JAN 06 1998

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 622848

2. To: (Receiving Organization) Distribution	3. From: (Originating Organization) Tank Waste Retrieval & Disposal	4. Related EDT No.: N/A
5. Proj./Prog./Dept./Div.: Tank Waste Remediation Systems (TWRS)	6. Cog. Engr.: S. H. Rifaey	7. Purchase Order No.: N/A
8. Originator Remarks: For approval and release.		9. Equip./Component No.: N/A
		10. System/Bldg./Facility: N/A
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: 1/5/98

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	HNF-2020		0	TWRS RTP Guidance & Requirements to Deliverables Crosswalk	N/A	1/2	1	

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	4. Review	2. Approved w/comment		4. Reviewed no/comment					
		2. Release	5. Post-Review	3. Disapproved w/comment		5. Reviewed w/comment					
		3. Information	6. Dist. (Receipt Acknow. Required)			6. Receipt acknowledged					
(G)	(H)	17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)						(G)	(H)		
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
1	1	Design Authority S. H. Rifaey	<i>[Signature]</i>	1/5/98	50	Author R. P. Raven	<i>[Signature]</i>	1/5/98	1	1	1
		Design Agent	N/A			Author's Manager R. D. Wojtasek	<i>[Signature]</i>	1/6/98	1	1	1
		Cog.Eng.	N/A			D. M. McDaniel	<i>[Signature]</i>	1/6/98	1	1	1
		Cog. Mgr.	N/A			S.D. Brumley per telecon	<i>[Signature]</i>	1/6/98	1	1	1
		QA	N/A								
		Safety	N/A								
		Env.	N/A								
18. R. P. Raven Signature on EDT Originator		19. Authorized Representative Date for Receiving Organization		20. R. D. Wojtasek Cognizant Manager		21. DOE APPROVAL (if required) Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments					

1/6/98

Tank Waste Remediation System Retrieval and Disposal Mission Readiness-to-Proceed Guidance and Requirements to Deliverables Crosswalk

C. E. Hall / R. P. Raven
Lockheed Martin Hanford Company, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

EDT/ECN: 622848 UC: 2030
Org Code: 7B220 Charge Code: D215P
B&R Code: EW3130010 Total Pages: 80

Type of LIMITED USE Information: **Business-Sensitive**

Key Words: TWRS, Retrieval and Disposal Mission, Readiness-to-Proceed

Abstract: Before RL can authorize proceeding with Phase 1B, the PHMC team must demonstrate its readiness to retrieve and deliver the waste to the private contractor(s) and to receive and dispose of the products and byproducts returned from the treatment. The PHMC team has organized their plans for providing these vitrification-support services into the Retrieval and Disposal Mission within the Tank Waste Remediation System (TWRS) Program.

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James Randall 1-6-98
Release Approval Date

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Tank Waste Remediation System Retrieval and Disposal Mission Readiness-to-Proceed Guidance and Requirements to Deliverables Crosswalk

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Date Published
January 1998

Prepared by Lockheed Martin Hanford Corporation
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Prepared for the U.S. Department of Energy

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Hanford Management and Integration Contractor for the
U.S. Department of Energy under Contract DE-AC-0696-RL13200

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Document Title: Tank Waste Remediation System Retrieval and Disposal Mission Readiness-to-Proceed Guidance and Requirements to Deliverables Crosswalk

Approved by:

D. M. McDaniel

Vice-President, IRM & Systems Engineering and Integration
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6 Jan 1998

Date

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LIST OF TERMS

DOE	U.S. Department of Energy
FDH	Fluor Daniel Hanford, Inc.
ICD	Interface Control Document
PHMC	Project Hanford Management Contract
RL	U.S. Department of Energy, Richland Operations Office
RTP	readiness to proceed
TWRS	Tank Waste Remediation System

**TANK WASTE REMEDIATION SYSTEM
RETRIEVAL AND DISPOSAL MISSION
READINESS-TO-PROCEED
GUIDANCE AND REQUIREMENTS TO
DELIVERABLES CROSSWALK**

In September 1996, the U.S. Department of Energy, Richland Operations Office (RL) initiated the first of a two-phase program to remediate waste storage in tanks at the Hanford Site in Washington State. Initiating the first phase, RL signed contracts with two private companies who agreed to receive and vitrify a portion of the tank waste in a demonstration and to return the vitrified product and byproducts to the Project Management Hanford Contract (PHMC) team for disposition. The first phase of the overall remediation effort is a demonstration of treatment concepts, and the second phase includes treatment of the remaining tank wastes. The demonstration phase, Phase 1 of the project, is further subdivided into two parts, A and B. During Phase 1A, the vitrification contractors are to establish the technical, operational, regulatory, business, and financial elements required to provide treatment services on a fixed-unit-price basis. Phase 1A deliverables will be evaluated by RL to determine whether it is in the best interest of the government to have one or more vitrification contractors proceed with Phase 1B, in which 6% to 13% of the tank waste would be treated in the demonstration. In addition, before RL can authorize proceeding with Phase 1B, the PHMC team must demonstrate its readiness to retrieve and deliver the waste to the private contractor(s) and to receive and dispose of the products and byproducts returned from the treatment. The PHMC team has organized their plans for providing these vitrification-support services into the Retrieval and Disposal Mission within the Tank Waste Remediation System (TWRS) Project.

Three RL core teams were established to assist in evaluating the PHMC team's readiness, specifically in regard to the following three task areas:

- Waste feed delivery
- Infrastructure and byproducts delivery
- Immobilized products.

The core teams each developed a set of criteria and plans to be used in evaluating the PHMC team's readiness to proceed (RTP). The three core teams are augmented by specialty teams established to provide expertise to the core team in the following five areas:

- Risk management
- Safety
- Quality assurance
- Administration
- Regulatory compliance.

The PHMC team evaluated its own readiness concurrent with an independent assessment of its readiness. Integral to the PHMC team's self-assessment, documents were identified that contain requirements and guidance for PHMC team's Retrieval and Disposal Mission. Some of these documents address portions of the overall TWRS Project that are applicable to the Retrieval and Disposal Mission. Because the parent TWRS Project is already underway, many of the activities needed to support vitrification operations are routine. In identifying evidence of readiness, the PHMC team identified, modified, or, when needed, developed documents at either the program or TWRS level, as appropriate. Proceeding with Phase 1B will employ proven technologies and expand the scope of a successfully operating program.

To facilitate self-assessment of RTP, the PHMC team identified requirements and guidance applicable to the initiation of the Retrieval and Disposal Mission field work. In the self-assessment, the PHMC team further identified which program or project document implements or responds to each guidance item or requirement. Because requirements and guidance are quite extensive, as are the number of program documents, the PHMC team developed a crosswalk linking each requirement or guidance item to one or more project or program planning documents. This crosswalk, or matrix, is included as Table 1. Following is an explanation of how items were selected from the applicable documents for inclusion in the matrix and how a graded level of detail was chosen for itemizing requirements and guidance from various source documents. The guidance/requirement source documents are organized into the following categories:

- A. RL letters regarding PHMC team RTP
- B. U.S. Department of Energy (DOE) Orders and Implementing Guides
- C. Interface Control Documents (ICD)
- D. Draft Evaluation Guidance to the RL Core Teams (four documents)
- E. RL Program Guidance.

The RL Core Team Critical Success Factors, dated December 22, 1997, are each addressed in Table 1, Section A-1, 36 Item Checklist, and Section B-2, DOE Order 425.1, *Startup and Restart of Nuclear Facilities*.

The RL Specialty Team Critical Success Factors dated November 22, 1997, are each addressed in Table 1, Section A-1, 36 Item Checklist; Section B-2, DOE Order 425.1; and numerous earlier DOE guidance documents.

Source document guidance and requirements in rows are matrixed to program/project documents in columns. The program/project documents shown are deliverables to RL or supporting information that is available to RL upon request. Program/project document titles are abbreviated in the matrix. Numbers preceding guidance or requirement items are for internal use and have no other meaning. Source document guidance and requirement items are indented to indicate subordination. Applicable items are indicated with an "I" as the matrix element. Dots as matrix elements are for relationship tracking.

A.1 RL letter 97-WDD-129, Contract Number DE-AC06-96RL13200, Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed (36 Item Checklist)

The RL's approach to evaluating the PHMC team's RTP is described in a letter from RL to Fluor Daniel Hanford, Inc. (FDH) (letter 97-WDD-129, *Contract Number DE-AC06-96RL13200, Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed* [Taylor 1997a]). This letter includes the "Readiness-to-Proceed Evaluation Plan," which outlines RL's approach to evaluating the PHMC team's RTP. Each provision of the letter is itemized independently in the matrix, and it is shown where the evidence of response can be found. The first section in the matrix is composed of 36 items taken from the letter's Appendix B, "Checklist for PHMC Team Readiness to Proceed."

A.2 RL letter 97-WDD-129, Contract Number DE-AC06-96RL13200, Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed (Body of Text)

Requirements identified from the balance of the letter (Taylor 1997a) are included in the matrix as line items, and each is linked to one or more program/project planning documents.

A.3 RL letter 97-WDD-182, Review of Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed

The DOE's review of the PHMC team's RTP Plan is included in a letter from RL to FDH (letter 97-WDD-182, *Review of Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed*). Each provision of Taylor (1997b) is itemized independently in the matrix and cross-referenced to program or project plans.

B.1 DOE Order 430.1, Life Cycle Asset Management, GPG-FM-002, Critical Decision Criteria

DOE Order 430.1, *Life Cycle Asset Management*, as implemented through the "Good Practice Guide" GPG-FM-002, *Critical Decision Criteria*, was used extensively in determining which documents were needed for readiness at the Retrieval and Disposal Mission (i.e., the "program") level and which additional program documents were needed, or which program documents would require revision, at the TWRS level. For brevity, the provisions of the Good Practice Guide are included in the matrix at the summary outline level only, with notation corresponding to the specific provisions in the Good Practice Guide. Links are established to these general subject areas for cross-reference to program/project documents.

B.2. DOE Order 425.1, *Startup and Restart of Nuclear Facilities*, Section 4.d.(1)-(20)

The 20 core requirements of DOE Order 425.1 were employed as primary guidance in the development and revision of program/project documents. For brevity, 18 core requirements are listed and cross-referenced to program/project plans. Core requirements 16 and 20 were eliminated as applicable to DOE only.

C.1 Interface Control Documents 1-22

The requirements extracted from the following 22 ICDs include those commitments made by RL for the project and/or program. These are treated as uncompromised requirements. The DOE commitments are itemized in their entirety:

- HNF-SP-1208-ICD-01, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization-Raw Water* (FDH 1997a)
- HNF-SP-1209-ICD-02, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization-Potable Water* (FDH 1997b)
- HNF-SP-1210-ICD-03, *Interface Control Document Between DOE and the PHMC - Radioactive Solid Waste* (FDH 1997c)
- ICD-04, *Interface Between DOE and the PHMC - Dangerous Wastes (not released)* (FDH 1997d)
- HNF-SP-1211-ICD-05, *Interface Control Document Between DOE and the PHMC - Non-Radioactive, Dangerous Liquid Effluent for Phase 1 Privatization* (FDH 1997e)
- HNF-SP-1212-ICD-06, *Interface Control Document Between DOE and the PHMC - Radioactive Dangerous Liquid Effluents* (FDH 1997f)
- ICD-07, *Interface Between DOE and the PHMC - Non-Dangerous Solid Water (not released)* (FDH 1997g)
- ICD-08, *Interface Between DOE and the PHMC - Liquid Sanitary Water (Not Released)* (FDH 1997h)
- HNF-SP-1213-ICD-09, *Interface Control Document Between DOE and the PHMC - Land for Siting Part A Privatization* (FDH 1997i)
- HNF-SP-1214-ICD-10, *Interface Control Document Between DOE and the PHMC - Deactivated Facility and Site for Phase 1 Privatization* (FDH 1997j)

- HNF-SP-1215-ICD-11, *Interface Control Document Between DOE and the PHMC - Electricity* (FDH 1997k)
- HNF-SP-1216-ICD-12, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Roads and Rails* (FDH 1997l)
- HNF-SP-1217-ICD-13, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Non-Routine High-Level Solid Wastes* (FDH 1997m)
- HNF-SP-1218-ICD-14, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Immobilized High-Level Waste Product* (FDH 1997n)
- HNF-SP-1219-ICD-15, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Immobilized Low-Activity Waste Product* (FDH 1997o)
- HNF-SP-1220-ICD-16, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Strontium/Transuranic/Entrained Solids* (FDH 1997p)
- HNF-SP-1221-ICD-17, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Cesium-137 Intermediate Product* (FDH 1997q)
- HNF-SP-1222-ICD-18, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization - ⁹⁹Technetium Secondary Product* (FDH 1997r)
- HNF-SP-1223-ICD-19, *Interface Control Document Between DOE and the PHMC - Low-Activity Waste Feed* (FDH 1997s)
- HNF-SP-1224-ICD-20, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization - High-Level Waste Feed* (FDH 1997t)
- HNF-SP-1225-ICD-21, *Interface Control Document Between DOE and the PHMC - Phase 1 Waste Feed Tank Support Systems Low-Activity Waste Product* (FDH 1997u)
- HNF-SP-1225-ICD-22, *Interface Control Document Between DOE and the PHMC - Air Emissions* (FDH 1997v).

**D.1 DOE Detailed Instructions for Assessment of RTP - Appendix C,
November 14, 1997**

Applicable criteria were identified from this draft guidance to the DOE core teams and specialty teams (RL 1997). These criteria are itemized in detail for cross-reference to the documents.

D.2 Plan for Determining the PHMC Team's RTP for Waste Feed Delivery

Applicable criteria were identified from the body of this draft guidance to the DOE Waste Feed Delivery review team. These criteria are itemized in detail for cross-reference to the planning documents.

**D.3 Plan for Determining the PHMC Team's RTP for Waste Feed Delivery
(Document Checklist)**

Criteria were derived from Table 1 of the DOE Waste Feed Delivery core team's plan (Potter and Treat 1998), which provided examples of what deliverables could be expected from the PHMC team. Because the document titles are draft and are not always precise, and because some of the documents listed could be developed at later stages of the project, the titles are listed and cross-referenced by content to the actual program/project documents.

D.4 PHMC Team RTP Approach for the Evaluation of Administrative Readiness

This DOE document is early-draft planning guidance to its core team. The document was provided to the PHMC team with a caution to expect revision. Therefore, criteria items were selected at the highest level (i.e., those that were considered standards). These summary-level standards are incorporated as line items in the matrix and cross-referenced to program/project planning documents.

D.5 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery

This DOE draft document outlines criteria for its review teams and includes the checklist in D.6 through D.11 as well as some guidance text. This document is instructions for the DOE review of the RTP deliverables.

D.6 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery, Appendix A, Technical Baseline Checklist

This source document includes checklists derived from the 36 criteria found in Taylor (1997a). Because the 36 criteria were covered elsewhere in the matrix, restatement of the criteria or listing the items that obviously follow from the 36 criteria was avoided. Instead, checklist items that might be overlooked when using Taylor (1997a) directly are listed in the matrix. (See D.5 for explanation.)

D.7 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery, Appendix B, Programmatic Baseline Checklist

Checklist items that might be overlooked when using Taylor (1997a) directly are listed in the matrix. (See D.5 for explanation.)

D.8 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery, Appendix C, Infrastructure (Management Baseline) Checklist

Checklist items that might be overlooked when using Taylor (1997a) directly are listed in the matrix. (See D.5 for explanation.)

D.9 Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery, Appendix D, Feed Tank Transfer/Air Emissions (Technical Baseline) Checklist

Checklist items that might be overlooked when using Taylor (1997a) directly are listed in the matrix. (See D.5 for explanation.)

D.10 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery, Appendix E, Infrastructure Feed Tank Transfer (Programmatic Baseline) Checklist

Checklist items that might be overlooked when using Taylor (1997a) directly are listed in the matrix. (See D.5 for explanation.)

D.11 Draft Plan for Determining RTP for Infrastructure and Byproducts Delivery, Appendix F, Infrastructure Feed Tank Transfer (Management Baseline) Checklist

Checklist items are listed in the matrix that might be overlooked when using Taylor (1997a) directly. (See D.5 for explanation.)

E.1 TWRS Waste Disposal Division Planning Guidance dated July 7, 1997

The TWRS planning guidance was screened for applicability because it is a TWRS Project-wide document. Portions selected as directly or indirectly applicable to the Retrieval and Disposal Mission were listed, summarized, and interpreted as nonrequirement guidance only. These criteria should include those found in the *Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery, Appendix G, Planning Guidance*; therefore, Appendix G criteria were not itemized into the matrix.

REFERENCES

U. S. Department of Energy Good Practice Guides

GPG-FM-002, *Critical Decision Criteria*, Life Cycle Asset Management, Good Practice Guide, U.S. Department of Energy, Washington, D.C.

U. S. Department of Energy Orders

DOE Order 425.1, *Startup and Restart of Nuclear Facilities*, U.S. Department of Energy, Washington, D.C.

DOE Order 430.1, *Life Cycle Asset Management*, U.S. Department of Energy, Washington, D.C.

Documents

FDH, 1997a, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization - Raw Water*, HNF-SP-1208-ICD-01, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.

FDH, 1997b, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization - Potable Water*, HNF-SP-1209-ICD-02, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.

FDH, 1997c, *Interface Control Document Between DOE and the PHMC - Radioactive Solid Waste*, HNF-SP-1210-ICD-03, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.

FDH, 1997d, *Interface Between DOE and the PHMC - Dangerous Wastes*, ICD-04, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington (not released).

- FDH, 1997e, *Interface Control Document Between DOE and the PHMC - Non-Radioactive, Dangerous Liquid Effluent for Phase 1 Privatization*, HNF-SP-1211-ICD-05, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997f, *Interface Control Document Between DOE and the PHMC - Radioactive Dangerous Liquid Effluents*, HNF-SP-1212-ICD-06, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997g, *Interface Between DOE and the PHMC - Non-Dangerous Solid Water*, ICD-07 prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington (not released).
- FDH, 1999h, *Interface Between DOE and the PHMC - Interface Between DOE and the PHMC - Liquid Sanitary Water*, ICD-08, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington (not released).
- FDH, 1997i, *Interface Control Document Between DOE and the PHMC - Land for Siting Part A Privatization*, HNF-SP-1213-ICD-09, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997j, *Interface Control Document Between DOE and the PHMC - Deactivated Facility and Site for Phase 1 Privatization*, HNF-SP-1214-ICD-10, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997k, *Interface Control Document Between DOE and the PHMC - Electricity*, HNF-SP-1215-ICD-11, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997l, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Roads and Rails*, HNF-SP-1216-ICD-12, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997m, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Non-Routine High-Level Solid Wastes*, HNF-SP-1217-ICD-13, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997n, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Immobilized High-Level Waste Product*, HNF-SP-1218-ICD-14, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997o, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Immobilized Low-Activity Waste Product*, HNF-SP-1219-ICD-15, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.

- FDH, 1997p, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Strontium/Transuranic/Entrained Solids*, HNF-SP-1220-ICD-16, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997q, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization Cesium-137 Intermediate Product*, HNF-SP-1221-ICD-17, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
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- FDH, 1997t, *Interface Control Document Between DOE and the PHMC - Phase 1 Privatization - High-Level Waste Feed*, HNF-SP-1224-ICD-20, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997u, *Interface Control Document Between DOE and the PHMC - Phase 1 Waste Feed Tank Support Systems Low-Activity Waste Product*, HNF-SP-1225-ICD-21, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
- FDH, 1997v, *Interface Control Document Between DOE and the PHMC - Air Emissions*, HNF-SP-1225-ICD-22, prepared by Lockheed Martin Hanford Corporation for Fluor Daniel Hanford, Inc., Richland, Washington.
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- Taylor, W. J., 1997a, *Contract Number DE-AC06-96RL13200, Tank Waste Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed* (letter 97-WDD-129 to H. J. Hatch, Fluor Daniel Hanford, Inc., August 8), U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- Taylor, W. J., 1997b, *Review of Tank Water Remediation System (TWRS) Privatization - Hanford Contractors Readiness to Proceed*, (letter 97-WDD-182 to H. J. Hatch, Fluor Daniel Hanford, Inc., December 2), U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
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Table 1. Guidance and Requirements to Deliverables Crosswalk.

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1																												
2	Checklist # 11. Waste feed plans and implementing actions and procedures are on track.	TWRS Mission Analysis Report																										
		TWRS Program Plan																										
		TWRS R&DM Waste Feed Delivery Plan	I																									
		TWRS R&DM Infrastructure Plan		I																								
		TWRS R&DM ILAW Disposal Plan			I																							
		TWRS R&DM IHLW Storage Plan			I																							
		TWRS Retrieval Authorization Basis Amendment Task Plan																										
		TWRS Environmental Program Plan																										
		TWRS Safety Program Plan																										
		TWRS Quality Assurance Program Plan																										
14	Checklist # 12. Infrastructure support plan and implementing actions and procedures are on track.	TWRS System Engineering Management Plan																										
15	Checklist # 13. Immobilized waste product project plans and implementing actions and procedures are on track.	TWRS Risk Management Plan																										
16	Checklist # 14. Plans and implementing actions that support privatization contract requirements for dealing with waste processing plan by-products including interfacing with other contractors are on track.	TWRS R&DM Risk List	I																									
17	Checklist # 15. Technical risks have been identified and are being managed.	TWRS R&DM Key Enabling Assumptions																										
18	Checklist # 16. The technical baseline is complete and defensible, and represents best value to the government.	TWRS Configuration Management Plan																										
19	Checklist # 17. The technical baseline under configuration control.	TWRS R&DM Technical Baseline Summary Description.																										
20	Checklist # 18. System reliability, availability, and maintainability have been assessed and are sufficient to support processing rate requirements.	TWRS Engineering Plan																										
21	Checklist # 19. The physical integrity of existing systems, structures, and components has been verified.	TWRS Operations & Utilization Plan (Update)																										
22	Checklist # 20. Waste has been characterized as necessary to satisfy all data quality objectives.	TWRS R&DM Interface Control Documents																										
23	Checklist # 21. The ability of the PHMC team to support alternatives other than the baseline has been evaluated from a technical perspective.	TWRS Initial Updated Retrieval & Disposal Baseline Summary	I																									
24		TWRS R&DM Phase 1 Financial Analysis Level 0 and Level 1 Logics																										
		TWRS R&DM RTP Memorandum																										
		Management Assessment of TWRS RTP																										
		TWRS R&DM RTP Internal Independent Assessment																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2	Checklist # 22. Resource-loaded estimates have been completed for all activities.	TWRS Mission Analysis Report																								
25		Checklist # 23. The critical path is identified and float has been calculated.	TWRS Program Plan																							
26			Checklist # 24. Activities have been properly funded.	TWRS R&DM Waste Feed Delivery Plan																						
27				Checklist # 25. Analysis of budget against resource requirements has been completed.	TWRS R&DM Infrastructure Plan																					
28	Checklist # 26. There is agreement among scope, budget, and schedule. The scope of work can be performed within budget and on schedule.				TWRS R&DM ILAW Disposal Plan																					
29		Checklist # 27. Schedule risk has been identified and is being managed.			TWRS R&DM IHLW Storage Plan																					
30			Checklist # 28. The programmatic baseline is under configuration management and a change control system is implemented.		TWRS Retrieval Authorization Basis Amendment Task Plan																					
31				Checklist # 29. The ability to support alternatives other than the baseline has been evaluated from a programmatic perspective.	TWRS Environmental Program Plan																					
32	Checklist # 30. Management systems are in place to track and report cost, schedule, and technical performance and take appropriate corrective actions.				TWRS Safety Program Plan																					
33		Checklist # 31. Program planning encompasses all organizations and facilities, including support, that contribute to the mission.			TWRS Quality Assurance Program Plan																					
34			Checklist # 32. Environmental permits and safety authorization bases are in place as required for authorization-to-proceed decision.		TWRS System Engineering Management Plan																					
35					TWRS Risk Management Plan																					
					TWRS R&DM Risk List																					
					TWRS R&DM Key Enabling Assumptions																					
					TWRS Configuration Management Plan																					
					TWRS R&DM Technical Baseline Summary Description.																					
					TWRS Engineering Plan																					
					TWRS Operations & Utilization Plan (Update)																					
					TWRS R&DM Interface Control Documents																					
					TWRS Initial Updated Retrieval & Disposal Baseline Summary																					
					TWRS R&DM Phase 1 Financial Analysis																					
					Level 0 and Level 1 Logics																					
					TWRS R&DM RTP Memorandum																					
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1																										
2		TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
36	Checklist # 33. Staff, including managers, are in place and trained.	I																						I		
37	Checklist # 34. A records management program, including technical drawings, has been implemented.	I									I				I									I		
38	Checklist # 35. A risk and decision management program has been implemented at all levels.	I									I	I	I	I										I		
39	Checklist # 36. The PHMC team has prepared a readiness-to-proceed memorandum and has identified deficiencies and corrective actions, including funding, necessary to support privatization.																				I			I		
40	A.2 DOE Letter to H. J. Hatch, FDH, from W. J. Taylor, DOE, dated August 8, 1997, #97571624 (BODY OF TEXT)																									
41	General PHMC Responsibilities from RL's 8/8/97 letter, Section 2.1	.	.	.	.	.	.				.	.	.	.	.	.	.			.	.	.	.	.	.	.
42	1. Establish a sound technical baseline including ICDs	I									I						I			I						
43	2. Develop a resource-loaded, logic driven schedule, including critical path	I																		I		I				
44	3. An executable programmatic baseline exists	I	I																							
45	4. Work in the technical baseline can be performed		I	I	I	I	I										I							I		
46	5. Costs and schedules in the programmatic baseline can be met																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
47	6. Critical path analysis is done to determine the impacts of budget shortfalls on the programmatic baseline		I																			I	I				
48	7. The technical and programmatic baselines are under configuration management		I									I						I	I								
49	8. Management systems and program controls are established		I									I													I		
50	9. A risk management program exists and includes evaluation of performance and reporting of that performance to DOE		I									I	I	I													
51	10. Performance measures can be integrated into plans		I												I												
52	11. PHMC programs are coordinated		I																						I		
53	Specific Responsibility from RL's August 8, 1997 letter, Section 2.2		.	.	.	.	.			.						.				.	.	.	.	.	.	.	.
54	1. Waste feed can be provided in the specified amount to the specified place at the specified time			I																I	I				I		
55	2. Infrastructure support can be provided to the private vendors as specified in the final privatization contract and ICDS				I															I	I				I		
56	3. PHMC Team will be prepared for receiving, storing and disposing of immobilized waste products					I	I													I	I				I		
57	4. PHMC will be prepared for receiving, managing, treating and disposing of by-products from private contractors																			I					I		

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1	5. A plan-of-action exists that assesses the ability of the PHMC Team to proceed with Phase 1B																										
2		TWRS Mission Analysis Report																									
3		TWRS Program Plan																									
4		TWRS R&DM Waste Feed Delivery Plan																									
5		TWRS R&DM Infrastructure Plan																									
6		TWRS R&DM ILAW Disposal Plan																									
7		TWRS R&DM IHLW Storage Plan																									
8		TWRS Retrieval Authorization Basis Amendment Task Plan																									
9		TWRS Environmental Program Plan																									
10		TWRS Safety Program Plan																									
11		TWRS Quality Assurance Program Plan																									
12		TWRS System Engineering Management Plan																									
13		TWRS Risk Management Plan																									
14		TWRS R&DM Risk List																									
15		TWRS R&DM Key Enabling Assumptions																									
16		TWRS Configuration Management Plan																									
17		TWRS R&DM Technical Baseline Summary Description.																									
18		TWRS Engineering Plan																									
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21		TWRS Initial Updated Retrieval & Disposal Baseline Summary																									
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23		TWRS R&DM RTP Memorandum																									
24		Management Assessment of TWRS RTP																									
25		TWRS R&DM RTP Internal Independent Assessment																									
26	6. Self Assessment functional areas are identified for assessment for readiness-to-proceed																										
27		I																									
28	7. All required administrative actions are understood and planned																										
29		I																									
30	8. A Readiness-to-Proceed Memorandum has been submitted																										
31		I																									

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Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
73	f. Address adequate planning of TEDF																									
74	g. Address adequate planning of similar facilities																									
75	h. Deliver to DOE or make available for DOE review, a SEMP																									
76	i. Deliver to DOE or make available for DOE review, a Draft Technical Baseline Summary Description																									
77	j. Deliver to DOE or make available for DOE review, Draft Program Plans																									
78	6. RTP deliverables and their support must address the readiness of supporting facilities outside of TWRS, and understand FDH's readiness to receive secondary wastes.																									
79	7. Establishment of sound technical baseline and update M&I TWRS Retrieval Baseline. Submit level 1 logic diagrams and documentation, an identified critical path, and a listing of documents that form the basis for the technical baseline for January RTP.																									
80	8. Be clear on how the implementation of key processes will be passed down from the TWRS level.																									
81	9. Identify the decisions that are being deferred, when they are projected to be finalized and the assumptions relating to those decisions.																									
82	10. Make plans for internal reviews available to DOE.																									
83	a. Show how the Team's internal review process will be completed in time available																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
1																									
2																									
34	b. Include a list of (internal review team) members in the internal review plans provided to DOE																								
35	c. Include the review criteria and approach in the internal review plans provided to DOE																								
36	d. Include the checklists used by the review teams in the internal review plans provided to DOE																								
37	e. Include the results and recommended actions in the internal review plans provided to DOE																								
38	11. Make a QA plan available for DOE review in January.																								
39	a. Address implementing procedures (of the QA Plan)																								
40	b. Address corresponding resources (for the QA implementing procedures)																								
41	c. Show how QA will be implemented in the waste feed delivery																								
42	e. Show how QA will be implemented in the infrastructure																								
43	f. Show how QA will be implemented in waste storage and disposal																								
44	12. Develop Operations and Maintenance Strategy and make it available for DOE Review.																								

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2	B.1 DOE Order 430.1, "Good Practice Guide," GPG-FM-002	TWRS Mission Analysis Report																									
		TWRS Program Plan																									
		TWRS R&DM Waste Feed Delivery Plan																									
		TWRS R&DM Infrastructure Plan																									
		TWRS R&DM ILAW Disposal Plan																									
		TWRS R&DM IHLW Storage Plan																									
		TWRS Retrieval Authorization Basis Amendment Task Plan																									
		TWRS Environmental Program Plan																									
		TWRS Safety Program Plan																									
		TWRS Quality Assurance Program Plan																									
		TWRS System Engineering Management Plan																									
		TWRS Risk Management Plan																									
		TWRS R&DM Risk List																									
		TWRS R&DM Key Enabling Assumptions																									
		TWRS Configuration Management Plan																									
		TWRS R&DM Technical Baseline Summary Description.																									
		TWRS Engineering Plan																									
		TWRS Operations & Utilization Plan (Update)																									
		TWRS R&DM Interface Control Documents																									
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																									
		TWRS R&DM Phase 1 Financial Analysis																									
		TWRS R&DM Phase 1 Level 0 and Level 1 Logics																									
		TWRS R&DM RTP Memorandum																									
		Management Assessment of TWRS RTP																									
		TWRS R&DM RTP Internal Independent Assessment																									
96	2.2.1 DOE Strategic Plan																										
97	1. Program Strategic Plan	I	I																								
98	2.2.2 Financial Management Criteria. (See other guidance documents and 2.3.2)																										
99	2.2.3 Baseline: Workscope (technical) Criteria																										
100	1. Systems Engineering																										
101	2.2.4 Baseline: Cost Criteria																										
102	1. Total Estimated Cost (TEC)																										
103	2. Life Cycle Cost (LCC)																										
104	2.2.5 Baseline: Schedule Criteria																										
105	1. Milestones	I																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
2.2.6 ES&H Program Plan																										
2.2.7 Project Risk Criteria																										
1. Risk Assessment																										
2.2.8 Acquisition Strategy Criteria																										
1. Diversity																										
2. Contracting Methods																										
2.2.9 Project Management Criteria																										
1. Organizational Planning																										
2.2.10 Stakeholder Considerations																										
1. Stakeholders																										
2.3.2 Funding Profile																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

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1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
2.3.3 Baseline: Work Scope (Technical) Criteria	117	I																								
2.3.4 Baseline: Cost Criteria	118	I																								
2.3.5 Baseline: Schedule Criteria	119																									
2.3.6 Environment, Safety and Health Criteria	120																									
1. Safety Analysis	121	I																								
2. Permits, Licenses, and Regulatory Approval	122																									

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
1																										
2																										

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Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
2.4.10 Stakeholder Considerations	5. Contingency Management	TWRS Mission Analysis Report																						
		TWRS Program Plan																						
		TWRS R&DM Waste Feed Delivery Plan																						
		TWRS R&DM Infrastructure Plan																						
		TWRS R&DM ILAW Disposal Plan																						
		TWRS R&DM IHLW Storage Plan																						
		TWRS Retrieval Authorization Basis Amendment Task Plan																						
		TWRS Environmental Program Plan																						
		TWRS Safety Program Plan																						
		TWRS Quality Assurance Program Plan																						
		TWRS System Engineering Management Plan																						
		TWRS Risk Management Plan																						
2.5.3 Baseline Workscope Technical Criteria	2.5.4 Baseline: Cost Criteria	TWRS R&DM Risk List																						
		TWRS R&DM Key Enabling Assumptions																						
		TWRS Configuration Management Plan																						
		TWRS R&DM Technical Baseline Summary Description.																						
		TWRS Engineering Plan																						
		TWRS Operations & Utilization Plan (Update)																						
		TWRS R&DM Interface Control Documents																						
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																						
		TWRS R&DM Phase 1 Financial Analysis																						
		Level 0 and Level 1 Logics																						
		TWRS R&DM RTP Memorandum																						
		Management Assessment of TWRS RTP																						
2.5.6 Environment, Safety and Health Criteria	1. Life Cycle Cost (LCC)	TWRS R&DM RTP Internal Independent Assessment																						
2.5.9 Project Management	1. Configuration Management																							

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2	2.5.10 Stakeholder Considerations	TWRS Mission Analysis Report																								
183		TWRS Program Plan																								
184		TWRS R&DM Waste Feed Delivery Plan																								
B.2. DOE Order 425.1, "Start-Up and Restart of Nuclear Facilities," Section 4.d(1)-(20)		TWRS R&DM Infrastructure Plan																								
		TWRS R&DM ILAW Disposal Plan																								
		TWRS R&DM IHLW Storage Plan																								
		TWRS Retrieval Authorization Basis Amendment Task Plan																								
		TWRS Environmental Program Plan																								
		TWRS Safety Program Plan																								
		TWRS Quality Assurance Program Plan																								
		TWRS System Engineering Management Plan																								
		TWRS Risk Management Plan																								
		TWRS R&DM Risk List																								
185	1. Public Participation	TWRS R&DM Key Enabling Assumptions																								
186		TWRS Configuration Management Plan																								
187		TWRS R&DM Technical Baseline Summary Description.																								
188		TWRS Engineering Plan																								
189		TWRS Operations & Utilization Plan (Update)																								
190		TWRS R&DM Interface Control Documents																								
191		TWRS Initial Updated Retrieval & Disposal Baseline Summary																								
192		TWRS R&DM Phase 1 Financial Analysis																								
193		Level 0 and Level 1 Logics																								
194		TWRS R&DM RTP Memorandum																								
195	425.1 Core Requirement (1) - Procedures and Safety Limits	Management Assessment of TWRS RTP																								
196	425.1 Core Requirement (2) - Training and Qualification	TWRS R&DM RTP Internal Independent Assessment																								
197	425.1 Core Requirement (3) - Operations Level of Knowledge																									
198	425.1 Core Requirement (4) - Safety Documentation																									
199	425.1 Core Requirement (5) - Operability Checks of Safety Systems																									
200	425.1 Core Requirement (6) - Audit Deficiency Resolution																									
201	425.1 Core Requirement (7) - DOE Order Conformance																									
202	425.1 Core Requirement (8) - Management Programs are established, Personnel and Supporting Personnel are Adequate																									

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Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2		TWRS Mission Analysis Report																								
		TWRS Program Plan																								
		TWRS R&DM Waste Feed Delivery Plan																								
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		TWRS R&DM Risk List																								
		TWRS R&DM Key Enabling Assumptions																								
		TWRS Configuration Management Plan																								
		TWRS R&DM Technical Baseline Summary Description.																								
		TWRS Engineering Plan																								
		TWRS Operations & Utilization Plan (Update)																								
		TWRS R&DM Interface Control Documents																								
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																								
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		TWRS R&DM RTP Memorandum																								
		Management Assessment of TWRS RTP																								
		TWRS R&DM RTP Internal Independent Assessment																								
425.1	Core Requirement (9) - Routine and Emergency Operations Drill Program		I								I															
194																										
425.1	Core Requirement (10) - Startup Test Program		I									I														
195																										
425.1	Core Requirement (11) - Functions, Assignments, Responsibilities, Relationships		I																							
196																										
425.1	Core Requirement (12) - Conduct of Operations		I																							
197																										
425.1	Core Requirement (13) - Personnel Qualifications		I																							
198																										
425.1	Core Requirement (14) - ES&H Site-Wide Safety Culture		I																							
199																										
425.1	Core Requirement (15) - Facility Complies With Safety Basis		I				I					I														
200																										
425.1	Core Requirement (17) - Adequacy of Contractor Operational Readiness Review		I													I										
201																										
425.1	Core Requirement (18) - Procedures and Training Reflect Actual Facility		I																							
202																										
425.1	Core Requirement (19) - Technical and Management Qualifications for Operations of the Facility are Adequate		I																						I	
203																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																												
2																												
204	C-1 Interface Control Documents																											
205	1. Raw Water																											
206	1. Provide up to 760 liters per minute (lpm) (24-hour average) of process water to the Contractor.																											
207	2. Provide and maintain a pipeline for process water to the Contractor's site perimeter.																											
208	3. Provide up to a total of 9,450 lpm of fire water to be shared among the Contractors.																											
209	4. Provide and maintain a pipeline for fire water to each Contractor's site perimeter.																											
210	5. Monitor raw water usage.																											
211	6. Function as the Site Water Purveyor.																											
212	7. Notify the Contractor in advance of scheduled interruption of services.																											
213	2. Potable Water																											
214	1. Provide up to 95 lpm (24-hour average) of potable water to the Contractor.																											

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Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
4. Dangerous Wastes																											
226																											
1. Not accept non-radioactive, dangerous waste from the Contractor.																											
227																											
5. Non-Radioactive, Non-Dangerous Liquid Effluents																											
228																											
1. Accept from each Contractor up to 300,000 m³/yr. corresponding to an average flow rate of 570 lpm.																											
229																											
2. Provide and maintain a transfer pipeline from the Contractor's site boundary to the 200 Area TEDF.																											
230																											
3. Negotiate with regulator(s) any necessary permit changes associated with the new waste stream.																											
231																											
4. Verify the volume and composition of liquid effluents discharged by the Contractor.																											
232																											
5. Notify the Contractor in advance of scheduled interruption of services.																											
233																											
6. Radioactive, Dangerous Liquid Effluents																											
234																											
1. Specify ETF treatability envelope.																											
235																											
2. Accept from the Contractor and treat up to 100,000 m³/yr. of radioactive, dangerous liquid effluents corresponding to an average flow rate of 190 lpm.																											
236																											

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
Table 1. Guidance and Requirements to Deliverables Crosswalk.																												
1																												
2																												
237	3. Provide and maintain an RCRA-compliant transfer pipeline between the Contractor's site boundary and the ETF.																											
238	4. Compare the predicted effluent characteristics to the ETF's treatability envelope and determine whether treatability tests or ETF process modifications are necessary.																											
239	5. Verify the volume and composition of liquid effluents discharged by the Contractor.																											
240	6. Dispose of secondary solid wastes resulting from waste water treatment at the ETF.																											
241	7. Negotiate with regulator(s) any necessary permit changes associated with the new waste stream.																											
242	8. Notify the Contractor in advance of scheduled interruption of services.									I																		
243	7. Non-Dangerous Solid Wastes																											
244	1. Not accept non-radioactive, non-dangerous solid wastes.																											
245	8. Liquid Sanitary Wastes																											
246	1. Not accept liquid sanitary wastes.																											
247	9. Land for Siting										I																	

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2	1. During Part A, provide the Contractor site-investigation access to the region shown in Section J, Attachment 3, <i>Siting Plan/Aerial View of Proposed Contractor Locations</i> . 2. At the start of Part B, select and lease a 6-hectare site within the region shown in Section J, Attachment 3. 3. Establish baseline site and environmental conditions through a third party. 4. Ensure that site-use satisfies requirements through the environmental checklist process at the initiation of Part B. 5. Provide Site Evaluation Reports. 6. Provide land corridors and required siting information for tank waste transfer lines. 10. Deactivate Facility and Site 1. Authorize facility deactivation. 11. Electricity 1. Deliver up to 20 MW of power at 13.8 kV, 60 Hz, 3 Phase AC 2. Deliver power to the Contractor's site perimeter.	TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment	
248																											
249																											
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251									I																		
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253																											
254																		I			I						
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Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
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Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																											
2			TWRS Mission Analysis Report																								
270	3. Evaluate requirements for transfer, interim storage, and ultimate disposal of non-routine High-Level solid waste.																										
271	4. Pick up the loaded shipping container from Contractor-designated transfer facility.																										
272	5. Provide transportation services and vehicles for the non-routine High-Level solid waste.																										
273	6. Verify the volume and composition of the non-routine High-Level solid waste.																										
274	7. Notify the Contractor in advance of scheduled interruption of services.			I																							
275	14. Immobilized High-Level Waste																										
276	1. Provide clean, approved shipping containers delivered to the Contractor-designated transfer facility. Shipping containers will be provided in accordance with the following:																										
277	a. Smearable contamination on shipping container (internal and external): <367Bq/m ² alpha, and <3670 Bq/m ² gamma/beta																										
278	b. Radiation level (when loaded): <200mRem/hr for shipping container outer surface; <10 mRem/hr at a distance of two meters from the vertical surface of the shipping container.																										
279	2. Accept the IHLW product.																										
280	3. Pickup the loaded shipping containers from the Contractor-designated transfer facility.																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
291	4. Transport shipping containers:																										
292	a. Empty - to the Contractor's loading facility																										
293	b. Full - from the Contractor's loading facility																										
294	5. Provide the transport vehicle.																										
295	6. Notify the Contractor in advance of scheduled interruption of services.																										
296	15. Immobilized Low-Activity Waste																										
297	1. Provide clean, approved shipping containers delivered to the Contractor-designated transfer facility. Shipping containers will be provided in accordance with the following:																										
298	a. Smeearable contamination on shipping container (internal and external): <367Bq/m ² alpha, and <3670 Bq/m ² gamma/beta																										
299	b. Radiation level (when loaded): <200mRem/hr for shipping container outer surface; <10 mRem/hr at a distance of two meters from the vertical surface of the shipping container.																										
290	2. Accept the ILAW product.																										
291	3. Pickup the loaded shipping container from the Contractor-designated transfer facility.																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
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Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
1																										
2																										
303	b. Radiation level (when loaded): <200mRem/hr for shipping container outer surface, <10 mRem/hr at a distance of two meters from the vertical surface of the shipping container.																									
304	2. Accept the ¹³⁷ Cs product.																									
305	3. Pickup the loaded shipping container from the Contractor-designated transfer facility.																									
306	4. Transport shipping containers:																									
307	a. Empty - to the Contractor's loading facility																									
308	b. Full - from the Contractor's loading facility																									
309	5. Provide the transport vehicle.																									
310	6. Notify the Contractor in advance of scheduled interruption of services.																									
311	18. ⁹⁸ Tc																									
312	1. Receive the ⁹⁹ Tc product.																									
313	19. Low-Activity Waste Feed																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A B C D E F G H I J K L M N O P Q R S T U V W X Y AA AB AC																										
Table 1. Guidance and Requirements to Deliverables Crosswalk.																												
1																												
2																												
314	1. Select waste envelope and waste quantity consistent with Specification 7, <i>Low-Activity Waste Envelopes Definition</i> .																											
315	2. Provide tank waste feed composition prior to transfer to the Contractor's waste feed tank (AP-106 or AP-108) and provide the information to the Contractor.																											
316	3. Transfer waste feed to the Contractor in accordance with Clause H.9, <i>Ordering and Contract Order Quantities</i> .																											
317	4. Flush the transfer line.																											
318	5. Provide samples of the LAW feed to the Contractor for testing.																											
319	20. High-Level Waste Feed																											
320	1. Transfer the HLW feed consistent with Specification 8, <i>High-Level Waste Envelope Definition</i> , to the Contractor.																											
321	2. Provide the HLW feed composition and transmit the results to the Contractor.																											
322	3. Transfer the waste feed to the Contractor in accordance with Clause H.9, <i>Ordering and Contract Order Quantities</i> .																											
323	4. Flush the transfer line.																											
324	5. Provide samples of HLW feed to the Contractor for testing.																											

[illegible]

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																												
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																												
2																												
335	D-1 Detailed Instructions for Assessment of RTP - Appendix C, November 14, 1997																											
336	1. Show the ability to provide HLW and LAW waste feed at the correct rate to the correct location with verified composition and carry out responsibilities per the following ICDs:																											
337	a. ICD-16 Sr/TRU/Entrained Solids																											
338	b. ICD-19 LAW Feed																											
339	c. ICD-20 HLW Feed																											
340	2. Provide correct level-1 and mid-level logics and schedules that support the waste feed delivery.																											
341	3. Provide validatable task duration estimates																											
342	4. Provide confirmable critical path and float activities not on the path																											
343	5. Show the ability to meet the June, 2002 hot start																											
344	6. Identify those activities most at risk for meeting the June, 2002 hot start																											
345	7. Show the ability of the PHMC Team to provide the infrastructure necessary to handle all by-products of the waste processing.																											

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1	Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
2		TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	TWRS Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
357	10. Show the ability of the PHMC to meet all dates required by the private contractors for the infrastructure.																			I						
358	11. Identify activities most at risk in schedules and logic diagrams (for infrastructure).													I							I	I	I			
359	12. Identify projects that directly support infrastructure, based on project plans.	I	I		I															I	I					
360	13. Discuss the likelihood that projects will require revalidation based on changes in requirements created by private contractor's ICDs/deliverables.													I			I			I						
361	14. Show what contractual arrangements have been made with Team Organizations for support.		I								I															
362	15. Show the PHMC Team's ability to receive, store and dispose of immobilized LAW and HLW and separated cesium from private contractor operations and to take the responsibilities described in the following ICDs:																									
363	a. ICD-3 Radioactive Solid Waste																I			I	I					
364	b. ICD-13 Non-Routine High Level Solid Waste																I			I	I					
365	c. ICD-14 IHLW Product						I										I			I	I					
366	d. ICD-16 ILAW Product					I											I			I	I					
367	e. ICD-17 Cs-137 Intermediate Product																I			I	I					

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
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2																									
365	16. Show an ability to meet all schedules needed by the private contractors for receiving Immobilized LAW and HLW and separated cesium.																								
366	17. Identify activities most at risk in schedules and logic diagrams (for ILAW, IHLW, and Cesium).																								
370	18. Identify projects which directly support Immobilized Waste Storage and Disposal in the project plans.																								
371	19. Describe the PHMC Team's risk management program and show it will be used to support the privatization contractor(s).																								
372	20. Describe the overall risk of proceeding with Phase 1B, individual risks, and risk handling actions for each.																								
373	21. Show that the PHMC Team is on schedule for completing safety-related documents supporting the private contractor(s).																								
374	22. Identify any safety-related documents behind schedule and impact of failure.																								
375	23. Show an ability to support private contractors regarding waste feed and delivery through the PHMC Team's QA Program.																								
376	24. Show an ability to support private contractors regarding the infrastructure to receive by-products through the PHMC Team's QA Program.																								
377	25. Show an ability to support private contractors regarding the immobilized product receipt and storage, through the PHMC Team's QA Program.																								
378	26. Describe the PHMC Team's administrative procedures regarding the ability to support private contractors.																								

Table 1. Guidance and Requirements to Deliverables Crosswalk.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC																									
1																									
2																									
378	27. Describe the PHMC Team's personnel qualifications regarding the ability to support private contractors.	TWRS Mission Analysis Report	I																						
380		28. Describe the PHMC Team's systems engineering regarding the ability to support private contractors.																							
381		29. Describe the PHMC Team's training programs regarding the ability to support private contractors.	I																						
382		30. Show that the PHMC Team is on schedule for completing regulatory-compliance-related documents supporting the private contractor(s).																							
383		31. Identify any regulatory-compliance-related documents behind schedule and impact of failure.																							
384	D.2 Plan for Determining PHMC-Team's RTP for Waste Feed Delivery (Table 2).																								
385	PHMC provide deliverables necessary to support RTP, as follows:																								
386	1. TWD Program Plan																								
387	2. TWD Manuals																								
388	3. TWD SEMP																								
389	4. Level 0/1 Logic																								

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC	
1																											
2	5. PHMC Management and Planning	TWRS Mission Analysis Report																									
360		TWRS Program Plan	I																								
		TWRS R&DM Waste Feed Delivery Plan																									
		TWRS R&DM Infrastructure Plan																									
		TWRS R&DM ILAW Disposal Plan																									
		TWRS R&DM IHLW Storage Plan																									
		TWRS Retrieval Authorization Basis Amendment Task Plan																									
		TWRS Environmental Program Plan																									
		TWRS Safety Program Plan																									
		TWRS Quality Assurance Program Plan																									
		TWRS System Engineering Management Plan																									
		TWRS Risk Management Plan																									
		TWRS R&DM Risk List																									
		TWRS R&DM Key Enabling Assumptions																									
362	6. Technical Baseline	TWRS Configuration Management Plan																									
363	7. Schedule Baseline	TWRS R&DM Technical Baseline Summary Description.																									
364	8. Cost Baseline	TWRS Engineering Plan																									
365	9. Phase 2 Planning	TWRS Operations & Utilization Plan (Update)																									
366	10. Initial RTP Memorandum	TWRS R&DM Interface Control Documents																									
367	11. Final RTP Memorandum	TWRS Initial Updated Retrieval & Disposal Baseline Summary																									
368	12. Draft TWD Master Blueprint	TWRS R&DM Phase 1 Financial Analysis																									
369	13. Multi-Level Logic for RTP Package	Level 0 and Level 1 Logics																									
397	14. Risk Resolution Plan	TWRS R&DM RTP Memorandum																									
398	15. WFD Program System Plan/ Functional Guidance	Management Assessment of TWRS RTP																									
400		TWRS R&DM RTP Internal Independent Assessment																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
401	16. Updated Program Documents/Plans		I																							
402	17. Waste Feed Transfer Procedure			I																						
403	18. M-50-03 Decision Report Sludge Washing (Milestone Completed, 1997)			I																						
404	19. S-107 Decant Testing																									
405	20. Report on Operations and Utilization Scenarios																									
406	21. Draft Alternative Generation Assessments											I														
407	22. Letter on LAW Throughput Rate Issue (FY98 MYWP Task R12442A)																									
408	23. ICD-19 Resolved RCR Issues - PC1 (FY98 MYWP Task R125142)																									
409	24. ICD-19 Resolved RCR Issues - PC2 (FY98 MYWP Task R1251422)																									
410	25. ICD-20 Resolved RCR Issues - PC1 (FY98 MYWP Task R125152)																									
411	26. ICD-20 Resolved RCR Issues - PC2 (FY98 MYWP Task R1251522)																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
	27. Licensing Strategy									I																	
412																											
	28. W-151 Notification of Startup (EPA)									I																	
413																											
	29. Retrieval Permit Incorporate Comments									I																	
414																											
	30. (Alternatives study) Best Basis/Inventory Estimate AX Farms Ancillary Equipment												I														
415																											
416	31. TWRS Functions and Requirements Document									I																	
417	32. (Private Contractor) Interface Control Documents																										
	33. PHMC-Team Work Packages																										
418										I																	
	34. Safety Analysis Reports																										
419																											
	35. PHMC Team QA Plan																										
420																											
	36. PHMC Team Emergency Response Plan																										
421																											
	37. PHMC Team Risk Management Plan																										
422																											

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
38. PHMC Team Decision Support Documentation																											
D.3 Plan for Determining PHMC-Team's RTP for Waste Feed Delivery - Document Checklist (Table 3)																											
1. Plans call for providing envelope A, B, and C waste to the privatization contractors within 60 days of request in the amount assumed in TWRS process flowsheet per paragraph 2.2.2.6.																											
2. Plans call for implementing sludge-washing capability to provide sludge to privatization contractor(s) in Phase 1B.		I																									
3. Plans call for retrieving DST waste to make room for SST waste, to optimize tank storage, and to stage waste.		I																									
4. Plans resolve tank 106-C high-heat safety issue.																											
5. Plans include demonstrating past-practice-sludging technology.																											
6. Plans call for providing high-level waste feed to the privatization contractor(s).		I																									
7. Plans call for retrieval of 99% tank inventory to support closure.																											
8. Plans include D&D of the retrieval project facilities.																											
9. Plans support the HTI demo. of retrieval technologies, retrieval performance objectives, and risk performance assessments.																											

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2	10. Plans include providing infrastructure necessary for Phase 1 waste retrieval and transfer from SSTs. 11. Plans support HTI demonstration of retrieval technologies. 12. Plans are to retrieve 36 SSTs by 2012, including one complete farm. 13. Plans are to retrieve all SSTs by 2018 and complete SST closure 2024. 14. Plans determine the retrieval strategy for MUSTs. 15. Plans provide for closing all SST and DST farm and ancillary equipment. 16. Plans support post-closure monitoring from 2034 to 2064. 17. Plans provide for project administration through 2034 (No applicable for Phase 1). 18. Plans are to complete closure of one OU or tank farm by 2014. 19. Plans include tank sampling and analysis from 2003 through 2011. 20. Plans are to receive the Tc/Sr/TRU and entrained solids back from the single-LAW-processing-plant private contractor.	TWRS Mission Analysis Report																								
		TWRS Program Plan																								
		TWRS R&DM Waste Feed Delivery Plan																								
		TWRS R&DM Infrastructure Plan				I																				
		TWRS R&DM ILAW Disposal Plan																								
		TWRS R&DM IHLW Storage Plan																								
		TWRS Retrieval Authorization Basis Amendment Task Plan																								
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		TWRS R&DM Risk List																								
		TWRS R&DM Key Enabling Assumptions																								
		TWRS Configuration Management Plan																								
		TWRS R&DM Technical Baseline Summary Description.																								
		TWRS Engineering Plan																								
		TWRS Operations & Utilization Plan (Update)																								
		TWRS R&DM Interface Control Documents																								
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																								
		TWRS R&DM Phase 1 Financial Analysis																								
		TWRS R&DM Phase 1 Level 0 and Level 1 Logics																								
		TWRS R&DM RTP Memorandum																								
		Management Assessment of TWRS RTP																								
		TWRS R&DM RTP Internal Independent Assessment																								

Table 1. Guidance and Requirements to Deliverables Crosswalk.

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
445	21. Plans are to perform acceptance testing of received Tc/Sr/TRU.	TWRS Mission Analysis Report	TWRS Program Plan																							
446	22. Plans are to arrange for delivery of Tc/Sr/TRU back to a DST Tank Farm.																									
447	23. Plans are to store separated Tc, entrained HLW solids, and Sr/TRU products and collect costs of this transport and storage.																									
448	24. Plans are that TWR will be responsible for consolidation and feed staging for Phase 1 treatment.			I																						
449	25. Plans are that TWR will be responsible to ensure safe minimum ops of SST farms after SSTs are interim-stabilized by 2002.																									
450	26. Plans are that TWR will be responsible for DST farm ops in FY06 and for S&M of all farms for which TWR assumes responsibility.																									
451	27. Plans are for the PHMC to complete retrieval of at least one tank farm and 36 SSTs.	I																								
452	28. Plans are for the 113 remaining to be retrieved by a private contractor, who will assume responsibility for ops and maintenance of those tank farms.	I																								
453	29. Plans are to transfer DST ops to a private contractor in 2012.	I																								
454	30. Plans are for the 242-A evaporator to be supplied by the Liquid Effluents Program to support ops until the immobilization facilities are in operation.																									
455	31. Plans are for upgrades to the evaporator needed to extend ops. to 2011 to occur by 2005.																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
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2																										
456																										
457																										
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Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
1																											
2																											
	43. Plans describe defining feed process & retrieval system using systems engineering.																										
467																											
	44. Plans integrate the waste feed delivery technical baseline.																										
468																											
	45. Plans define retrieval project requirements to interface with Hanford Tanks Initiative (HTI) & other EM-50 funded technology development projects.																										
469																											
	46. Plans describe completion of planning for tank-106 Heel removal using ACTR-defined technology.																										
470																											
	47. Plans include preparation and update of the waste feed delivery DOOs.																										
471																											
	48. Plans include preparation of the Tank Waste Ops and Utilization Plan to be consistent with the feed staging plans.																										
472																											
	49. Plans include establishing a long term strategy for waste retrieval and feed staging based on latest inventory assessment.																										
473																											
	50. Plans describe PHMC managing the interface during prep of Phase 1 feed envelope with Waste Processing Project.																										
474																											
	51. Plans describe completion of LAW feed definition and LAW process flowsheets.																										
475																											
	52. Plans include performance of Alternative Generation Analyses and testing integral to the Waste Ops and Utilization Plan.																										
476																											
	53. Plans define equipment requirements, infrastructure requirements, and recommend a preferred alternative consistent with DOE guidance.																										
477																											

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
478	54. Plans include update of retrieval and feed delivery requirements required to define Phase 2 privatization.	1																								
479	55. Plans describe providing feed delivery support to the privatization requirements definition and down-select process.	1																								
480	56. Plans include resolving feed delivery/composition issues identified by the IP/Process Teams during development of the feed ICDs and specs.																									
481	57. Plans include performing alternative analyses needed to support the ATP decision and TWRS Program review per EIS ROD.																									
482	58. Plans describe reassessing the timing and needs for procurement of additional mixer pumps for DSTs, considering the need dates and availability of advanced mixer-pump designs.																									
483	59. Plans describe evaluation of the sludge-washing process as required by TPA M-50-03 (Completed).																									
484	60. Plans include updating the tank retrieval sequence document (TPA-45-02B-V) per the Waste Tank Ops and Utilization Plan; Update consistent with consolidation requirements and feed plans to Phase 1 contractors.																									
485	61. Plans include completion of SST Retrieval System CDR, including system definition, leak detection mitigation and monitoring as required per TPA.																									
486	62. Plans include formulating the requirements for Subsequent SST Retrieval System (SSSTRS) Project.	1																								
487	63. Plans include completion of the C-106 waste retrieval sufficient to satisfy the resolution of the high-heat tank waste safety issue. (See also HTI)																									
488	64. Plans include meeting feed quantity requirements for Phase 1 and allowing the HTI heel demonstration to proceed.																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																									
1																									
2																									
485	65. Plans include completing design activities and safety studies to support installation of the mixer pumps in AP-102, 104 and 105 and determine the needs for all tanks identified in the Phase 1 feed.																								
486	66. Plans include PHMC admin of the TWR Project and the SST and DST closure subprojects, including management oversight, detailed planning, MYWP and PBS prep., performance reporting, records management, personnel management, QA, technical integration, and interface with regulators/DOE.																								
487	67. Plans describe submitting a detail work plan/cost estimate for completion of closure actions, incl. approach, work description, ID of tech issues/responses, turnover criteria from the privatized, cont., and resource-loaded schedule incl. D&D.																								
488	68. Plans include PHMC interface with DOE, EPA and Management System Div (MSD) on closure strategy dev/closure EIS.																								
489	69. Plans include formulating the basis and continue to develop/demonstrate the best retrieval methods from industry & DOE Complex to support closure prep of C-106 & AX-104 as part of HTI.																								
490																									
491																									
492																									
493																									
494	D.4 PHMC RTP: Approach for the Evaluation of Administrative Readiness, December 4, 1997																								
495	1. Organizational Maturity - Indicate or show evidence of the following:																								
496	a. There is a success culture that builds ownership.																								
497	b. There is a clear direction.																								
498	c. Management sponsorship is evident.																								
499																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC																									
1	TWRS Mission Analysis Report																								
2	TWRS Program Plan																								
499	d. There is worker ownership of programs, processes and goals.																								
500	e. Work is planned and implemented to accomplish the strategic objectives.	I																							I
501	f. Continuous improvement occurs based on feedback, outside information and analysis.																								
502	2. Direction - Direction includes having a clearly-defined purpose, considering alternative approaches for success, and having definition of the desired technical and cultural end state.	I																							I
503	3. Sponsorship - Sponsorship begins with the DOE Richland Operations Office Manager, flows to the PHMC/PHMC Team, to the integrated contractors and ends where the work is actually performed.	I																							I
504	4. Ownership - Systems, processes and behaviors promote outcome-ownership, buy-in of the approach to achieve the outcome, commitment to success and individual involvement.	I																							I
505	5. Planning and Implementation - Mature planning management considers customer's needs, determines org priorities, defines technical approaches, establishes schedules, and develops annual and long-term budgets in order to accomplish objectives.	I																							I
506	6. Planning and Implementation - Mature planning recognizes the impacts of proposed actions on the business elements and culture.	I																							
507	7. Continuous Improvement - Feedback provides information for course correction to meet strategic objectives.	I																							I
508	8. Continuous Improvement - Data and metrics are made available to management as reliable, timely, user-friendly information to evaluate performance.																								I
509	9. Continuous Improvement - TWRS feedback includes performance metrics, self-assessments, employee input, and independent assessments.																								I

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	AA	AB	AC
1																												
2	10. Continuous Improvement - uses feedback and external information to improve performance. 11. Administrative Processes - The necessary management processes exist and the PHMC Team is likely to achieve the TWRS goals using them. 12. Strategic & Tactical Planning - There is a clearly defined and documented approval and planning process for the development of plans to achieve mission objectives. 13. Records Management - TWRS uses clearly defined and documented operating processes for managing records, with effective process features regarding content, distribution, timeliness, retrievability, availability and pertinent data. 14. Issues & Decision Management - Issues are identified, analyzed and prioritized and resolved as decisions to ensure that the strategic objectives are defined and achieved. 15. Project Control Management Systems - Project control systems provide all levels of management with reliable and consistent assessment of work planned and completed. 16. Project Control Management Systems - Project control systems support forecasting activities needed to generate estimates of cost-at-completion and schedule projections. 17. Configuration Management - CM provides an orderly and efficient process for identifying and defining configuration items (the integrated site baseline) in a system, controlling, reporting on and verifying the status of these items throughout the system life. 18. Technical Industrial Processes - TIPS are capable to meet the needs of TWRS and interrelate and cut across project boundaries to support all work. 19. Staffing, Personnel Training and Qualification - SPT&Q strategies for TWRS ensure qualified personnel are available when needed.	TWRS Mission Analysis Report																										
510		TWRS Program Plan																										
511		TWRS R&DM Waste Feed Delivery Plan																										
512		TWRS R&DM Infrastructure Plan																										
513		TWRS R&DM ILAW Disposal Plan																										
514		TWRS R&DM IHLW Storage Plan																										
515		TWRS Retrieval Authorization Basis Amendment Task Plan																										
516		TWRS Environmental Program Plan																										
517		TWRS Safety Program Plan																										
518		TWRS Quality Assurance Program Plan																										
519		TWRS System Engineering Management Plan																										
		TWRS Risk Management Plan																										
		TWRS R&DM Risk List																										
		TWRS R&DM Key Enabling Assumptions																										
		TWRS Configuration Management Plan																										
		TWRS R&DM Technical Baseline Summary Description.																										
		TWRS Engineering Plan																										
		TWRS Operations & Utilization Plan (Update)																										
		TWRS R&DM Interface Control Documents																										
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																										
		TWRS R&DM Phase 1 Financial Analysis																										
		Level 0 and Level 1 Logics																										
		TWRS R&DM RTP Memorandum																										
		Management Assessment of TWRS RTP																										
		TWRS R&DM RTP Internal Independent Assessment																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
	20. Staffing, Personnel Training and Qualification - SP1&Q strategies consider a range of options including training and education, hiring and recruitment, subcontracting, part time employment, and others.		I																								
320	21. Systems Engineering - SE is the PHMC Team's way of doing business. There is management sponsorship, worker ownership, and continuous improvement.		I																								
321	D.5. Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery																										
322																											
323	1. Show the ability to provide infrastructure at the correct rate to the correct location.									I																	
324	2. Provide correct level-1 and mid-level logics and schedules that support the infrastructure support.																										
325	3. Provide validatable task duration estimates.																										
326	4. Provide confirmable critical path and float activities not on the path.																										
327	5. Show the ability to meet the June, 2002 hot start.																										
328	6. Identify those activities most at risk for meeting the June, 2002 hot start.																										
329	7. Ensure ICDs are compatible with PHMC's RTP Package.																										
330	8. Show that correct procedures and policies have been established at the Program level and passed down to the Project level.										I																

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																											
2																											
531	D.6: Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery, Appendix A, Technical Baseline Checklist																										
532	9. Provide (on request) an Infrastructure Project Mission Analysis Report which supports the TWRS and Site MARs (1.1-1-1.2).	I																									
533	10. Provide (on request) an Infrastructure SEMP based on the TWRS SEMP. (2.2.1)											I															
534	11. Provide evidence of independent review planning for Infrastructure Project (systems, technical, design, definitive design, ORR). (2.3.1-2.3.7)				I						I																
535	12. Verify design changes are followed through using CM and BCC. (2.4.1-2.4.6)															I											
536	13. Show that requirements are (or will be) in the Hanford Site Technical Baseline (HTSB). (3.1.4).	I																									
537	14. Identify verification tests in the QA Plan (Section 3.1.5)	I									I																
538	15. Show requirements are allocated to functions in the HSTB and Multi Year Work Plan (MYWP).	I																									
539	16. Show that the Master Blueprint and Engineering studies and Alternative Generation Analyses (AGAs) are complete (Sections 4.1.1 through 4.1.3)																		I								
540	17. Evaluate the need for Fire Hazards Analysis (Section 4.1.9)										I																
541	18. Provide for infrastructure control systems to ensure safe construction, ops and maintenance. (Sections 4.1.5 through 4.1.8)				I						I																

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	AA	AB	AC
1																											
2	19. Show that space has been provided for temporary facilities when needed (Sections 4.1.9 and 4.1.10)	TWRS Mission Analysis Report																									
		TWRS Program Plan																									
		TWRS R&DM Waste Feed Delivery Plan																									
		TWRS R&DM Infrastructure Plan																									
	20. Show infrastructure design meets seismic and wind-loading requirements. (Sections 4.1.10 and 4.1.11)	TWRS R&DM ILAW Disposal Plan																									
		TWRS R&DM IHLW Storage Plan																									
		TWRS Retrieval Authorization Basis Amendment Task Plan																									
		TWRS Environmental Program Plan																									
	21. Show interface description. In ICDs, MOUs, funding, engineering, document sign-off, with Safety, Emergency, Maintenance, LMHC internal, construction, coordination, DOE interface, and configuration control of MYVP/ICDs has been covered. (Sections 5.1.1-5.1.15; 5.2.1-5.2.6)	TWRS Safety Program Plan																									
		TWRS Quality Assurance Program Plan																									
		TWRS System Engineering Management Plan																									
		TWRS Risk Management Plan																									
	22. Validation of enabling assumptions and planning document update is scheduled, funded, proceduralized and/or managed. (Sections 6.1.1 and 6.1.2)	TWRS R&DM Risk List																									
		TWRS R&DM Key Enabling Assumptions																									
		TWRS Configuration Management Plan																									
		TWRS R&DM Technical Baseline Summary Description.																									
	23. Risk management includes uncertainties from CDR and IPT meetings, issues from ICDs, general risk template. (Sections 6.2.1 through 6.2.5)	TWRS Engineering Plan																									
		TWRS Operations & Utilization Plan (Update)																									
		TWRS R&DM Interface Control Documents																									
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																									
	24. Provide complete Alternatives Generations Analyses (AGAs) with checklists and decision process checklists. (Sections 6.3.1 through 6.3.3)	TWRS R&DM Phase 1 Financial Analysis																									
		Level 0 and Level 1 Logics																									
		TWRS R&DM RTP Memorandum																									
		Management Assessment of TWRS RTP																									
	25. Provide the completed quantitative reliability/availability/maintainability analysis (Section 6.4.1)	TWRS R&DM RTP Internal Independent Assessment																									
	26. Provide the risk/benefit analysis and identify risks on risk list. (Sections 6.4.2 and 6.4.3)																										
	27. Show that the schedule status report is available, used for management, and roll-up to the next level. (6.7.1-6.7.4)																										
	28. Indicate that all activities on logic diagrams are tiered from contractual or MAR requirements. (1.1.1)																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2		TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
553	29. Indicate that activities needed to support privatization are defined in Level-1 Logic. (1.1.2)																						I			
554	30. Indicate that the Infrastructure Level-1 Logic is consistent with the CDR schedules, the feed delivery schedules, the Privatization Contractor's schedules, and other appropriate interface schedules. (2.1.1-2.1.3)				I																I		I			
555	31. If an Operations Plan is needed and exists, indicate that it is infrastructure- need-specific, consistent with LCAM and MYWP. (2.2.2-2.2.4)				I																					
556	32. Indicate that the WBS is accurate and consistent with the MYWP. (2.3.1-2.3.2)				I																I					
557	33. Provide Economic Analyses and Life Cycle Cost analyses, and Independent Cost Estimates. (2.3.3-2.3.4)																				I					I
558	34. Show that the critical path contains schedule contingency. (2.4.3)																				I					
559	35. Provide schedule risks and identify how schedules are managed to reduce risk. (2.5.1-2.5.7)		I											I	I	I						I				
560	36. Provide ICE/Validation Reports consistent with MYWP/10 yr. budget profile. (3.1.1-3.1.2)																									I
561	37. Indicate that historical change requests have been processed through BCC. (4.2.1)															I										
562	38. Provide the Critical Path Diagram Schedule (CPDS). (4.1.4)																				I					
563	D.8 Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery, Appendix C, Infrastructure (Management Baseline) Checklist.																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC	
1																											
2	39. Indicate that adequate reports of schedule, cost, cost variances, project status, DOE requirements, problem resolution, and task tracking by WBS are in place and timely. (1.1-1.1.8;1.1.10-1.1.11)	TWRS Mission Analysis Report																									
		TWRS Program Plan	I																								
		TWRS R&DM Waste Feed Delivery Plan																									
		TWRS R&DM Infrastructure Plan			I																						
		TWRS R&DM ILAW Disposal Plan																									
		TWRS R&DM IHLW Storage Plan																									
		TWRS Retrieval Authorization Basis Amendment Task Plan																									
		TWRS Environmental Program Plan																									
		TWRS Safety Program Plan																									
		TWRS Quality Assurance Program Plan																									
		TWRS System Engineering Management Plan																									
		TWRS Risk Management Plan																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
1																					2					
D.9 Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery, Appendix D, Feed Tank/Air Emissions (Technical Baseline Checklist)	50. Show that the training program is acceptable or is not needed. (1.6.1)		I		I																					
	51. Show that the RTP Memorandum identifies deficiencies consistent with risk list and corrective actions consistent with Project/CRL Risk Lists. (2.1.1-2.1.5)																									
	52. Indicate that Project Critical Decision Planning is in place. (2.1.6)		I																							

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2		TWRS Mission Analysis Report																								
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		TWRS Retrieval Authorization Basis Amendment Task Plan																								
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		TWRS System Engineering Management Plan																								
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		TWRS R&DM Risk List																								
		TWRS R&DM Key Enabling Assumptions																								
		TWRS Configuration Management Plan																								
		TWRS R&DM Technical Baseline Summary Description.																								
		TWRS Engineering Plan																								
		TWRS Operations & Utilization Plan (Update)																								
		TWRS R&DM Interface Control Documents																								
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																								
		TWRS R&DM Phase 1 Financial Analysis																								
		Level 0 and Level 1 Logics																								
		TWRS R&DM RTP Memorandum																								
		Management Assessment of TWRS RTP																								
		TWRS R&DM RTP Internal Independent Assessment																								
586	60. Show that the Master Blueprint and Engineering studies and Alternative Generation Analyses (AGAs) are complete. (4.1.1-4.1.3)																	I								
587	61. Evaluate the need for Fire Hazards Analysis. (4.1.9)									I																
588	62. Provide for infrastructure control systems to ensure safe construction, ops and maintenance. (4.1.5-4.1.8)									I								I								
589	63. Show that space has been provided for temporary facilities when needed. (4.1.9 and 4.1.10)																	I								
590	64. Show infrastructure design meets seismic and wind-loading requirements. (4.1.10 and 4.1.11)																	I								
591	65. Show INTERFACE description, in ICDs, MOUs, funding, engineering, document sign-off, with Safety, Emergency, Maintenance, LMHC internal, construction, coordination, DOE interface, and configuration control of MYWPP/ICDs has been covered. (5.1.1-5.1.15; 5.2.1-5.2.6)									I										I						
592	66. Validation of enabling assumptions and planning document update is scheduled, funded, proceduralized and/or managed (6.1.1-6.1.2)			I																						
593	67. Risk management includes uncertainties from CDR and IPT meetings, issues from ICDs, general risk template. (6.2.1-6.2.5)																				I					
594	68. Provide complete Alternatives Generations Analyses (AGAs) with checklists and decision process checklists. (6.3.1-6.3.3)																				I					
595	69. Provide the completed quantitative reliability/availability/maintainability analysis. (6.4.1)																						I			
596	70. Provide the risk/benefit analysis and identify risks on risk list. (6.4.2-6.4.3)											I		I												
599																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2	71.. Show that the schedule status report is available, used for management, and rolls-up to the next level. (6.7.1-6.7.4)	TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	TWRS R&DM RTP Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
597		I																								
598	D.10 Draft Plan for Determining RIP for Infrastructure & Byproducts Delivery, Appendix E, Infrastructure Feed Tank Transfer. (Programmatic Baseline) Checklist.																									
599	72. Indicate that all activities on logic diagrams are tiered from contractual or MAR requirements. (1.1.1)	I																					I			
600	73. Indicate that activities needed to support privatization are defined in Level-1 Logic. (1.1.2)																						I			
601	74. Indicate that the Infrastructure Level-1 Logic is consistent with the CDR schedules, the feed delivery schedules, the Privatization Contractor's schedules, and other appropriate interface schedules. (2.1.1-2.1.3)																				I		I			
602	75. If an Operations Plan is needed and exists, indicate that it is infrastructure- need-specific, consistent with LCAM and MYWP. (2.2.2-2.2.4)															I										
603	76. Indicate that the WBS is accurate and consistent with the MYWP. (2.3.1-2.3.2)																			I						
604	77. Provide Economic Analyses and Life Cycle Cost analyses, and Independent Cost Estimates. (2.3.3-2.3.4)																				I					I
605	78. Show that the critical path contains schedule contingency. (2.4.3)																			I						
606	79. Provide schedule risks and identify how schedules are managed to reduce risk. (2.5.1-2.5.7)	I											I	I	I							I				
607	80. Provide ICValidation Reports consistent with MYWP/10 yr. budget profile. (3.1.1-3.1.2)																									I

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
1																										
2																										
608	81. Indicate that historical change requests have been processed through BCC. (4.2.1)																									
609	82. Provide the Critical Path Diagram Schedule (CPDS). (4.1.4)																									
610	D.11 Draft Plan for Determining RTP for Infrastructure & Byproducts Delivery. Appendix E. Infrastructure Feed Tank Transfer. (Management Baseline) Checklist.																									
611	83. Indicate that adequate reports of schedule, cost, cost variances, project status, DOE requirements, problem resolution, and task tracking by WBS are in place and timely. (1.1.1-1.1.8;1.1.10-1.1.11)		I																							
612	84. Identify the manager assigned to each cost account. (1.1.9)																									
613	85. Confirm the Organizational Breakdown Structure (OBS) crosswalks to WBS (1.2.1-1.2.3)		I																							
614	86. Confirm the Project and SEMP execution plans are to be developed. (1.2.4;1.2.7)																									
615	87. Confirm D&D is considered during design. (1.2.8)																									
616	88. Provide Acquisition Plan or Procurement Plan which contains vendor prequalification and testing/verification and which provide procurement event-sequence leading to project completion on time. (1.2.9)		I																							
617	89. Show acceptable environmental permits and safety bases are in place. (1.3.1-1.3.2)																									
618	90. Confirm that if USOs exist, strategy for resolving them is in the baselines, and strategy to implement Safety Authorization. Bases to get to hot start are in place. (1.3.3)		I																							

Table 1. Guidance and Requirements to Deliverables Crosswalk.

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC	
		Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
1																												
2		TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment		
619	91. Indicate that support is planned/budgeted for RL preparation of NEPA docs. (1.3.5)								I												I							
620	92. Show that the records management program is acceptable or is not needed. (1.4.1-1.4.2)		I													I												
621	93. Show that the risk and decision management program is acceptable or is not needed. (1.5.1)											I	I	I														
622	94. Show that the training program is acceptable or is not needed. (1.6.1)		I																									
623	95. Show that the RTP Memorandum identifies deficiencies consistent with risk list and corrective actions consistent with Project/CRML Risk Lists. (2.1.1-2.1.5)																								I			
624	96. Indicate that Project Critical Decision Planning is in place. (2.1.6)		I																									
625	E.1 TWRS Waste Disposal Division Planning Guidance dated July 7, 1997 (Updated December 12, 1997)																											
626	Division will prepare integrated plans consistent with the technical baseline and fully coordinated across projects.		I	I	I	I	I										I											
627	Develop a logic-based, resource loaded schedule.																				I							
628	Prioritize budget according to 2.2.1 (privatization highest, LLW over HLW, finish projects over new starts, demonstrate an early success with a tank closure.)																					I						
629	Mandatory completion of approved TPA milestones.		I												I						I							

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
630	TD (EM-50) will be supported through the STCG Process.																									
631	Alternative strategies, risk reduction, core competencies and capsule disposition, closure get lowest budget priority																									
632	Specify technology activities which support core competencies and alt. path planning, regardless of funding source, in the integrated technology section of each project description (FY98 MYWP R1321711 (TFA) WBS 1.1.3.1.01.01.04 series of tasks (Tech. Dev. Needs); R123121 and R123122 (ESW Shipments) WBS 1.1.3.1.01.02.03.03 (Settle/Decant); 1.1.3.1.01.02.03.04 (Dilution/Dissolution) 1.1.3.1.01.02.03.07 (Clean Salt); 1.1.3.1.01.02.03.08 (ESW), 1.1.3.1.01.02.03.09 (TFA).																									
633	Project plan for management, administrative, and system definition of projects WIT plan for support to WDD.																									
634	Division will assume responsibility for TWRS Waste Storage program beginning in 2002 and Management Systems functions in fiscal year 2006.																									
635	Baseline schedule for Retrieval will be a subset of the TWRS Project Master Baseline Schedule.																									
636	Interfaces between elements and external interfaces must be represented in the PBMS (of which WDD baseline schedule is a subset).																									
637	Use the Phase 1 and 2 schedules to establish the WDD schedule.																									
638	Establish logic between retrieval, waste processing, infrastructure, and immobilized tank waste storage and disposal projects.																									
639	Ensure logic between privatized and non-privatized, activities through added detail.																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
	Establish all detailed schedule, consistent with TWRS Level 1 logic.	TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
640	Use a code field to facilitate roll-up of detailed schedules to TWRS Level 1 and to Level 0.																									
641	Changes to Levels 1 and 0 resulting from roll-up must be put into MYWP.																									
642	Plan WDD at greatest detail in CY, less in next two (but sufficient, for logic-driven cost), less in next 7, and sufficient detail beyond ten to define baseline for entire project.		I																							
643	Add sufficient detail in schedules to define critical path and logical sequences.																									
644	Prepared detailed planning describing work, scope, schedule, milestones and budget to complete work scope.		I																							
645	Financial staff must define task package control numbers which allow for proper collection of costs by schedule activity.																									
646	(Projects) identify the impact of funding shortfall on mission.																									
647	PHMC develop sludge washing capability.																									
648	Private contractor(s) will perform retrieval for Phase 2 (show in plans, schedule, budget).																									
649	Retrieve and blend DST waste to make room for SST waste.																									

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2																										
661	Waste Retrieval Project will plan for the 18 Phase 1 items in paragraph 3.2.1.			I																						
662	Waste Retrieval Project will assume the 11 items in paragraph 3.2.2.			I																						
663	Waste Feed Delivery will define feed process and retrieval systems, integrate the waste feed delivery technical baseline and define Retrieval Project requirements to interface with HTI and other EIW-50 funded projects.			I																						
664	WFD prepare Operations and Utilization Plan consistent with feed staging plans and using inventory assessment results.																									
665	Complete LAW feed definition, staging plans, process flowsheets.																									
666	Waste Feed Delivery will provide feed delivery support to the Privatization requirements definition and down-select processes.																									
667	Resolve feed/delivery composition issues identified during ICD development.																									
668	Reassess the timing and needs for the procurement of additional mixer pumps for DSTs and evaluate the enhanced sludge washing process (Completed). HNF-SD-TWR-A-GA-002 and HNF-SD-TWR-A-GA-003																									
669	Update the RTSD (TPA-45-02B-V) per Operations & Utilization Plan, consistent with consolidation and planned feed rate requirements.																									
669	Complete design activities and safety studies to support the installation of mixer pumps in AP-102, AP-104 and AN-105.																									
669	Waste Processing will prepare the 13 plans outline in paragraph 3.3.1.																									
669																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

Table 1. Guidance and Requirements to Deliverables Crosswalk.																										
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
2	Waste Processing will make the Phase 1 assumptions outlined in paragraph 3.3.2.1.	TWRS Mission Analysis Report	TWRS Program Plan	TWRS R&DM Waste Feed Delivery Plan	TWRS R&DM Infrastructure Plan	TWRS R&DM ILAW Disposal Plan	TWRS R&DM IHLW Storage Plan	TWRS Retrieval Authorization Basis Amendment Task Plan	TWRS Environmental Program Plan	TWRS Safety Program Plan	TWRS Quality Assurance Program Plan	TWRS System Engineering Management Plan	TWRS Risk Management Plan	TWRS R&DM Risk List	TWRS R&DM Key Enabling Assumptions	TWRS Configuration Management Plan	TWRS R&DM Technical Baseline Summary Description.	TWRS Engineering Plan	TWRS Operations & Utilization Plan (Update)	TWRS R&DM Interface Control Documents	TWRS Initial Updated Retrieval & Disposal Baseline Summary	TWRS R&DM Phase 1 Financial Analysis	Level 0 and Level 1 Logics	TWRS R&DM RTP Memorandum	Management Assessment of TWRS RTP	TWRS R&DM RTP Internal Independent Assessment
662	Include M&I and Vendor Interface funding and work scope for Phases 1 and 2 in Process Waste Support PBS.														I		I									
663	Show PHMC preparing, reviewing, signing interface control documents (PHMC assisting in integration of PHMC and private contractor functions) in WDD Plans.		I																	I						
664	Show scope and schedule for WIT and PHMC in the WDD plans.		I																	I						
665	Infrastructure will support new or modified physical interfaces with the privatization contractors.				I															I						
666	Infrastructure will ensure all needs identified by the private contractors and agreed to by DOE are satisfied.				I															I						
667	Infrastructure will manage the construction of the 6 elements listed in paragraph 3.3.3.3, and provide and maintain utilities and serves as agreed to with the privatization contractor.				I															I						
668	Decontaminate and decommission all infrastructure that provided services to the PC's and deactivate systems following D&D of the facilities.				I															I						
669	Immobilized Tank Waste Storage and Disposal Project will use the items listed in paragraph 3.4.1 as a basis for planning.																									
670	The Storage and Disposal project will ensure the requirements in paragraph 3.4.2 are met.										I	I														
671	The storage and disposal project is responsible for the planning assumptions outlined in paragraph 3.4.3 for ILAW, IHLW and Cesium and Strontium Capsules.																									
672																										

Table 1. Guidance and Requirements to Deliverables Crosswalk.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	AA	AB	AC
1																										
		TWRS Mission Analysis Report																								
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		TWRS R&DM Infrastructure Plan																								
		TWRS R&DM ILAW Disposal Plan				I																				
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		TWRS Safety Program Plan						I																		
		TWRS Quality Assurance Program Plan																								
		TWRS System Engineering Management Plan							I																	
		TWRS Risk Management Plan																								
		TWRS R&DM Risk List																								
		TWRS R&DM Key Enabling Assumptions																								
		TWRS Configuration Management Plan																								
		TWRS R&DM Technical Baseline Summary Description.							I																	
		TWRS Engineering Plan								I																
		TWRS Operations & Utilization Plan (Update)																								
		TWRS R&DM Interface Control Documents																								
		TWRS Initial Updated Retrieval & Disposal Baseline Summary																								
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		Level 0 and Level 1 Logics																								
		TWRS R&DM RTP Memorandum																								
		Management Assessment of TWRS RTP																								
		TWRS R&DM RTP Internal Independent Assessment																								
673		ILAW Storage/Disposal will continue waste form data collection and determine the long-term properties of the waste form.							I																	
674		IHLW Storage will update the statement of work to prepare conceptual design for IHLW storage facilities and issue for review a conceptual design and preliminary safety evaluation.								I																
675		Cesium and Strontium Capsules project will update the Alternative Generation Analysis and Decision Analysis Report and the Cesium Strontium Capsule Disposition Decision Analysis.										I														
676		The Retrieval MYWP will provide top-level, technical logic, technical requirements, and associated interrelationships to define the total Retrieval work scope.											I													
677		Retrieval will follow the special MYWP requirements outlined in paragraph 4.2.																I								

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