0054822

Meeting Minutes Transmittal

324 REC/HLV
Project Managers' Meeting
Federal Building/Room 554
Richland, Washington

January 11, 2001
2:00 p.m. to 3:00 p.m.

The undersigned indicate by their signatures that these meetings minutes reflect the actual occurrences of the above dated Unit Managers Meeting.

DC Langstaff — **Date:** 3/15/01
David C. Langstaff, RL Representative

Fredrick W Bond — **Date:** 3/15/01
F. W. Bond, Washington State Department of Ecology

J M Barnett for DER — **Date:** 15 Mar 2001
D. E. Rasmussen, Contractor Representative, FH

Meeting Minutes are attached. The minutes are comprised of the following:

Attachment 1 - Agenda
Attachment 2 - Summary of Discussion and Commitments/Agreements
Attachment 3 - Attendance List
Attachment 4 – December 2000 324 Building B-Cell Highlights
Attachment 5 – 324 Building M-89-02 Checklist as of 12/31/00
Attachment 6 – Size Reduction of Non-Mixed Waste Equipment from 324 Building D-Cell

Attachment 1

324 REC/HLV
Project Managers' Meeting
Federal Building/Room 554
Richland, Washington

January 11, 2001
2:00 – 3:00 p.m.

AGENDA

1. Introduction(s)
2. Previous meeting minutes
3. B-Cell cleanout project status
   a. M-89-02 Milestone revised schedule and status
   b. Recent progress/highlights
   c. M-89-02 Completion Checklist showing M-89-02 status
   d. Future size reduction of non-mixed waste equipment from D-Cell
4. Action item review
   a. Conduct workshop meeting on January 10, 2001, regarding future size reduction of non-mixed waste equipment from D-Cell
   b. Other action(s)
5. Other topics/discussions
   a. Future 324 Building visits/workshops as appropriate
   b. TPA Milestone Review meeting, January 23, 2001 (M-89 and M-92)
   c. Other topics

11 Schedule next meeting

Attachment 2

324 REC/HLV
Project Managers Meeting
Federal Building, Room 554
Richland, Washington

January 11, 2001
2:00 p.m. - 3:00 p.m.

1. Introduction(s)

   There were no new introductions to be made.

2. Previous Meeting Minutes

   The December 19, 2000, Project Managers' Meeting (PMM) minutes have not been finalized, and will be approved at a later time.

3. B-Cell cleanout project status

   a. M-89-02 Milestone revised schedule and status

      D. Rasmussen (FH) acknowledged that the Washington State Department of Ecology's (Ecology) letters regarding the M-89-02 milestone schedule, dated December 20 and 22, 2000, were received. The U.S. Department of Energy (DOE), Richland Operations Office (RL) sent a letter to Ecology dated December 21, 2000, regarding the M-89-02 milestone recovery schedule. R. Bond (Ecology) pointed out that a revised schedule would be more appropriate terminology than recovery plan schedule, since the milestone was missed. There was some discussion that Ecology may be sending DOE-RL a follow-up letter indicating that use of the term recovery schedule is inappropriate.

      T. Erickson (FH) reported that FH is currently 17 hours ahead of schedule. A total of five mixed-waste boxes (steel waste disposal boxes [SWDB]) have been shipped out of B-Cell. Two more SWDBs are in the process of being loaded out. Grout container 88 (GC-88) was cleaned out. All of the high-level vault filters will fit into two SWDBs, which will reduce the number of SWDBs and accelerate the mixed-waste shipment schedule.

      R. Bond emphasized the importance of meeting the revised milestone deadlines of March 30, 2001, and July 31, 2001.

   b. Recent progress/highlights

      D. Rasmussen distributed a handout providing the recent 324 Building B-Cell highlights from 12/11/00 through 01/11/01 (Attachment No. 4). T. Erickson

reported on the 30-ton crane. The bridge on the crane is out of alignment, and since realignment would impact the March 30 and July 31, 2001, milestones, preventative maintenance is ongoing to ensure the rails are not wearing out. The bridge will be aligned at a later time. All of the major load-bearing bolts have been replaced.

c. M-89-02 actions/performance standards checklist showing M-89-02 status

The M-89-02 checklist was provided at the January 10, 2001, workshop, and the recent changes made to the checklist were highlighted. D. Rasmussen distributed a revised checklist that incorporated the changes (Attachment No. 5). An updated checklist will be provided at each PMM.

d. Future size reduction of non-mixed waste equipment from D-Cell

D. Rasmussen provided the handout that was distributed at the January 10, 2001, workshop, which describes size-reduction of non-mixed waste for D-Cell (Attachment No. 6). R. Bond inquired about how long the D-Cell waste would remain in B-Cell for size reduction. T. Erickson estimated it would take two weeks to a month to size reduce and fill a grout container and then move it out of B-Cell.

4. Action Item Review

a. Conduct workshop meeting on January 10, 2001, regarding future size reduction of non-mixed waste equipment from D-Cell

A workshop was held January 10, 2001. A video of B-Cell was viewed.

b. Other action(s)

An action was taken to provide a video of B-Cell work at each PMM.

5. Other topics/discussion

a. Future 324 Building visits/workshops as appropriate

Future visits or workshops will be scheduled when needed.

b. TPA Major Milestone Review meeting, January 23, 2001 (M-89 and M-92)

DOE-RL will transmit the presentation materials for milestones M-89 and M-92 to Ecology by January 16, 2001.

c. Other topics

D. Langstaff (DOE-RL) initiated a discussion regarding document transmittal protocol between DOE-RL and Ecology. DOE-RL is in the process of

establishing the guidelines, which will be presented at the next PMM. D. Langstaff indicated that a package containing technical documentation supporting the revised M-89-02 schedule will be provided at the next PMM.

6. Schedule Next Meeting

The next meeting was scheduled for February 7, 2001, at 3:00 p.m. at the Federal Building in Richland, Washington.

Attachment 3

Attendance List

Meeting Title: **324 Building REC/HLV Project Managers Meeting (PMM)**

Date: **January 11, 2001**

Original included in hard copy.

Name	Company	Phone Number
David E. Rasmussen	FH-RCP 324/327	376-3288
Tina Masterson-Heggen	Ecology	736-5701
David C. Langstaff	RL-AMNM/FTD	376-5580
J. M. Barnett	RL-RCP	373-2928
R. Piippo	FH-TPA	373-3285
Rick Bond	Ecology	736-3007
Gloria A. Williams	RL-DOE-RCA	372-0586
Tim Erickson	FH	373-0295
Dave Evans	RL-FTD	373-9278
Dave Templeton	RL-FTD	373-2966

Attachment 4

December 2000 324 Building B-Cell Highlights

Mixed waste (MW) Activities

Steel Waste Disposal Box (SWDB) Container MW Shipments to 200 Area

- No SWDB shipments were performed from 12/11/00 – 12/31/00
- Four (4) of fourteen (14) planned SWDB shipments have been completed, as of 12/31/00
- Based on discussions of safety issues and subsequent RL rejection of the EP-0063 exception request, actions are underway to determine whether the CWC Authorization Basis Document supporting analyses can be augmented to accommodate acceptance of SDWBs with bottom hot spots exceeding 1000 millirem/hr

SWDB Loadouts and staging of SWDBs for shipment

- 5th SWDB (RGC-324-00-101) remained staged in 90-day area during 30-ton crane repair/preventive maintenance outage
- Five (5) of fourteen (14) planned MW loadouts have been completed, as of 12/31/00
- Loadout of RGC-324-00-117 (formerly referred to as RGC-9) remained on hold due to predicted/calculated SWDB bottom hot spots up to 17,000 millirem/hr

Filling/Loading MW items into Rectangular Grout Containers (RGCs) within B-Cell

- Transferred additional pre-shielded RGCs into B-Cell for MW loading
- Completed loading of MW items into RGC-324-00-104
- Seven (7) of fourteen (14) planned RGCs have been filled/loaded with MW, as of 12/31/00

Non-Mixed Waste (non-MW) Activities

- Size reduced Glass Canister Storage Rack (GCSR) and loaded into GCs
- Loaded items into GC-160, including glass logs from GC-88
- Finished removal of items from GC-88, cleaned out and rinsed GC-88 to prepare it for potential re-use
- Completed GC-157 and GC-159 loading, dose profiling, and moved to A-Cell for staging for future shipment
- Size reduced shuttle box
- Thirty-five (35) of the planned forty (40) GCs have been filled/loaded and removed from B-Cell (for staging and shipment), as of 12/31/00
- Seventeen (17) of the thirty-five (35) loaded GCs have been shipped to the 200 Area, and eighteen (18) are staged in A-Cell for future shipment, as of 12/31/00

Attachment 5

324 Building M-89-02 Checklist as of 12/31/00

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
2) Second Distinct Action for M-89-02 (reference 1):						
The second distinct action required under interim milestone M-89-02 requires the removal of excess equipment from the REC B-Cell Table attached to RL letter 00-FTD-006 provides all equipment currently within the REC B-Cell and defines "Excess" versus "Required" equipment Performance Standard for Second Distinct Action: • Removal and containerization of all equipment (excluding Spent Nuclear Fuel) from B-Cell not required for the implementation of further closure actions and/or deactivation endpoints as established in the Closure Plan and the 324/327 Buildings integrated Project Management Plan (PMP), HNF-1289 • Excess equipment is defined in the attachment (pages 4-6) to RL letter 00-FTD-006, which provides the listing of B-Cell and a determination of its disposition status per M-89-02						

324 BUILDING – TRI-PARTY AGREEMENT MILESTONE M-89-02 CHECKLIST – DECEMBER 31, 2000

The Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-89-02 is defined in Tri-Party Agreement Change Number M-89-98-03 (Reference 1 below) as "Complete removal of 324 Building REC B-Cell MW and Equipment". The M-89-98-03 change indicates that containerized mixed-waste (MW) will be managed in compliance with Chapter 173.303 WAC (Washington Administrative Code, Dangerous Waste Regulations), thereby reducing risks to human health and the environment. It also indicates that any remaining residues will be managed through the final closure process.

The checklist provided consists of a list of the actions and conditions described in the DOE RL letter number 00-FTD-006, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-89-02, Complete Removal of 324 Building REC B-Cell MW and Equipment, November 30, 2000" (Reference 2 below). The RL letter was submitted to Ecology on December 08, 1999. The RL letter provided an Attachment and a Table to provide greater definition for the performance standards to be met by interim milestone M-89-02. Ecology concurred with RL letter 00-FTD-006 in a response letter (same subject) to RL, dated February 28, 2000 (Reference 3 below). Detailed B-Cell equipment information regarding useable deactivation equipment was provided in a one-page information handout at the May 18, 2000, Project Manager Meeting (Reference 4 below). Ecology provided clarifications regarding the interim milestone M-89-02 in a one-page handout at the August 9, 2000, Project Managers' Meeting (Reference 5, Attachment 6, Ecology handout regarding use of 90-day MW accumulation area and clarifications regarding M-89-02 milestone performance standard).

Note: The non-shaded areas in the checklist table will be used to provide status information for activities/measures.

References:

1) TPA Change Number M-89-98-03, for Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement, TPA), regarding Milestone M-89-02, November 1998
2) DOE RL Letter No. 00-FTD-006, "Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Interim Milestone M-89-02, Complete Removal of 324 Building REC B-Cell MW and Equipment, November 30, 2000", dated December 08, 1999
3) Ecology letter dated February 28, 2000, same subject as reference (2)
4) 324 REC/HLV Project Managers' Meeting, May 18, 2000, Meeting Minutes, Attachment 4, List of Usable Deactivation Equipment, 324 Building, M-89-02, Detailed B-Cell Equipment Information 5/18/00
5) 324 REC/HLV Project Managers' Meeting, August 9, 2000, Meeting Minutes

324 BUILDING TRI-PARTY AGREEMENT INTERIM MILESTONE M-89-02 CHECKLIST SHOWING STATUS AS OF 12/31/00

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
1) First Distinct Action for M-89-02 (reference 1): Mixed waste (MW) must be containerized, removed from B-Cell and placed in a condition that is compliant with Chapter173.303 of the WAC Performance standard for First Distinct Action: • Removal of MW from the REC B-Cell requires the collection and containerization of dispersible material from the B-Cell • Collection will not include destructive and/or chemical methods (i.e., spalling or decontamination washes) so that a determination of liner interity (closure activity required post M-89-02) can be made prior to liner decontamination • The dispersible material will be containerized in a compliant (with receipt facility acceptance criteria) container system • Containerized dispersible material will be removed from REC B-Cell and may be moved to an interim storage area						
Activity(s)/Measure(s): 1a Perform collection and containerization of dispersibles through retrieval with a pneumatic clamshell from the B-Cell floor (reference 1)	P	Clamshelling of open areas has been performed. Remaining clamshelling will require clearing the cell, and then scraping/clamshelling the floor. Clamshelling will be statused using systematic grid approach.	30%			

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
1b Following clamshelling (1a above), collect dispersibles by performing a filtered vacuum of the B-Cell floor (reference 1) (NOTE: Invite Ecology to observe vacuuming and documentation.)		Cold testing of vacuuming equipment has been performed outside of B-Cell. Vacuuming will be statused based on systematic grid approach.	0%			
1c Transfer dispersibles collected by these methods into containers for interim storage (reference 5, Section 5.6, directly loading MW dispersibles into rectangular grout containers))	P	An estimated nine (9) RGCs will contain primarily dispersibles Transfer of dispersibles into RGCs has been completed forfive (5) of nine (9) expected dispersibles RGCs, including following containers: RGC-324-00-123 (RGC-5) RGC-324-00-114 (RGC-8) RGC-324-00-117 (RGC-9) RGC-324-00-101 RGC-324-00-102 These RGCs contain some MW debris and MW equipment, but will be tracked as dispersibles RGCs on this checklist. Dispersibles contained in engineered containers (EC) located in the B-Cell wagon wheel storage rack have been transferred into RGCs.	55%			

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
Activity(s)/Measure(s) (continued): 1d Move containerized dispersibles to a compliant mixed waste storage area (reference 1)						
1d.1 Remove containerized MW dispersible material from B-Cell (reference 1). -MW containers will be staged/moved to a 324 Building 90-day MW accumulation area after packaging and radiological survey. This provides waste management controls commensurate with WAC 173-303 dangerous waste accumulation requirements. Ecology concurrence (through enforcement discretion) is applicable for this activity since the MW is not newly generated (reference 5).	P	An estimated nine (9) RGCs will contain mostly dispersibles. Three (3) of the nine (9) expected dispersibles RGCs have been removed from B-Cell, including the following: RGC-324-00-123 (RGC-5) RGC-324-00-114 (RGC_8) RGC-324-00-101 RGC-324-00-117 (formerly RGC-9) has bottom hot spots exceeding 1000 millirem/hr and is still located in B-Cell. RGC-324-0-102 is in B-Cell, awaiting preparations for loadout..	33%			
1d.2 Complete shipment (and receipt) of containerized MW dispersible material to 200 Area Central Waste Complex compliant MW storage area by 11/30/00 (reference 5)[1]	P	Shipping has been completed for two (2) of the nine (9) expected dispersibles RGCs, including the following: RGC-324-00-114 (10/09/00) RGC-324-00-123 (12/01/00)	22%			

[1] Reference 5, Attachment 6, indicates that all collected mixed waste must be removed from the 324 Building B-Cell and placed in compliant, long-term storage in the 200 Area prior to the deadline established by M-89-02 (November 30, 2000).

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
2) Second Distinct Action for M-89-02 (reference 1):						
The second distinct action required under interim milestone M-89-02 requires the removal of excess equipment from the REC B-Cell Table attached to RL letter 00-FTD-006 provides all equipment currently within the REC B-Cell and defines "Excess" versus "Required" equipment Performance Standard for Second Distinct Action: • Removal and containerization of all equipment (excluding Spent Nuclear Fuel) from B-Cell not required for the implementation of further closure actions and/or deactivation endpoints as established in the Closure Plan and the 324/327 Buildings integrated Project Management Plan (PMP), HNF-1289 • Excess equipment is defined in the attachment (pages 4-6) to RL letter 00-FTD-006, which provides the listing of B-Cell and a determination of its disposition status per M-89-02						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
Activity(s)/Measure(s): 2a Containerize following "Excess" equipment from B-Cell (reference 1):						
2a.1 Rack 2A and remaining portions of previously size reduced racks	P	The last process rack, 2A, was size reduced in April 2000 and the last remnants (contained within non-MW grout containers) were relocated to A-Cell in June 2000. There is still one RGC in B-Cell with portions of rack components.	90%			
2a.2 2,265-kilogram steel block		This item is also called the 5,000 lb block, and it is scheduled to be deconned to contact handled levels and placed into a 5x5x9 box.				
2a.3 Sump trench cover screen (east end of B-Cell floor)						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
2a.4 Waste containers (with contents requiring transfer into other containers) i.e., grout containers (non-MW), engineered containers (MW), and rectangular grout containers (RGC) (MW). These include GC-88, GC-115, GC-120, RGC-0, and engineered containers in wagon wheel.	P	Disposition/repackaging of waste from four (4) of the subject five (5) items has been completed, including: GC-115 GC-120 GC-88 Wagon wheel EC dispersible Repackaging of contents of RGC-0 is not complete yet. All wagon wheel EC dispersibles have been loaded into RGCs. The wagon wheel storage rack now contains two (2) empty ECs.	80%			
2a.5 Storage rack (wagon wheel holding engineered containers) used for Special-Case Waste and MW.						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
Activity(s)/Measure(s) (continued) 2b Remove containerized excess equipment designated as MW (in RGCs) from B-Cell (reference 1).	P	The lead shield plugs have been removed from B-Cell. Two (2) of the five (5) expected MW equipment RGCs have been removed from B-Cell, including the following: RGC-324-00-083 (RGC-4) RGC-324-00-103 (RGC-6) One RGC still in B-Cell has been filled with equipment, including condensers, rack filters, and some items from RGC-0, and is awaiting loadout from B-Cell.	40%			
2c Ship containerized excess equipment designated as MW (in RGCs/SWDBs) to 200 Area by 11/30/00 (reference 5)[2].	P	Shipping has been completed for two (2) of the expected five (5) SWDBs containing MW equipment RGCs, including the following: RGC-324-00-083 (09/28/00) RGC-324-00-103 (09/30/00)	40%			

[2] Reference 5, Attachment 6, indicates that all collected mixed waste must be removed from the 324 Building B-Cell and placed in compliant, long-term storage in the 200 Area prior to the deadline established by M-89-02 (November 30, 2000).

	Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
2d	Remove containerized excess equipment designated as non-MW (in grout containers) from B-Cell (to be staged in A-Cell) by 11/30/00 (reference 5)[3].	P	Thirty-five (35) of the forty (40) expected grout containers filled with non-MW excess equipment have been removed from B-Cell.	87%			
2e	Ship excess equipment designated as non-MW (in grout containers) to 200 Area storage by 7/31/01 (reference 5)[3]	P	Seventeen (17) of the forty (40) expected grout containers filled with excess equipment have been shipped to 200 Area storage.	42%			

[3] Reference 5, Attachment 6, indicates that the non-mixed waste (grout containers) removed from B-Cell (and stored/staged in A-Cell) will be moved to compliant, long-term storage in the 200 Area. Reference 5 indicates that the deadline for this activity will appear as a DOE (RL) milestone for the next fiscal year (2001) and will occur within eight months after the completion date required by Tri-Party Agreement Milestone M-89-02 (i.e., within eight months after November 30, 2000).

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed

2f Following "Required" equipment to remain in B-Cell to support closure activities (reference 1):
• Cell penetration plugs
• West window work tray
• 10-ton crane (overhead crane)
• 3-ton crane (overhead crane)
• Two temporary fuel storage racks[4]
• Fuel pin storage container (gattling gun)[4], west wall
• Fuel thimbles[4], west side of B-Cell in fuel storage racks
• Installed electrostatic precipitators and HEPA (particulate) filters, north wall
• Installed manipulators
• Empty grout containers, lids, engineered containers, RGCs
• Useable deactivation equipment including following (references 1 and 4):
  • Fire protection hoses and nozzles (needed for fire protection)
  • Installed and functioning camera systems, including pan/tilt heads, mounts, etc. (needed for size reduction of fuel storage equipment, as well as cleanout of pipe trench and D-Cell)
(Continued on next page)						

[4] SNF currently stored within B-Cell will remain in B-Cell pending availability of the 200 Area Interim Storage Area (ISA). This is a delay in the removal of the fuel out of B-Cell. The former schedule had an interim movement of this fuel out of B-Cell and into A-Cell pending availability of the ISA. The project will benefit by eliminating this interim move within the facility and result in an earlier shipment of SNF out of the 324 Building, and allow for an overall better sequencing of closure activities within the 324 Building.

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
• Useable deactivation equipment (continued) • Fixed and portable lights (needed for viewing the cell) • Jib crane (accompanies 3-ton crane) and auxiliary hooks for 10-ton and 3-ton cranes (needed for fuel pin consolidation and size reduction of fuel storage equipment) • Torches and cables (needed for size reduction of fuel storage equipment) • Clamshells (needed for removal of size reduced fuel storage equipment as well as cleanout of pipe trench and D-Cell) • Dispersibles Removal System (DRS) attachments (needed for cleanout of D-Cell particulate material) • Vacuum system and hoses (needed for cleanout of D-Cell and pipe trench material) • Extension cords and cables (needed for operating installed equipment including electrostatic precipitators, portable lights, cameras, and DRS system) • Labounty shear (needed for size reduction of fuel storage rack) • Rinsing equipment (needed to support future deactivation packaging and loadout of low-level waste and transuranic waste materials and equipment into 3-82B grout containers) • Grouting equipment (needed for grouting future low-level; waste 3-82B grout containers)						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
3) Third Distinct Action (reference 1):						
Removal of debris from B-Cell Performance Standard for Third Distinct Action: • Miscellaneous debris (i.e., tools, metal scrap, manipulator boots) located on B-Cell floor will be removed from B-Cell and packaged for removal • Packaged debris will be removed from the REC B-Cell						
Activity(s)/Measure(s): 3a Collect debris from B-Cell (reference 1)	P	Debris is collected using clamshelling method. Clamshelling has been performed in open areas. Remaining clamshelling will be statused using systematic grid approach.	30%			
3b Rinse and package debris consistent with the size-reduced equipment removed from B-Cell (reference 1)						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
Activity(s)/Measure(s) (continued): 3b.1 Containerize non-MW debris using cylindrical Grout Containers (GCs) (reference 5):	P	Containerization of non-MW debris into cylindrical grout containers (GC) is essentially completed. Remaining clamshelling of B-Cell debris is expected to yield entirely MW debris, based on virtually all non-MW debris already having been recovered and containerized. MW debris is containerized within RGCs (addressed in Section 3.b.2 below).	90%			
3b.2 Containerize MW debris using Rectangular Grout Containers (RGCs) (reference 5):	P	Containerization of MW debris (by clamshelling, Section 3a) is approximately 30% complete. The upcoming effort to scrape the B-Cell floor and clamshell dispersibles into RGCs (Section 1a) will effectively containerize remaining MW debris. The MW debris is being containerized into the RGCs addressed in Section 1a (MW dispersibles) and Section 2b (MW excess equipment) for packaging efficiency reasons.	30%			
3c Remove containerized debris from B-Cell (reference 1)						

Action/Requirement/Conditions	Status (Complete (X) In Progress (P)	Status Statement	% Complete	Estimated Completion Date	Actual Completion Date	Documentation Completed
Activity(s)/Measure(s) (continued): 3c.1 Remove containerized non-MW debris (GCs) from B-Cell (to be staged in A-Cell) by 11/30/00 (reference 5)[5]	P	Non-MW debris has been containerized into the same GCs addressed in Section 2d (non-MW excess equipment) for packaging efficiency reasons. Thirty-five (35) of the forty (40) expected non-MW GCs have been removed from B-Cell.	87%			
3c.2 Remove containerized MW debris (RGCs) from B-Cell by 11/30/00 (reference 5)	P	Two (2) of the expected nine (9) dispersibles RGCs (Section 1.d.1) has been removed from B-Cell.	22%			
3d Ship containerized debris to 200 Area compliant storage (reference 1)						
3d.1 Ship containerized non-MW debris (GCs in liner assembly/3-82 B cask) to 200 area compliant storage by 7/31/01 (reference 5)[5]. Approximately five of the GCs will be categorized as low-level waste and are expected to therefore require grouting (in B-Cell) prior to shipment.	P	Seventeen (17) of the expected forty (40) non-MW GCs (Section 2e) have been shipped to 200 Area storage.	42%			
3d.2 Ship containerized MW debris (RGCs in Rectangular Overpack Disposal Container / Steel Waste Disposal Box, SWDB) to 200 Area compliant storage by 11/30/00 (reference 5)[6]	P	Two (2) of the expected nine (9) dispersibles RGCs (Section 1.d.2) has been shipped to CWC.	22%			

[5] Reference 5, Attachment 6, indicates that the non-mixed waste (grout containers) removed from B-Cell (and stored/staged in A-Cell) will be moved to compliant, long-term storage in the 200 Area. It also indicates that the deadline for this activity will appear as a DOE milestone for the next fiscal year (2001) and will occur within eight months after the completion date required by Tri-Party Agreement Milestone M-89-02 (i.e., within eight months of November 30, 2000).

[6] Reference 5, Attachment 6, indicates that all collected mixed waste must be removed from the 324 Building B-Cell and placed in compliant, long-term storage in the 200 Area prior to the deadline established by M-89-02 (November 30, 2000).

324 BUILDING B-CELL MILESTONE M-89-02 WASTE SUMMARY

Steps	(1) Dispersibles		(2) Excess Equipment		(3) Debris	
	MW	Non-MW	MW	Non-MW	MW	Non-MW
Collect waste	X	-	-	-	X	X
Containerize	X	-	X	X	X	X
Remove/Stage	X	-	X	X	X	X
Ship containers	X	-	X	X	X	X

Attachment 6

Size Reduction of Non-Mixed Waste Equipment from 324 Building D-Cell

ECOLOGY / DOE RL / FLUOR HANFORD WORKSHOP MEETING 01/10/01

Subject: Size Reduction of Non-Mixed Waste Equipment from 324 Building D-Cell

Introduction:

- **Work planning is consistent with requirements/conditions of 324 Building Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas Closure Plan, DOE/RL-96-73, Revision 1**
- **324 Closure Plan describes activities for B-Cell and D-Cell, as well as other cells and applicable areas**

Purpose:

- **Provide clarification information regarding plans for the removal and size reduction of non-mixed waste from the 324 Building D-Cell**
- **Provide supplemental information regarding the methodology and constraints within which this work will be accomplished**
- **Ensure that Ecology does not have any issues or concerns with planned activities**

Non-Interference with M-89-02 Milestone Activities:

- **D-Cell equipment removal and size reduction activities are being planned so that do not cause any interference whatsoever with the TPA milestone M-89-02 activities**
- **Size reduction of the large non-mixed waste equipment from D-Cell is planned to take place (in B-Cell) after completion of M-89-02 activities**
- **Some preparation activities may take place within D-Cell, as long as those activities do not interfere with the B-Cell M-89-02 activities**
- **D-Cell schedule is consistent with M-89-02 and B-Cell activities**

Compliance Considerations:

- **Work activities and planning are consistent with 324 Closure Plan**
- **D-Cell equipment (non-mixed waste) does not introduce mixed waste into B-Cell**
- **Resultant waste management activities are consistent with the 324 Closure Plan and intent of planned REC closure activities described in Closure Plan**
- **The non-MW equipment items from D-Cell will be managed in the same manner as non-MW items removed from B-Cell during M-89-02 activities**

Physical Considerations/Constraints:

- **Regular Grout Containers (GC) are to be used for D-Cell non-MW equipment packaging and eventual loadout from REC**
- **Size reduction is required to enable packaging in Grout Containers (GC)**
- **Some D-Cell equipment size reduction can be accomplished by disassembly or minor cutting with a saw**
- **D-Cell structural components (e.g., I-beams, gridway, etc.) are relatively large/substantial and are welded together, and cannot be size-reduced using a saw within D-Cell, and will therefore require plasma torch cutting**
- **D-Cell is not configured to support use of a plasma torch for size reduction**
- **Regular GC cannot be loaded out of D Cell due to size and door constraints**
- **Mini-GCs are to be used for packaging/handling/transfer of non-MW equipment items removed from and exiting D Cell**
- **Three mini-GCs will be vertically stacked within a GC in B-Cell**
- **Current plans are to use existing capabilities within the B-Cell for size reduction of large non-mixed waste equipment items from D-Cell**
- **B-Cell has necessary utilities/capabilities/configuration for size reduction of large items**
  - **plasma torch size reduction capability**
  - **ventilation systems**
  - **rinsing capability (e.g., rinse GCs prior to exit from B-Cell, for radiological control, keep airlock dose rate ALARA)**
  - **supplemental hot cell window shielding**

D-Cell Information:

- **Described in 324 Closure Plan (section 2.3.1.4), directly above C-Cell**
- **D-Cell adjacent to and south of the Radiochemical Engineering Cells (REC) airlock**
- **Normal access to D-Cell via swinging shield door in airlock south wall**

Size Reduction of Non-Mixed Waste Equipment from 324 Building D-Cell (01/09/01)

Introduction/Purpose:
The purpose of this document is to provide clarification information regarding plans for the removal and size reduction of non-mixed waste from the 324 Building D-Cell. This work is being planned consistent with requirements/conditions as described in the 324 Building Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas Closure Plan, DOE/RL-96-73, Revision 1 (referred to hereafter as the 324 Closure Plan).

The intent of this clarification information is to provide supplemental information regarding the methodology and constraints within which this work will be accomplished, so as to ensure that Ecology does not have any issues or concerns with the planned activities.

The D-Cell equipment removal and size reduction activities are being planned in such a manner that they will not cause any interference whatsoever with the TPA milestone M-89-02 activities currently in progress in the 324 Building B-Cell. The removal and size reduction of the non-mixed waste equipment from D-Cell is one of the planned 324 Closure Plan activities that will follow the B-Cell M-89-02 activities.

The 324 Closure Plan describes activities for B-Cell and D-Cell, as well as other cells and applicable areas. As described below, some large items (non-mixed waste) from D-Cell will eventually need to undergo size reduction to enable final packaging into cylindrical Grout Containers (GCs) in B-Cell. This size reduction will take place after the M-89-02 milestone B-Cell non-mixed waste equipment packaging is completed. Some preparations activities may take place within D-Cell, as long as those activities do not interfere with the B-Cell M-89-02 activities. A workshop meeting with Ecology is being conducted to facilitate the process of reviewing this information and addressing any potential questions or concerns.

D-Cell Information:
As described in the 324 Closure Plan (section 2.3.1.4), D-Cell is located adjacent to and south of the Radiochemical Engineering Cells (REC) airlock. D-Cell is located directly above C-Cell. Normal access to D-Cell is through a swinging shield door located in the airlock on the south wall.

Mini-Grout Containers (GCs) Description
Mini-GCs will have to be used to for packaging and handling/transfer of the non-MW equipment items removed from and exiting D Cell. Mini-GCs are designed such that three mini-GCs can be vertically stacked within a regular GC within B-Cell to provide the normal GC for non-MW packaging and eventual loadout from the REC. Mini-GCs are approximately 40 inches in diameter (as opposed to 48 inches for a regular GC) and are approximately 16 inches in height. Spacers and/or other waste can be packaged within the GCs to prevent movement of the mini-GCs during subsequent handling/transport of the packaged GC.

Although regular-sized empty GCs (referred to hereafter as GCs) could be placed into D-Cell from the airlock, the GCs cannot be loaded out of D Cell due to size and door constraints. The D-Cell door (between the airlock and D Cell) is not large enough to support the required rigging

for adequate movement with the available crane. Moving an empty GC into D-Cell could be performed using a short choker, although it would be difficult due to the tight fit through the doorway. After a GC is loaded, the short choker could not be used, because it would exceed the lifting capacity of the crane and rigging equipment. In addition, although a spreader bar may be able to be used for this purpose, it would be very difficult to make the required rigging connections, since the top of the spreader bar and the doorway are not easily visible. Therefore, the mini-GCs are the only viable alternative for waste loading/packaging/handling within D-Cell.

D-Cell Equipment Size-Reduction

It is highly desirable to move the structural components (non-mixed waste) of the D-Cell treatment equipment to B-Cell for size reduction. These structural components (e.g., I-beams, gridway, etc.) are relatively large/substantial and are welded together, and cannot be size-reduced using a saw within D-Cell. Therefore, a plasma torch will have to be used. D-Cell is not configured to support use of a plasma torch for size reduction. There are various reasons (as described below) why using the plasma torch in D-Cell is not feasible based on the current capabilities/conditions within D-Cell:

1. Ventilation Issues: Smoke generated by a plasma torch would pass through the dust stops and begin loading the A-frame filters beneath the airlock. This would cause the A-frame filters to load and approach the differential pressure limits/constraints specified in the 324 Building Safety Analysis Report (SAR), thereby causing operations to be discontinued and the filters to be changed prior to resuming work. Changeout of the A-frame filters would entail lifting cover blocks within the Cask Handling Area (CHA) airlock, and replacing the filter(s). Such an increase in facility A-frame filter replacement activities would negatively impact CHA activities and 324 Building REC closure activities, and would consume valuable resources. It would also significantly increase radiological exposure to personnel. Additional planning activities would be required to perform such filter replacements. Even one A-frame filter replacement represents a significant activity, and multiple replacements would be likely. Redesign of the current filtration system to use in-cell filters to remove/filter smoke from plasma torch operations would require an engineering study, followed by design, specification, procurement, testing, and installation prior to a plasma torch being used. Development of a plasma torch size reduction capability within D-Cell is not required or intended by the 324 Closure Plan. The clarification information is intended to provide perspective regarding this subject.

2. Rinsing Issues: Some potential water rinsing may be necessary and appropriate to remove loose non-mixed waste debris/material from equipment items. Water is not normally allowed into D-Cell for two reasons. First, water would be expected to seep down through the D-Cell floor (removable block) into C-Cell, causing alpha contamination to enter C-Cell. Second, water could potentially come into contact with containerized spent nuclear fuel (SNF) located within D-Cell, causing potential degradation.

3. Electrical power capabilities within D-Cell may not be sufficient to supply a plasma torch. Engineering effort, in terms of calculations and potential modifications would most likely be required to pursue such a possibility. Modifications that involve installing new equipment or capabilities within D-Cell are not consistent with the overall concept of D-Cell cleanout and closure as planned and intended in the 324 Closure Plan. The intent of the 324 Closure Plan is to

use the existing capabilities already established in B-Cell to support closure activities, such as non-mixed waste equipment size reduction.

4. Plasma torch size reduction capability also requires shielding of the hot cell windows, as is the case in B-Cell, to protect the windows from being hit with molten slag during torch use. D-Cell is not equipped with plasma torch capability or the corresponding supplemental window shielding.

Conclusion:
The planned D-Cell non-MW equipment disposition activities will involve the use of existing capabilities within the B-Cell for size reduction of large non-mixed waste equipment items from D-Cell. The B-Cell has the utilities/capabilities as required to support these activities. The resultant waste management activities are consistent with the 324 Closure Plan requirements and the intent of planned REC closure activities described in the 324 Closure Plan. The non-MW equipment items from D-Cell will be managed in the same manner as non-MW items removed from B-Cell during M-89-02 activities, and will not introduce any mixed waste to B-Cell.

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