

FEB 27 1997

Station 30

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

617918

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) Tank Farm Restoration and Safe Operations Project		4. Related EDT No.: N/A	
5. Proj./Prog./Dept./Div.: Project W-314/TWRS		6. Design Authority/ Design Agent/Cog. Engr.:		7. Purchase Order No.: N/A	
8. Originator Remarks: This Design Review Report (DRR) documents the closure of all Review Comment Records associated with the design reviews conducted for the Project W-314 Phase 1 Project Development Specifications (PDS) Requirements Analysis.				9. Equip./Component No.: N/A	
				10. System/Bldg./Facility: 200 E/W Tank Farms	
11. Receiver Remarks: 11A. Design Baseline Document? ☐ Yes ☒ No				12. Major Assm. Dwg. No.: N/A	
				13. Permit/Permit Application No.: N/A	
				14. Required Response Date: N/A	

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Trans- mittal	Originator Dispo- sition	Receiver Dispo- sition
1	HNF-SD-W314-DRR-001	--	0	Design Review Report: Project Development Specifications for Project W-314, Tank Farm Restoration and Safe Operations, Phase 1	N/A	2	1	

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: N/A									
		Design Agent: N/A									
2	1	Cog.Eng.: K.A. Boes	<i>K.A. Boes</i>	2/24/97	R3-25						
2	1	Cog. Mgr.: W.W. Rutherford	<i>W.W. Rutherford</i>	2/24/97							
2	1	QA: <i>Tim M. Chapin</i>	<i>Tim M. Chapin</i>	2/26/97	R3-25						
		Safety: N/A									
		Env.: N/A									

18. <i>K.A. Boes</i> K.A. Boes Signature of EDT Originator		19. N/A Authorized Representative for Receiving Organization		20. <i>W.W. Rutherford</i> W.W. Rutherford Design Authority/ Cognizant Manager		21. DOE APPROVAL (if required) Ctrl. No.: N/A ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments	
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Design Review Report: Project Development Specifications for Project W-314, Tank Farm Restoration and Safe Operation, Phase 1

K. A. Boes

Numatec Hanford Corporation, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 617918 UC: 5/0
Org Code: 8C800 Charge Code: N314D
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Key Words: Design Review Report, DRR, W-314, Tank Farm Restoration and Safe Operations, Phase 1, Project Development Specifications, PDS, System Engineering

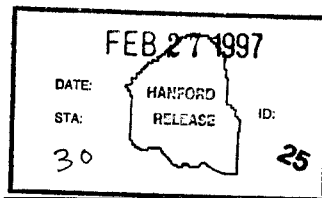
Abstract: This Design Review Report (DRR) documents the closure of all Review Comment Record sheets associated with the design reviews conducted for the Project W-314 Phase 1 Project Development Specification (PDS) Requirements Analysis. The DRR includes the documented comments and their respective dispositions for the W-314 PDS Requirements Analysis documents associated with Transfer Piping, Valve Pit Manifolds, Pit Leak Detection, Master Pump Shutdown, and Special Protective Coating. Acceptance of the comment dispositions and closure of the review comments is indicated by the signatures of the participating reviewers.

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Release Approval

2/27/97
Date



Release Stamp

Approved for Public Release

REVIEW COMMENT RECORD (RCR)		1. Date 12-18-96	2. Review No.
		3. Project No. W-314	4. Page 1 of 6

5. Document Number(s)/Title(s) HNF-SD-W314-TI-009/Transfer Piping Requirements Analysis	6. Program/Project/ Building Number W-314	7. Reviewer Various (coordinated by Mark Rickenbach)	8. Organization/Group Various	9. Location/Phone 1200 Jadwin/373-2539
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10. Agreement with indicated comment disposition(s)

Mark Rickenbach
Mark Rickenbach

1/16/97 *Disal m'ch for REF cc: mail*
Date Salsman

1-16-97
Date

Disal m'ch for Don Smith
Don Smith

1-16-97 *Shakti Saman*
Date

1/16/97
Date

DE Bowers
Dave Bowers

1-16-97 *for DE Bowers*
Date Dan Reberger

1-16-97
Date

George Janicek
George Janicek

1/16/97 *n/a*
Date

n/a
Date

Chuck Scarlet
Chuck Scarlet

1-16-97 *n/a*
Date

n/a
Date

Disal m'ch
Dick McGraw

1-16-97 *Hank M. Chapin*
Date Hank Charin

1-16-97
Date

Ron Reed
Ron Reed

1/16/97 *n/a*
Date Phil Miller

n/a
Date

Author: Dale F Salsman at ~WHC302
Date: 01/14/97 03:36 PM
Priority: Normal
TO: Mark D Rickenbach at ~HANFORD07C
CC: Dick L McGrew at ~WHC82
Subject: Acceptance of RCRs

----- Message Contents -----

Mark D. Rickenbach,

I have reviewed the disposition to my comments on the RCRs for
HNF-SD-W314-TI-009 and 010 and have found them acceptable.

Dale F. Salsman

REVIEW COMMENT RECORD (RCR)			
1. Date 12-18-96		2. Review No.	
3. Project No. W-314		4. Page 2 of 6	

Com #	Commenter	Comment	Disposition	Closed
1	Rickenbach	General Comment: See the Valve Manifold Analysis (TI-010) RCR's for appropriate general comments and other changes that would apply to this document. Remove dates on reference documents and leave the REV or change #.	Accept. Removed dates on reference documents. Modified Section 3.2.1.1 per applicable comments in TI-010.	Y
2	Rickenbach	Pg. 1, Table 1-1, switch lines 2 and 3 to match line designations in Fig. 3-1.	Accept. Modified Table 1-1.	Y
3	Rickenbach	Pg. 1, make first paragraph under 1.0 "1.1 Description", add a "1.2 Classification" and make it "not applicable".	Accept. Added Sections 1.1 and 1.2.	Y
4	Jacobson	Pg. 5, Fig. 3-1, show only part reflecting Phase 1 of the project.	Accept. Modified Figure 3-1.	Y
5	Reed	Pg. 6, Fig. 3-2, renumber bubbles to reflect components listed in the paragraph above.	Accept. Renumbered bubbles in Figure 3-2.	Y
6	Rickenbach/Janicek	Pg. 13, 3.2.2.2, expand the requirement to state that the minimum slope is all in one direction.	Accept. Added "shall slope continuously in one direction."	Y
7	Reed	Pg. 14, 3.2.2.6, add requirement to make the annulus of the pipe encasement pressure testable.	Accept. Added requirement number 3.2.2.8.	Y
8	Salsman	Pg. 14, 3.2.2.7 (encasement pipe pressure), move this section to section 3.2.5.2 (Induced Environments).	Accept. Moved this requirement under 3.2.5.2.6 Pressure Load.	Y
9	Zaman/Reed/Janicek	Pg. 14, 3.2.2.9, delete section completely.	Accept. Deleted requirement for ASME Section III.	Y
10	Zaman/Reed/Janicek	Pg. 24, add requirement of how and where leak detection is located in the physical characteristics section of the leak detector system.	Reject. The leak detection system design will be left generic per verbal comments from Operations.	Y

REVIEW COMMENT RECORD (RCR)

1. Date 12-18-96			2. Review No.	
3. Project No. W-314			4. Page 3 of 6	
11	Rickenbach	Pg. 15, 3.2.3.2, delete section completely.	Accept. Section deleted.	Y
12	Zaman/Reed/ Scaief/ Janicek	Pg. 15, 3.2.3.4, reword to reflect an availability of 99% of the time is required for the encasement leak detection system when called upon to perform its function.	Reject. This section was modified per comments on the pit leak detection (TI-11). Added requirement of 0.95 probability for detection and 0.05 probability of false alarm.	Y
13	Salsman	Pg. 15, 3.2.4.1 (cathodic protection maintenance freq.), move to section 3.5.1 (Logistics). Check the exact wording of the requirement for testing capability.	Accept. Moved to 3.5.1.4 and reworded. Added to 3.5.1.5 for annual inspection per WAC.	X
14	Salsman	Pg. 15, 3.2.4, add requirement for no corrective or preventative maintenance for the design life of transfer piping.	Accept. Added requirement numbers 3.2.4.1 thru 3.2.4.3.	Y
15	Rickenbach/ Carratt	Pg. 15, 3.2.4.2, insert whatever the requirement and the basis is for the pit leak detection PDS. Also, add requirement for mean time to repair (MTTR) per component.	Accept. Added requirement numbers 3.2.4.4 and 3.2.4.5 per TI-11. Also, added 25 day repair time requirement per the LLW Feed Staging Plan.	Y
16	Rickenbach	Pg. 15, 3.2.5.1, make same basic changes to the "Natural Environment" section of this document as identified in the comments for the valve manifold document (HNF-SD-W314-TI-010).	Accept. Incorporated generic "Natural Environments" modifications.	Y
17	McGrew	Pg. 16, 3.2.5.1.2, add requirement for average soil temperature. Also, add to valve manifold document (HNF-SD-W314-TI-010).	Accept. Added average temperatures per PNLL report.	Y
18	Janicek	Pg. 16, 3.2.5.1.5, not safety class, make same as Valve Manifold document. Need to wait for safety class determination and design as applicable (cover blocks)	Accept. Safety class loading requirements removed.	Y

REVIEW COMMENT RECORD (RCR)

1. Date 12-18-96			2. Review No.	
			4. Page 4 of 6	
3. Project No. W-314				
19	Rickenbach	Pg. 19, 3.3.1.1, change basis to higher level basis instead of referring to the same document that is mentioned in the requirement.	Accept. Reference PHMC contract number.	Y
20	Rickenbach	Pg. 19, 3.3.1.3, delete section completely.	Accept.	Y
21	Rickenbach	Pg. 19, 3.3.1.2, add "and encasement" after "primary".	Accept.	Y
22	Rickenbach	Pg. 19, 3.3.1.5, delete section completely.	Accept.	Y
23	Rickenbach	Pg. 19, 3.3.1.7, add requirement for using same dirt that is taken out of hole as the backfill (depending on contamination levels). Jacobson will get radcon reference for backfill material.	Accept. Added requirement to reuse contaminated soil per Contaminated Soil Policy letter.	Y
24	Rickenbach	Pg. 19, 3.3.1.8, delete the words "and similar small diameter pipe".	Accept.	Y
25	Carratt	Pg. 20, 3.3.1.9, add "UL 508" to the requirement.	Accept.	Y
26	Rickenbach	Pg. 20, 3.3.3, incorporate same corrections as identified in the comments for valve manifold document (HNF-SD-W314-TI-010).	Accept. Modified per requirements in WMC-IP-0842.	Y
27	Rickenbach	Pg. 20, 3.3.4, delete any reference to ASME section III.	Accept.	Y
28	Rickenbach	Pg. 20, 3.3.6.1, make format same as valve manifold document, i.e., 3.3.6.1.1 will be called safety classification.	Accept. Modified to be consistent with TI-10.	Y
29	Janicek	Pg. 21, 3.3.6.1.2, delete section completely.	Accept. Deleted Safety Class requirement.	Y
30	Rickenbach	Pg. 21, 3.3.6.2, revise the section concerning "Personal Safety" to be consistent with the similar section in the valve manifold document (HNF-SD-W314-TI-010).	Reject. Section was deleted to be consistent with TI-10.	Y

REVIEW COMMENT RECORD (RCR)			1. Date 12-18-96	2. Review No.
			3. Project No. W-314	4. Page 5 of 6
31	Rickenbach	Pg. 21, 3.3.7.3, delete section completely.	Accept. Modified Section 3.3.7 per TI-10.	Y
32	Rickenbach	Pg. 22, 3.4, revise the section concerning "Documentation" to be consistent with the similar section in the valve manifold document (HNF-SD-W314-TI-010).	Reject. No changes were made in TI-10.	Y
33	Rickenbach	Pg. 22, 3.5.3, change to "not applicable".	Accept.	Y
34	Rickenbach Scatef	Pg. 23, 3.7.1.2.1, delete section completely.	Accept.	Y
35	Rickenbach	Pg. 23, add requirements for cathodic protection NACE Guidelines in physical characteristics.	Accept. Added requirement under Section 3.3 (3.3.1.9).	Y
36	Scatef	Pg. 24, 3.7.2.1.1, add "the administrative lock is removed" after the first word and delete "a waste transfer has started".	Reject. Reworded per comments on TI-11.	Y
37	Carratt	Pg. 24, 3.7.2.1.1.1, insert "equal to or greater than" before the word "thirty". Expand on basis to identify where requirement came from.	Reject. Modified to make frequency continuous per TI-11.	Y
38	Carratt/Reed	Pg. 24, 3.7.2.1.1.2, Expand on basis to identify where requirement for the encasement leak detection response time came from. Use same basis as written in the Master Pump Shutdown spec.	Accept. Modified per changes in TI-11 and used same basis.	Y
39	Scatef	Pg. 24, 3.7.2.1.2, add "the administrative lock is removed" after the first word and delete "a waste transfer has started".	Reject. Reworded per comments on TI-11.	Y
40	Scatef	Pg. 24, 3.7.2.1.2.1, split into two separate requirements. Add word "detected" before failure.	Accept. Split and reworded per comments on TI-11.	Y
41		Pg. 24, 3.7.2.1.2.2, check reference to OSD-T-152-001, is it really OSD-T-152-001.	Accept. Change to OSD.	Y

REVIEW COMMENT RECORD (RCR)			1. Date 12-18-96	2. Review No.
			3. Project No. W-314	4. Page 6 of 6
42	Brown	Pg. 25, 3.7.2.2, add requirement about location of leak detector.	Reject. The leak detection system design will be left generic per verbal comments from Operations.	Y
43	Reberger	Add requirement for using existing encasement leak detection design for our system (basis will be PDC).	Reject. The leak detection system design will be left generic per verbal comments from Operations.	Y
44	Rickenbach	Add sections 4.0 and 5.0 to be consistent with all other documents and the PDS's.	Accept. Section 4 and 5 added.	Y
45		Add table 4-2 from HNF-SD-W314-PDS-001 into this document and change all "Test" to "Analysis".	Accept.	Y

REVIEW COMMENT RECORD (RCR)				1. Date	2. Review No.
				12-18-96	
				3. Project No.	4. Page
				W-314	1 of 1

5. Document Number(s)/Title(s)	6. Program/Project/ Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
HNF-SD-W314-TI-010/Valve Pit Manifold Requirements Analysis	W-314	Various (coordinated by Mark Rickenbach)	Various	1200 Jadwin/373- 2539

10. Agreement with indicated comment disposition(s)

Mark Rickenbach
Mark Rickenbach

1/10/97
Date

Send me plan for REF EC: MAIL
Date Salsman

David M. Bowers
Don Smith

1-16-97
Date

Shakir Zaman
Date

D.E. Bowers
Dave Bowers

1-16-97
Date

by D.E. Bowers
Dan Reberger

George Janiak
George Janiak

1/16/97
Date

n/a
Dick Carratt

A.P. S. Smith
Chuck Scafer

1-16-97
Date

n/a
Aditya Palit

David M. Bowers
Dick McGrew

1-16-97
Date

Frank M. Chafin
Frank Chafin

Phil Miller
Ron Reed

1/16/97
Date

n/a
Phil Miller

Author: Dale F Salsman at -WHC302
Date: 01/14/97 03:36 PM
Priority: Normal
TO: Mark D Rickenbach at -HANFORD07C
CC: Dick L McGrew at -WHC82
Subject: Acceptance of RCRs

----- Message Contents -----

Mark D. Rickenbach,

I have reviewed the disposition to my comments on the RCRs for
HNF-SD-W314-TI-009 and 010 and have found them acceptable.

Dale F. Salsman

REVIEW COMMENT RECORD (RCR)

			1. Date 12-18-96	2. Review No.
			3. Project No. W-314	4. Page 2 of 2
Com. #	Commenter	Comment	Disposition	Closed
1	Chafin	pg. 1, add Reference DOE-RL-92-36, Hanford Site Hoisting and Rigging Manual (from pg 24 3.5.3.3)	Rejected. Section 3.5.3.3 deleted. See comment #57.	Y
2	McGrew	pg. 1, sect. 1.1., work in a description of why we are putting in manifolds (i.e., deleting the need to reposition jumpers after the word "flexibility".)	Accepted. 2nd sentence reworded in section 1.1.	Y
3	Reed	Question: Will documents referenced as draft be issued before the PDS? Documents other than W314 as draft are out of our control.	Yes, documents will be issued if they are W-314 docs.	Y
4	Janicek	Page 3. Identify WHC governing documents separately from W-314 documents.	Accepted. New section 2.4 to list W-314 documents.	Y
5	Salsman/Janicek	Pg. 4, remove RD 100 from reference section.	Accepted. Removed all ref. to RDD-100.	Y
6		Pg. 3, ISB-001 and WHC 4-46, new versions released.	Accepted. All dates deleted in section 2.0.	Y
7		Page 4, section 2.3, Remove "KH... - Manual".	Accepted. Deleted the reference.	Y
8	Zaman	Page 6. Change VP100 to 900 and change VP 900 to 100 in Fig. 3-1. Also, identify Line 4 as replacement for SN 213.	Accepted. Figure revised, however, SN-213 replacement is identified in Tranfer Piping PDS.	Y
9	Janicek	Page 7, switch designation of VP100 and VP900 valve pits previously labeled as 241-AX-A change to -B.	Accepted. Designations switched.	Y
10	Janicek	Page 7, add reference to FFB'D's and add to appendix A (move RAS's to last appendix).	Accepted. FFB'D's put in Appendix A.	Y

REVIEW COMMENT RECORD (RCR)

1. Date 12-18-96			2. Review No.
3. Project No. W-314			4. Page 4 of 10
20	Rickenback, Janicek	Table 3-1. Include ammonia and other organics (i.e. TBP) with concentrations. (Janicek will provide further guidance on values for the table).	Rejected. No additional information located over what is listed. Y
21	Dale Salsman	Pg. 11, 3.2.1.2.11, delete this section completely.	Accepted. Deleted section. Y
22	Rickenbach	Page 15, 3.2.1.3.2, delete this section completely.	Accepted. Deleted section. Y
23	Salsman	Page 15, 3.2.2.1, delete b & c and reword a, d, & e as separate requirements.	Accepted. Deleted b & c and reworded a and added section # in basis. Y
24	Rickenbach	Pg. 15, Section 3.2.2.2, delete section completely.	Accepted. Deleted section. Y
25	McGrew	Page 15, 3.2.2.3, reword to be clearer on how the valve manifold extension handles are going to be arranged.	Accepted. Section now 3.2.2.2 & rephrased and basis rewritten. Y
26	Reed	Page 16, 3.2.3.1, expand on the basis why valve manifold design life is 10 years.	Accepted. Basis expanded for clarity. Y
27	McGrew	Page 16, 3.2.3, provide a reliability % and MTBF value.	Accepted. New requirements 3.2.3.3 & 3.2.3.4 added. Y
28		Page 16, 3.2.4, clarify that the current requirement apply to "corrective" maintenance. Add requirement that it require NO preventative maintenance that requires pit entry (basis will be the PDC).	Accepted. Revised 3.2.4 and added 2 requirements 3.2.4.1 & 3.2.4.2. Y
29		General Comment: ensure all basis references have the chapters/sections where the requirement comes from called out to facilitate database entry.	Accepted. Called out sections where applicable. Y

REVIEW COMMENT RECORD (RCR)			1. Date 12-18-96	2. Review No.
			3. Project No. W-314	4. Page 5 of 10
30	Salsman	Page 16, 3.2.5.1, make the temperature requirement read generically (without ref. to valve manifolds) for ease of database entry.	Accepted. Reworded.	Y
31	Salsman	General Comment: make all environmental requirements read generically, if applicable, for ease of database entry.	Accepted. Reworded.	Y
32		page 16, 3.2.5.1.2, make this requirement a "minimum" temperature requirement.	Accepted. Added "minimum".	Y
33		page 17, 3.2.5.1.3, remove all wording after "GC-LOAD-01".	Accepted. Deleted wording after "GC-LOAD-01".	X
34	Rickenbach	Page 18, 3.2.5.1.6, make the W-314 DRD as the basis.	Accepted. Changed basis to W-314 DRD.	Y
35	Reed	Page 18, 3.2.5.1.11, delete section completely.	Accepted. Deleted section.	X
36		Pg. 18, add a requirement for "Ice Buildup".	Accepted. Added section called "Glaze" (section 3.2.5.1.11).	X
37	Rickenbach	page 19, 3.2.5.2.4, change the lower temperature value to that used in the new transfer pump spec. Delete RDD-100 from the basis and use another basis.	Accepted. Changed lower temperature to 50 and used new transfer pump spec. (draft) as basis. Also, deleted "solids content" from requirement based on the new basis.	Y
38	McGrew	Page 19, 3.2.5.2, add requirements (somewhere) for a radiation dose and accumulated dose.	Accepted. Added radiation requirements (section 3.2.5.2.5).	X
39	Rickenbach	Pg. 20, 3.3.1.1, General comments: anywhere DOE 6430.1A is in the requirement, cite the higher source document for the basis. (possibly use the PHMC contract).	Accepted.	Y
40		Pg. 20, 3.3.1.2, use higher basis ref. for the pit cover blocks.	Accepted. PHMC contract used as basis.	Y

REVIEW COMMENT RECORD (RCR)		1. Date	2. Review No.
		12-18-96	
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		W-314	6 of 10
41	Pg. 20, 3.3.1, add a requirement (somewhere) to follow UL 508 for design of control panels.	Accepted. Added new requirement 3.3.1.5.	Y
42	Pg. 20, 3.3.1.5, delete section completely. AIP's not covered in the technical requirements document.	Accepted. Deleted section.	Y
43	Pg. 20, 3.3.1.6, delete word "corrosion" and add "to exterior corrosion" following "resistant".	Accepted. Requirement reworded to indicate exterior corrosion.	Y
44	Pg. 20, delete sections 3.3.1.7 and 3.3.1.8 completely.	Accepted. Deleted section.	Y
45	Pg. 21, 3.3.3, redo this requirement for identification and marking and break into several requirements and base them on WHC-IP-0842.	Accepted. Added 3 new requirements, 3.3.3.1, 3.3.3.2 & 3.3.3.3.	Y
46	Salsman Pg. 21, 3.3.4, revise current "workmanship" requirement into 2 requirements and use the basis found in the transfer piping PDS.	Accepted. Split into 2 requirements 3.3.4.1 & 3.3.4.2.	Y
47	Pg. 21, 3.3.5, in the section addressing "Interchangeability", add a requirement for standardization of like parts.	Accepted. New requirement added.	Y
48	Pg. 22, 3.3.6.1.1, change title to Safety Classification. The rest of the section is on hold until clarification is provided by Janicek.	Accepted. Title changed and requirement rewritten.	Y
49	Pg. 22, 3.3.6.1.2, incorrect type of requirement as written for occupational radiation exposure. Specify the requirement for shielding purposes. (Radiological Design Document DGS-30011).	Accepted. Section deleted (see requirement 3.2.5.2.4).	Y

REVIEW COMMENT RECORD (RCR)

			1. Date	2. Review No.
			12-18-96	
			3. Project No.	4. Page
			W-314	7 of 10
50		Pg. 22, 3.3.6.1.3, change title from "Hazardous Environments" to "Flammable Gas Hazardous Environment". Review the standing order and ensure all pits are addressed as to the hazardous environment to design to.	Accepted. Changed title and requirement revised (now section 3.3.6.1.2).	Y
51	Zaman	Pg. 22, 3.3.6.2, Should cite WHC-CM-1-11 as a reference for Industrial Safety. "Design related requirements" from the cited references should be inserted. If no "design related requirements" are found, this section will be N/A.	Rejected. No design related requirement were found.	Y
52	Bower	Pg. 22, 3.3.7, check DOE 6430.1A for more specific human factors criteria and add as applicable.	Accepted. New requirement 3.3.7.2 added.	Y
53		Pg. 23, delete sections 3.3.7.2 and 3.3.7.3 completely.	Accepted. Deleted sections.	Y
54		Pg. 23, 3.4, check WHC-IP-0842 for additional documentation requirements for design phase documentation.	Document checked but no additional design requirements were found.	Y
55		Pg. 24, 3.5.3.1, delete section completely.	Accepted. Deleted section.	Y
56		Pg. 24, 3.5.3.2, reword requirement to provide new impact wrenches.	Accepted. Section reworded and now 3.5.3.1.	Y
57		Pg. 24, 3.5.3.3, delete this section if cover block weight limit is set compatible with cranes available on site.	Accepted. Deleted section and added new requirement 3.7.3.2.4 for weight of cover blocks.	Y
58		Pg. 24, delete sections 3.5.3.4 and 3.5.3.5 completely.	Accepted. Deleted sections.	Y
59		Pg. 25, 3.7.1.1.4, use PDC as basis for flow meter instead of CDR.	Accepted. Basis changed to PDC.	Y

REVIEW COMMENT RECORD (RCR)		1. Date	2. Review No.
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60	Pg. 25, delete sections 3.7.1.1.1.5 completely.	Accepted. Deleted section.	Y
61	Pg. 25, 3.7.1.1.1.3 & 3.7.1.1.1.6, move these requirements to section 3.7.2.	Accepted. Moved to sections 3.7.1.2.1 & 3.7.1.2.2.	Y
62	Pg. 25, add a requirement for the accuracy of the flow meter.	Accepted. New requirement 3.7.1.1.1.4 added.	Y
63	Pg. 26, 3.7.2.1, develop accuracy requirement for valve position indicator.	Accepted. New requirement 3.7.2.1.1.4 added.	Y
64	Pg. 26, 3.7.2.1.3, use the PDC as the basis for valve position indication to Tank Farm Monitoring and MPS Systems.	Accepted. Changed basis to transfer piping PDC.	Y
65	Pg. 26, 3.7.2.1.4, move information to 3.7.2.2.	Accepted. Changed to section 3.7.2.2.4.	Y
66	Pg. 26, delete sections 3.7.2.1.5 and 3.7.2.1.6 completely.	Accepted. Deleted sections.	Y
67	Rickenbach Pg. 26, add a requirement for local indication of valve position and define what local indication means.	Accepted. New requirement 3.7.2.1.4 added.	Y
68	Pg. 27, 3.7.2.2.1, add "and still operate properly" at the end of the requirement.	Accepted. Added to the sentence.	Y
69	Pg. 27, 3.7.2.2.2, reword to address inadvertent physical abuse of the valve position equipment.	Accepted. Reworded.	Y
70	Pg. 27, 3.7.2.2.3, reword to address pit cover design to facilitate quick mechanical /electrical disconnect of all equipment for ease of cover block removal and replacement.	Accepted. Reworded.	Y

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71		Pg. 27, 3.7.3.1.1.1, delete last sentence. Then expand requirement to identify the degree of sealing required for pit cover blocks.	Accepted. Requirement rewritten.	Y
72		Pg. 28, 3.7.3.2.2, expand requirements to include AZ-02A ventilation in-leakage, provide maintenance/inspection ports positioned to afford maximum view of pit interior, provide gas sampling capability, provide an alignment mechanism for cover block installation. Add a requirement for maximum weight of cover block.	Accepted. Reworded 3.7.3.2.2 (now 3.7.3.2.3) and added new requirement 3.7.3.2.2 for AZ-02A.	Y
73	Rickenbach	Pg. 28, 3.7.3.2.3, delete section completely.	Accepted. Deleted section.	Y
74	Rickenbach	General Comment: Make all PDS's look exactly the same for section 4.0 (QA).	Accepted. Included the same section 4.0.	Y
75	Rickenbach	Pg. 30, Table 4-1, change all "test" requirements to "analysis". Adjust table for any added or deleted requirements.	Accepted. Table 4-1 revised.	Y
76		Pg. 37, 5.0 (Notes), remove the word jumper and create definition for manifold.	Accepted. "Jumper" removed and manifold definition created.	Y
77	Rickenbach	General Comment: for all PDS's, make the first Appendix the FFBD's and the last appendix the RAS sheets.	Accepted. FFBD's put in App. A.	Y
78	Janicek	Pg. 28, 4.2, redo section on "Quality Conformance Verification" to look exactly like DRD.	Accepted. Same resolution as comment 74.	Y
79	McGrew	Note: system number does not appear on RAS sheets. McGrew will furnish guidance on what to put in the far right column on RAS sheets.	TBD. Nothing put in column now. Will be addressed in any revision to PDS.	Y
80	Janicek/ Rickenbach	If sketches are still used in the appendix, add a performance requirement that refers to the sketches for connection of nozzles.	Accepted. Sketches removed from appendix. Table 3.1-1 was added.	Y

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81	Reberger	Set up meeting with W-211, Jacobson, Reberger and Galbraith, etc. to determine the required manifold configuration (currently shown on attached sketches). Notes: Leave existing 2-inch system as is and hookup new 3-inch system only need clarification of criteria for manifold systems: do we need tie between 2- and 3-inch systems? Make inter-tie (between 2" & 3" systems) capability connections on emergency basis only. W-454 was changed to eliminate permanent cross ties. Need to ensure that W-211 is not planning on using the system. Should only have manifold that connects 3-inch nozzles.	Accepted. Meeting held and Table 3.1.1 was created to identify the nozzles.		Y
82	Rickenbach	Appendix B, change figures to Engineering Flow Diagrams if they are going to be used.	Rejected. Sketches removed from appendix.		Y
83	McGrew	Add requirements for matching internal diameters, bends, and bubble type valves (DGS-30011).	Accepted. New requirement 3.3.1.7 added.		Y
84	Salsman	Missing RAS for 1.2.2.2, Indicate Valve Position.	Accepted. Added.		Y

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5. Document Number(s)/Title(s)	6. Program/Project/ Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
HNF-SD-W314-TI-011/Pit Leak Detection Requirements Analysis	W-314	Various (coordinated by Mark Rickenbach)	Various	1200 Jadwin/373- 2539

10. Agreement with indicated comment disposition(s)

<u>Mark Rickenbach</u> Mark Rickenbach	<u>1/16/97</u> Date	<u>N/A</u> Date	<u>1/16/97</u> Date
<u>Don Smith</u> Don Smith	<u>1-16-97</u> Date	<u>Singaman</u> Shakir Zaman	<u>1-16-97</u> Date
<u>DE Bowens</u> Dave Bowens	<u>1-16-97</u> Date	<u>for DE Bowens</u> Dan Reberger	<u>1-16-97</u> Date
<u>George Janicek</u> George Janicek	<u>1/16/97</u> Date	<u>St Carratt</u> Dick Carratt	<u>1-16-97</u> Date
<u>C.C. Smith</u> Chuck Scarf	<u>1-16-97</u> Date	<u>N/A</u> Aditya Palit	<u>N/A</u> Date
<u>Dick McGrew</u> Dick McGrew	<u>1-16-97</u> Date	<u>Hand M. Chafin</u> Mark Chafin	<u>1-16-97</u> Date
<u>Ron Reed</u> Ron Reed	<u>1-16-97</u> Date	<u>N/A</u> Phil Miller	<u>N/A</u> Date

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Com. #	Commenter	Comment	Disposition	Closed
1	Rickenbach	General Comment: based on comments documented in the valve manifold RCR, apply all applicable changes to this document.	Accept: All applicable changes to this document from comments on valve manifold RCR incorporated	Y
2	Rickenbach	Pg. 1, 1.2.1, move to 3.3.1 and make this section "not applicable".	Accept: Contents of 1.2.1 moved to 3.3.1, "Not Applicable" added to 1.2.1	Y
3	Smith	Pg. 4, 3.1 and Diagram 1, identify components in these 2 areas similar to the transfer piping PDS.	Accept: Diagram 1 changed to Figure 3-1. Components of Pit Leak Detection System identified similar to Transfer Piping PDS.	Y
4	Rickenbach	Pg. 4, 3.1.2, include reference to FFBDS in Appendix A.	Accept: FFBDS 3.0 (Monitor for Leaks) included in Appendix A. Reference to FFBDS included in 3.1.1.	Y
5	Rickenbach	General Comment: add requirement to section 3.1.2 (Interface Definition) in all applicable PDSs that the design must be coordinated with the design covered by the other PDS's.	Accept: Requirement to coordinate with design from other PDSs added to 3.1.2	Y

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6	Reed	Pg. 4, Item Diagram 1, add I/O box (not numbered).	Accept: I/O Box added to Figure 3-1	✓
7	Scatf	Pg. 5, 3.2.1.1, delete the second sentence under the functional description and turn it into a requirement. Note: do the same thing to transfer piping	Accept: Second sentence deleted in 3.2.1.1. Added requirement 3.2.1.1.2 using contents of deleted sentence.	✓
8		Pg. 5, 3.2.1, add WAC code requirement to detect leak in 24 hours. Also, define "leak".	Accept: WAC Code requirement to detect leak in 24 hours added as requirement 3.2.1.1.1. No specific leak rate identified. A definition for leak rate was developed.	✓
9	Scatf/ Rickenbach	Pg. 5, 3.2.1, add requirement for electrically supervised wiring.	Accept: Added 3.2.1.1.6 which includes electrically supervised wiring requirement.	✓
10	Scatf	Pg. 5, 3.2.1.1.1, make the requirement read exactly the same as the WHC-SD-WM-RD-057 document.	Accept: Changed requirement to 3.2.1.1.3. Requirement reads the same as WHC-057 document.	✓
11	Rickenbach	Pg. 5, 3.2.1.1.2, expand on the basis for leak detection system monitoring freq.	Accept: Changed requirement to 3.2.1.1.4 and made freq. continous. Expanded basis for monitoring frequency.	✓

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12	Reed/Scaief	Pg. 5, 3.2.1.1.3, add "equal to or less than" before "1 second" for response time.	Accept: Changed requirement to 3.2.1.1.5 and made response time instantaneous	Y
13	Rickenbach	Pg. 5, 3.2.1.2, insert the words "the administrative lock has been removed" to replace "transfer system is prepared for a transfer."	Accept: Inserted "after the administrative lock has been removed" to first sentence of 3.2.1.2	Y
14	Reed/Rickenbach	Pg. 5, 3.2.1.2.1, divide into 2 requirements.	Accept: Requirements 3.2.1.2.1 and 3.2.1.2.2 added.	Y
15	Smith	Pg. 5, 3.2.1.2.1, delete everything from "activate" to the end of the sentence and replace it with "provide output signal to local alarm and MPS"	Accept: "provide output signal to local alarm and MPS" incorporated into requirements 3.2.1.2.1 and 3.2.1.2.2	Y
16	Scaief/Bowers	Pg. 6, 3.2.1.2.2, expand the requirement to ensure that testing is from the sensor to the MPS system. Note: do this to the transfer piping also.	Accept: Requirement 3.2.1.2.3 expanded to include test covers system from sensor to MPS system.	Y
17	Smith	Pg. 6, 3.2.1.3.1, reword to state the warning light location will be determined from Human Factors Analysis for each location.	Accept: Requirement 3.2.1.3.1 revised to include warning light location to be per Human Factors Analysis	Y

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18	Scaief	Pg. 6, 3.2.1.3.2, delete section completely.	Accept: Section Deleted	y
19	Smith	Pg. 6, 3.2.1.3, add requirement for remote reset/acknowledgement capability.	Accept: New requirement 3.2.1.3.2 and 3.2.1.3.3 added for remote/reset acknowledgement capability	y
20	Rickenbach	General Comment: ensure that all PDSs conform to requirements in the draft Tank Farm Pump Specification Guide (per Janicek direction).	Accept:	Y
21	Rickenbach	Pg. 6, 3.2.2, be consistent with requirement numbering as the other documents.	Accept: All lower case alpha changed to number system.	Y
22	Rickenbach	Pg. 6, 3.2.2, delete parts c & g.	Accept: Parts c&g deleted	Y
23	Bowers	Pg. 6, 3.2.2, delete part h and include radiation dose and rate information as in the other documents.	Accept: Part h) deleted. Radiation dose and rate included in 3.2.5.2.3	y

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24	Rickenbach/ Zaman	Pg. 7, 3.2.3.1, delete last sentence. Change requirement to state 35 year design life is for buried conduit and 12 years for replaceable components.	Accept: 3.2.3.1 revised to 35 year life for conduit and 12 year life for replaceable components	Y
25	Bowers	Pg. 8, 3.2.3.2, tie the operational percentage for leak detection systems to the Critical Characteristics contained in the SAR.	Partially Accepted: Requirement 3.2.3.2 revised to match requirement in WAC 173-360-350(1) since no critical characteristics could be located.	Y
26	Bowers/ Rickenbach/ Scaief	Pg. 8, 3.2.4.1, add requirement that cover blocks be removable with disconnect, etc. Add requirement that leak detector system have a wet-testing capability.	Accept: Requirement 3.2.4.3 added to include coverblock removal requirements. Accept: "Wet Test" requirement added	Y
27	Rickenbach	Pg. 8, 3.2.4.1, delete part c.	Accept: Part c) deleted.	Y
28	Rickenbach	Pg. 8, 3.2.4, check usage of maximum vs minimum for appropriate wording.	Accept: The requirement was changed to 3.2.4.1. The word "maximum" was deleted and sentence reworded	Y
29	Rickenbach	Pg. 9, 3.2.5.1 and 3.2.5.2, use valve manifold environment format and values.	Accept: Generic Environmental requirements was added	Y

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30	Carratt	Pg. 12, 3.3.1.1, add UL 508 to requirement.	Accept: UL 508 added	Y
31	Rickenbach	Pg. 12, 3.3.1.3 and 3.3.1.4, delete sections completely.	Accept: Sections were deleted	Y
32	Scatef	Pg. 12, 3.3.2, change requirement to add distance and wattage (parameters) from radios that it has to be able to shield from.	Accept: Requirement 3.3.2.1 includes requirement to shield instruments from radios and cell phone	Y
33	Rickenbach	Pg. 12, 3.3.3, change section addressing identification and markings to be consistent with valve manifold document (HNF-SD-W314-TI-010).	Accept: Identification and marking input from valve manifold document included	Y
34	Bowers	Pg. 13, 3.3.5, add requirement for all electronic components installed under this specification be standardized. Verify same comment in valve manifold document.	Accept: Input from Valve Manifold document included	Y
35	Rickenbach	General Comment: leave in safety class designation, as applicable, in all specifications in section 3.3.6. Janicek will provide specific guidance on the SC "design" requirements.	Accept: Safety Class requirements included in 3.3.6.1	Y

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36	Scaief	Pg. 13, 3.3.6.2, delete words "intrinsically safe".	Accept: "intrinsically safe" deleted from 3.3.6.2	Y
37	Bowers	Pg. 13, 3.3.7, add generic performance requirement that the design will be done considering Human Factors per DOE 6430.1a. This should be applied to all specs.	Accept: 3.3.7.1 requirement added to include Human Factors Engineering considerations	Y
38	Bowers	Pg. 8, 3.2.4, expand the 4 hour maximum maintenance time for the leak detection systems to further define where that 4 hours applies.	Accept: 3.2.4.1 requirement revised to identify how 4 hours repair time applies	Y
39	Rickenbach	Pg. 13, 3.4, revise the section addressing documentation to be consistent with the valve manifold document (HNH-SD-W314-TI-010).	Accept: Input from valve manifold document included	Y
40	Rickenbach	Pg. 14, 3.5.1, delete current requirement concerning design life. Insert general guideline requirements from the valve manifold document.	Accept: Input from valve manifold document included	Y
41	Rickenbach	Pg. 14, 3.5.3, change to "not applicable".	Accept: 3.5.3 changed to "Not Applicable"	Y

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42	Rickenbach	Pg. 14, 4.0, revise the QA section to be consistent with the similar section in the valve manifold document (HNF-SD-W314-II-010).	Accept: Generic QA Section included	Y
43	Scatief/ Rickenbach	Pg. 17, Table 4-1, generic statement on mock-up testing and what all components are in the mock-up are the responsibility of the A/E. Discussion notes: Interface required between pit design and leak detection and	Accept: Section 4.1.2 added to define tests required through use of mock-up	Y
44	Rickenbach	Pg. 17, Table 4-1, make the following changes: 3.2.1.1.2 to Anal., 3.2.2.b to Test, and 3.3.6.2 to Anal.	Accept: Table 4-1 revised	Y

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5. Document Number(s)/Title(s)	6. Program/Project/ Building Number	7. Reviewer	8. Organization/Group	9. Location/Phone
HNF-SD-W314-TI-012/Master Pump Shutdown Requirements Analysis	W-314	Various (coordinated by Mark Rickenbach)	Various	1200 Jadwin/373- 2539

10. Agreement with indicated comment disposition(s)

<u>Mark Rickenbach</u> Mark Rickenbach	<u>11/31/97</u> Date	<u>N/A</u> Date	<u>N/A</u> Date
<u>N/A</u> Don Smith	<u>N/A</u> Date	<u>2/12/97</u> Date	<u>N/A</u> Date
<u>Dave Bowers</u> Dave Bowers	<u>2/13/97</u> Date	<u>N/A "No Comments"</u> Dan Reberger	<u>N/A</u> Date
<u>George Janick</u> George Janick	<u>3/7/97</u> Date	<u>Dick Garratt</u> Dick Garratt	<u>1/31/97</u> Date
<u>C.P. Swift III</u> Chuck Swift	<u>2-13-97</u> Date	<u>N/A</u> Date	<u>N/A</u> Date
<u>Dick McGraw</u> Dick McGraw	<u>2-11-97</u> Date	<u>Handwritten: M. Chafin</u> Mark Chafin	<u>2-6-97</u> Date
<u>Donald W. Reed</u> Ron Reed	<u>6 Feb 97</u> Date	<u>N/A "No Comments"</u> Phil Miller	<u>N/A</u> Date
<u>Kirk A. Boer</u> Kirk Boes	<u>2-6-97</u> Date		

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12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of this action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	16. Status
1	Page 1, section 2: Make editorial changes to reference section similar to previous RAS/PDS documents.. (Rickenbach)		Accept.	Done
2	Page 2-3, section 3.1: Item definition should identify any MPSS inputs in addition to leak detection and system malfunction. Add an additional bullet to address the additional non-leak detecton inputs..(Jacobson)		Accept.	Done
3	Page 2, section 3.1, 2nd bullet: Delete the word "automatically". (Zaman)		Accept.	Done
4	Page 1, section 1.0: Clarify in introductory section that the requirements apply to Phase 1 upgrades (Phase 2 requirements to incorporated at a later date). (Bowers)		Accept.	Done
5	General comment: Comments made against the MPSS PDC document will be incorporated into this document. (Bowers)		Accept.	Done
6	Page 6-8, definitions: In all references to "digital serial", delete the word "serial". (Scaief)		Accept.	Done
7	Page 8, section 3.1.2: Delete reference to Pit Coatings PDS (no interfaces involved). (Rickenbach)		Accept.	Done
8	Page 10, section 3.2.1.1.3: Revise this requirement to state that multiple access levels will be used. Move the 5 levels defined here currently into the PDC document and cite these levels as examples (specifics to be developed during definitive design). Update the "basis" for this revised requirement to reflect the PDC as the basis. (McGrew/Scaief/Reed)		Accept.	Done

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12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	16. Status	
9	Page 10, section 3.2.1.1.5: Revise waste transfer announcement to the default mode. (Scaief)		Accept.	Done	
10	General comment: Change "mass" balance to "material" balance. (Rickenbach)		Accept.	Done	
11	Page 11, section 3.2.1.1.8: Add the MPSS self-diagnostics requirement to the PDC document, but delete the word "automatic" from this requirement. Update the "basis" in this document to reflect the new PDC requirement. (McGrew)		Accept.	Done	
12	General comment: Delete references to "engineering judgement" in the bases stated in the document, to the greatest extent possible. (McGrew)		Accept.	Done	
13	General comment: Add a definition of "simultaneous transfers" to Section 5.0 (Bowers)		Accept	Done	
14	General comment: Add a definition of "interferences" (as used in section 3.2.1.3.6) to Section 5.0. (Boes)		Accept	Done	
15	Page 14, section 3.2.1.4.3: Delete the word "alternatively". (Scaief) Also, add this requirement to the PDC document, and update the "basis" to reflect the new PDC requirement. (Rickenbach)		Accept. Section 3.2.1.4.3 has been deleted. Contents was combined with 3.2.1.4.1.	Done	
16	Page 15, section 3.2.1.7.2: Revise time limit allowed for confirming pump interlock operation from "2 to 4 seconds" to "4 seconds". Update "basis" if required. (Scaief)		Accept.	Done	
17	Page 16, section 3.2.1.8: Revise title of function to "Indicate Pump Interlocks Verified". Update the applicable FFBD. (Scaief)		Accept.	Done	
18	Page 16, sections 3.2.1.8.1 and 3.2.1.8.2: Combine these two items into a single requirement. (Scaief)		Accept.	Done	

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12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	16. Status	
19	Page 16, section 3.2.1.9.1 and 3.2.1.9.3: These two items appear to present the same requirement. Either combine the two items into a single requirement, or clarify the distinctions between these two items. (Rickenbach)		Accept.	Done	
20	Page 17, section 3.2.1.10: Revise title of function (and associated FFD function 1.2.1.7) to "Indicate Pump Interlocks Not Verified". Also revise wording of this requirement accordingly. (Scafe)		Accept.	Done	
21	General comment: Correct numbering sequence beginning with section 3.2.1.11.		Accept.	Done	
22	Page 17, section 3.2.1.11.3: Add "operations preference" based standardized graphics information (e.g., equipment status symbols and colors) to the PDC. Revise "basis" for this requirement accordingly. (McGrew)		Accept.	Done	
23	Page 20, sections 3.2.1.14.1, 3.2.1.14.2, and 3.2.1.14.5, and 3.2.1.16.7: Delete the word "simultaneous". (Boes)		Accept.	Done	
24	Page 22, section 3.2.1.15.3: Revise time limit allowed for confirming MPSS software logic functional test from "4 to 8 seconds" to "8 seconds". (Rickenbach)		Accept.	Done	
25	Page 24, section 3.2.1.18.1 and 3.2.1.18.3: Combine these two items into a single requirement. (Scafe)		Accept. Section rewarded to provide correct intent.	Done	
26	Page 24, section 3.2.1.19: No change required to this document, but in future development of the lower-level specifications, include provisions for a programmable time delay in shutting down a transfer operation upon detection of a malfunction (versus detection of a leak). (Bowers)		Accept.	Done	

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12. Item	13. Comment(s)/discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	16. Status	
27	Page 25, section 3.2.1.19.4: Revise requirement for leak detection signal to be initiated "upon loss of signal", rather than "if there is a detected failure of the interface". (Bowers) Also, combine this requirement with 3.2.1.19.5. (Rickenbach)		Accept.	Done	
28	Page 27, section 3.2.1.22: Delete the word "all" from this requirement. (Scaief)		Accept.	Done	
29	Page 27, section 3.2.1.22.1 and 3.2.1.22.4: Combine these two items into a single requirement. (Scaief)		Accept.	Done	
30	Page 27, section 3.2.1.22.1, 3.2.1.22.2, and 3.2.1.22.4: Delete the word "simultaneous". (Rickenbach)		Accept.	Done	
31	General comment: Need to add requirement for a "master" emergency shutdown switch at each operator station. A similar requirement should be reflected in the PDC, and used as the basis for this new requirement in the RAS/PDS documents. (Bowers)		accept.	Done	
32	Page 29-30, sections 3.2.1.25.1, 3.2.1.25.2, 3.2.1.26.1, and 3.2.1.27.1: Delete the word "simultaneous" from these requirements. (Boes)		Accept.	Done	
33	General comment: Verify that all requirements in this document are for work to be included in Phase 1 of the W-314 project. Any requirements for Phase 2 work (if any) should be added at a later date. (Boes)		Accept.	Done	
34	Page 30, section 3.2.1.25.2: This requirement is for work to be performed during Phase 2 of Project W-314, and should therefore be deleted. (Rickenbach)		Reject: MPSS must have the capability to accomplish requirement even though the function not used during Phase 1. MPSS must have capability to perform Phase 2.	Done	
35	Page 29, section 3.2.1.25.1: Clarify that this requirement applies to flowmeters installed by the project. (Rickenbach)		Accept.	Done	

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12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	16. Status		
36	Page 32, section 3.2.2.5.2: Delete this item entirely. (Scaief)		Accept.	Done		
37	Page 33, section 3.2.4.1: Delete requirements for "maximum time to repair". Add a definition in Section 5.0 for "mean time to repair". (Rickenbach)		Accept.	Done		
38	Page 33, section 3.2.4.3: Delete this requirement for "frequency of preventative maintenance." (Bowers)		Accept.	Done		
39	Page 36, section 3.2.5.2.3 and 3.2.5.4.1: Delete these requirements associated with "waste properties" and "inside pit radiation level". (Rickenbach)		Accept.	Done		
40	Page 38, section 3.3.1.1: Delete the word "requirement". (Carratt)		Accept.	Done		
41	Page 38, section 3.3.1.3: Expand requirement to identify what is needed if UL or FM tested products are not available. (Bowers)		Accept.	Done		
42	Page 39, section 3.3.2: Revise "basis" for this requirement to identify that this requirement is based on operational experience with electrical interference. (Bowers)		Accept.	Done		
43	Page 39, section 3.3.4: Provide a basis as to why this item is not applicable. (Boes)		Accept.	Done		
44	Page , section 3.3.6.3.1: Delete discussion of cover blocks from the "safety class" and add applicable MPSS components. (Boes)		Accept.	Done		
45	Page 40, section 3.3.6.3.1: In the "basis" section, change Standing Order number to 97-01, and revise title to "East and West Tank Farms ...". (Scaief)		Accept.	Done		

REVIEW COMMENT RECORD (RCR)					
12. Item	13. Comment(s)/discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Hold Point	15. Disposition (Provide justification if NOT accepted.)	2. Review No.	
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46	Page 46, section 3.7.4.8: Revise "basis" to reflect the applicable Human Factors evaluation documentation. (McGrew)		Accept.		Done
47	Page 46, section 3.5.1.2: Delete the word "local" from this requirement. Make same change to the PDC document if required. (McGrew)		Accept.		Done
48	General comment: Verify that all requirements and "not applicable" sections of the RAS document include a "basis" statement. (Jacobson)		Accept.		Done
49	Page 47, section 3.5.1.9: Delete this requirement since it appears to be not applicable for the MPS Upgrades. (Scaief)		Accept.		Done
50	General comment for section 3.5.1: Add a requirement for isolation switches and lock and tag requirements. (Bowers)		Accept.		Done
51	General comment: Add a definition of "operator trainor" to section 5.0. (Carratt)		Accept.		Done
52	Section 4.1.1, general comment: The title for this section is "responsibility for Tests," but the narrative talks only about inspections. Suggest revising title for this section. (Chafin)		Accept.		Done

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5. Document Number(s)/Title(s) HNF-SD-W314-TI-013/Pit Coating Requirements Analysis	6. Program/Project/ Building Number W-314	7. Reviewer Various (coordinated by Mark Rickenbach)	8. Organization/Group Various	9. Location/Phone 1200 Jadwin/373-2539
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10. Agreement with indicated comment disposition(s)

<i>Mark Rickenbach</i> Mark Rickenbach	<u>1/16/97</u> Date	<u>N/A</u> Date
<i>Dick M'Hee Jr. Rev 5/1/97</i> Don Smith	<u>1-16-97</u> Date	<u>1/16/97</u> Date
<i>David Bowers</i> Dave Bowers	<u>1-16-97</u> Date	<u>1-16-97</u> Date
<i>George Janick</i> George Janick	<u>1/16/97</u> Date	<u>N/A</u> Date
<i>P. P. S. S. S.</i> Chuck Scarier	<u>1-16-97</u> Date	<u>1-16-97</u> Date
<i>Dick McGrew</i> Dick McGrew	<u>1-16-97</u> Date	<u>1-16-97</u> Date
<i>Phil Miller</i> Phil Miller	<u>1-16-97</u> Date	<u>N/A</u> Date

REVIEW COMMENT RECORD (RCR)

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Com #	Commenter	Comment	Disposition	Closed
1	Reberger	Pg. 4, 3.1.2.1.1, expand on requirement for underlying concrete.	Not accepted. This requirements does not really discuss a "functional interface" therefore we have deleted section 3.1.2.1.1 and made section 3.1.2.1 N/A.	X
2	McGrew	Pg. 6, 3.2.2.2, quantify size of crack, if possible.	Accepted. Added size of crack of 0.040 - 0.060 inches to the requirement and added revised the basis.	Y
3	Don Smith	Pg. 4, 3.1, expand to talk about the three types of material associated with SPC.	Accepted. Reworded first sentence to say "The SPC system ...".	X
4	Rickenbach	General Comment: change the general wording from coatings to "Coating System".	Accepted. Changed all applicable wording to "SPC system".	Y
5	Zaman/Palitt	Pg. 8, 3.2.2.7, expand to address other components of the SPC.	Accepted. Wording changed to say "The SPC system shall display adhesion property to the underlying concrete and previously coated surfaces. Minimum pull-off strength shall be 6,200 KPa (900 psi)."	Y
6	Palitt/Zaman	Pg. 8, 3.2.3, change design life from 10 to 12 years so there would be only 2 change outs of the coating in the 35 year design life.	Accepted. Changed to 12 years.	Y

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7	Rickenbach	General Comment: review requirements for special coatings to ensure all exposed surfaces are addressed.	Accepted. Added "... all exposed surfaces of the pits and cover blocks, ..." to section 3.1.2.2.	Y
8	Smith/Bowers/McGrew	Pg. 6, 3.2.2, add specification for the labeling paint used to paint over the coating.	Accepted. Added section 3.2.2.9.	Y
9	Bower	Pg. 9, 3.2.4, reword the maintainability requirement to indicate the system should be repairable, etc. Expand on basis.	Accepted. Reworded to add system shall be repairable.	Y
10	Rickenbach	Pg. 9, 3.2.5, revise the section addressing "Environmental Conditions" to reflect changes indicated in valve manifold document (HNF-SD-W314-II-010).	Accepted. Included changes for applicable requirements.	Y
11	Rickenbach	Pg. 10, 3.2.5.2.2, delete section completely.	Accepted. Deleted section.	Y
12	Rickenbach	Pg. 14, 3.3, delete introductory paragraph.	Accepted. Deleted paragraph.	Y
13	Palit	Define service level area in section 5.0	Accepted. Defined service level in the definitions in section 5.0.	Y
14	Rickenbach	Pg. 15, 3.3.1.2.1, rewrite subsurface preparation requirement as per the first paragraph under the PDS and delete the three bullets.	Accepted. Reworded to reflect what was written in the PDS.	Y
15	Rickenbach	Pg. 16, 3.3.3, add identification and marking requirements for this section.	Rejected. Could find no design requirements for labeling and marking that is applicable to the SPC system.	Y

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16	Rickenbach	Pg. 17, 3.3.6.2.1, revise the section addressing radiological dose limits to be consistent with the similar section contained in valve manifold document (HNF-SD-W314-TI-010).	Rejected. All applicable requirements dealing with radiation are covered in other sections. There were no other requirements found that apply to this section therefore this section was deleted.	Y
17	Rickenbach	Pg. 17, 3.3.6.2.2, delete section completely.	Accepted. Section deleted.	Y
18	Rickenbach	Pg. 18, 3.3.6.2.3, remove the current paragraph and add contents of RCR 1360-96 #1 submitted by NF Barilo.	Accepted. Added 2 requirements (sections 3.3.6.2.1 and 3.3.6.2.2) as per the RCR.	Y
19	Bowers	Add a non-skid requirement for surface of cover block.	Accepted. The requirement dealing with a non-skid surface will be included in the Valve Manifold PDS (where the cover block requirements are found).	Y
20	Rickenbach	Pg. 18, 3.4, use the same section 3.4 from valve manifold document.	Accepted. Used sections 3.4.1 and 3.4.2 from the valve manifold PDS.	Y
21	Janicek	Pg. 18, 3.5.2, change to "not applicable".	Accepted. Changed to N/A.	Y
22	Rickenbach	Pg. 19, 4.0, make this section like section 4.0 (QA) in valve manifold document (HNF-SD-W314-TI-010).	Accepted. Used same section 4.0 as the other PDS's.	Y

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23	Donald Smith	Pg. 28, 5.1, expand definitions of "substrate" and "cracking".	Partially accepted. Deleted cracking definition and added "to the substrate" after "coated surface" in section 3.2.4. Additionally, reviewed definition of substrate and deleted word uncoated but left the remaining part of the definition because it is the best definition found.	Y
24	Rickenbach	Deleted this section. This section deals with construction items and airborne releases during normal operations which do not apply to this PDS.	Accepted. Deleted section.	Y

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		Date February 24, 1997
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W-314, Tank Farm Restoration and Safe Operations (Phase 1)		ECN No. N/A

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