

U.S. Department of Energy

P.O. Box 450, MSIN H6-60 Richland, Washington 99352

JUL 1 7 2012

12-WTP-0226

The Honorable Peter S. Winokur Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, NW, Suite 700 Washington, DC 20004-2901

Dear Mr. Chairman:

#### TRANSMITTAL OF DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB) RECOMMENDATION 2010-2 IMPLEMENTATION PLAN (IP) DELIVERABLE 5.7.3.2

This letter provides the deliverable responsive to Commitment 5.7.3.2 of the U.S. Department of Energy plan to address Waste Treatment and Immobilization Plant (WTP) Vessels Mixing Issues; IP for DNFSB 2010-2.

The attached WTP Interface Management Plan (IMP) was revised to reflect organizational and programmatic changes that have been made to improve the integrated management of WTP and Tank Farms technical and safety risks. Significant changes to the IMP include clarification of the roles, responsibilities, authorities, and accountabilities of the One System Integrated Project Team to manage technical and safety risks, as well as the introduction of specific Nuclear Safety Leads and Regulatory Leads assigned to each applicable Interface Control Document.

If you have any questions, please contact me at (509) 372-2315, or your staff may contact Ben Harp, WTP Start-up and Commissioning Integration Manager at (509) 376-1462.

Sincerely,

Scott *L*. Samuelson, Manager Office of River Protection

WTP:WRW

Attachment

cc: See page 2

Hon. Peter S. Winokur 12-WTP-0226 JUL 1 7 2012

cc w/attach: D. M. Busche, BNI W. W. Gay, BNI F. M. Russo, BNI D. McDonald, Ecology D. G. Huizenga, EM-1 J. D. Lorence, EM-41 M. B. Moury, EM-1 T. P. Mustin, EM-1 K. G. Picha, EM-1 C. S. Trummell, EM-1 A. C. Williams, EM-2.1 D. Chung, HS-1 M. N. Campagnone, HS-1.1 R. H. Lagdon, Jr., US M. D. Johnson, WRPS S. A. Saunders, WRPS R. G. Skwarek, WRPS M. G. Thien, WRPS **BNI** Correspondence WRPS Correspondence

### ATTACHMENT to 12-WTP-0226

## TRANSMITTAL OF DEFENSE NUCLEAR FACILITIES SAFETY BOARD (DNFSB) RECOMMENDATION 2010-2 IMPLEMENTATION PLAN DELIVERABLE 5.7.3.2

### Interface Management Plan 24590-WTP-PL-MG-01-001, Rev6

(Total Number of Pages including coversheet: 38)





Document title:	<b>Interface Management Plan</b>			
Document number:	: 24590-WTP-PL-MG-01-001, Rev 6			
Contract:	DE-AC27-01RV141	36 <b>Contract deliverable:</b> 1.4		
Department:	Project Management			
	Signature	Position		
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S. A. Saunders	Siland	_Manager, One System Technical Division		
All WTP Interface Partner concurrence signatures found on the following page shall be obtained prior to submission of this document for final Concurrence and Approval.				
Approval:	$Q/M_{n}$			
		DOE-ORP (WTP) Startup & Commissioning Integration Manager		
	$\cup$ $/$			
Issue Status:	Approved	_		
Date Issued:	7/12/2012	_		

### WTP Interface Partner Concurrence

Signature on this concurrence sheet by the management personnel listed below, commits the organizations that they represent to compliance with this Interface Management Plan and to full participation in the interface management program that it describes.

Organization	Position	Name	Signature	Date
WTP	Interface Manager	G. M. Duncan	Mouncan	7/9/12
WTP	Assistant Project Director, Startup & Completions	W. S. Oxenford	statt	1/10/12
WTP	Deputy Project Director / Project Manager	R. W. Bradford	Rubuly	7/9/12
TOC	Interface Manager	J. S. Van Meighem	7/Vally_	7-10-12
DOE-RL	Interface Manager	J. L. Bird	J.2. Durd	7-10-12
DOE-ORP	Interface Manager	C. C. Harrington	Chin Harrington	7/11/12

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# **History Sheet**

Rev	Date	Reason for revision	Revised by
A	27 Jun 2001	Initial issue for DOE-ORP concurrence	T Brown
в	14 Dec 2001	Incorporate DOE-ORP concurrence	T Brown
0	28 Jan 2002	Issued for implementation	T Brown
1	01 Jul 2003	Issued for use. This is a complete rewrite; therefore, no revision bars are used to indicate changes.	T Brown
2	18 Jan 2007	Complete rewrite. No revision bars are used to indicate changes.	І Рарр
3	17 Mar 2009	Complete rewrite. No revision bars are used to indicate changes, though descriptions of changes are provided in Revision Descriptions section for clarity. Incorporated changes in accordance with Letter from DOE-ORP, received by WTP PDC on August 4, 2008 (CCN 183784) and further changes from DOE-ORP as a result of the meeting held on 11/18/2008.	M Pell
4	11 Aug 2010	Clearly define the roles and responsibilities of the current WTP Interface Partners.	M Pell
5	29 Nov 2011	This is a complete rewrite; therefore, no revision bars are used to indicate changes. Restructured the WTP Interface Management Plan to accommodate Interface Partner contractual concerns and to clarify the method by which WTP interfaces are to be optimized.	M Pell
6		This is a focused changed to implement DNFSB 2010-2 IP Deliverable 5.7.3.2 as follows:	M Pell and S Arm
		<ul> <li>Strengthens roles, responsibilities, authorities, and accountabilities for identifying, tracking, managing, and allocating the technical, regulatory and safety-related risks that span the tank farms/WTP interface.</li> </ul>	
		• Establishes a disciplined process to systematically evaluate items to determine their impact on design (i.e., functional and performance requirements) and nuclear safety (i.e., safety basis documents).	
		<ul> <li>Incorporates decision making tools for managing emerging technical and safety issues.</li> </ul>	
		<ul> <li>Provides enhanced methods for identification and resolution of contract misalignments.</li> </ul>	

# **Revision Description**

IMP Section	Description	
Acronyms	Added ICDRT (ICD Review Team), IPT (Integrated Project Team),OS (One System), OSRMT (One System Risk Management Team), NSL (Nuclear Safety Lead) and RL (Regulatory Lead) to Acronym List. Deleted GG (Governance Group)	
1.1	Added a statement that includes the objective of managing the ICD Program under the One System Organization Integrated Project Team.	
1.2	Clarified interface incompatibilities include those of technical, regulatory, nuclear safety or contract in nature.	
1.5	Defined contract misalignments as incompatibilities between WTP requirements and prime contractors current scope and funding limitations.	
2	Editorial changes to clearly articulate roles, responsibilities, authorities and accountabilities.	
2.1 & 2.2	Clarified that DOE-RL concurs with the IMP and DOE-ORP approves the IMP.	
2.6	Added section to describe the organizational responsibilities of the One System Integrated Project Team and the purpose, scope and objectives of the OSRMT.	
3	Editorial changes to clearly articulate roles, responsibilities, authorities and accountabilities and organization with respect to the OS IPT.	
3.1	Replaced GG with CIB / HCAB.	
3.2	Introduced Regulatory Leads (RLs) and Nuclear Safety Leads (NSLs) to the ICDRT. Added Table 1, ICDs that require WTP and TOC Nuclear Safety Leads and Regulatory Leads.	
3.2.4	Description of the NSL.	
3.2.3	Description of the RL.	
	Added ICD Coordinator responsibility as follows:	
3.2.5	Maintain a consolidated list of ICD Issues, Open Items and Actions and transmit upon request.	
	Communicate all risks identified by IOs to the OSRMT.	
Former 3.2.3 & 3.2.5	Deleted since responsibilities are covered by sections describing DOE and Interface Manager responsibilities (3.4).	
<u></u>	Added the following responsibilities for Interface Owners:	
2.2.1	<ul> <li>Appoint RLs and NSLs as indicated on Appendix B, Interface Owner ICD Revision Checklist.</li> </ul>	
3.3.1	• Coordinate with the RL and NSL evaluation of all new ICDs or revisions.	
	• Ensure all TL, RL, and NSL comments are resolved as documented on Appendix B, Interface Owner ICD Revision Checklist.	
3.4	Added section describing responsibilities of Interface Managers.	
3.5	Added section describing roles of CIB / HCAB.	
4	Added text to articulate that ICD Issues are interface incompatibilities between technical,	

IMP Section	Description	
4.2 & 4.5.1	Replaced GG with CIB / HCAB.	
4.5.2	Modification to limit concurrence to IOs.	
5.1	Added text to identify ICD Risks.	
5.2	New section describing identification of ICD Issues.	
5.3	New section describing allocation of ICD Issues.	
5.4	New section describing how ICD Issues are tracked.	
5.5	Added text describing how the IO is responsible for forming a team to resolve ICD Issues and that a resolution is agreed by the ICDRT.	
	Replaces GG with CIB / HCAB.	
Former 5.3 & 5.4	Moved these sections under section 6 'Organizational Responsibilities'.	
6	New section describing the definition of Open Items and their management.	
7.3	Add text describing how OS staff are responsible for following their own organization's procedures (TOC or WTP).	
7.4	Added text on the staff located in the OS.	
7.5	Added text describing how the TOC and WTP are individually responsible for assigning resources to the OS consistent with their contracts.	
8	Added new Reference, WRPS 2012a. 2020 Vision One System IPT Charter, RPP-51471, Rev. 2 (24590-WTP-CH-MGT-11-008)	
8	Added new Reference, WRPS 2012b. One System Risk Management Team Charter, RPP-52149, 2012. Richland, Washington.	
Appendix A	Defined incompatibilities as technical, regulatory, nuclear safety or contractual in nature.	
Appendix B	Added new Interface Owner ICD Revision Checklist to assist Interface Owners of each partner organization to determine and document the required reviews for Interface Control Document revisions.	

# **Revision Description**

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### Acronyms

CCN	Correspondence Control Number
CIB	Contractor Interface Board
COR	Contracting Officer Representative
DOE	U.S. Department of Energy
DOE-ORP	U.S. Department of Energy, Office of River Protection
DOE-RL	U.S. Department of Energy, Richland Operations Office
DOE-TF	U.S. Department of Energy, Office of River Protection, Tank Farms Project
DOE-WTP	U.S. Department of Energy, Office of River Protection, WTP Project
HCAB	Hanford Contract Alignment Board
ICD	Interface Control Document
ICDRT	Interface Control Document Review Team
ICF	Interface Change Form
IMP	Interface Management Plan
ΙΟ	Interface Owner
IOG	Interface Owners Group
IPT	Integrated Project Team
MOA	Memorandum of Agreement
MSC	Mission Support Contractor
OS	One System
OSRMT	One System Risk Management Team
NSL	Nuclear Safety Lead
PADC	Project Archives and Document Control
PRC	Plateau Remediation Contractor
RL	Regulatory Lead
SME	Subject Matter Expert
TL	Technical Lead
TOC	Tank Operations Contractor
WTP	Waste Treatment and Immobilization Plant

### **1** Introduction

#### 1.1 Objective

The objective of this Interface Management Plan (IMP) is to establish the WTP interface management program. The program created by this plan will achieve functional, physical, and administrative compatibility among all external interrelated system elements that are required in order to support efficient and timely design, construction, startup, commissioning, and operation of the Hanford Tank Waste Treatment and Immobilization Plant (WTP). This plan provides governance of the program that will be executed by means of a series of Interface Control Documents (ICDs). WTP contractual requirements for managing and maintaining approved ICDs are specified in WTP Contract Section C.9. To ensure that WTP contract objectives are met, and to align the roles and responsibilities between the WTP Interface Partners for managing and maintaining ICDs, a joint One System IPT charter; RPP 51471, Rev. 2; WRPS 2012a). Managing ICDs in the One System IPT will aid implementation of a mission-focused approach and provide an effective connection between the WTP and the other WTP Interface Partners for coordinating their respective contracts.

#### 1.2 IMP Scope

This plan governs the definition, development, management, issue resolution, approval and documentation of external interfaces between WTP and the WTP Interface Partners. These interfaces are for services, equipment, energy, data, or materials transferred between WTP and other WTP Interface Partners not controlled through other means (such as MOAs controlling services such as Fire & Emergency Response Services and Badging). This plan does not address the internal interfaces of any WTP Interface Partner. This IMP performs the following functions:

- Defines the scope of the WTP interface management program.
- Describes the processes through which the WTP interface management program will be implemented.
- Identifies the WTP Interface Partners.
- Defines the roles and responsibilities of all WTP Interface Partners.
- Describes the means to identify and resolve ICD Issues (defined as interface technical, regulatory, nuclear safety or contract incompatibilities between the WTP Interface Partners OR, incomplete interfaces).

#### **1.3** Interface Partners

The Hanford Site organizations listed below are defined as WTP Interface Partners. As such, each organization has a particular role to play in the development and management of the WTP interfaces. Each organization has its different and distinct prime contract responsibilities, as described in the Hanford Site Interface Management Plan, MSA-IMP-00001 (MSA 2012), that collectively need to be administratively aligned in order to achieve success in making the WTP interfaces function correctly. These WTP-specific roles and responsibilities are described in detail in Section 2.

- U.S. Department of Energy Office of River Protection (DOE-ORP)
- U.S. Department of Energy Richland Office (DOE-RL)
- Waste Treatment and Immobilization Plant Contractor (WTP)
- Tank Operations Contractor (TOC)
- Plateau Remediation Contractor (PRC)
- Mission Support Contractor (MSC)

#### 1.4 IMP Approvals and Concurrences

The DOE-ORP management signature for approval of this plan constitutes approval of the WTP Interface Management Program. By concurring with this plan, the DOE-RL and DOE-ORP agree | that the prime contractors under their management control are committed to supporting the WTP startup and operations objectives through their contract performance. The concurring DOE | organizations will also ensure that the prime contractors under their contract will fully support the WTP ICD Program as set forth in this plan.

The WTP Contractor and TOC concurrence signatures on this plan signify that the contractor organizations agree to fully support the objectives of the WTP IMP, within the boundaries and constraints of their prime contracts.

#### 1.5 WTP Interface Management Program Relationship to Contracts

ICDs provide a mechanism to define specific details required to implement inter-contractor interfaces, that are consistent with each prime contractor's statement of work, J-3 Table, and funding constraints. ICD's also identify incompatibilities between WTP requirements and the current scope and funding limitations of the interface partners. This IMP and the ICDs are not approved change mechanisms for contractual requirements. Any interface requirements outside the scope of a current contract baseline may not be implemented without prior contract changes as required by the affected partner's contract. Refer to Section 5 for the process to be used to raise and manage scope issues raised by ICDs.

# 2 Organizational Roles, Responsibilities, Authorities and Accountabilities

### 2.1 DOE

DOE is responsible for ensuring that viable interfaces between Hanford Site prime contractors are established and maintained and reflected in prime contracts in accordance with site funding priorities. DOE-RL and/or DOE-ORP have authority to halt processing of an ICD to resolve whatever question there may be regarding conduct of the process.

#### 2.1.1 DOE-ORP

DOE-ORP's role as the client for the WTP contract means it has the following responsibilities:

- Monitor the interfaces between the WTP and TOC to ensure that the interfaces remain functional, optimized and aligned with site funding priorities.
- Approve this plan for managing the designated WTP external interfaces and the program that this plan describes.
- Provide interface team members to participate in the production and maintenance of the ICDs.
- Provide DOE-ORP a continuing awareness of the state of each interface.
- In the event of a disagreement with DOE-RL regarding ICD scope or responsibilities, DOE-ORP will take the lead to resolve the point of disagreement.

ICDs are WTP contract deliverables and as such DOE-ORP has ultimate authority over their content.

#### 2.1.2 DOE-RL

In their role as client for site services, DOE-RL has the following joint responsibilities

- Monitor the interfaces between the Hanford Site Contractors that provide services to WTP (PRC and MSC) to ensure that the interfaces remain functional, optimized and aligned with site funding priorities.
- Concur with this plan for managing the designated WTP external interfaces and the program that this plan describes.
- Provide interface team members to participate in the production and maintenance of the ICDs.
- Provide DOE-RL a continuing awareness of the state of each interface.
- In the event of a disagreement with DOE-ORP regarding ICD scope or responsibilities, DOE-RL will actively support DOE-ORP to resolve the point of disagreement.

#### 2.2 WTP (Contract DE-AC27-01RV14136 [DOE 2000])

In their role as contractor, WTP assumes the following responsibilities:

- Lead the development of this IMP, sign to signify concurrence and commitment to the plan, obtain DOE-ORP's concurrence signature and work with DOE-ORP to obtain concurrence signatures from DOE-RL and the TOC. Submit this plan to DOE-ORP for approval.
- Participate in the definition, development, management, issue resolution, approval and documentation of the interfaces.
- Co-author and maintain the resulting ICDs and provide resources to support their implementation within the WTP baseline. WTP will ensure the ICDs accurately reflect WTP's:
  - o Baseline plan
  - Roles and responsibilities
  - o Forecasted services and infrastructure requirements
  - o Milestones
  - o Technical requirements related to external interfaces
  - o Physical and administrative interfaces
  - o Acceptance criteria
  - o Funding availability
- Ensure that ICD Issues have been identified and documented in the ICD to describe the baseline incompatibility (contract misalignment) or incomplete interface that affects WTP, if any. (Issue Management is described in Section 5).
- Approve by signing the ICDs to authorize issuance through the WTP records management system. Refer to Section 4.5.2 for more detail. Following ICD Team Lead approval, the ICDs will be submitted to WTP Project Archives and Document Control (PADC) for issuance and distribution to the interface partners.

The WTP, through the ICD Coordinator, is responsible for making interface control documentation readily available to all interface participants, including the following as a minimum:

- Current copies of the IMP
- ICDs
- Listing of Interface Review Team membership
- ICD Revision target schedule for resource planning purposes

WTP is accountable to DOE-ORP for its performance of the ICD process consistent with its contract (DOE 2000).

#### 2.3 TOC (Contract, DE-AC27-08RV14800 [DOE 2008a])

In its role as the tank operations contractor, the TOC assumes the following responsibilities:

- Participation in development of this plan and signing to signify concurrence and commitment to the plan.
- Participation in the definition, development, management, issue resolution, approval and documentation of the interfaces.
- Co-authorship of the resulting ICDs to ensure accuracy of the physical and administrative interfaces, and provide resources to implement their ICD commitments.
- Concurrence with applicable ICDs by signing to signify that they accurately reflect TOC's:
  - o Baseline plan
  - Roles and responsibilities
  - o Forecasted services and infrastructure requirements
  - o Milestones
  - o Technical requirements related to external interfaces
  - o Physical and administrative interfaces
  - o Acceptance criteria
  - o Funding availability
- Ensure that ICD Issues have been identified and documented in the ICD to describe the baseline incompatibility (contract misalignment) or incomplete interface that affects WTP, if any. (Issue management is described in Section 5).
- Due to TOC's Contract Section J.3, TOC has a special relationship to WTP's external interfaces. It states:

"TOC shall be responsible for coordinating, planning and paying for the WTP contractor's requirements for infrastructure, utility, and service support from the MSC and PRC as identified in the J-3 Hanford Site Services and Interface Requirements Matrix." All ICD related services provided by PRC and MSC to WTP that are not coordinated through some other vehicle (such as MOAs) will be coordinated by TOC through the Infrastructure and Services Alignment Plan (ISAP) (MSA 2011). TOC is also responsible for coordination of this document (the WTP IMP) with the Hanford Site Interface Management Plan, MSA-IMP-00001 (MSA 2012).

TOC is accountable to DOE-ORP for its performance with its contract (DOE 2008a).

#### 2.4 PRC (Contract DE-AC06-08RL14788 [DOE 2008c])

In its role as the plateau remediation contractor, the PRC assumes the following responsibilities:

- Participation in the definition, development, management, issue resolution, approval and documentation of the interfaces as documented in their contract scope of work interface management responsibilities and references to Section J.3 Hanford Site Services and Interface Requirements Matrix and the Hanford Site Interface Management Plan (MSA 2012).
- Provide resources to perform to the technical specifications of the approved ICDs.
- Concurrence with applicable ICDs by signing to signify that they accurately reflect PRC's:
  - o Baseline plan
  - o Roles and responsibilities
  - o Forecasted services and infrastructure requirements
  - o Milestones
  - o Technical requirements related to external interfaces
  - o Physical and administrative interfaces
  - o Acceptance criteria
  - o Funding availability
- Collaboration with the ICD Review Teams to ensure that ICD issues have been identified and documented in the ICD to describe all baseline incompatibilities or incomplete interfaces that affects WTP, if any (Issue management is described in Section 5).

The PRC is accountable to DOE-RL for performance of its contract (DOE 2008c).

#### 2.5 MSC (Contract DE-AC06-08RL14728 [DOE 2009])

- In its role as the mission support contractor, the MSC assumes the following responsibilities:
- Participation in the definition, development, management, issue resolution, approval and documentation of the interfaces as documented in their contract scope of work interface management responsibilities and references to Section J.3 Hanford Site Services and Interface Requirements Matrix and the Hanford Site Interface Management Plan (MSA 2012).
- Providing resources to perform to the technical specifications of the approved ICDs.
- Concurrence with applicable ICDs by signing to signify that they accurately reflect MSC's:
  - o Baseline plan
  - o Roles and responsibilities
  - o Forecasted services and infrastructure requirements
  - o Milestones
  - o Technical requirements related to external interfaces
  - o Physical and administrative interfaces
  - o Acceptance criteria
  - o Funding availability

- Collaboration with the ICD Review Teams to ensure that ICD issues have been identified and documented in the ICD to describe all baseline incompatibilities or incomplete interfaces that affects WTP, if any (Issue management is described in Section 5).
- Serve in a lead integration role for the Contractor Interface Board (CIB) and Hanford Contract Alignment Board (HCAB) to assure that all Site-wide management issues, including ICD approvals, are resolved in an expedient manner in accordance with the respective board's charters.

The MSC is accountable to DOE-RL for performance of its contract (DOE 2009).

#### 2.6 One System IPT

The One System IPT implements a mission-focused approach to provide an effective connection between the Tank Operations Contract (TOC) and WTP. The One System IPT serves to integrate between the WTP and TOC organizations and coordinate their respective contracts. It consists of a number of divisions, one of which is the Technical Division. Within the Technical Division, the Technical Interface Integration Group, as defined in RPP 51471, Rev. 2 (24590-WTP-CH-MGT-11-008) 2020 Vision One System IPT Charter (WRPS 2012a), assumes the following ICD related responsibilities:

- Facilitate and coordinate identification and resolution of all interfacing WTP/TOC technical issues
- Maintain a formal management program for all WTP ICDs
- Monitor performance against the ICDs
- Coordinate the revision of all WTP ICDs as necessary with applicable IOs and TLs
- Plan and coordinate WTP support activities of WTP Interface Partners

The One System IPT is also responsible for managing and maintaining a register of common and interface risks through its One System Risk Management Team (OSRMT). Technical, regulatory, nuclear safety or contractual interface incompatibilities (defined in Section 5.1 as ICD Issues) determined by the OSRMT as presenting a significant project (cost or schedule) impact are classified as risks. The OSRMT's charter (WRPS 2012b) defines its purpose, scope and objectives as:

- Retain risk management compliance and accountability within WTP and TOC contracts. Implement One System risk management as a planning, coordinating, monitoring, communicating, problem solving and reporting function.
- Facilitate integration of One System risk management activities with the DOE-ORP risk management process.
- Ensure effective identification, integration and management of One System risks including those identified as potential risks by IOs, as outlined in this Interface Management Plan.

- Perform One System risk screening activities for determination of risk ownership, e.g. BNI/WTP
- Provide a management forum to identify and review new One System risks, evaluate, review, approve, and provide oversight of mitigation strategies and actions, and monitor and closeout of One System risks.
- Ensure there is a current and comprehensive One System risk register of all One System technical, programmatic, operational and execution-based risks and opportunities for risk management.
- Increase One System IPT focus and accountability, eliminate risk gaps/surprises.
- Enhance WTP and TOC risk-related communications.
- Enable mutually acceptable risk mitigation approaches. Elevate unresolved handling strategies for timely resolutions.

### 3 Management Approach

#### 3.1 Overview

The overall structure of WTP Interface Management is made of three distinct levels, each level having specific functions and organizations that are responsible for coordinating these functions. The three levels of WTP ICD Management are as follows:

#### Contractor Interface Board (CIB) / Hanford Contract Alignment Board (HCAB)

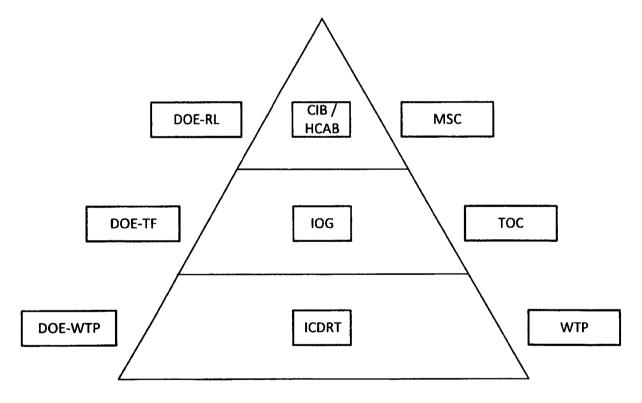
One CIB / HCAB with upper level management representatives from each Interface Partner (as outlined in Section 3.5)

#### Interface Owners Groups (IOGs)

Three IOGs (as outlined in Section 3.3)

#### ICD Review Teams (ICDRT)

One ICDRT for each active ICD (as outlined in Section 3.2



#### Figure 1 - WTP ICD Management Triad

These groups and their specific roles, responsibilities, accountabilities and authorities are discussed in detail below.

#### 3.2 ICD Review Teams (ICDRTs)

The ICDRTs are responsible for the technical, regulatory, nuclear safety and administrative accuracy of the interface. The team will consist of personnel from each of the Interface Partners responsible to implement the interface, including, as appropriate for each ICD and Interface Partner's scope:

- ICD Team Lead
- Technical Leads (TLs) and other subject matter experts (SMEs)
- Regulatory Leads (RLs) and other SMEs
- Nuclear Safety Leads (NSLs) and other SMEs
- IO or their designated representative
- WTP ICD Coordinator
- DOE-ORP Interface Manager

Teams may be either standing teams that hold periodic meetings or teams created for a specific purpose of limited duration. Most comments and questions received from ICD Team members can be resolved at ICDRT Meetings and the resolutions recorded in ICD Meeting Minutes. Other questions or comments may lead to Actions, which will be recorded and tracked by the WTP ICD Coordinator.

WTP, the contractor responsible for issuing and maintaining the ICDs, will provide the administrative leadership for coordinating ICDRT activities. DOE-ORP will provide oversight for ICDRT activities. WTP, TOC and DOE-ORP will be present at all ICDRT Meetings. PRC, MSC, and DOE-RL will be present at applicable ICDRT Meetings. The requirement for a quorum at an ICDRT Meeting is considered to be satisfied if each involved organization is represented by at least one individual that is authorized by the IO or functional lead to speak for their organization. TOC will be copied on all communications between WTP and PRC or MSC. The WTP ICD Coordinator will be responsible for scheduling ICDRT Meetings and for recording and distributing minutes for these meetings.

#### 3.2.1 ICD Team Lead

Each ICD has one ICD Team Lead, who may reside in the One System IPT. The ICD Team Lead is designated by the WTP Interface Owner in consultation with individuals in the Team Lead's chain of management. The ICD Team Lead has the following responsibilities:

- Overall responsibility for the content of the ICD.
- Responsible for ensuring that the ICD reflects the current state of the physical and administrative interfaces.
- Typically responsible for chairing ICDRT Meetings (this may be delegated).
- Responsible for ensuring all required concurrences have been obtained prior to signing for Final Approval of the ICD. (Refer to Section 4.4 for more detail.)

The ICD Team Lead is accountable to the WTP IO for performance of their ICD-related responsibilities.

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#### 3.2.2 Technical Lead (TL)

TLs are SMEs that are designated as appropriate by the Contractors' Interface Owners (IOs) in consultation with other managers within their organization. WTP and TOC will assign TLs for each ICD. PRC and MSC will assign TLs for ICDs in which they are Interface Partners. DOE may appoint TLs at their discretion. TOC and WTP TLs and SMEs may reside in the One System IPT. There may be multiple technical SMEs from one organization for a single ICD. Technical SMEs are appropriately qualified to systematically evaluate the ICD's content for interfacing systems technical and design impacts and identify technical risks and issues. TLs and SMEs are accountable to their respective IOs for performance of the following ICD-related responsibilities:

- Participation in ICD Team Meetings
- Reviewing revisions to the ICDs and ICFs for technical accuracy, including evaluation of system technical and design impacts.
- Identification of technical risks and issues as ICD Issues.

#### 3.2.3 Nuclear Safety Lead (NSL)

NSLs are SMEs that are designated as appropriate to the ICD and Interface Partner's scope by the IOs with necessary concurrence from functional management. WTP and TOC will assign NSLs as specified in Table 1, *ICDs that require WTP and TOC Nuclear Safety Leads and Regulatory Leads* on the following page. DOE, PRC and MSC may appoint NSLs at their discretion. There may be multiple nuclear safety SMEs from one organization for a single ICD appropriately qualified to systematically evaluate ICD's content for interfacing systems nuclear safety impacts and identify nuclear safety issues. NSLs and SMEs are accountable to their respective IOs for performance of the following ICD-related responsibilities:

- Participation in ICD Team Meetings.
- The WTP NSL completes a technical review and/or safety evaluation of proposed changes to the ICD or ICF to determine the impact to the DOE-WTP approved safety basis documents.
- Identifying nuclear safety risks as ICD Issues.
- Facilitating the identification and resolution of technical risks consistent with the WTP prime contract (DOE 2000).

#### 3.2.4 Regulatory Lead (RL)

RLs are SMEs that are designated as appropriate to the ICD and Interface Partner's scope by the IOs with necessary concurrence from functional management. WTP and TOC will assign RLs as specified in Table 1, *ICDs that require WTP and TOC Nuclear Safety Leads and Regulatory Leads* on the following page. DOE, PRC and MSC may appoint RLs at their discretion. There may be multiple regulatory SMEs from one organization for a single ICD appropriately qualified to systematically evaluate ICD's content for interfacing systems regulatory impacts and identify regulatory issues. RLs and SMEs are accountable to their respective IOs for performance of the following ICD-related responsibilities:

- Participation in ICD Team Meetings
- Reviewing revisions to the ICDs and ICFs for regulatory accuracy, including evaluation of system regulatory impacts.
- Identification of regulatory issues as ICD Issues.

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> ICDs that require WTP and TOC Nuclear Safety Leads and Regulatory Leads **Table 1**

ICD	NSL Required	RL Required
ICD 1: Raw Water	No	Yes
ICD 2: Potable Water	No	Yes
ICD 3: Radioactive Solid Wastes	Yes	Yes
ICD 5: Non-Radioactive, Non-Dangerous Liquid Effluents	No	Yes
ICD 6: Radioactive, Dangerous Liquid Effluents	Yes	Yes
ICD 9: Land for Siting	No	Yes
ICD 11: Electricity	Yes	Yes
ICD 12: Roads	No	Yes
ICD 14: Immobilized High-Level Waste	Yes	Yes
ICD 15: Immobilized Low-Activity Waste	Yes	Yes
ICD 19: Waste Feed	Yes	Yes
ICD 23: Waste Treatability Samples	Yes	Yes
ICD 28: Pit 30 Aggregate Supply for Construction	No	Yes
ICD-29 Waste Sodium	No	Yes

#### 3.2.5 WTP ICD Coordinator

The WTP ICD Coordinator resides in the One System IPT's Technical Division and has the following responsibilities:

- Maintain and coordinate the revision of this Plan and the Interface Control Procedure that implements this plan for WTP.
- Generate the ICD Revision target schedule and transmit it to all ICDRT members for resource planning purposes.
- Maintain the WTP Interface Team List and transmit it to all ICDRT members.
- Maintain a consolidated list of ICD Issues, Open Items and Meeting Actions and transmit it upon request.
- Act as a single point of contact for organizations exterior to WTP for exchanging information regarding this IMP, the ICDs, and any ICFs.
- Assist the ICD Team Lead in identifying all outstanding issues and comments when preparing to revise an ICD.
- Schedule all ICDRT meetings.
- Attend all ICDRT Meetings
- Record, submit for review and issuance, and distribute all ICDRT Meeting Minutes.
- Enter ICD Issues that are owned by WTP into the WTP Action Tracking System (ATS).
- If there are ICD Issues that cannot be resolved by the ICDRT, the WTP ICD Coordinator will be responsible for informing the DOE-ORP Interface Manager and the TOC Interface Manager of all pertinent details in order that the Issue may be brought before the appropriate Interface Owners Group for resolution.

The WTP ICD Coordinator is accountable to their One System line management for performance of their ICD-related responsibilities.

#### 3.3 Interface Owners Groups (IOGs)

The subject matter of the ICDs falls into three general categories. The three Interface Owners Groups (IOGs) are similarly grouped:

#### • Infrastructure Interface Owners Group

- o ICD 01, ICD for Raw Water
- o ICD 02, ICD for Potable Water
- o ICD 09, ICD for Land for Siting
- o ICD 11, ICD for Electricity
- o ICD 12, ICD for Roads
- o ICD 28, ICD for Pit 30 Aggregate

#### • Waste Feed Interface Owners Group

- o ICD 19, ICD for Waste Feed
- o ICD 23, ICD for Waste Treatability Samples
- o ICD 29, ICD for Waste Sodium

#### Waste Management Interface Owners Group

- o ICD 03, ICD for Radioactive Solid Waste
- o ICD 05, ICD for Nonradioactive, Nondangerous Liquid Effluent
- o ICD 06, ICD for Radioactive, Dangerous Liquid Effluent
- o ICD 14, ICD for Immobilized High Level Waste
- o ICD 15, ICD for Immobilized Low Activity Waste

The benefit of having three IOGs rather than one large Owners Group is that for meetings and Issues that only involve one area, such as Infrastructure, the members in the other two groups (Waste Feed and Waste Management) need not spend time and resources in areas of no direct concern to them. One advantage of having three IOGs is that the member IOs for each group are typically IOs for multiple ICDs within that group. Thus, a periodic meeting within that group can serve to address the status and Issues of several ICDs at one meeting rather than having to attend a separate Owners Group meeting for each ICD.

Each of the three IOGs will hold meetings to discuss status of the ICDs assigned to their group and to resolve any ICD Issues that the ICDRTs have not been able to reach resolution on. The requirement for a quorum at an ICDRT Meeting is considered to be satisfied if each involved organization is represented by at least one individual that is authorized by the IO or functional lead to speak for their organization.

TOC will provide the administrative leadership for coordinating Interface Owner Group meetings. In this role, TOC will be responsible for scheduling all IOG Meetings and for recording and distributing minutes for these meetings. DOE-ORP will provide oversight for IOG activities.

#### 3.3.1 Interface Owners

IOs are designated project management representatives who are responsible for the primary area affected by the interface. Each interfacing organization will designate an IO for each ICD who is accountable to the organization's Interface Manager for performance of their ICD-related responsibilities. TOC and WTP IOs may reside in the One System IPT. In their role as interface owners, IOs assume the following responsibilities:

- Ensuring a TL, RL and NSL are appointed as appropriately determined and recorded on Appendix B, Interface Owner ICD Revision Checklist, for each ICD and Interface Partner's scope in consultation with other managers within their organization.
- Ensuring the ICDs accurately reflect their organization's contract baseline and that exceptions falling outside their organization's contract baseline (contract misalignments) are captured as ICD Issues.
- Ensuring all new ICDs and all revisions to ICDs affecting their organization are evaluated by their TL, RL, NSL as applicable and respective SMEs to identify and evaluate any regulatory, nuclear safety and technical issues and that these are tracked as ICD Issues.
- Ensuring resolution of all comments is completed to the satisfaction of the TL, RL, NSL and respective SMEs before signing their concurrence on new and revised ICDs.

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- Managing the ICD Issues identified above if applicable.
- Identifying and evaluating ICD issues (contract misalignments) and initiate any necessary contract baseline changes needed to drive the Issue to resolution.
- Concurrence of completed ICDs and ICFs by signature.
- Understanding each interface and monitoring its compatibility. This may be accomplished through reports from team representatives or direct participation in the interface process. The IOs are responsible for ensuring a compatible and viable interface exists that:
  - o Accurately describes all Interface Issues
  - o Documents the vehicle being used to follow each Issue to resolution
  - o Is within the contract baseline, permits, and authorization basis of the contractor
- Participate in IOGs (3) as applicable to address ICD Issues that have not been resolved in the course of routine ICD Review Team Meetings (more detail on IO ICD Issue resolution is Section 5, Issue Management).

#### 3.4 Interface Managers

In their role as Interface Managers, these staff assume the following responsibilities:

- Attend ICDRT Meetings at their discretion.
- Ensure that any ICD Issues that are raised from the ICDRT to the IOG have adequate support from their staff and management.
- Ensure that all interface management processes described in this IMP remain functional and responsive.
- As applicable, participate in meetings of the CIB and HCAB addressing ICD Issues that have not been resolved by an IOG (more detail on IO ICD Issue resolution is Section 5, Issue Management).

The Interface Managers are accountable to their senior management for their interface management responsibilities.

#### 3.5 Contractor Interface Board (CIB) / Hanford Contract Alignment Board (HCAB)

The Contractor Interface Board (CIB) provides inter-contractor leadership to review financial, contractual, and Interface Management topics and issues that affect any or all Hanford contractors in advance of coordination with DOE.

The Hanford Contract Alignment Board (HCAB) will determine/approve RL and ORP prioritization of work (including emerging and deferred work) ensuring consistent execution of contract changes, project, and funds management.

The Hanford Site Interface Management Plan (MSA 2012) describes the roles and responsibilities of the CIB and HCAB in detail.

### **4** Interface Control Documents

#### 4.1 Overview

The external interfaces between WTP Interface Partners related to services, equipment, energy, data, or materials transferred between WTP and other WTP Interface Partners will be defined and documented in ICDs. The purpose of the ICDs is to define the interface in question, without regard to limitations set by other business agreements, including contracts. If the description of the interface falls outside the bounds of one or more technical, regulatory, nuclear safety or contractual baselines (contract misalignment), this is identified as an ICD Issue, recorded within the ICD and in the affected organization's tracking system.

#### 4.2 Interface Definition Development

The ICDs identify baseline requirements for shared responsibilities associated with WTP interfaces. Specific ICDs are identified by the WTP contract and are reflected in the Contract Section J.3 Matrix shared by TOC, PRC and MSC. If any of the WTP Interface Partners identify a need for new interfaces, the Interface Owner for that WTP Interface Partner will recommend the new interface to the CIB / HCAB (see Section 3.5) for further consideration.

#### 4.3 Interface Control Document Content

Interface definitions are documented in ICD text, graphics, tables, issues, and reference to other documents or drawings. The definition should be in adequate detail to ensure compatibility between organizations sufficient for safe and compliant design, construction, and operation. ICDs will describe the organizational roles and responsibilities for the interface, the details of the physical interface, and the details of the administrative interface. Any technical, regulatory, nuclear safety or contractual baseline incompatibility between any of the interfacing parties will be described as an ICD Issue with the tracking mechanism identified. Where appropriate, the acceptable criteria for the transfer of the service, equipment, energy, data, or material across the interface should be described.

The content of the ICDs will be jointly developed by the interfacing organizations through use of the ICDRTs. Agreement will be achieved through team consensus. Key interface milestones will be identified to mark activities or project phases when significant interactions between any interface participant begins and will be included on each contractor's baseline project schedule. As the project develops and greater detail regarding the sequence and timing of project milestones is discovered, adjustments to the milestone dates are to be expected. These will be incorporated as part of the ICD revision process. Each participating organization's management will monitor and participate in the team effort when necessary.

ICDs requiring Hanford site contractors to provide WTP with services shall reflect all interfaces and services needed in the construction and performance testing phases, and projected interface and services needed for the future commissioning and operating phases. When revising an ICD, if this information is not immediately available, an ICD Issue will be generated, tracked, and assigned to the ICD Team Lead for resolution. The ICD Issue will state exactly what information is needed and will incorporate a plan with a reasonable schedule for obtaining that information. When the required information is obtained, the ICD Team Lead will ensure that the information is communicated to the TOC and to any Hanford site contractor responsible for providing the service. The information will be incorporated into the next revision of the ICD in question.

Open ICD Issues and their associated actions are listed in each ICD as an appendix (normally Appendix A). This appendix shows the Issue number, the corresponding Action tracking number, a brief description of the Action / Issue and indicates for each interface partner if the item is inside the technical, regulatory, nuclear safety or contractual baseline, outside that baseline or not applicable. This appendix also shows what page in the ICD the Issue is found on.

Within each ICD, ICD Actions and ICD Issues that have closed since issuance of the prior revision are listed as an appendix (normally Appendix B). This appendix shows the Action / Issue number, the corresponding tracking number, the date the Action/Issue closed and a brief description of the resolution.

Appendix A of this document provides additional guidelines for ICD content.

#### 4.4 ICD Approvals and Concurrences

ICD approval will be based on the concurrences of the interfacing contractors as described below. Concurrence from the IOG and CIB / HCAB is not required, since the functions of these groups with regard to the ICDs are to provide oversight to the process and to resolve disagreements and issues.

Interface Owners (IOs) including DOE-ORP and DOE-RL when appropriate, will sign ICD concurrence sheets indicating their concurrence with the ICD contents. Concurrence signatures on an ICD signify that the ICD accurately reflects current technical, regulatory, nuclear safety and contract baselines, except as indicated in the ICD issues table. In the course of a revision to an ICD (or the production of a new one) the WTP ICD Team Lead will ensure that all required concurrence signatures have been obtained. Afterward, the WTP ICD Team Lead will sign for Approval. The approval signature indicates that the document is approved for issuance on the basis that each participating interface partner concurs with the content.

The entire WTP ICD revision and approval process is subject to DOE-RL and/or DOE-ORP monitoring, audit, and review at any time. DOE-RL and/or DOE-ORP have authority to halt processing of an ICD to resolve whatever question there may be regarding conduct of the process.

#### 4.5 ICD Change Management

Changes to ICDs can be implemented by ICFs or by ICD revision. Extensive changes to ICDs are achieved through revision. Smaller, more focused changes to an ICD can be implemented by means of an Interface Change Form (ICF). Both methods are described below.

#### 4.5.1 Interface Change Forms

The purpose of the ICF is to implement smaller more focused changes to the ICD. The ICF will describe the change and the impact of the proposed change. An ICF will receive review, concurrence and approval from the same organizations required for the ICD approval. Concurrence and approval will be documented on the ICF. If the ICF proposes a change to contractor technical, regulatory or nuclear safety baselines or contracts as determined by the IO and TL, RL or NSL, an ICF Addendum will be developed. The ICF Addendum summarizes the change to the baseline and/or contract and is reviewed by the IOG and the CIB / HCAB. The Addendum may result in the generation of an ICD Issue, if the change constitutes an incompatibility between contractor baselines or an incomplete interface.

The WTP ICD Team Lead will verify that all required concurrences have been obtained prior to approval of the ICF. Following ICD Team Lead approval, the Team Lead will submit the ICF to WTP PADC for issuance. When the ICF is issued, it becomes part of the currently authorized ICD. Typically, no more than five ICFs would be written against a single ICD before the ICD is revised, incorporating all outstanding ICFs into the Revision.

#### 4.5.2 ICD Revision

The formal process for revising an ICD is presented in 24590-WTP-GPP-MGT-003, Interface Control Procedure (BNI 2011a).

The WTP Interface Control Document Coordinator will assist the ICD Team Lead in identifying all needed changes and/or items of contention associated with the ICD to be revised. All comments from the ICD Review Team will be considered and resolved. Each ICD revision will be reviewed by the TL and the IO for every affected organization including DOE-ORP and DOE-RL if applicable. The IOs will provide their concurrence on the concurrence sheet of the ICD and return the IO ICD Revision Checklist, completed as applicable. The ICD Team Lead will review the documentation to ensure all required concurrences have been obtained. When satisfied, the ICD Team Lead will approve the ICD and submit it to WTP PADC for issuance.

When issued, the ICD Team Lead will prepare and send a Letter of Transmittal to DOE-ORP as specified in 24590-WTP-GPP-MGT-003, Interface Control Procedure (BNI 2011a). The Interface Control Document Coordinator will ensure that copies (either electronic or hard copy) of the Transmittal are made available to the entire ICD Review Team.

## 5 ICD Issue Management

#### 5.1 Issue Definition

WTP ICD Issues are defined as follows:

- An incompatibility between Contractor's technical, regulatory or nuclear safety baselines or contract across a WTP Interface
- OR
- An incomplete WTP Interface.

An incomplete WTP Interface is defined as follows:

• A contract requirement that is not currently being met.

OR

- A perceived need that is not currently in any Partner's technical, regulatory or nuclear safety baselines or contract, however the following conditions are met:
  - The perceived need has been validated by a rigorous engineering evaluation **AND**
  - All of the IOs for the affected systems have concurred that the perceived need must be met in order to achieve mission success.

OR

• The perceived need must be met in order to comply with state or federal law.

ICD Actions are defined as activities that are necessary to:

• Establish or restore the compatibility of the interface,

OR

• Complete the interface.

ICD Issues would be considered ICD Risks if their consequences have an impact on cost and/or schedule to exceed a threshold determined by the OSRMT.

#### 5.2 ICD Issue Identification

ICD issues are identified via two pathways:

- 1. During an ICD review cycle.
  - a. The ICD review cycle is initiated by the WTP ICD coordinator, who circulates the currently approved ICD (with any format changes for compliance with current IMP requirements) to the appropriate Partner ICDRT. As appropriate to the ICD and Partner scope, the Partner ICDRT may consist of the IO, TL, RL, NSL and Interface Manager.
  - b. The Partner ICDRT evaluates the ICD for determining its impacts on design (i.e. functional and performance requirements), regulatory compliance and nuclear safety according to the established Partner's processes. During the course of its review, the Partner ICDRT also identifies any potential ICD issues. The Partner ICDRT consolidates its comments and potential issues and transmits them to the WTP ICD Coordinator.
  - c. The WTP ICD Coordinator schedules meetings of the ICDRT to discuss potential issues.
  - d. The ICDRT will discuss all aspects and implications of the potential ICD Issue. If an incompatibility is identified by consensus of the ICDRT present at the meeting, then the WTP ICD Coordinator will record an ICD Issue identified in the Meeting Minutes. If further

information is needed to make a determination on a potential Issue then the WTP ICD Coordinator will record an Open Item identified in the Meeting Minutes. Open Items are discussed in Section 6.

- e. ICD Issues shall be communicated to the OSRMT by the WTP ICD Coordinator for their evaluation to determine if they pose a significant project (cost or schedule) risk. If significant project risks are identified, the OSRMT will then track them according to RPP-52149, One System Risk Management Team Charter (WRPS 2012b). The OSMRT risk identifier will also be included in the ICD with any action tracking identifiers.
- 2. Outside an ICD review cycle.
  - a. Partner ICDRTs may identify potential ICD issues outside the formal review cycle according to established Partner practice for evaluating design and nuclear safety impacts.
  - b. The Partner ICDRT transmits the potential issues to the WTP ICD Coordinator.
  - c. The WTP ICD Coordinator schedules meetings of the ICDRT to discuss the potential issue.
  - d. The ICDRT will discuss all aspects and implications of the potential ICD Issue. If resolution cannot be reached by the ICDRT at the meeting, then the WTP ICD Coordinator will record an ICD Issue as identified in the Meeting Minutes.
  - e. ICD Issues shall be communicated to the OSRMT by the WTP ICD Coordinator for their evaluation to determine if they pose a significant project (cost or schedule) risk. If significant project risks are identified, the OSRMT will then track them according to RPP-52149, One System Risk Management Team Charter (WRPS 2012b). The OSRMT risk identifier will also be included in the ICD with any action tracking identifiers.

#### 5.3 ICD Issue Allocation

ICD Issues are allocated to Partners by consensus of the applicable IOs.

#### 5.4 ICD Issue Tracking

Each ICD Issue must be described within the ICD text (with a tracking number or schedule ID) by the Team Lead as assisted by the WTP ICD coordinator. The affected Partner's IO is responsible for ensuring the Issue/risk and associated actions are entered into the affected Partner's action tracking system and/or project schedule as applicable. When an ICD Issue is owned by more than one Partner, the ICD Issue will be tracked in each Partner's tracking system and/or project schedule and therefore be recorded in the ICD with multiple tracking numbers.

Progress on closing ICD Issues is tracked at routine ICDRT meetings and periodic meetings of the associated Interface Managers. The WTP ICD Coordinator is responsible for maintaining a consolidated list of Open Items, ICD Issues, and ICD Actions.

#### 5.5 ICD Issue Resolution

The overall strategy for resolution of ICD Issues will rely upon the three level management approach described in Section 5.

- Individual ICD Review Teams (ICDRTs) for each ICD (As described in Section 3.2)
- Three Interface Owners Groups (IOGs) (As described in Section 3.3)
- CIB / HCAB (As described in Section 3.5)

The method to resolve ICD Issues will be as follows:

- Having implemented the Partner's tracking mechanism for identified and allocated ICD Issues, the affected Partners' IO is responsible for forming and leading a team to resolve the Partner's scope of the Issue and close actions. The affected Partners' teams can consist of the TL, RL and NSL as appropriate to the ICD and Partner's scope. The Partners' teams periodically present their findings to the ICDRT at meetings scheduled by the WTP ICD Coordinator. ICD Issues will be resolved by consensus of the ICDRT.
  - a. If consensus can be reached by the affected IOs present at an ICDRT meeting, the resolution will be recorded in the Meeting Minutes.
  - b. Although ICD Issues may be declared resolved, they will not be considered closed until DOE-ORP has made that determination. Following needed changes to project documentation and/or contracts the appropriate IOG shall recommend ICD Issue closure and provide the closure strategy to DOE-ORP. The document from DOE-ORP granting approval to close the Issue will be given a WTP Correspondence Control Number (CCN) and referenced in the Closure Comments of the action tracking system item (DOE 2008b) or the project schedule item.
  - c. If consensus cannot be reached among the affected IOs at the ICDRT meeting and no further actions are considered viable, the WTP ICD Coordinator will record this in the Meeting Minutes and will notify the TOC Interface Manager that the Issue must be elevated to the appropriate IOG.
- 2) The TOC Interface Manager will schedule an appropriate IOG meeting and include the Issue on the agenda. If resolution of the Issue is urgent, the TOC Interface Manager will call a timely meeting of the affected IOG.
  - a. If the IOs are successful in reaching a consensus resolution among all IOG members present at the meeting, the resolution will be recorded in the Meeting Minutes and distributed to the entire ICDRT.
  - b. Although ICD Issues may be declared resolved, they will not be considered closed until DOE-ORP has made that determination. Following needed changes to project documentation and/or contracts the appropriate IOG shall recommend ICD Issue closure and provide the closure strategy to DOE-ORP. The document from DOE-ORP granting approval to close the Issue will be given a WTP Correspondence Control Number (CCN) and referenced in the Closure Comments of the action tracking system item (DOE 2008b) or the project schedule item.
  - c. If the IOs are not successful in reaching a consensus resolution among all IOG members present at the meeting, the TOC Interface Manager will record this in the Meeting Minutes, distribute the Meeting Minutes to the entire ICDRT, and notify the MSC Interface Manager that the ICD Issue must be elevated to the CIB / HCAB. The TOC Interface Manager will provide the MSC Interface Manager with a complete description of the ICD Issue and identify the IOs that have not been able to reach resolution.

3) The MSC Interface Manager will designate personnel to invite the appropriate IOs (identified in 2b above) and the CIB / HCAB to discuss the Issue. If resolution of the Issue is urgent, the MSC Interface Manager will call a timely meeting of the CIB / HCAB. The IOs shall jointly brief the CIB / HCAB on the basis for the impasse and the alternatives considered and evaluated prior to referring the issue to the CIB / HCAB for resolution.

#### 5.5.1 Issue Resolution Implementation into ICDs

If available time will allow, the resolution to an Issue will be incorporated into the next scheduled revision of the affected ICD. If the need to implement the resolution cannot wait for the next revision of the affected ICD, ICFs may be used to temporarily implement Issue resolution plans. The next revision of the affected ICD will incorporate the ICF and reflect actions taken and conditions established as a result of the issue resolution.

### 6 Open Item Management

#### 6.1 **Open Item Definition**

At times, there are items of multifarious nature that do not meet the definition of ICD Issues that one or more members of an ICDRT want to track. For example, there may be an ongoing engineering study being undertaken by a Partner, which would be noted in the ICD as an Open Item. The Open Item would serve as a means for the ICDRT to track the study to its completion. The study may then cause a change in that Partner's technical baseline such that an incompatibility may then arise at an interface, which would create an ICD Issue. Another example is provided in Section 5.2, where additional information is needed for positively identifying Issues.

Therefore, as conditions change, Open Items may be closed, or they may develop into ICD Issues. An Open Items List may be added to any ICD to track such items in an Appendix. The WTP ICD Coordinator is responsible for maintaining a consolidated list of ICD Open Items, ICD Issues and ICD Meeting Minute Actions.

#### 6.2 **Open Item Identification**

Open Items are identified in the same way as Issues, as described in section 5.2.

#### 6.3 **Open Item Allocation**

Open items are allocated by consensus of the applicable ICDRT.

#### 6.4 **Open Item Tracking**

Each Open Item must be described within the ICD text by the Team Lead as assisted by the WTP ICD coordinator. The affected Partner's IO is responsible for ensuring any associated actions are entered into the affected Partner's action tracking system and/or project schedule.

Progress on closing Open Items is tracked at routine ICDRT meetings and periodic meetings of the associated Interface Managers. The WTP ICD Coordinator is responsible for maintaining a consolidated list of Open Items, ICD Issues, and ICD Actions.

#### 6.5 **Open Item Closure**

The applicable Partner's IO will determine the best means of closing Open Items. In the example provided above, no additional activities are required since the ICDRT maintains a watch on the ongoing engineering study. However, some Open Items may require additional activities if their intent is to determine the existence or not of an ICD Issue.

Closure of Open Items and their consequences are agreed by consensus of the applicable ICDRT.

#### 6.5.1 Open Item Closure Implementation into ICDs

If available time will allow, the closure to an Open Item will be incorporated into the next scheduled revision of the affected ICD. If the need to implement the closure cannot wait for the next revision of the affected ICD, ICFs may be used to temporarily implement Open Item closure plans. The next revision of the affected ICD will incorporate the ICF and reflect actions taken and conditions established as a result of the open item closure.

### 7 Organizational Implementation

#### 7.1 Management Responsibilities

Each participating organization is responsible for establishing and maintaining an interface program that integrates the requirements of this plan with the organization's internal work control processes and procedures.

#### 7.2 Senior Management Participation

Senior management in each interface partner organization is responsible for ensuring the interface process is established and active in sufficient measure to ensure compatible and viable interfaces are created and maintained. In cases where the IOG cannot reach resolution of an ICD Issue, the CIB / HCAB will be called to a meeting to provide resolution.

#### 7.3 Procedures

Each interface partner organization will issue procedures to implement this plan. The interface partner organizations will maintain implementing procedures that flow down the requirements in this plan and ensure that the processes prescribed are compatible with the Hanford Site Interface Management Plan (MSA-IMP-00001). One System staff are responsible for following their organization's procedures (WTP or TOC); there are no specific One System ICD-related procedures applicable to both WTP and TOC staff.

#### 7.4 Personnel

Each interface partner Contractor and DOE organization will designate participants. The WTP ICD coordinator is resident in the One System IPT's Technical Division.

#### 7.5 **Resources**

Each interface partner Contractor and DOE organization is responsible for providing the resources necessary to maintain each interface in which they participate. If resources are required that are not currently in a Contractor's baseline, they are to be requested from DOE through the appropriate baseline change process.

TOC and WTP are individually responsible for assigning resources to the One System IPT consistent with their contracts (DOE 2000, DOE 2008a).

### 8 References

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# Appendix A

# **Interface Control Document Content Guidance**

## **Appendix A**

## **Interface Control Document Content Guidance**

Interface Control Documents (ICD), as appropriate, may include details of the following topics consistent with the complexity, maturity, and phase (design, construction, operation) of the project:

- Summary level description of the interface
- Key functional requirements for each participating contractor necessary to implement and operate the interface
- Specific details that further break down the functional requirements into discrete items that can be referenced as the source of specific design requirements or programmatic commitments
- Descriptions of physical aspects of the interfaces that contain the following, as appropriate:
  - Location and description of each interface point
  - Interface block diagrams and schematics that clearly define organizational responsibilities for each interface (such as ownership, construction, and maintenance)
  - Type, quantity, and composition of material
  - Packaging requirements
  - Design drawings
  - Operation and maintenance requirements
- Descriptions of administrative aspects of the interfaces, including the following:
  - Procedures that define the administrative transfer of interface items (such as who, what, when, where, and how)
  - Linkage to the integrated DOE-ORP and individual Contractor project technical baselines; baseline schedules and logic must contain a level of detail that demonstrates that key ICD events or milestones are achievable
  - Documentation necessary for official exchange of interface items
  - Authorization basis and permitting integration
  - Criteria that apply to items transferred across the interface
  - Forecasted Services and Infrastructure Requirements
    - Precise description of the required service and/or infrastructure
    - Quantity of service/infrastructure required. If the quantity of service/infrastructure varies over time, a best-estimate forecast will be generated by WTP including a time vs. quantity estimate. This time vs. quantity estimate should run as far into the future as is practical, up to and including the commissioning and operating phases.
- Description of interface technical, regulatory, nuclear safety or contractual incompatibilities between contractors (contract misalignments)
- Describe the method for closing incompatibilities
- Identification of key baseline document references from all affected participants defining the interface boundaries and parameters

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# **Appendix B**

# **Interface Owner ICD Revision Checklist**

### Appendix B Interface Owner ICD Revision Checklist

The purpose of this checklist is to assist the Interface Owner of each partner organization to determine and document the required reviews for Interface Control Document revisions.

Inte	rface Control Document:		Rev
Org	anization:		
Inte	rface Owner (IO):		Mandatory for all Interface Partners.
Technical Lead (TL):			Optional if DOE; Mandatory for all other Interface Partners.
	-	Mark N/A if no TL assigned.	-
Nuclear Safety Lead (NSL)			For WTP and TOC, as designated on
Mark N/A if no NSL assigned. Regulatory Lead (RL)		Table 1, of 24590-WTP-PL-MG-01-001, Interface Management Plan, <i>ICDs that</i> require WTP and TOC Nuclear Safety	
6		Mark N/A if no RL assigned.	Leads and Regulatory Leads. Optional for all other Interface Partners.
1. If an NSL was assigned above, the NSL has completed a review of the ICD draft and all mandatory comments pertaining to nuclear safety have either been resolved, placed on the Open Items List, or have been identified as ICD Issues. (If no NSL assigned, mark N/A)			
			NSL Signature / Date
2. If an RL was assigned above, the RL has completed a review of the ICD draft and all mandatory comments pertaining to regulatory matters have either been resolved, placed on the Open Items List, or have been identified as ICD Issues. (If no RL assigned, mark N/A)			
			RL Signature / Date
3.	draft and all mandatory co and design matters have en Open Items List, or identif		
	(Optional if DOE. If no T	L, $\operatorname{III} (K \operatorname{IN} / A)$	TL Signature / Date
4.	safety, regulatory, technic questions from their organ placed on the Open Items If identified as ICD Issues the WTP ICD Coordinator	urs that all mandatory nuclear al, and design comments and ization have either been resolved, List, or identified as ICD Issues. , they have been communicated to for submission to the One System or evaluation as project risks.	
			IO Signature / Date

This record shall be submitted to WTP Project Archives and Document Control (PADC) for logging, issuance, distribution, and records retention to meet project records management requirements.