MAR 16 2000

ENGINEERING DATA TRANSMITTAL

Page 1 of 1
1. EDT 616417

2. To: (Receiving Organization) Distribution		3. From: (Originating Organization) RPP Quality Assurance		4. Related EDT No.: N/A	
5. Proj./Prog./Dept./Div.: River Protection Project		6. Design Authority/Design Agent/Cog. Engr.: Roger R. True, Cog. QAE		7. Purchase Order No.: N/A	
8. Originator Remarks: Issuing Suspect/Counterfeit Item Implementation Plan as a Supporting Document (SD) for tracking and reference purposes.				9. Equip./Component No.: N/A	
11. Receiver Remarks:				10. System/Bldg./Facility: RPP General	
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 Transmittal	Originator Disposition	Receiver Disposition
1	RPP-6027	-	0	Implementation Plan for	Q	2,3	1	
				Tank Farm Transition				
				Projects Suspect/				
				Counterfeit Items				

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
3		Design Authority	R.S. Popielarczyk	R2-58		3		D.I. Allen			R2-50
-		Design Agent				3		C.B. Bryan			R2-58
1	1	Cog. Eng.	R.R. TRUE	R.R. True	3-15-00	3		T.J. Kelley			R2-33
3		Cog. Mgr.	H.R. Hopkins II	R2-58		3		R.R. TRUE			74-07
1	1	QA MGR.	J.B. Hebdon	3/15/00							
-		Safety									
-		Env.									

18. Signature of EDT Originator Roger R. True Date 3-15-00		19. Authorized Representative for Receiving Organization Date		20. Design Authority/Cognizant Manager Joel Hebdon Date 3/15/00		21. DOE APPROVAL (if required) Ctrl No. _____ ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments	

IMPLEMENTATION PLAN FOR TANK FARM TRANSITION PROJECTS SUSPECT/COUNTERFEIT ITEMS

CH2M HILL Hanford Group, Inc.

Richland, WA 99352

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

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Abstract:

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Release Approval Date

Approved For Public Release

**Westinghouse
Hanford Company****Internal
Memo**

From: Tank Waste Remediation System Quality Assurance
Phone: 373-5005 S1-57
Date: July 13, 1995
Subject: IMPLEMENTATION PLAN FOR TANK FARM TRANSITION PROJECTS
SUSPECT/COUNTERFEIT ITEMS

38200-95-031

To: J. L. Lee R2-50

cc: T. L. Bennington	S1-57	J. N. Nansen	R3-56
J. G. Burton	S8-05	D. P. Reber	T4-08
H. P. Fox	R2-88	J. M. Roberts	A4-79
C. J. Geier	R2-36	W. E. Ross	R2-50
C. N. Hogan	S1-57	F. O. Strankman	R2-50
J. L. Logston	S1-57	J. H. Wicks, Jr.	S5-07
T. Morton	R2-54	JW File/LB	

I am attaching a copy of the revised and approved Implementation Plan for TFTP Suspect/Counterfeit Items for your use throughout the Tank Farms.

Should you have any questions concerning the contents of this revised plan, please contact Mr. T. L. Bennington (372-1801) or me (373-5005).

J. Weber
Manager

ad

Attachment

IMPLEMENTATION PLAN
for
TFTP SUSPECT/COUNTERFEIT ITEMS

Westinghouse Hanford Company

Tank Waste Remediation System

Quality Assurance

Revision 1

June 26, 1995

TFTP IMPLEMENTATION PLAN FOR SUSPECT/COUNTERFEIT ITEMS

Under direction from the Department of Energy (letter 9200979B) all divisions of Westinghouse are to develop a plan to address the issue of suspect items. This document sets forth the strategy for implementing such direction for the Tank Farm Transition Projects.

Approval Signatures:

John L. Lee, Director, Tank Farm Transition Projects

6-30-95
date

Jack Weber, Manager, Tank Waste Remediation Systems Quality Assurance

6/30/95
date

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1.0 PURPOSE

This plan is designed to provide an appropriate level of confidence that Tank Farm Transition Projects (TFTP) facilities will be evaluated to assess the presence of suspect/counterfeit items. It is intended to identify suspect/counterfeit items that are presently in inventory and provide for the reporting and disposition of those items. Items which have been installed will also receive appropriate evaluation using a graded approach to achieve optimum results balanced against safety considerations and cost effectiveness.

2.0 SCOPE

Through implementation of this plan, East Tank Farm, West Tank Farm, and the Evaporator facilities will be assessed for the presence of suspect/counterfeit items.

The graded approach will include items categorized as Safety Class 1 and 2. It will additionally include General Plant Selected Industrial Safety items categorized as Safety Class 3 and 4.

Inaccessible items will not be evaluated nor will a record search be undertaken since construction records are not readily retrievable, adequately indexed or sufficiently detailed to yield a cost effective evaluation of potentially suspect/counterfeit items that may have been previously installed.

3.0 DESCRIPTION

Arising from direction of the Department of Energy, Richland Operations Office¹, and an Internal Memo² from the Manager of Quality Assurance, Westinghouse Hanford Company (WHC), all divisions of WHC were to develop and implement a plan of action to address the issue of suspect items. The principal aim of such plans was to satisfy the concerns and findings expressed in the Inspector General's report³ related to suspect items found at Department of Energy facilities.

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¹ Letter 92009798, Department of Energy, Richland Operations Office, from R. A. Holten, Director Technical Support Division, to President of Westinghouse Hanford Company, "Suspect Parts," dated February 11, 1992.

² Internal Memo, 38000-92-024, From A. J. Fisher, Manager, Quality Assurance, to Westinghouse Hanford Company Level 1 Managers, "Suspect Parts," dated March 30, 1992.

³ Report Number DOE/IG-0304, U.S. Department of Energy, Office of Inspector General, "Concerns with the Effectiveness of the Department's Quality Assurance Program Regarding Product Substitution Issues," dated November 19, 1991.

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4.0 DEFINITIONS

4.1 Suspect/Counterfeit Items:

- 4.1.1 Fasteners: All grade 5 and 8 fasteners procured in accordance with the Society of Automotive Engineers (SAE) and identified ASTM standards. See Attachment 1.
- 4.1.2 Electrical Components: Molded case and metal clad circuit breakers, transformers, fuses, resistors, switchgears, and relays. See Attachment 2.
- 4.1.3 Piping Components: Fittings, flanges, valves, valve replacement products, couplings, plugs, spacers, and nozzles. See Attachment 3. (Ref. Quality Assurance Bulletin (QAB)# 93-01)

4.2 Graded Approach:

- 4.2.1 Inspection by TWRS QC of Safety Class 1, 2, and General Plant Selected Safety Class 3 and 4 equipment staged for installation including:
  - a) Those systems, components, and structures whose failure could adversely affect the environment, safety, and health of the public;
  - b) Those systems, components, and structures whose failure could adversely affect the health and safety of worker, e.g., cranes, elevators, etc.; and
  - c) Fasteners, electrical components, and other identified suspect/counterfeit products in inventory.⁴
- 4.2.2 Inspection by TWRS QC of essential spare equipment located in controlled storage areas prior to plant installation and/or use.

4.3 Inaccessible Systems/Components:

Items installed in systems which are buried, or below grade (valve and pump pits, underground vaults, tanks, etc.), or items within a component that are not readily visible without disassembling.

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⁴ "Plan for the Suspect/Counterfeit Products Issue in the Department of Energy, October 1993

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5.0 RESPONSIBILITIES

Tank Farms Transition Projects: The Director of TFTP is responsible for implementing this plan and providing the necessary support to permit QC personnel access for timely evaluations of TFTP facilities; to report discovery of suspect/counterfeit items to proper agencies; concur with nonconformance report dispositions; identify, remove and/or segregate suspect/counterfeit items as required on a timely basis, assuring that appropriate personnel have read and understood the objectives of this Plan, and for providing personnel who can support prompt disposition of nonconformance reports that document the presence of suspect/counterfeit items.

Quality Assurance: The Manager of TWRS Quality Assurance (QA) is responsible for providing support, by trained QA/QC personnel, to evaluate TFTP facilities for the presence of suspect/counterfeit items; document the evaluation in accordance with this plan; and process nonconformance reports per CM-4-2, QI-15.6.

6.0 REQUIREMENTS

TWRS QC shall visually inspect a sample of the shop stock inventories at all known TFTP facilities for suspect/counterfeit items described in the QAB's⁵. Additionally, this assessment will focus on spares which have the largest turnaround and are located in various storage locations. Field assessments for installed components subject to the previously described exclusions will be conducted as warranted based on current work scheduled and performed with JCS packages.

Personnel responsible for evaluating the presence of suspect/counterfeit items shall have undergone appropriate training such that they are aware of the types and kinds of suspect items.

Suspect items will include those identified in the QAB's and listed in the Attachments to this plan.

Items meeting the definition of suspect/counterfeit shall be documented on a non-conformance report in accordance with QI-15.6. Additionally, items requiring an Occurrence Report⁶ will be reported in accordance with WHC-IP-0842, section 4.6.2. One Occurrence Report per calendar year will be initiated to document the discovery of suspect/counterfeit items requiring an Occurrence Report and will be updated throughout the year as necessary.

⁵ Quality Assurance Bulletin: QAB-94-01, Discrepant Dual Head Stamped Stainless Steel Bolts, dated August 23, 1994; QAB-93-03, Substandard Chinese Pipe Flanges, dated May 20, 1993; QAB-93-02, Revised U. S. Department of Energy Guidance Relative to Identification of Suspect/Counterfeit Graded Fastener Headmarks, dated April 28, 1993; QAB-92-02, Control and Procurement of Suspect Parts, dated August 21, 1992; and QAB-92-01, Control and Procurement of Suspect Parts, dated February 14, 1992.

⁶ DOE Order 5000.38

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Suspect items may be dispositioned as acceptable and left in place or replaced based on an Engineering evaluation by the NCR process.

Suspect items located in a RCA, that are dispositioned to be replaced, shall be packaged and disposed of in accordance with facility procedures.

Engineering disposition will be based on a graded approach to provide reasonable assurance that all suspect part safety issues have been addressed and dispositioned in accordance with significance, complexity, application, and ALARA criteria.

ATTACHMENT 1

SUSPECT ITEMS FASTENER HEADMARKS CHART

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ATTACHMENT 2

ELECTRICAL COMPONENT SUSPECT ITEMS LIST

The following electrical products have been known to be misrepresented by Licensees of the Nuclear Regulatory Commission (NRC):

<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Information Source</u>
Relays	Potter and Brumfield	MDR-138-8	NRC 90-57
		MDR-173-1	"
		MDR-134-1	"
		MDR-142-1	"

Consider all MDR relays from Potter & Brumfield to be suspect.

Vendors:	Spectronics, Inc. Mobile, AL	NUTHERM International Mount Vernon, IL
	Stokely Enterprises Norfolk, VA	The Martin Co. Chesapeake, VA

These relays may also be used in original electrical equipment

Metal Clad Breakers	GE	AKF-2-25	NRC 89-45

Used for low voltage applications (less than 600V)

Vendors:	Satin America Corp.	Circuit Breaker Systems

Overcurrent Trip Device	GE	EC-1 EC-2A	NRC 89-45 Supp 1 "

(is a component of the GE AKF-2-25 Metal Clad Breaker and was used during the 1983-1987 time period)

Vendors:	Satin America Corp.	Circuit Breaker Systems

Low-Voltage Switchgear	Westinghouse	DB-25	NRC 89-45 Supp 2

Vendor:	Satin America Corp.

Circuit Breakers	GE	THEF 136050	NRC 88-46 Supp 3 06/08/89

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<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Information Source</u>
Vendor:	Bob Ferguson's Industrial Control & Supply Whittier, CA/Lake Forest, CA	Lakeland Engineering- Equipment Company Minneapolis, MN	
Shunt Trip Coil	Westinghouse	2609D39624	NRC 88-46 Supp 4
		LA2600F	09/11/89
Frames	"	LA3600F	"
	"	MA2800F	"
	"		"
Trip Units	Westinghouse	HLA 21250TM	NRC 88-46 Supp 4
	"	HLA 2400TM	09/11/89
	"	HLA 3600T	"
	"	HLB 3200T	"
	"	HMA 3600T	"
	"	HMA 3700T	"
	"	HKA 3225T	"
	"	HNB 2700T	"
Vendor:	Molded case Circuit Breakers Co. (MCCB) Temple City, CA		

ELECTRICAL SUSPECT MATERIALS LIST

The following is a listing of electrical equipment and associated suppliers which were all reported on NRC Bulletin 88-46 Supplement 2:

<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Supplier</u>
Circuit Breaker	GE	AK2A25	Rosen Electric Equipment
Circuit Breaker	Square D	KA 36200	California Breakers, Inc.
Circuit Breaker	ITE	OJ2B200	"
Circuit Breaker	GE	TEC 360S0	General Circuit Breakers & Electrical Supply, Inc.
Circuit Breaker	GE	THED 136100WL	"
Circuit Breaker	GE	THED 136050WL	"
Circuit Breaker	GE	THED 136045WL	"

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<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Supplier</u>
Circuit Breaker	GE	THFK 236070WL	California Breakers, Inc.
Circuit Breaker	ITE	EF 3B070	ATS Circuit Breakers, Inc.
Circuit Breaker	Westinghouse	EH 2020	HLC Electric Supply
Circuit Breaker	"	FA 3035	"
Circuit Breaker	"	EH 2050	"
Circuit Breaker	"	EH 2070	"
Circuit Breaker	"	EH 2070	"
Circuit Breaker	"	EH 2050	"
Circuit Breaker	"	Unknown	Molded case Circuit Breakers
Circuit Breaker	Westinghouse	FA 2100	HCL Electric Supply Co.
Circuit Breaker	"	FA 2050	"
Circuit Breaker	CH	10177H13	AAKER
Heaters	"	10177H21	"
Heaters	"	10177H32	"
Heaters	"	10177H036	N/A
Heaters	"	10177H1049	N/A
Circuit Breaker	FED Pacific	2P125	Midwest Co.
Starters	Westinghouse	A200MICAC	HLC Electric Supply Co.
Circuit Breaker	"	HFB3050	"
Circuit Breaker	"	TE122070	AAKER
Circuit Breaker	ITE	EH 313015	General Circuit Breakers and Electrical Supply, Inc.
Circuit Breaker	Westinghouse	JA 2225	Molded Case Circuit Breakers
Circuit Breaker	ITE	JL3B070	"
Starters	Westinghouse	626B187G17	Romac Supply Co.
	"	626B187G13	"

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<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Supplier</u>
Circuit Breaker	ITE	JL3B150	General Circuit Breakers and Electrical Supply, Inc.
Circuit Breaker	ITE	E43B015	General Circuit Breakers and Supply, Inc.
Electrical			
Circuit Breaker	GE THED	136150WL	California Breakers, Inc.
Circuit Breaker	GE	THED 136150	Molded Case Circuit Breakers
Circuit Breaker	GE THED	124015WL	California Breakers, Inc.
Circuit Breaker	GE	TF136090	Voyten Electric Co.
Circuit Breaker	Unknown	50DHP250	"
Circuit Breaker	GE	AK-3A-25	NSSS, Inc.
Circuit Breaker	Westinghouse	JL3-B125	NSSS, Inc.
	"	JL3-8070	"
	"	JL3-B150	"
	"	JL3-B200	"
	"	JL3-B090	"
	"	JL3-B100	"
Circuit Breaker	"	HFA, HFB and FA	Spectrum Tech
Motor	Siemen Allis	INP 143T	Rosen Electric Equipment
Motor	"	10 HP 215T	"
Transformer	Jefferson	75KVA XFMR	"
Gauge Glasses	Siemen Allis	PN 00-737-637-11 8	"
Circuit Breaker	Westinghouse	HLM3800T	Molded Case Circuit Breakers
Circuit Breaker	ITE	1193 60 amp	Panel Board Specialties
Circuit Breaker	Westinghouse	F3100N	"
Circuit Breaker	ITE	EF2-B030	Rosen Electric Equipment
Circuit Breaker	Westinghouse	MA3500	Rosen Electric Equipment
Circuit Breaker	"	EH2015	Luckow Circuit Breakers
Circuit Breaker	Superior	246U-3	Rosen Electric Equipment

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<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Supplier</u>
Circuit Breaker	ITE	Unknown	"
Circuit Breaker	"	EF2-B030	"
Circuit Breaker	GE	TF361050WL	"
Circuit Breaker Circuit	Westinghouse	LA3200 WL	Molded Case Breakers
Circuit Breaker	"	HLA3200T	"
Shunt Trip	"	2602D58U9	"
Circuit Breaker	"	HLB3200T	"
Shunt Trip Circuit Breaker	GE	2602156G19 TED 1130020	"
Aux Contact	Westinghouse	EHB2100	N/A
Circuit Breaker	"	EHB2100	Molded Case Circuit Breakers
Aux Contact	"	N/A	N/A
Circuit Breaker	"	HL3800T	Molded Case Circuit Breakers
Circuit Breaker	GE	TED 1360 OWL	"
Circuit Breaker	Square D	999330	

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ATTACHMENT 3

PIPING COMPONENTS SUSPECT MATERIALS LIST

<u>Type of Equipment</u>	<u>Manufacturer</u>	<u>Part Number</u>	<u>Information Source</u>
4", 1500 PSI Pressure Sealed Crane Valves	Southern California Valve Maintenance Company (SCV)	None	NRC 91-09
Counterfeit Valve Replacement Parts, Plug Stem, Stem to plug anti-rotation pin, seat ring, valve plugs, bushings, cages, and packing box components	Sample-Webtrol Controls, Inc. (S-W) as secondary source such as Cor-Val or Control Valve Specialties, Inc. (CVS)	None	NRC 88-97 Suppl. 1
Vogt 2" valves, 3" & 6" Pacific globe valves, 24" Crane-Chapman check valves, 6" Lunkenheimer, 20" Lunkenheimer gate valve, 2" Vogt globe valve, 5" Crane valves	Western Valve Co., CMA International	SW13111 Mod. 1542 Mod. 3013 Mod. SW-1023	NRC 88-48 Suppl. 1 & 2