

May 12, 2021

WRPS-2102296

Mr. D. B. Hardy, Laboratory Manager Hanford Laboratory Management and Integration, LLC 710 George Washington Way, Suite J Richland, Washington 99352

Dear Mr. Hardy:

INTERFACE CONTROL DOCUMENT NUMBER TOC-ICD-63088, REV. 00, BETWEEN WASHINGTON RIVER PROTECTION SOLUTIONS LLC AND HANFORD LABORATORY MANAGEMENT AND INTEGRATION, LLC FOR THE TRANSITION AND OPERATION OF THE 219-S WASTE HANDLING FACILITY

Please find enclosed for formal implementation and use, the subject Interface Control Document number TOC-ICD-63088, Rev. 00, between Washington River Protection Solutions LLC and Hanford Laboratory Management and Integration, LLC for the Transition and Operation of the 219-S Waste Handling Facility.

If you have any questions, please contact me at 376-2574, or your staff may contact Mr. Z. M. Schatz at 376-6411.

Sincerely,

John R. Eschenberg

President & Project Manager

Inhante rame

DCH:ACP

Enclosure:

Interface Control Document number TOC-ICD-63088, Rev. 00, between Washington River Protection Solutions LLC and Hanford Laboratory Management and Integration, LLC for the Transition and Operation of the

219-S Waste Handling Facility (14 pages)

Mr. D. B. Hardy Page 2 May 12, 2021

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DOCUMENT RELEASE AND CHANGE FORM

Prepared For the U.S. Department of Energy, Assistant Secretary for Environmental Management By Washington River Protection Solutions, LLC., PO Box 850, Richland, WA 99352 Contractor For U.S. Department of Energy, Office of River Protection, under Contract DE-AC27-08RV14800

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1. Doc No: TOC-ICD-63088 Rev. 00

2. Title:

INTERFACE CONTROL DOCUMENT BETWEEN WASHINGTON RIVER PROTECTION SOLUTIONS, LLC AND HANFORD LABORATORY MANAGEMENT AND INTEGRATION, LLC FOR 222-S LAB TRANSITION.

3. Project Number:

□ Yes □ No

5. USQ Number:
□ N/A

N/A-9

4. Design Verification Required:
□ Yes □ No

6. PrHA Number Rev. □ N/A



Clearance Review Restriction Type: public

7. Approvals

Title	Name	Signature	Date	
Clearance Review	Raymer, Julia R	Raymer, Julia R	05/03/2021	
Design Authority	Huntington, Nikki L	Huntington, Nikki L	04/15/2021	
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Document Control Approval	Alvarez, Efren	Alvarez, Efren	05/03/2021	
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Originator	Marwan, Kevin H	Marwan, Kevin H	04/04/2021	
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Other Approver	Jarecki, Theodore D	Jarecki, Theodore D	04/07/2021	
Other Approver	Everett, Brian K	Everett, Brian K	04/13/2021	
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USQ Evaluator	Dosramos, Eduardo	Dosramos, Eduardo	04/28/2021	
Waste Transfer Engineering	Blaak, Todd M	Blaak, Todd M	04/07/2021	

8. Description of Change and Justification

Initial release.

This Interface Control Document (ICD) specifies the agreement for interfacing WRPS managed equipment outside of 219-S and HLMI managed 222-S lab.

This document has been approved by the required officers of each company and is being released in SPF.

9. TBDs or Holds ⊠N/A

10. Related Structures, Systems, and Components

a. Related Building/Facilities	□N/A	b. Related Systems	□N/A	c. Related Equipment ID Nos. (EIN)	□N/A
219-S		241-WT		219S-WT-V-5354	
222-S				219S-WT-WTL-SNL-5350	
241 TANK FARM FACILITIES				219S-WT-WTL-SNL-5351	
				241-SY-101	
				241-SY-102	
				241-SY-103	
				CA-V-6607	
				SY101-WT-LDE-150A/B	
				SY101-WT-LDE-152A/B	
				SY103-WT-LDE-151A/B	
				SY103-WT-LDE-153A/B	
				SY241-WT-P-010	
				SY241-WT-P-011	
				WT-P-1	

11. Impacted Documents – Engineering ⊠N/A

Document Number Rev. Title

12. Impacted Documents (Outside SPF):

N/A

13. Related Documents

Document Number	Rev.	Title
H-14-020831 SH 001	15	WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID
H-14-020831 SH 002	16	WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID

DOCUMENT RELEASE AND CHANGE FORM Doc No: TOC-ICD-63088 Rev. 00 13. Related Documents □N/A Document Number Rev. Title WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID H-14-020831 SH 003 09 H-14-020831 SH 004 WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID 18 H-14-020831 SH 005 WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID H-14-020831 SH 006 05 WASTE TRANSFER SYSTEM (WT) O&M P&ID WASTE TRANSFER SYSTEM (WT) O&M P&ID H-14-020831 SH 007 05 H-14-020831 SH 008 05 WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 001 45 H-14-107346 SH 002 31 DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 003 51 DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 004 29 DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 005 48 DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 006 48 DST WASTE TRANSFER PIPING DIAGRAM DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 007 39 H-14-107346 SH 009 14 DST WASTE TRANSFER PIPING DIAGRAM H-14-107346 SH 010 DST WASTE TRANSFER PIPING DIAGRAM H-2-820831 SH 001 03 CIVIL PLAN & PROFILE STA 0+00 TO STA 14+00 H-2-820832 SH 001 03 CIVIL PLAN & PROFILE STA 14+00 TO STA 24+00 H-2-820833 SH 001 04 CIVIL PLAN & PROFILE STA 24+00 TO STA 30+29.41 CIVIL PLAN & PROFILE STA 27+71 TO STA 35+27 H-2-820833 SH 002 00 H-2-820833 SH 003 00 CIVIL MISCELLANEOUS DETAILS 2"SNL-5350 & 2"SNL-5351 H-2-827563 SH 001 06 P & I D RETENTION AND NEUTRALIZATION BLDG H-2-827563 SH 002 P & ID RETENTION AND NEUTRALIZATION BLDG 16 H-2-827563 SH 003 13 P & ID RETENTION AND NEUTRALIZATION BLDG H-2-827563 SH 004 P&ID RETENTION AND NEUTRALIZATION BLDG 16 H-2-827563 SH 005 P & I D RETENTION AND NEUTRALIZATION BLDG 15 H-2-827563 SH 006 80 P & I D RETENTION AND NEUTRALIZATION BLDG H-2-827566 SH 001 02 PIPING CELL B ENLARGED PLAN H-2-827566 SH 002 PIPING CELL B WEST ELEVATION 01 H-2-827566 SH 003 01 PIPING CELL B EAST ELEVATION H-2-827566 SH 004 02 PIPING CELL B NORTH & SOUTH ELEV PIPING CELL B PLAN & SECTIONS H-2-827566 SH 005 02 HNF-14733 222-S LABORATORY TECHNICAL SAFETY REQUIREMENTS 05 OSD-T-151-00007 28 OPERATING SPECIFICATIONS FOR THE DOUBLE-SHELL STORAGE TANKS 00 INTEGRITY ASSESSMENT REPORT DESIGN & CONSTRUCTION FOR PROJECT W-314 TANK FARM RPP-20513 RESTORATION AND SAFE OPERATIONS 219-S MODIFICATION RPP-29002 02 Double-Shell Tank Waste Analysis Plan 14. Distribution Name Organization Blaak, Todd M AP FARM/WASTE TRANSFER ENGR Everett, Brian K WASTE TRANSFER PLANNING MGMT Hatten, Casey C INTERFACE, RISK, FACILITIES MGMT Huntington, Nikki I CSE & RELIABILITY ENGINEERING Jarecki, Theodore D PRODUCTION OPERATIONS Kembel, Monica R PRODUCTION OPERATIONS Kirch, Nick PROCESS ENGINEERING AP FARM/WASTE TRANSFER ENGR Marwan, Kevin H Medford, Timothy J RETRVL & CLOSURE/PROJ ENV CMPL

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Interface Control Document Between Washington River Protection Solutions, LLC and Hanford Laboratory Management and Integration, LLC for 222-S Lab Transition.

Author

Washington River Protection Solutions, LLC

Date Published May 2021



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Contract No. DE-AC27-08RV14800

219-S Interface Control Document

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Washington River Protection Solutions (WRPS)

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Digitally signed by Mills, Laura A Date: 2021.04.01 16:18:58 -07'00'

L.A. Mills, Project Contract Manager (Acting)

Date

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M.R. Kembel, Production Operations Manager

Date

Hanford Laboratory Management and Integration, LLC (HLMI)

Jessica C. Linton, Contracts Director

Don B. Hardy, 222-S Laboratory Manager

3/30/2021

Date

3/31/2021

Date

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TERMS

Ecology State of Washington Department of Ecology

HLMI Hanford Laboratory Management and Integration, LLC

ICDinterface control documentMOAMemorandum of AgreementWACWashington Administrative CodeWRPSWashington River Protection Solutions

1.0 SCOPE

This document defines the interface requirements between Washington River Protection Solutions (WRPS) and Hanford Laboratory Management & Integration (HLMI) to describe roles and responsibilities of the administrative controls in place for transfer of waste from the 219-S Waste Handling Facility's tank system to the Double Shell Tank Systems' SY Tank Farm.

The tanks within the 219-S Waste Handling Facility receive and temporarily store mixed waste from the 222-S Laboratory analytical processes. Waste is received through gravity -fed drain lines to tanks in 219-S. When adequate waste is collected, waste is transferred to a third tank in 219-S for sampling and treatment if necessary. Waste will then be transferred to a double-shell tank at the SY Tank Farm. Two waste transfer lines, SNL-5350 and SNL-5351 connect the 219-S Building to the SY Tank Farm. Currently no transfers from 219-S Tank 102 to Tank 241-SY-103 via motor-operated valve 219S-WT-V-5354 is allowed.

The 219-S waste transfer pump is an air driven diaphragm pump. An administrative lock is installed on valve CA-V-6607 and located within the 219-S Waste Handling Facility. This valve controls operation of the waste transfer pump. This valve ensures waste is not inadvertently sent to Tank 241-SY-103 or Tank 241-SY-101. Removal of the lock will physically connect the Tank Farm waste transfer system to an active waste transfer pump, which initiates Tank Farm DSA and TSR level control requirements. The interface boundary between Tank Farm waste transfer system and 222-S lab facilities is the 219-S exterior wall.

2.0 RESPONSIBILITIES/REQUIREMENTS

This ICD is subordinate to the current respective Prime Contracts and Memorandum of Agreements (MOA) between the parties. Applicable MOAs include current versions of TOC-MOA-HLMI-00096, Memorandum of Agreement for the Performance and Payment of Services between Washington River Protection Solutions and Hanford Laboratory Management and Integration. The terms and conditions contained in the prime contracts and other agreements applicable to the respective parties shall prevail over any conflicts and conflicting terms and conditions herein.

The following sections delineate the respective responsibilities between WRPS and HLMI. Appendix A provides the associated transfer diagram and drawings for the interface.

2.1 WRPS

WRPS Responsibilities:

- 1. Conduct transfers in compliance with TO-430-080 and share changes with potential impacts with HLMI.
- 2. Communicate sampling requirements from HNF-SD-WM-DQO-001 to be incorporated into ATS-MP-1011, 222-S Laboratory 219-S Tank 102 Sampling and Analysis Plan.
- 3. Communicate waste acceptance criteria for the DST System that will be incorporated into 222-S procedures governing waste acceptance into the 219-S Tank System.

- 4. WRPS Design Authority review and approve design documentation for modifications to the 219-S waste transfer pump (WT-P-1) with potential to impact waste transfer lines (e.g., pressure).
- 5. Perform waste compatibility assessment for the transfer of waste from 219-S tank 102 to DST 241-SY-101.
- 6. Controls removal and installation of the administrative lock on valve CA-V-6607.
- 7. Monitor transfer line and siphon station leak detection and SY levels during the transfers.
- 8. Operation and control of the Containment Leak Sump Pumps at the siphon stations as required.
- 9. Communicate any potential impacts to future transfers to SY farm.
- 10. Provide written authorization to transfer or notification and explanation of why the transfer is not acceptable.
- 11. Maintains TFMCS and TFLAN components within 219-S in support of transfer operations.
- 12. Authorize HLMI to resume a stopped transfer to SY Farm when appropriate.

2.2 HLMI

HLMI Responsibilities:

- 1. Conduct transfers in compliance with ATS-LO-100-177 and share changes with potential impacts with WRPS.
- 2. Control waste additions into the 219-S Tank System so as to comply with communicated DST System waste acceptance criteria.
- 3. Operations, surveillance and maintenance of 219-S, except for TFMCS & TFLAN components.
- 4. Operates the waste transfer pump located inside of 219-S.
- 5. Communicate schedule of 219-S transfers.
- 6. Ensure design documentation for modifications to the 219-S waste transfer pump (WT-P-1) with potential to impact waste transfer lines (e.g., pressure) receives WRPS Design Authority review and approval.
- 7. Provide notification of intent to sample 219-S tank 102 per ATS-MP-1011, 222-S Laboratory 219-S Tank 102 Sampling and Analysis Plan.
- 8. Sample the 219-S tank 102 contents per ATS-MP-1011, 222-S Laboratory 219-S Tank 102 Sampling and Analysis Plan -.
- 9. Adjust waste to meet chemistry control requirements as listed in OSD-T-151-00007.
- 10. Provide sample analysis report via SmartPlant.
- 11. Upload sample results to TWINs.

- 12. Provide a Waste Stream Profile per RPP-29002.
- 13. Provide a written request to transfer.
- 14. Coordinate transfer with WRPS, upon receipt of authorization to transfer.
 - Address any questions or concerns raised by WRPS relating to a transfer request before discharging to SY Farm.
- 15. Visually monitor surge suppressor WT-ARSR-1 during transfer.

3.0 REFERENCES

ATS-LO-100-177, 222-S Laboratory Transfer 219-S Tank 102 Liquid Waste to Tank Farms, Pipeline

ATS-LO-040-121, 222 S Laboratory Perform 222 S Process Equipment Surveillance

H-14-020831, WASTE TRANSFER SYSTEM (WT) O&M SYSTEM P&ID, Shts 1,3, 6 & 7

H-14-107346 Sheet 7, Rev 39, DST Waste Transfer Primary Piping Diagram

H-2-827566, SH 5 Rev 1, Piping Cell B Plan & Sections

H-2-820831 Rev 3, Civil Plan & Profile STA 0+00 to STA 14+00

H-2-820832 Rev 3, Civil Plan & Profile STA 14+00 to STA 24+00

H-2-820833 Sheet 1-3, Civil Plan & Profile

H-2-827563 P&ID Retention and Neutralization BLDG

HNF-12125, 222-S Laboratory Documented Safety Analyses

HNF-14733, 222-S Laboratory Technical Safety Requirements

HNF-SD-WM-TSR-006, Tank Farms Technical Safety Requirements

OSD-T-151-00007, Operating Specifications for the Double-Shell Storage Tanks

RPP-13033, Rev 7Q, Tank Farms Documented Safety Analysis

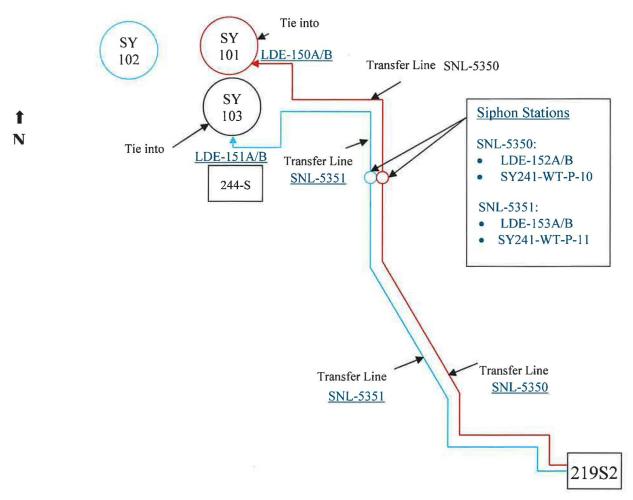
RPP-20513, Integrity Assessment Report Design and Construction for Project W 314 Tank Farm Restoration and Safe Operations; 219 S Modification.

RPP-29002, Waste Analysis Plan

TO-430-080, Transfer from 219-S Tank 102 to SY-101

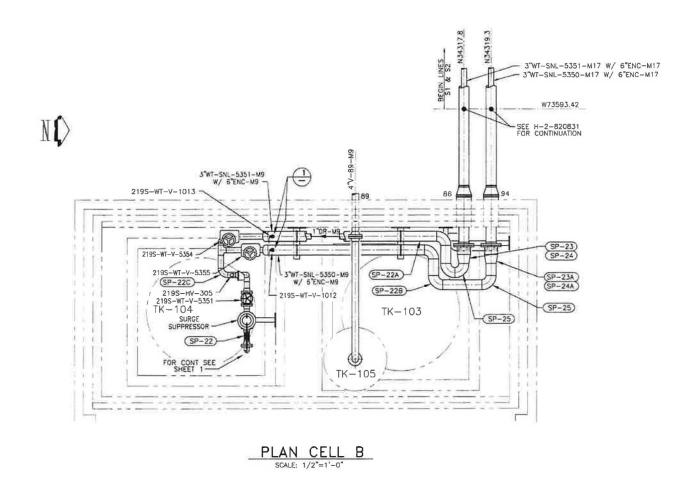
4.0 APPENDICES

A-1, FIGURE OF TRANSFER LINES FROM 219-S TO SY FARM THRU THE SIPHON STATIONS



(Schematic From Course 350290/350291)

A-2, EXCERPT OF DRAWING H-2-827566, SH 5, PIPING CELL B PLAN AND SECTIONS



A-3, EXCERPT OF DRAWING H-14-020831, SH 6, WASTE TRANSFER SYSTEM (WT) O&M P&ID

