

Control Number VES-71556		WO CLOSED		Off-Shift Issuance: _____	
2. Originator LAWRENCE PETKUS /WV-48 /4402		Signature <i>Lawrence Petkus</i> 8/15/02		Date/Time 8-15-02	
Print Name/MS/Ext		Signature/Date		Signature/Date	
4. Charge No. (Labor) (M & S)		5. Equipment I.D. NA _____			
WH 1210006 /WH		Eqpt/Instr/Valve # 63-V011 MELTER FEED HOLD TANK			
6. Performance Code		System		Equipment	
A. <input type="checkbox"/> Special Preparation		0 <input type="checkbox"/> May be shut down		0 <input type="checkbox"/> May be shut down	
		1 <input type="checkbox"/> Must be shut down		1 <input type="checkbox"/> Must be shut down	
B. <input checked="" type="checkbox"/> Normal Preparation		2 <input checked="" type="checkbox"/> Must be operating		2 <input checked="" type="checkbox"/> Must be operating	
		3 <input type="checkbox"/> NA		3 <input type="checkbox"/> NA	
Other: _____					
8. System: 63I		9. Location: MWOA		10. Dwg/Sketch: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
		Attached <input type="checkbox"/>		11. Docs./Dwgs Rgd. Revs: TM# _____ ECN# _____ NA <input type="checkbox"/> X <input checked="" type="checkbox"/>	
				12. Profile No. N/A	
				13. Document Ref No. N/A	
14. Quality Level C		15. Safety Class N		16. ALARA Trigger Level(s) [WV-984, Sec. 7.8.3] Exceeded Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
				ALARA Checklist Attached: Yes <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
				Detailed Dose Estimate Attached: Yes <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
18. RWP Required: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		19. Hoisting & Rigging: NA <input checked="" type="checkbox"/>		20. QA Insp. Rgd: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
RWP No. _____		Routine <input type="checkbox"/> Non-routine <input type="checkbox"/>		21. Welding or Special Process Rgd: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
		Critical (Ref. SOP 00-38) <input type="checkbox"/>		If Yes, Cite _____	
22. Special Qualification Rgd.: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		23. IWP required: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		24. Ground Disturbance Permit Required: Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
		IWP No. _____		Attached <input type="checkbox"/>	
25. RWG Walkdown: (Print) NAME: E. ARDUS		DATE: 8-15-02		26. Reqd. Finish Date: SEPTEMBER 30, 2002	
				27. Key Event KE 560P	
28. "Is a USQ Safety Evaluation (USQD Form WV-3306, Sections V, VI, and VII) required? *Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
<i>Lawrence Petkus</i>		LAWRENCE PETKUS		8/15/02	
(USQD Originator or Safety Analyst Signature)		(Printed)		(Date)	
If Yes: attach the completed USQD Form WV-3306, Sections V, VI, and VII."					
29A. HLW - Does W.O. provide instr. For Maint., Ops. Support etc. for Vit Sys 63I, 63J, L, K, 63P, 68, 69A, B or 200A, B Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
B. Is Maint/support/testing/R&D issue listed in WVDP-200 Part IV HLW activities list)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
C. Is the activity designated HLW? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
30. Type of work:		31. Title: MFHT HEEL REMOVAL			
<input type="checkbox"/> Fab <input type="checkbox"/> Test					
<input type="checkbox"/> Install <input type="checkbox"/> Calib					
<input type="checkbox"/> Mod/Repair <input checked="" type="checkbox"/> Other					
<input type="checkbox"/> Insp					
32. Resp. WVNS Work Group: VITRIFICATION OPS		33. WGS (Print Name): R.C. Myers		34. Work Group Manager: JOSEPH CURCIO	
		WGS <i>R.C. Myers</i> 8-15-02 (Walkdown Sat)			
35. Review/Walkdown Approval (Signature/Date)		36. Changed during review cycle Reroute to:			
CM <i>Mike</i> 8/27/02 MS- 48		IH&S <i>George Czuma</i> 8/27/02 MS- AA15			
Maint <i>N/A</i> MS- _____		QA <i>Mike</i> 8/27/02 MS- VA-3			
RE <i>Eric J. Lawler</i> 8/27/02 MS- 226		Eng <i>N/A</i> MS- _____			
FM <i>Mike</i> 8/27/02 MS- _____		EA <i>Derald Rock</i> 8/27/02 MS- WV-50			
WMS <i>Mike</i> 8/27/02 MS- 31H		Orig <i>OK to TWEED</i> 8/27/02 MS- _____			
		MS- _____			
37. Brief Information of Work Completion for History Record		38. Documentation of Work Completion			
<input type="checkbox"/> Yes		Work Group Supervisor <i>Mike</i> 8-10-02			
<input checked="" type="checkbox"/> No (Check One)		Date			
_____		<i>Lawrence Petkus</i> 8-10-02			
_____		Date			
_____		Originator			
(Attach additional pages as necessary)					

MFHT HEEL REMOVAL

1 INTRODUCTION

1.1 PURPOSE

The MFHT heel will be transferred to the CFMT. Consolidating any feed slurry in the CFMT after slurry feeding of the Melter has been completed.

1.2 SCOPE

The WO covers transferring the MFHT to the CFMT, adding water to the MFHT and transferring the flush water to the CFMT. .

2 PRECAUTIONS / LIMITATIONS

2.1 Verify that vessel have sufficient capacity to accept transfers.

3 MATERIAL / SPECIAL TOOLS AND EQUIPMENT

3.1 Demineralized water hose, provided by Vit. Ops, to transfer water

4 PREREQUISITES

4.1 Referenced SOP s provide initial conditions for transfer.

5 PERFORMANCE SECTION

5.1 Transfer the contents of the MFHT to the CFMT per SOP 63-21. Get transfer data sheet from SAE.

5.2 Complete MFHT transfer prerequisites in Section 8.3 of SOP 63-25 Rev. 3

5.3 RCO tech to survey for line break at 6-CH-HC-905.

OK to proceed with connection

date

9-10-02

5.4 Connect a transfer hose from 63-DW-H-0449, isolation valve at the demineralized water line, Utility station south end of MWOA, to hose connection 6-CH-HC-905, next to rack 2W5.

5.5 Close valve 6-CH-H-903, near 2W5.

5.6 Open valves:

6-CH-H-904, Near 2W5, hose connection isolation valve

63-DW-H-0449, Utility station isolation valve

6-DW-GL-027, Utility station globe valve.

5.7 Open 6-CH-H-963, at penetration 1213, (LNOA) and transfer demineralized water into the MFHT until LIXX-1156 reaches 22 inches.

5.8 Close 6-CH-H-963 at penetration 1213 (LNOA) when the transfer is complete.

5.9 Close valves

6-CH-H-904, Near 2W5, hose connection isolation valve

63-DW-H-0449, Utility station isolation valve

6-DW-GL-027, Utility station globe valve.

5.10 Start agitator at HIC-1111. Mix the MFHT for a minimum of two hours before transfer to the CFMT.

+

5.11 RCO tech to survey for line break / hose removal at 6-CH-HC-905.

OK to proceed with line break Tom Benz date 9/10/02

5.12 Remove hose from 6-DW-H-0449, isolation valve at the demineralized water line, Utility station south end of MWOA, to hose connection 6-CH-HC-905, next to rack 2W5.

5.13 Transfer the contents of the MFHT to the CFMT per SOP 63-21. Get transfer data sheet from SAE.

6 POST MAINTENANCE TESTING

6.1 No testing required.

7 POST TEST CONFIGURATION

7.1 Concentrate in the CFMT as required for water management.

HAZARDS SCREEN CHECKLIST

Project/Document ID: MFHT HEEL REMOVAL	Rev.	FC#
Hazards Analyst: Lawrence Petkus	Date: August 15, 2002	

If the answer to any of the following questions in "Yes," consult the Hazard Control Specialty Area indicated in the right-hand column for assignment of a Hazards Controls Specialist. Screening of a field change needs to address only the impact of the field change on the original Hazards Screen Checklist.

Hazard Control Specialty Areas Acronyms

CSE - Criticality Safety Engineer	IH&S - Industrial Hygiene & Safety
EA - Environmental Affairs	MPOSS - Main Plant Operations Shift Supervisor
EM - Emergency Management	RP - Radiation Protection
FM - Facility Manager	USQD Orig - USQD Originator
FP - Fire Protection	WMS - Waste Management Services

YOU SHALL CONSIDER BOTH NORMAL OPERATIONS AND PROCESS UPSET CONDITIONS.
Sheet 1 of 4

#	Yes	No	Potentially Hazardous Situations	Cog. Function
Radiological and Utilities				
1a	✓		Will the work be performed in a radiologically posted area, i.e., radiological buffer area, radiation area, high radiation area, contamination area, etc.?	RP
1b		✓	Will the work involve high-activity sealed radioactive sources?	RP
1c		✓	Will the work involve any type of excavation or ground intrusion (e.g., driving posts, installing Hilti bolts)? (See WV-370; use Form WV-3521.)	RP, IH&S
1d		✓	Will the work involve any type of construction, remodeling, or demolition?	RP, IH&S
1e		✓	Will the work be conducted on equipment containing radiation detectors?	RP
1f	✓		Will the work involve systems or vessels containing highly radioactive waste?	RP
Chemical Note: Obtain and review Material Safety Data Sheets for all chemicals involved.				
2a		✓	Will toxic, carcinogenic, flammable, or reactive chemicals be involved (either used, e.g., lead paint, PCBs, or generated, e.g., wastes)?	IH&S, EM, EA
2b		✓	Will corrosive or oxidizing chemicals other than water be used or generated?	IH&S
2c		✓	Will compressed or uncompressed gases in cylinders or bottles or cryogenics be involved, e.g., halon in cylinders?	IH&S
2d		✓	Will the work involve piped-in chemicals, chemical sensors, or equipment or piping containing chemicals?	IH&S
2e		✓	Will the work involve Trade/Brand name chemicals that do not list all the ingredients on the MSDS?	IH&S, EM, EA
2f		✓	Will the work involve the purchase of new or increase an existing inventory level of chemicals?	IH&S, EA, EM, WMS

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YOU SHALL CONSIDER BOTH NORMAL OPERATIONS AND PROCESS UPSET CONDITIONS.

Sheet 2 of 4

#	Yes	No	Potentially Hazardous Situations	Cog. Function
Fire and Explosion				
3a		✓	A. Will an open flame be used or produced?	IH&S, FP
3b		✓	B. Will a heat source greater than 100°C be used, produced, or located in close proximity to the work?	IH&S, FP
3c		✓	C. Will the work involve or require disabling a fire alarm or protection system?	IH&S, FP, MPOSS
<div style="display: flex; justify-content: space-between;"> <div>Safety Basis</div> <div>Note: This question is intended to trigger the early involvement of a USQD Originator and does <u>not</u> replace the USQP required by WV-914.</div> </div>				
4a		✓	Will the work involve any changes to facilities or procedures as described in a safety analysis or involve tests or experiments?	USQD Orig
Emergency Preparedness				
5a		✓	Will the work disable the 812-all-page system, the 222-plant-page system, or the sheltering alarm? (See SOP 00-04; use Form WV-2164.)	EM, MPOSS
5b		✓	Will the work disable the meteorological tower or instrumentation?	EA, EM, MPOSS
5c		✓	Will the work block or render inaccessible any emergency access or emergency relocation routes or assembly areas?	EM, MPOSS
5d		✓	Will the work affect the ability to respond to an emergency at an adjacent facility?	EM, MPOSS
5e		✓	Will the work involve maintenance on or temporary or permanent relocation or disablement of emergency response equipment?	EM, MPOSS
5f		✓	Will the work require the development of new or a change to existing emergency management postings, signs, or instructions (e.g., relocation route postings, assembly area maps, or ventilation or sheltering instructions)?	EM
5g		✓	Will the work directly or indirectly affect the operability of the Emergency Operations Center's (EOC's) or the Technical Support Center's (TSC's) facility or equipment?	EM, MPOSS
Environmental, Waste Minimization, Pollution Prevention, and Regulatory				
6a		✓	Will the work potentially result in any airborne releases (e.g., smoke, fumes, gases, exhaust, asbestos, dust, mercury, radioactive material)?	EA
6b		✓	Will the work potentially result in any liquid releases (e.g., water, petroleum products, mercury, chemicals) into the environment?	EA
6c	✓		Will the work produce any waste products (e.g., industrial waste, hazardous waste, mixed waste, radioactive waste) or involve the on-site or off-site transportation of any waste products?	WMS, EA
6d		✓	Will the work result in changes to the site storm water drainage system (e.g., changes to drainage pathways/patterns) or result in removal of established vegetative ground cover or exposure of soil to rain/snowfall?	EA
6e		✓	Will the work result in the siting of new structures, the relocation, demolition, or removal of existing structures, or modifications to existing structures (e.g., removing a tank or adding floor space to a building)?	EA
6f		✓	Will the work disable or be performed in close proximity to any environmental monitoring equipment (i.e., air monitors, groundwater wells, etc.)?	EA

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YOU SHALL CONSIDER BOTH NORMAL OPERATIONS AND PROCESS UPSET CONDITIONS.
Sheet 3 of 4

#	Yes	No	Potentially Hazardous Situations	Coq. Function
6g		✓	Will the work require the disturbance of migratory bird nests or involve animal control?	EA
6h		✓	Will the work involve PCB items in use (e.g., transformers, capacitors, voltage regulators), PCB wastes, or the removal or abandonment of pipes that distribute natural gas?	EA
6i		✓	Will the work potentially affect wetlands, the flow of creeks or streams, or lake discharges?	EA
Equipment Status • Facility Manager shall decide whether the Radiation and Safety Committee must review the proposed activity pursuant to WV-906.				
7a		✓	Will the work involve removing Process Safety Requirement (PSR) controlled equipment from service? (See WVDP-218.)	FM *
7b		✓	Will the work be performed on equipment identified in any Process Safety Requirement? (See WVDP-218.)	FM *
7c		✓	Will the work be performed on or disable Safety Class A, B, or C equipment? (See WVDP-204.)	FM *
7d		✓	Will the work be performed on ventilation systems or air effluent monitoring systems?	FM *
7e		✓	Will the work impair the operability of or have the potential to inadvertently actuate any alarm (e.g., fire detection, fire suppression, carbon monoxide, NOx, ammonia) system?	FM *, IH&S, MPOSS
7f		✓	Will the work be performed on any standby or backup power supply? (See SOP 00-04, Appendix E.)	FM *
7g		✓	Will the work impair any breathing air supply or fresh air intake?	FM *
Industrial Hygiene and Safety, Emergency Management and Construction Safety				
8a		✓	Will the work be performed on open-sided platforms or roofs more than 4 feet above ground level or more than 6 feet up on a ladder?	IH&S
8b		✓	Will the work require designing and/or building a permanent fall-protection system for other than field or construction use?	IH&S
8c		✓	Will the work require burning, welding, or grinding or involve forms of high energy (e.g., electrical, steam, high-pressure air, or water)?	IH&S
8d		✓	Will the work require entry into a confined space?	IH&S
8e		✓	Will the work produce a breathing hazard (dust, fumes, solvent vapors, etc.) requiring use of respiratory protection for non-radiological purposes?	IH&S
8f		✓	Will the work require handling asbestos or insulation-containing materials?	IH&S
8g		✓	Will the work be conducted on or near live electrical components with more than 50 volts alternating current (VAC)?	IH&S
8h		✓	Could the work or job location result in "heat" or "cold" injuries such as heat exhaustion, frost bite, or hypothermia?	IH&S
8i		✓	Will the work produce noise greater than 85 dBA at the job site or at other locations?	IH&S
8j		✓	Will the work produce paint or chemical fumes at the job site or at other locations?	IH&S
8k		✓	Will the activity involve manual lifting of materials, power tools, vibrating equipment, or repetitive motions that could cause musculoskeletal injury?	IH&S
8l		✓	Will the work involve hoisting and/or rigging activities?	IH&S

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YOU SHALL CONSIDER BOTH NORMAL OPERATIONS AND PROCESS UPSET CONDITIONS.
Sheet 4 of 4

#	Yes	No	Potentially Hazardous Situations	Cog. Function
8m		✓	Will the work result in the temporary or permanent routing of utilities (e.g., electricity, air, gas, steam, water, gasoline, fuel oil) that may become damaged as a result of exposure to personnel or vehicular traffic?	IH&S
8n		✓	Will the work result in the temporary or permanent routing of utilities (e.g., electricity, air, gas, steam, water, gasoline, fuel oil) that may unintentionally become covered in some manner by material (e.g., snow, water, sand, dirt, gravel, mud, boxes, containers)?	IH&S
8o		✓	Will the work breach a system known or suspected to contain hazardous materials (e.g., mercury) or energy sources (e.g., steam, electricity)?	IH&S
8p		✓	Will the work be performed in an area where previous spills of hazardous materials (e.g., mercury) are known or suspected to have occurred?	IH&S
8q		✓	Will the work involve conditions where the unexpected energization or startup of machines or equipment or the release of stored energy could cause injury or death to personnel? (See SOP 00-04.)	FM
Nuclear Criticality				
9a		✓	Will the work involve or potentially involve greater than 1 gram of fissionable material (e.g., U-233, U-235, Pu-239, Pu-241)?	CSE
9b		✓	Will the work involve spent fuel handling outside an approved shipping container?	CSE
9c		✓	Will the work involve storage of fissile material in a container other than described in PSR-6 or PSR-18?	CSE
9d		✓	Will the work impact any fissionable material contained in the GPC, PMC, XC-1, XC-2, or PPC?	CSE

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APPENDIX C
Transfer Data Sheet
(Page 1 of 1)

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Rev. 5
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Section 1

Slurry Batch # N/A

	Send Tank BEFORE	Receipt Tank BEFORE
Tank Name	MFHT	CFMT
Tank Number	63-V-011	63-V-001
Date	9-10-02	9-10-02
Time	0858	0859
LIX* (Inches) AGITATOR OFF (1, 2, or 3 readings)	26 25 26 Ave = 25.9	58.3 58.4 57.9 Ave = 58.2
DIX (Sp.Gr.) AGITATOR OFF (1, 2, or 3 readings)	1.04 0.91 1.03 Ave = 0.99	1.058 1.089 1.140 Ave = 1.096
Temp. (°C)	28	26.2
Average Volume (L)	5468.5	10494.6

* Instantaneous Readings

Section 2

Volume to be transferred As much of MFHT as possible (NOT TO EXCEED 112" IN CFMT)

SAE Signature [Signature] Date 9/10/02

Shift Engineer Signature [Signature] Date 9-10-02

Section 3

	Send Tank AFTER	Receipt Tank AFTER
Tank Name	MFHT	CFMT
Tank Number	63-V-011	63-V-001
Date	9-10-02	9-10-02
Time	1135	1135
LIX (Inches) AGITATOR OFF (1, 2, or 3 readings)	1 -2 0 Ave = -0.4	86.3 86.5 85.8 Ave = 86.2
DIX (Sp.Gr.) AGITATOR OFF (1, 2, or 3 readings)	1.04 0.91 1.03 Ave = 0.99	1.018 1.047 1.099 Ave = 1.054
Temp. (°C)	26.3	28.6
Average Volume (L)	770	15654.1

Total Flush Water (L) N/A

VOSS Signature [Signature] Date 9-10-02