRAF Annulus Leak Detector Development	Proof of concept test and report

HNF-4546, Rev. 1, ENRAF Series 854 Advanced Technology Gauge (ATG) with SPU II Card for Leak Detector Use Acceptance Test

Shop Acceptance Test Procedure

HNF-5155, Rev 0, Acceptance Test Report for the SY-102 Annulus Leak Detector Demonstration Unit

Report for HNF-4546 (shop ATP) for SY-102 gauge

HNF-5397 Test Report for New SY Farm Annulus Leak Detectors, Rev.0

Test report for SY-102 demonstration period

HNF-5467 In Shop Acceptance Test Report for the SY Farm Annulus Leak Detectors, Rev. 0

Report for HNF-4546 (Shop ATP) for the remaining eight gauges

Vendor Information Files

31560 (Existing Enraf VI File)

Training Completed

Training Bulletin RPP-TB-99-18 - Enraf Annulus Leak Detector (ALD) in SY Tank Farms.

4.0 REFERENCES

TWR-4092, Engineering Task Plan For New SY Farm Annulus Leak Detectors

HNF-IP-0842, Volume IV section 3.12, Acceptance of Structures, Systems, and Components For Beneficial Use.

5.0 APPENDIX A: ACCEPTANCE FOR BENEFICIAL USE FORM**DOCUMENTATION REQUIRED FOR ACCEPTANCE FOR BENEFICIAL USE**

DESCRIPTION	RESPONSIBILITY	DESCRIPTION	RESPONSIBILITY
ENGINEERING [X] Engineering Task Plan		ADP	
[X] Activity Schedule	CC Scaief III	[] Software Configuration Mgmt Plan	
[] Final Safety Analysis Report	KE Carpenter	[] System Requirements Spec	
[] Interim Safety Basis - update		[] Software Design Description	
[] Safety Assessment		[] Software Validation/Verification	
[X] Safety Equipment List		[] _____	
[] Operational Safety Requirements - or update existing		TRAINING	
[] Operational Safety Document(s) - or update existing		[] Training Plan	
[X] Design Criteria (In ETP)	CC Scaief III	[] Training Manuals	
[] System Design Description	JH Huber	[] Training to Operating Crews	
[X] Test Plan/Specifications (In ETP)	JH Huber	[X] Training to Maintenance Crews	
[X] Acceptance Test Procedures and Final Test Report	JH Huber	[X] Training Mock-Up	
[] Operational Test Procedures and Final Test Report		[] _____	
[] Environmental Impact Statement		OPERATIONS/MAINTENANCE	
[] Environmental Report		[] Operating and Maintenance Manuals	
[] Environmental Permit		[X] Operating Procedures	DC Larsen
[] Hazardous Waste Disposal Plan/Procedures		[] Surveillance Procedures	DB Smet
[] Solid Waste Disposal Plan/Procedure		[X] Calibration Procedures	
[] Stress/Seismic Analysis		[] Preventative Maintenance Proc.	
[] Stress/Design Report		[] Repair/Maintenance Procedures	DB Smet
[] Design Specifications/Report		[X] Functional Check Procedures	DB Smet
[] Equipment Specifications		[X] PM/S Datasheets	
[] Procurement Specifications		[] Final Joint Safety walkdown by Operations, Engineering, maintenance, and Health Physics Technicians, as appropriate.	
[] Construction Specification		[] _____	
[] Essential Material Specifications		[] _____	
[] Final Design Drawings		QUALITY ASSURANCE	
[X] Installation Drawings (ECNs)	WE Willingham	[] Inspection Plan	
[] Installation Work Plan		[] QAPP	
[] As-built Drawings		[] QAPP	
[] Interface Control Drawings		[] _____	
[] IEFD Drawings			Existing
[] Systems Drawings		PROCUREMENT	
[] Drawing Tree		[X] Vendor Information Files	
[] Incorporate Outstanding Project Generated ECNs		[] Comprehensive Equip. List	
[X] Authorization Basis Revision	JE Meacham	[] Spare Parts List	Existing
		[X] Spare Parts in Stock	