

ENGINEERING CHANGE NOTICE	Page 1 of <u>2</u>	1. ECN No 621343
		Proj. ECN

2. ECN Category (mark one) Supplemental <input type="checkbox"/> Direct Revision <input checked="" type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void <input type="checkbox"/>	3. Originator's Name, Organization, MSIN, and Telephone No. J. Jo, 8E480, R2-12, 373-9322	3a. USQ Required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Date 05-05-95
5. Project Title/No./Work Order No. TANK 241-B-104 TANK CHARACTERIZATION PLAN		6. Bldg./Sys./Fac. No. 241-B	7. Approval Designator N/A
8. Document Numbers Changed by this ECN (includes sheet no. and rev.) WHC-SD-WM-TP-349, REV. 0		9. Related ECN No(s). N/A	10. Related PD No. N/A
11a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 11b) <input checked="" type="checkbox"/> No (NA Blks. 11b, 11c, 11d)	11b. Work Package No. N/A	11c. Modification Work Complete N/A _____ Cog. Engineer Signature & Date	11d. Restored to Original Condition (Temp. or Standby ECN only) N/A _____ Cog. Engineer Signature & Date

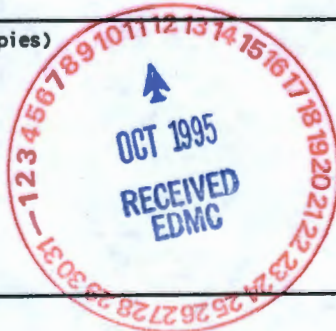
12. Description of Change
 The risers were identified for the sampling event in the Tank Characterization Plan (riser 2 and riser 7).

13a. Justification (mark one)

Criteria Change <input checked="" type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>
As-Found <input type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>

13b. Justification Details
 Identification of risers directs sampling crew which risers to use for the sampling event.

14. Distribution (include name, MSIN, and no. of copies)
 see attached Distribution Sheet



RELEASE STAMP

OFFICIAL RELEASE BY WHC	5
DATE MAY 04 1995	
<i>sto</i> 4	

ENGINEERING CHANGE NOTICE

15. Design Verification Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	16. Cost Impact				17. Schedule Impact (days) Improvement <input type="checkbox"/> Delay <input type="checkbox"/>
	ENGINEERING		CONSTRUCTION		
	Additional <input type="checkbox"/> \$	Savings <input type="checkbox"/> \$	Additional <input type="checkbox"/> \$	Savings <input type="checkbox"/> \$	

18. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 12. Enter the affected document number in Block 19.

SDD/DD	<input type="checkbox"/>	Seismic/Stress Analysis	<input type="checkbox"/>	Tank Calibration Manual	<input type="checkbox"/>
Functional Design Criteria	<input type="checkbox"/>	Stress/Design Report	<input type="checkbox"/>	Health Physics Procedure	<input type="checkbox"/>
Operating Specification	<input type="checkbox"/>	Interface Control Drawing	<input type="checkbox"/>	Spares Multiple Unit Listing	<input type="checkbox"/>
Criticality Specification	<input type="checkbox"/>	Calibration Procedure	<input type="checkbox"/>	Test Procedures/Specification	<input type="checkbox"/>
Conceptual Design Report	<input type="checkbox"/>	Installation Procedure	<input type="checkbox"/>	Component Index	<input type="checkbox"/>
Equipment Spec.	<input type="checkbox"/>	Maintenance Procedure	<input type="checkbox"/>	ASME Coded Item	<input type="checkbox"/>
Const. Spec.	<input type="checkbox"/>	Engineering Procedure	<input type="checkbox"/>	Human Factor Consideration	<input type="checkbox"/>
Procurement Spec.	<input type="checkbox"/>	Operating Instruction	<input type="checkbox"/>	Computer Software	<input type="checkbox"/>
Vendor Information	<input type="checkbox"/>	Operating Procedure	<input type="checkbox"/>	Electric Circuit Schedule	<input type="checkbox"/>
OM Manual	<input type="checkbox"/>	Operational Safety Requirement	<input type="checkbox"/>	ICRS Procedure	<input type="checkbox"/>
FSAR/SAR	<input type="checkbox"/>	IEFD Drawing	<input type="checkbox"/>	Process Control Manual/Plan	<input type="checkbox"/>
Safety Equipment List	<input type="checkbox"/>	Cell Arrangement Drawing	<input type="checkbox"/>	Process Flow Chart	<input type="checkbox"/>
Radiation Work Permit	<input type="checkbox"/>	Essential Material Specification	<input type="checkbox"/>	Purchase Requisition	<input type="checkbox"/>
Environmental Impact Statement	<input type="checkbox"/>	Fac. Proc. Samp. Schedule	<input type="checkbox"/>	Tickler File	<input type="checkbox"/>
Environmental Report	<input type="checkbox"/>	Inspection Plan	<input type="checkbox"/>		<input type="checkbox"/>
Environmental Permit	<input type="checkbox"/>	Inventory Adjustment Request	<input type="checkbox"/>		<input type="checkbox"/>

19. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number/Revision
N/A		

20. Approvals

Signature		Date	Signature		Date
<u>OPERATIONS AND ENGINEERING</u>			<u>ARCHITECT-ENGINEER</u>		
Cog. Eng.	J. Jo	<u>5-4-95</u>			_____
Cog. Mgr.	J.G. KRISTOFZSKI	<u>5-4-95</u>			_____

SUPPORTING DOCUMENT		1. Total Pages 33				
2. Title Tank 241-B-104 Tank Characterization Plan	3. Number WHC-SD-WM-TP-349	4. Rev No. 0A				
5. Key Words Tank 241-B-104, Tank Characterization Plan	6. Author Name: Jaiduk Jo Signature <u>Jaiduk Jo</u> Organization/Charge Code 8E480/MDR21					
7. Abstract N/A						
APPROVED FOR PUBLIC RELEASE						
8. RELEASE STAMP						
<table border="1"><tr><td>OFFICIAL RELEASE BY WHC</td><td style="text-align: center;">5</td></tr><tr><td>DATE MAY 04 1995 <i>Ata .4</i></td><td></td></tr></table>			OFFICIAL RELEASE BY WHC	5	DATE MAY 04 1995 <i>Ata .4</i>	
OFFICIAL RELEASE BY WHC	5					
DATE MAY 04 1995 <i>Ata .4</i>						

9613457.0960

RECORD OF REVISION		(1) Document Number WHC-SD-WM-TP-349		Page 1
(2) Title TANK 241-B-104 TANK CHARACTERIZATION PLAN				
CHANGE CONTROL RECORD				
(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release		
		(5) Cog. Engr.	(6) Cog. Mgr.	Date
0	(7) WHC-SD-WM-TP-349, REV 0, EDT 610415, April 12, 1995			
0A RS	Replaced pages A-1; ECN 621343	<i>Spidek</i>	<i>John Kunt</i>	5/4/95

A1.0 TANK CHARACTERIZATION OBJECTIVES

This Sampling and Analysis Plan (SAP) will identify characterization objectives pertaining to sample collection, hot cell sample breakdown, and laboratory analytical evaluation and reporting requirements in accordance with the *Tank Safety Screening Data Quality Objective* (Babad and Redus 1994) and *Interim Data Quality Objectives for Waste Pretreatment and Vitrification* (Kupfer et al. 1994). These Data Quality Objectives (DQO's) are described in the Tank Characterization Plan (TCP) for tank 241-B-104 (B-104). The pretreatment DQO, at the request of the Pretreatment Program, will have limited use in this SAP (refer to Section A6.1). This SAP will also identify procedures and requirements for collecting and characterizing samples from tank B-104 by the core sampling method.

A2.0 TANK STATUS AND SAMPLING INFORMATION

A2.1 TANK STATUS

Tank B-104 is identified as a low-heat load non-Watch List tank, that is passively ventilated, and is categorized as sound with interim stabilization and intrusion prevention completed. It entered service in August 1946 and as of December 31, 1994, it stored 1,404 kL (371 kgal) of non-complexed waste, which corresponds to a depth of 330 cm (130 inches). The waste is comprised of 3.9 kL (1 kgal) of supernatant; 230 kL (61 kgal) of saltcake; 340 kL (90 kgal) of unknown waste; and 829 kL (219 kgal) of sludge which includes 151 kL (40 kgal) of pumpable liquid remaining (Brevick et al. 1994). However, this contradicts with the current Hanlon document which, states that there are 261 kL (69 kgal) of saltcake, 3.9 kL (1 kgal) supernatant, and 1,140 kL (301 kgal) of sludge which includes 154 kL (47 kgal) of pumpable liquid remaining (Hanlon 1995).

The current maximum temperature reading from July 1993 is 66° F. Tank B-104 contains a single thermocouple tree with 12 thermocouple probes in riser 5. Specific thermocouple elevations are not available. Tank B-104 is a low-heat load tank and has a semiannual temperature monitoring requirement for January and July (Brevick 1994).

A2.2 SAMPLING INFORMATION

Tank B-104 is currently scheduled to be core sampled. Two core samples shall be collected from risers 2 and 7 of the tank. If a different riser is capable of meeting the intent of other requirements in the DQO, it may be used if the riser number is recorded and approved in writing in advance by the sampling cognizant engineer. Risers used may be recorded on a permanent data sheet, or recorded directly in a work package.

Based on current waste volume information, each of the core samples is expected to consist of seven segments. Segments 2 through 7 should be 48 cm (19 inches), and segment 1 should be 41 cm (16 inches). It should be noted that the sampling objective is to obtain a vertical profile of the waste; therefore, more or less segments may need to be taken depending on the accuracy of the current waste volume records. For detailed information regarding the sampling activities, refer to work package ES-95-166. This document contain operating procedures and the chain-of-custody records for this sampling event.

DISTRIBUTION SHEET

To Distribution	From Characterization Plans and Reports	Page 1 of 2
		Date 5-5-95
Project Title/Work Order Tank 241-B-104 Tank Characterization Plan (WHC-SD-WM-TP-349), Revision 0A		EDT No.
		ECN No. 621343

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
------	------	--------------------------------	-----------	------------------------------	-----------------

ONSITEU. S. Department of Energy -
Richland Field Office

C. A. Babel	S7-54	X
P. R. Hernandez	S7-54	X
W. Liou	S7-54	X
N. W. Willis	S7-54	X

MACTEC

J. P. Haney	S7-73	X
-------------	-------	---

Westinghouse Hanford Company

R. N. Campeau	S7-04	X
A. B. Cockrell	S7-12	X
T. F. Dale	T6-20	X
S. J. Eberlein	R2-12	X
G. D. Forehand	S7-31	X
R. K. Fuller	T6-31	X
V. W. Hall	H4-19	X
J. Jo (2)	R2-12	X
W. J. Kennedy	S7-03	X
J. G. Kristofzski	T6-06	X
J. S. Lee	S7-03	X
A. D. Olguin	S7-04	X
A. D. Rice	T6-06	X
R. H. Stubbs	S7-12	X
C. L. Thomas	H4-19	X
T. C. Tribble	S1-57	X
Central Files (2)	L8-04	X
O.S.T.I. (2)	L8-07	X
TCRC (2)	R2-12	X

OFFSITE

U. S. Department of Energy - Headquarters
Office of Environmental Restoration and
Waste Management EM-563
12800 Middlebrook Road
Germantown, MD 20874

K. T. Lang X
J. A. Poppiti X

Los Alamos Technical Associates
750 Swift, Suite 14
Richland, WA 99352

A. T. Dicenso X
C. J. Lindquist X
T. T. Tran X
G. P. Westleigh X