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MAY 13 1999 ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 625092

2. To: (Receiving Organization)	3. From: (Originating Organization)	4. Related EDT No.:
Distribution	NHC	NA
5. Proj./Prog./Dept./Div.:	6. Design Authority/Design Agent/Cog. Engr.:	7. Purchase Order No.:
Project W-519/Infrastructure	G.Porter	NA
8. Originator Remarks:		9. Equip./Component No.:
For release		NA
		10. System/Bldg./Facility:
		NA
		12. Major Assm. Dwg. No.:
11. Receiver Remarks:	11A. Design Baseline Document? ○ Yes ◉ No	NA
		13. Permit/Permit Application No.:
		NA
		14. Required Response Date:
		NA

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	HNF-4386	---	0	Project W-519 QAIP	NA	2	1	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									
		Design Agent									
2	1	Cog. Eng. G.Porter	G.Porter	5/13/99	R3-47						
2	1	Cog. Mgr. J.Payne	J.Payne	5/13/99	R3-47						
		QA									
		Safety									
		Env.									

18. G.Porter 5/13/99
Signature of EDT Originator — Date

19. J.Payne J.Payne 5/13/99
Authorized Representative for Receiving Organization — Date

20. J.Payne J.Payne 5/13/99
Design Authority/ Cognizant Manager — Date

21. DOE APPROVAL (if required)
Ctrl No. NA
○ Approved
○ Approved w/comments
○ Disapproved w/comments

INSTRUCTIONS FOR COMPLETION OF THE ENGINEERING DATA TRANSMITTAL

(USE BLACK INK OR TYPE)

BLOCK	TITLE	
(1)*	EDT	Pre-assigned EDT number.
(2)	To: (Receiving Organization)	Enter the individual's name, title of the organization, or entity (e.g., Distribution) that the EDT is being transmitted to.
(3)	From: (Originating Organization)	Enter the title of the organization originating and transmitting the EDT.
(4)	Related EDT No.	Enter EDT numbers which relate to the data being transmitted.
(5)*	Proj./Prog./Dept./Div.	Enter the Project/Program/Department/Division title or Project/Program acronym or Project Number, Work Order Number or Organization Code.
(6)*	Design Authority (for Design Baseline Documents)/Cognizant Engineer (for all others)/Design Agent	Enter the name of the individual identified as being responsible for coordinating disposition of the EDT.
(7)	Purchase Order No.	Enter related Purchase Order (P.O.) Number, if available.
(8)*	Originator Remarks	Enter special or additional comments concerning transmittal, or "Key" retrieval words may be entered.
(9)	Equipment/Component No.	Enter equipment/component number of affected item, if appropriate.
(10)	System/Bldg./Facility	Enter applicable system, building or facility number, if appropriate.
(11)	Receiver Remarks	Enter special or additional comments concerning transmittal.
(11A)*	Design Baseline Document	Enter an "X" in the appropriate box. Consult with Design Authority for identification of Design Baseline Documents, if required.
(12)	Major Assm. Dwg. No.	Enter applicable drawing number of major assembly, if appropriate.
(13)	Permit/Permit Application No.	Enter applicable permit or permit application number, if appropriate.
(14)	Required Response Date	Enter the date a response is required from individuals identified in Block 17 (Signature/Distribution).
(15)*	Data Transmitted	
	(A)* Item Number	Enter sequential number, beginning with 1, of the information listed on EDT.
	(B)* Document/Drawing No.	Enter the unique identification number assigned to the document or drawing being transmitted.
	(C)* Sheet No.	Enter the sheet number of the information being transmitted. If no sheet number, leave blank.
	(D)* Rev. No.	Enter the revision number of the information being transmitted. If no revision number, leave blank.
	(E) Title or Description of Data Transmitted	Enter the title of the document or drawing or a brief description of the subject if no title is identified.
	(F)* Approval Designator	Enter the appropriate Approval Designator (Block 15). Also, indicate the appropriate approvals for each item listed, i.e., SQ, ESQ, etc.
	(G) Reason for Transmittal	Enter the appropriate code to identify the purpose of the data transmittal (see Block 16).
	(H) Originator Disposition	Enter the appropriate disposition code (see Block 16).
	(I) Receiver Disposition	Enter the appropriate disposition code (see Block 16).
(16)	Key	Number codes used in completion of Blocks 15 (G), (H), and (I), and 17 (G), (H) (Signature/Distribution).
(17)	Signature/Distribution	
	(G) Reason	Enter the code of the reason for transmittal (Block 16).
	(H) Disposition	Enter the code for the disposition (Block 16).
	(J) Name	Enter the signature of the individual completing the Disposition 17 (H) and the Transmittal.
	(K)* Signature	Obtain appropriate signature(s).
	(L)* Date	Enter date signature is obtained.
	(M)* MSIN	Enter MSIN. Note: If Distribution Sheet is used, show entire distribution (including that indicated on Page 1 of the EDT) on the Distribution Sheet.
(18)	Signature of EDT Originator	Enter the signature and date of the individual originating the EDT (entered prior to transmittal to Receiving Organization). If the EDT originator is the Design Authority (for Design Baseline Documents)/Cognizant Engineer (for all others) or Design Agent, sign both Blocks 17 and 18.
(19)	Authorized Representative for Receiving Organization	Enter the signature and date of the individual identified by the Receiving Organization Design Authority (for Design Baseline Documents)/Cognizant Engineer (for all others) as authorized to approve disposition of the EDT and acceptance of the data transmitted, as applicable.
(20)*	Design Authority/Cognizant Manager	Enter the signature and date of the Design Authority/Cognizant Manager. (This signature is authorization for release.)
(21)*	DOE Approval	Enter DOE approval (if required) by signature or control number that tracks the approval to a signature, and indicate DOE action.

*Asterisk denote the required minimum items check by Configuration Documentation prior to release; these are the minimum release requirements.

S

Tank Waste Remediation System Privatization Phase I Infrastructure, Project W-519, Quality Assurance Implementation Plan

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

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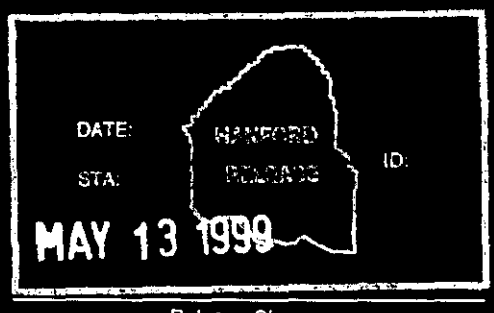
Key Words: Quality Assurance, Project W-519, Implementation plan,TWRS, Infrastructure Phase I

Abstract: This document has been prepared to identify the quality requirements for all products/activities developed by or for Project W-519. This plan is responsive to the Numatec Hanford Corporation, Quality Assurance Program Plan, NHC-MP-001.

5/13/99
Release Approval Date



Release Stamp

Approved For Public Release

PROJECT W-519
TWRS PRIVATIZATION PHASE I
INFRASTRUCTURE

QUALITY ASSURANCE IMPLEMENTATION PLAN

APRIL 27, 1999

John B Payne
Project Manager — 4/27/99 Date

Bob J Parazin
Technical Lead — 9/27/99 Date

Gene Roosendaal, DYN
Design Authority
Site, Roads, Water — 4/5/99 Date

Mike Hache, DYN
Design Authority
Electrical — 4/29/99 Date

Lilly Lin, WMH
Design Authority
Rad/Danderous Liquid Effluent — 4/27/99 Date

Al Crane, WMH
Design Authority
Non-Rad/Non-Dangerous Liquid Effluent — 4-29-99 Date

Peter Smith
Safety — 4/27/99 Date

Lucinda Penn
Environmental — 4/27/99 Date

Jeffrey J Huston
Quality Assurance — 4-27-99 Date

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1.0 SCOPE

Project W-519 TWRS Privatization Phase I Infrastructure will consist of a new electrical substation and with transmission lines, site development and road improvements to and within the former grout disposal compound, the extension of the 200 East Area raw water and potable water distribution system, and provision of two liquid effluent systems (Non-radioactive Non-dangerous and Radioactive Dangerous).

The Electrical System will provide a 230 kV system loop from the existing transmission line connecting A8 substation and Ashe Tap to new substations A6. Install a 230/13.8 kV substation and provide 13.8 kV duct-banks up to the site boundary for the new PC facilities.

Site development and road improvements includes identifying up to 22 hectares of land, performing upgrades to three street intersections; widening, and asphalt overlays of existing roadway. Construction of new roadways and intersection lighting and removal or relocation of existing facilities, utilities and physical features for installation within new utility corridors is included. Also the relocation of an existing spoil pile. The extension of temporary power from 200 East Area to the Privatization Contractor (PC) site boundaries for the construction of PC facilities is also included. The extension of the 200 East Area raw and potable water distribution system will provide raw and potable water for the operation of PC facilities.

Two liquid effluent transfer systems will be constructed for routing liquid waste from the PC site to existing waste line facilities for storage, treatment, and disposal in the 200 East Area. One system will convey potentially radioactive, dangerous liquid effluent in a pipe-in-pipe (double containment) line to the Liquid Effluent Retention Facility (LERF). The other system will convey non-radioactive, non-dangerous liquid effluents suitable for disposal at the Treated Effluent Disposal Facility (TEDF) in a single walled pipeline that ties into the existing H-line from the 242A Evaporator.

2.0 DOCUMENT OVERVIEW

This document sets forth the quality requirement for all products/activities developed by or for Project W-519. This Quality Assurance Implementation Plan (QAIP) is responsive to the Numatec Hanford Corporation (NHC), Quality Assurance Program Plan (QAPP), NHC-MP-001.

The Quality requirements of this QAIP are applicable to all nuclear and non-nuclear products/activities Project W-519 will perform and are applied using a graded approach.

Use of a graded approach provides the flexibility to implement the QA requirements in a way that best suits the products/activities.

Project W-519 takes no exception to the NHC QAPP, Project W-519 will comply with the FDH and NHC policies and procedures for all products/activities generated by or for the Project.

3.0 ORGANIZATIONAL RESPONSIBILITIES

PROJECT MANAGER has overall responsibility for compliance and assures implementation of the QAIP for all W-519 activities and products. He has directed all Project W-519 personnel that implementation of this QAIP for all products/activities is their responsibility.

TECHNICAL LEAD has responsibility for implementation of technical baseline into approved design media. Also for issuing of design media into the construction/fabrication process and assurance that the design remains consistent with the authorized technical baseline.

CONSTRUCTION LEAD has oversight responsibility for the execution of construction/fabrication consistent with approved design media, site interfaces, and the development and/or execution of change, non-conformance and acceptance documentation.

DESIGN AUTHORITY has overall responsibility for all modifications or changes to facilities they are assigned. This includes changes to the project technical design criteria and baseline design media.

SAFETY has overall responsibility for the development and issuance of all safety basis documentation required that are important to the safety function of the Project.

QUALITY ASSURANCE has overall responsibility to provide a level of assurance those W-519 products/activities are performed in accordance with client requirements. Quality Engineering responsibilities on project work are coordinated with W-519 Project Manager.

4.0 REQUIREMENTS

W-519 Personnel are responsible for performing work in accordance with the requirements set forth in this QAIP. The minimum set of Project Hanford and NHC procedures that will be used to implement the QAIP can be found on the Internet using address http://docs.rl.gov/phpp/index.htm. The established Numatec Hanford Corporation, Quality Assurance Program Plan (QAPP), NHC-MP-001 is responsive to the Fluor Daniel Hanford (FDH), Quality Assurance Program Description (QAPD), HNF-MP-599. The Project Hanford Policies and Procedures (PHPP) are the controls necessary to comply with this QAIP.

W-519 Personnel are responsible for identifying problems related to quality and reporting them to the appropriate level of W-519 Management.

The quality requirements imposed by this QAIP are applicable to all W-519 products/activities and will be performed using graded approach in accordance with Part 2, Section 1, Paragraph 3.9 of the QAPD.

No additional quality requirements, other than those defined in the NHC QAPP, will be implemented on project (W-519) work..

The Project Hanford procedures are under the control of Fluor Daniel Hanford (FDH) and the NHC procedures are controlled within the NHC policies and procedure system.

5.0 ACCEPTANCE INSPECTION (AI)

Acceptance Inspection (AI) works for FDH and performs overview of Construction on behalf of the Government. The AI organization will perform all on-site National Electric Code (NEC) compliance verifications.

AI will perform overview of all construction activities. Specific overview activities will be performed as scheduled in the Acceptance Inspection Plan.

6.0 CRITICAL ITEMS REQUIRING VERIFICATION

Table 1 reflects the types of verification and inspections to be performed. These Verification points are the responsibility of the Contractor performing the work. The result of the applicable verification point shall be documented and will become part of the Project documentation.

TABLE 1

W-519 Verification Point Matrix

Note: Structures, systems and components noted in this table have been evaluated by Project W-519 Management Team and may be modified at any time.

STRUCTURE, SYSTEM, COMPONENT	TYPES OF VERIFICATION AND INSPECTION	LOCATION AND TIMING OF VERIFICATION AND INSPECTION		REMARKS
		SUPPLIER FACILITY	SITE	
ELECTRICAL SYSTEM				
230 kV transmission Line	F		1,2,3,4,6,7	
Substation Subsystems (Grounding, Lighting, Lightening Protection, Dist. Sys. etc.)	F		1,2,3,4,6,7	
Major Equipment	F	2,3,4,7	5,6,7	
Switchgear Building	F		1,2,3,4,6,7	
13.8 kV duct-bank	G		3,4,6	
Farm Construction/ AP Tank Power	F		1,3,4,6, 7	
Fire System Piping	*		*	* Same requirements as raw water system below
Fire Sys. Instrument/Control	D		1,3,4,6,7	
Heating, Ventilation & Air Conditioning (HVAC)	F		1,3,4, 6,7	
Excavation/Backfill	G		3,4,6	
Pads & Foundations	G		3,4,6	
Fence	G		3,4,6	

WATER SYSTEMS				
POTABLE				
Piping/valves	G		3,4,6	
Instruments/Controls	D		1,3,4,6	
Flush/Testing	D		7	
Excavation/Backfill	G		3,4,6,7	Compaction Density Testing
RAW				
Piping/valves	G		3,4,6	
Instruments/Controls	D		1,3,4,6	
Flush/Testing	D		7	
Excavation/Backfill	G		3,4,6	

EFFLUENT SYSTEMS				
LERF				
Primary pipe system	D		1,2,3,4,6	
Pressure tests	D		7	
Excavation/Backfill	G		3,4,6	
Containment pipe system	G		1,3,4,6	
Leak detection	G		3,4,6,7	
Controls	F		3,6,7	
TEDF				
Piping System	D		1,2,3,4,6	
Pressure tests	D		7	
Excavation/Backfill	G		3,4,6	
Controls	F		3,6,7	

ROADS				
Subgrade	G		3,4,6,7	
Drainage/Stabilization	G		3,4,6	
Pavement	G		3,4,6,7	
Signing/Marking	G		3,4,6	
Clearing and Grubbing	F		3,4	
Removal of Grout Spoil	F		3,4,6	
Fencing & Gates	G		3,4,6	

Legend: Types of Verifications/Inspections

D - Detailed inspection to verify details and to perform inspection for quality assurance reasons.

F - Functional inspection and/or system operation to determine overall compliance with contract drawings and specifications.

G - General inspection to ascertain that workmanship, and kind and quality of materials conforms to the contract drawings and specifications.

Timing of verification and inspection:

1 - Receipt of materials
2 - Prior to first weld or NDE
3 - In process
4 - Final inspection
5 - Upon receipt
6 – Installation/Placement
7 - Testing

DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	G. Porter, NHC	Date 5-13-99
Project Title/Work Order		EDT No. 625092
Project W-519, Quality Assurance Implementation Plan		ECN No.

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
A. Crane	S6-72	x			
M. Hache	S2-12	x			
L. Lin	S6-72	x			
G. Roosendaal	S4-55	x			
J. Payne	R3-47	x			
R. Parazin	R3-47	x			
L. Penn	R1-51	x			
P. Smith	R3-01	x			
J. Huston	B4-68	x			
J. Henderson	G3-14	x			
T. Nemzek	G3-14	x			
G. Porter	R3-47	x			
R. Root	R2-53	x			
S. Lowe	H6-06	x			
S. Zeigler (WFC)	R3-47	x			
D. Murillo	A2-45	x			
C. Bryan	R2-58	x			
Central Files	B1-07	x			
Project Files	R1-29	x			