Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

11-AMCP-0114

MAR 15 2011

Ms. J. A. Hedges, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton
Richland, Washington 99354

Mr. D. A. Faulk, Program Manager
Office of Environmental Cleanup
Hanford Project Office
U.S. Environmental Protection Agency
309 Bradley Boulevard, Suite 115
Richland, Washington 99352

Addressees:

FACILITY STATUS CHANGE FORMS FOR BUILDINGS 272E, 275E, 2701M, AND 2734EA

This letter transmits the approved Facility Status Change Forms for Buildings 272E, 275E, 2701M, and 2734EA. The required facility removal actions were performed in accordance with the "Action Memorandum for General Hanford Site Decommissioning Activities," DOE/RL-2010-22, Revision 0, March 2010, and the "Removal Action Work Plan for the Central Plateau General Decommissioning Activities," DOE/RL-2010-33, Revision 0, April 2010. The removal actions consisted of decontamination, deactivation, decommissioning, and demolition of the aforementioned facilities.

If you have any questions, please contact me, or your staff may contact Al Farabee, of my staff, on (509) 376-8089.

Sincerely,

Richard A. Holten, Acting Assistant Manager
for the Central Plateau

AMCP:DHC

Attachments

cc: See Page 2

cc w/attachs:
G. Bohnee, NPT
F. W. Bond, Ecology
L. Buck, Wanapum
C. E. Cameron, EPA
D. Einan, EPA
S. Harris, CTUIR
R. Jim, YN
S. L. Leckband, HAB
N. M. Menard, Ecology
K. Niles, ODOE
D. Rowland, YN
Administrative Record
Environmental Portal

cc w/o attachs:
D. G. Black, CHPRC
R. H. Engelmann, CHPRC
D. L. Klages, FFS
D. L. Norman, CHPRC
R. E. Piippo, MSA
J. G. Vance, MSA

Facility Status Change Form

Date Submitted: January 31, 2011	**Area:** 200 East	**Action Memorandum:**
Originator: Michael R. Greene	**Facility ID:** 272E	"Action Memorandum for General Hanford Site Decommissioning Activities," DOE/RL-2010-22, Revision 0, March 2010
Phone: (509) 373-9900	**Control #** FSCF-2010-033-272E	

This form documents the status of facility decontamination, deactivation, decommissioning and demolition operations or debris removal in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

☒ All D4 operations required by action memo complete.

☐ D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

The required facility removal actions were performed in accordance with the *"Action Memorandum for General Hanford Site Decommissioning Activities,"* DOE/RL-2010-22, Revision 0, March 2010, and the *"Removal Action Work Plan for the Central Plateau General Decommissioning Activities,"* DOE/RL-2010-33, Rev. 0, April 2010.

Construction of Building 272E Fabrication Shop, also known as the Mock-up Shop and Rotating Equipment and Pipe Shop, was started in 1943 and completed in 1944. Building 272E was located in the central portion of the 200 East Area, southwest of the intersection of Baltimore Avenue and 4th Street. Building 272E supported the beginning of the Manhattan Project. The building was used principally to fabricate and test components for the specialized process equipment used in various Hanford Site facilities.

Building 272E was a very large structure constructed of a steel frame high bay with wood exterior paneling and transite sheeting cover. A lower framed extension portion existed on the east side. The main building footprint was approximately 61.6 m (202 ft) long by 26.2 m and 19.2 m (63 ft) high. The main floor space was approximately 16,200 square feet. Adjacent attached structural covers and building additions brought the total area of floor space to approximately 1,752.5 m^3 (18,864 ft^2). Building 272E was modified during its lifetime with attached and detached support structures.

Building 272E contained a deep pit (the Pump Run-in Pit) in the southwest corner of the building. The pit was 2.4 m (8 ft) in diameter and approximately 15.2 m (50 ft) deep. The pit was designed to hold water for testing equipment and had no drains. A large steel plate covered the pit opening with access points.

The demolition of Building 272E was started in July 2010 and completed in October 2010. Demolition removed the main structure and supports and adjacent (attached) structures. The demolition of Building 272E left the slab and foundations intact and at grade level. The pit structure was left intact belowgrade and filled with a sand/gravel mix, to grade. The steel pit cover was disposed of as waste. All service penetrations through the remaining slabs were plugged. All identified dry wells near the structure were excavated and backfilled to grade.

The facility cooling system adjacent to the main structure (east side) of Building 272E was demolished. The demolition of the water cooling system left a small concrete slab and some exposed soil in area around the cooling towers and ducting.

Wastes associated with this demolition were characterized under Waste Profile Number WPPRCIF001 and disposed at the Environmental Restoration Disposal Facility (ERDF). Waste materials from this demolition weighed approximately 1,500 tons.

General actions implemented for Building 272E were as follows:

- Hazardous substances (batteries, light bulbs, oils, grease, mercury, refrigerant , and polychlorinated biphenyls) were removed from equipment (or fixtures) within and around the structure. All hazardous substances removed were characterized and disposed in accordance with waste management applicable or relevant and appropriate requirements (ARAR) and receiving facility waste acceptance criteria. Equipment was removed and disposed to facilitate demolition.
- All utility connections (water, electrical, sewer) were severed at their source (the service point). Connections were also severed at the building entry point at grade. All pipes and penetrations were plugged (at grade).
- Historic preservation and ecological resource evaluations were performed in accordance with NEPA requirements to address the impacts of demolition at the site. "Cultural Resources Review for Demolition of Miscellaneous Buildings/Structures in the 200, 400, and 600 Areas and the Removal of Debris from the North Slope, Hanford Site Benton County, Washington (HCRC 2009-200-051)"; "Ecological Resources Review, ECR 2009-200-051B."
- All wastes generated during demolition were characterized, shipped, and disposed of in accordance with waste management applicable or relevant and appropriate requirements (ARARs) and the ERDF waste acceptance criteria.
- The area was leveled and contoured using clean fill material to ensure that no safety hazard remained.

Description of Deferral (as applicable):

Not applicable. No activities were deferred for this removal action. Pre and post-demolition radiological surveys were completed; no radiological contamination was detected. Visual inspection of the area revealed no evidence of staining (e.g., potential hazardous substances resulting from spills or other events)..

Section 2: Underlying Soils Status

☒ No waste(s) present. No additional actions anticipated.

☐ Documented waste(s) present. Cleanup and closeout to be addressed under separate CERCLA Response Action.

☐ Potential waste site discovered during D4 operations. Waste site identification number, <to be> assigned>. Cleanup and closeout to be addressed under separate CERCLA Response Action.

Description of Current/As-Left Condition:

Building 272E slab and surrounding soils, located within the area of demolition, were visually inspected for any remaining chemical staining or discoloration. No staining or discoloration was present on the slab areas and surrounding soil from potential hazardous substances. Post-demolition radiological surveys of the underlying soils did not detect the presence of radiological contamination.

The placement of backfill material was required in areas around the Building 272E slab to bring the soil areas to grade. Adjacent soils were covered with a clean mix of sand and gravel consistent with surrounding buildings and structures ground material. The area was leveled and contoured to ensure that no safety hazard remained.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

Prior to the demolition of Building 272E, the location of identified or potential waste sites (including underground pipelines) within the demolition boundary or in close proximity to the demolition boundary was researched. It was determined that no documented waste sites were present. In addition, no potential waste site discoveries were identified during this review or as a result of implementation of the demolition activities.

Section 3: List of Attachments

Attachment A. Project Photographs of 272E—Pre-demolition, Demolition, and Post-demolition.

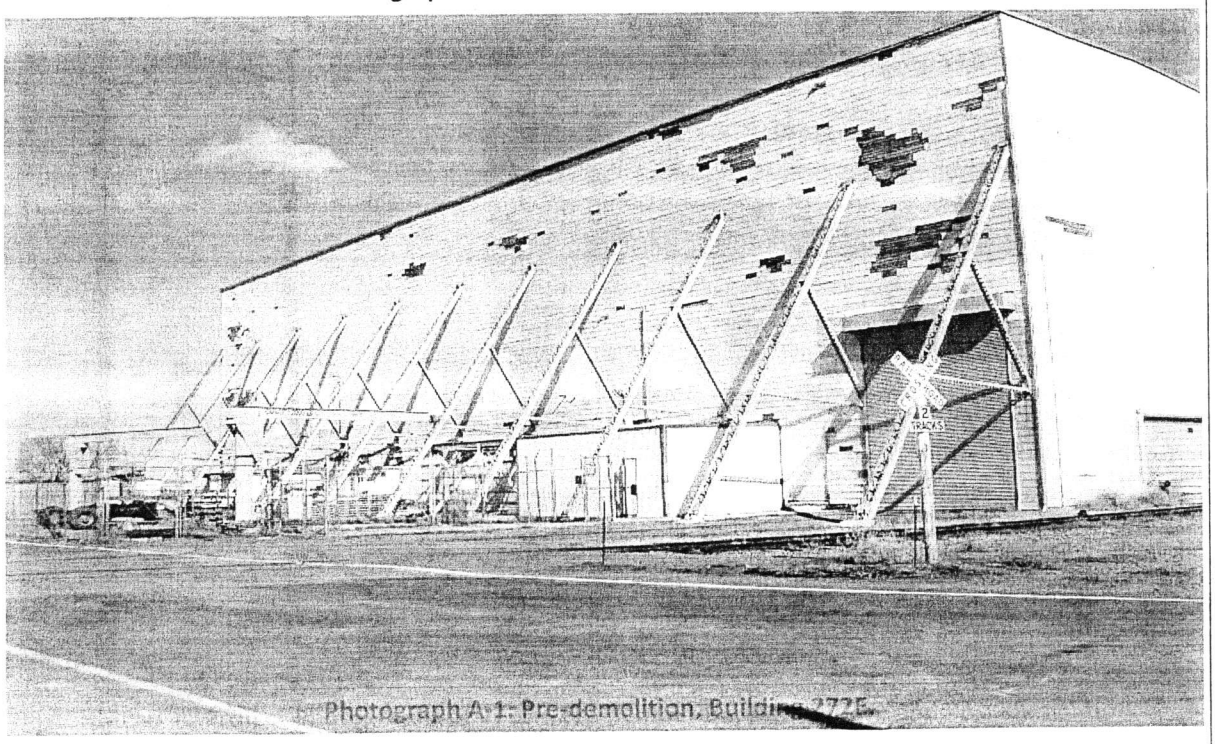
Attachment B. Pre-demolition and Decommissioning Radiological Survey Report—RC-05920; BE-09-003; BE-10-0021.

Attachment C. Post-demolition and Decommissioning Radiological Survey Report—BE-10-010/3.

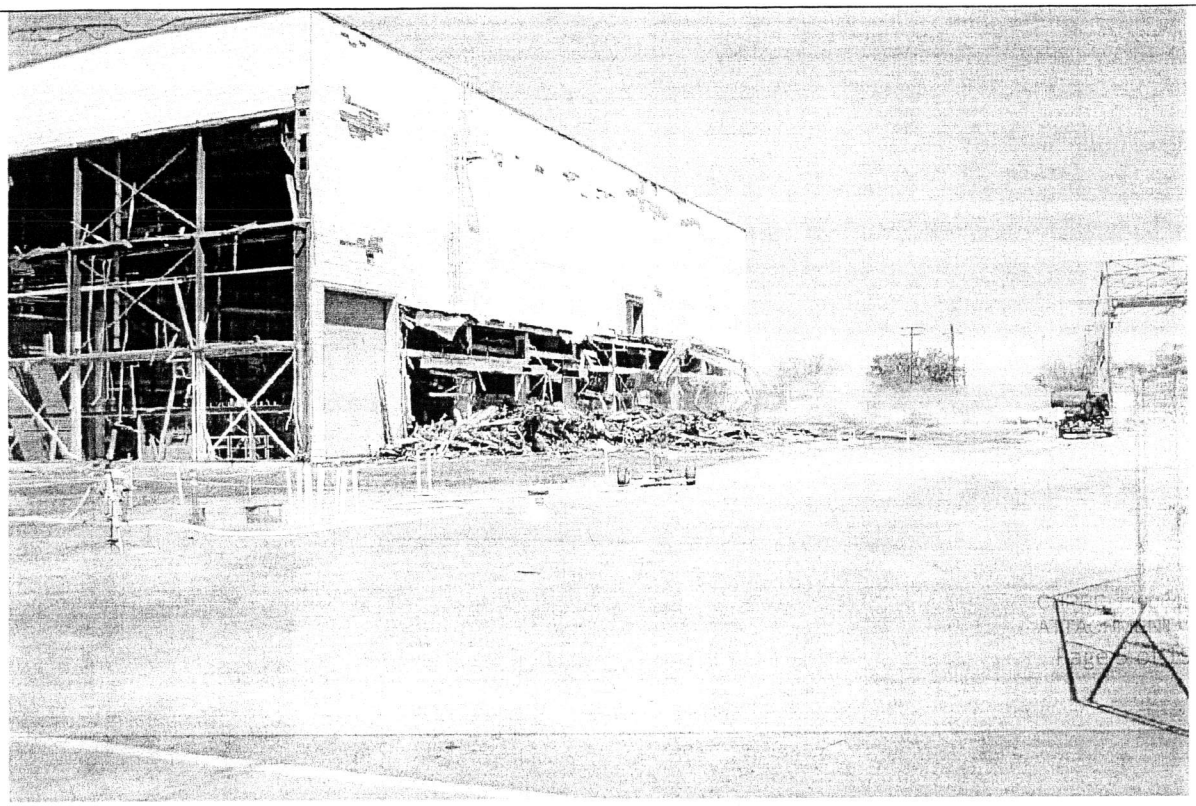
DOE-RL	2/8/2011 Date

ATTACHMENT A. Project Photographs of 272E—Pre-demolition, Demolition, and Post-demolition.

Photograph A-1. Pre-demolition, Building 272E.



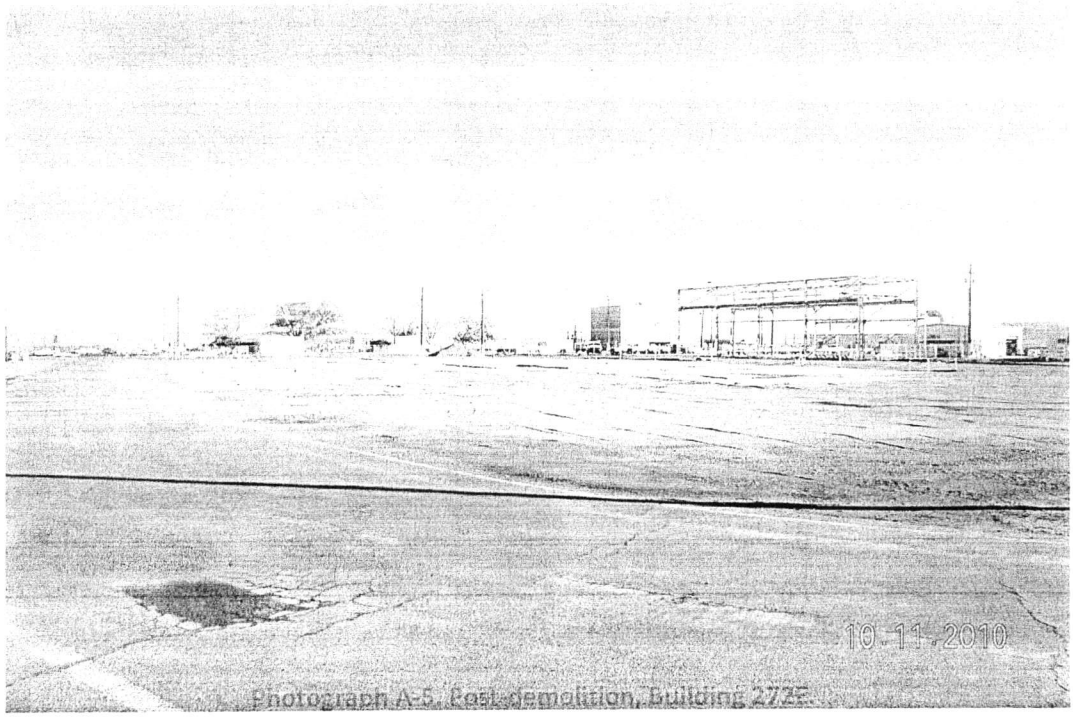
Photograph A-2. Pre-demolition, Building 272E.



Photograph A-3. Demolition, Building 272E.

Photograph A-4. Demoltion, Building 272E.

Photograph A-5. Post-demolition, Building 272E.



Photograph A-6. Post-demolition, Building 272E. Final sand and gravel cap on surrounding soils.

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CH2M HILL PLATEAU REMEDIATION COMPANY
RADIOLOGICAL SURVEY REPORT

RSR No. RC-05920

Date: 11/08/09
Start/Stop Time: 1300 / 1600
Area/Location: 200 East / 272-E Pipe Shop
RWP/Rev.: N/A

Purpose of Survey
- ☐ Material Release
- Release Survey Plan #: 3B600-AMN-09-011
- Released to: N/A
- ☐ RAM Shipment: N/A
- ☐ Required Task: N/A
- ☐ Job Coverage: N/A
- ☐ Other: N/A

Description of Work/Comments:

Performed verification survey of the office area of building 272-E per the survey plan #3B600-AMN-09-011. 272-E is considered a Category 3 building and is unlikely to be contaminated. Both Direct and Scan surveys were performed inside and outside of the building. All urinals, sinks and toilets had greater than background readings these appear to be natural radiation within the porcelain, rest of office area of building no direct or removable contamination was detected. Smea were counted with portable instruments. Shop area of building needs to be cleaned of pigeon droppings prior to being surveyed. Rest of building needs be to be surveyed. N/A

COPY

No	Description	Dose Rate Measurements: Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Contamination Measurements: Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	Spot check survey of walls, floor, ceilings, & equipment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	300	0	<5000	<100	<D/LAW	<D/LA
2	Spot check survey of walls, floor, ceilings, & equipment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	300	0	<5000	<100	<1000	<20
3	Urinals, sinks & toilet (All)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	600	0	3000	<100	<1000	<20
4	Spot check surveys exterior concrete pad area - west side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	N/A	N/A	<5000	<100	<D/LAW	<D/LA
5	Spot check surveys exterior concrete pad area - west side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	N/A	N/A	N/A	N/A	<1000	<20
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
[illegible]	[illegible]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

☒ Verification survey α= <D 1 in/s 1/8 inches away, 10 count time (seconds), >10% of items surveyed or swiped, N/A # of static counts, 10 sq. feet Area Swiped. No Audible counts above background.

☒ Verification survey βγ= <D 2 in/s 1/8 inches away, 5 count time (seconds), >10% of items surveyed or swiped, N/A # of static counts, 10 sq. feet Area Swiped. No Audible counts above background.

A-6004-663 (REV 3)

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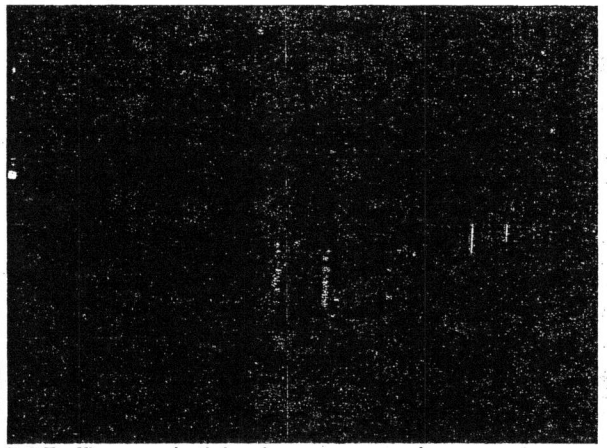
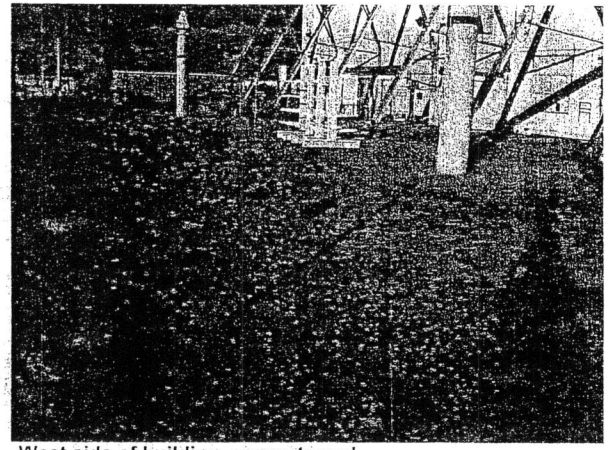
CHPRC-1100849
ATTACHMENT 1
Page 8 of 19

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. RC-05920	Page 2 of 2

Map/Sketch



272-E office area, both levels were surveyed



West side of building, concrete pad

COPY

Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

	Air Sample Log Number	Instruments						
1	/A	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	Ludlum 2360	Ludlum 2360	Ludlum 2360	N/A
2	N/A	Serial No	N/A	N/A	SCLL8-0260	SCLL8-0256	SCLL8-0245	N/A
3	N/A		N/A	N/A	DTLLP-0366	DTLLP-0362	DTLLP-0351	N/A
4	N/A	Efficiency (used)	N/A	N/A	10%	10%	10%	N/A
5	N/A	Smear Log Number	HPT: Date: 11/08/09	Payroll N		Review Date: 11-10 09	Payroll N	
6	N/A	N/A	HPT Name (Print): C. R. MEINECKE / P. RASCON			Reviewer Name (Print): S Demiter		
7	N/A	N/A	Signature: C R Meinecke / P Rascon			Signature: [signature]		

A 6004 663 (REV 3)

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CH2M HILL PLATEAU REMEDIATION COMPANY
RADIOLOGICAL SURVEY REPORT

RSR No. 13E-09003

Date: 12-28-09
Start/Stop Time: 0900 / 1600
Area/Location: 200E / BLDG 272E
RWP/Rev: BE-09-001 REV 0

Purpose of Survey
- [ ] Material Release
- Release Survey Plan # 3B600-AMN-09-007
- Released to:
- [ ] RAM Shipment:
- [ ] Required Task:
- [x] Job Coverage: DD-09-009
- [ ] Other

Description of Work/Comments
PERFORMED 2 SURVEYS AS OUTLINED IN THE RELEASE PLAN. THE FIRST SURVEY WAS PERFORMED IN THE MORNING AND CONSISTED OF THE MAIN LEVEL FLOORS, WALLS AND SOME BIASED SUSPECT LOCATIONS. (pp 3&4) THE SECOND SURVEY WAS THE UPPER LEVELS AND EQUIPMENT — SOME ADDITIONAL BIASED SUSPECT LOCATIONS AND BUILDING EXTERIOR AS CONDITIONS PERMITTED. (pp 5&6) THIS WAS DONE IN THE AFTERNOON

No	Description	Dose Rate Measurements (Note[1] F = Field (>30 cm) C = Contact (≤1 cm))								Contamination Measurements							
		Dist (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	Background cpm βγ	Background cpm α	Direct Gross cpm/PA βγ	Direct Gross cpm/PA α	Total dpm/100 cm² βγ	Total dpm/100 cm² α	Removable dpm/100 cm² βγ	Removable dpm/100 cm² α
49 [49]	Surveys on Sinks/Lav.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	200	0	500	0	<5000	<100	<1000	<20
*	Dose rates ALL AREAS	F	<0.5	<0.5	2	1	NA	<0.5	<0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	MORNING SURVEY	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
I-63	EXCEPT 49 ABOVE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	170	1.4	200	3	<5000	<100	<1000	<20
II-63	SEE pp. 3&4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	AFTERNOON SURVEY	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
I-44	AND II-44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	170	1.4	200	3	<5000	<100	<1000	<20
	SEE pp. 5&6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
*	ALL DOSE RATES WERE <0.5 mREM/HR INSIDE AND OUTSIDE THE BUILDING.																

- [ ] Verification survey α= <D in/s inches away, count time (seconds), % of items surveyed or swiped, # of static counts, sq. feet. Area Swiped No Audible counts above background.
- [ ] Verification survey βγ= <D in/s inches away, count time (seconds), % of items surveyed or swiped, # of static counts, sq. feet. Area Swiped No Audible counts above background

A-6004-663 (REV 3)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-09003	Page 2 of 6

Map/Sketch

SEE pp 3-6 FOR MAPS

Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	NA	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	RO-20	~~2929~~	2360	2360
2		Serial No.	NA	NA	ICE84-1596	~~SCL4-0052~~	SCL8-0173	SCL8-0143
3					NA	~~DTLLP-0023~~	DTLLP-0282	DTLLP-0253
4		Efficiency (used)			NA	12-29-09	10%α, 10%β-γ	10%α, 10%β-γ
5		Smear Log Number	HPT: Date 12-28-09	Payroll		Review Date 1.4.10	Payroll	
6		NA	HPT Name (Print) LARRY D. LARSON / Robert Yavlsen			Reviewer Name (Print) Lora Newman		
7			Signature: / Matt Y. Yan			Signature:		

A-6004-663 (REV 3)

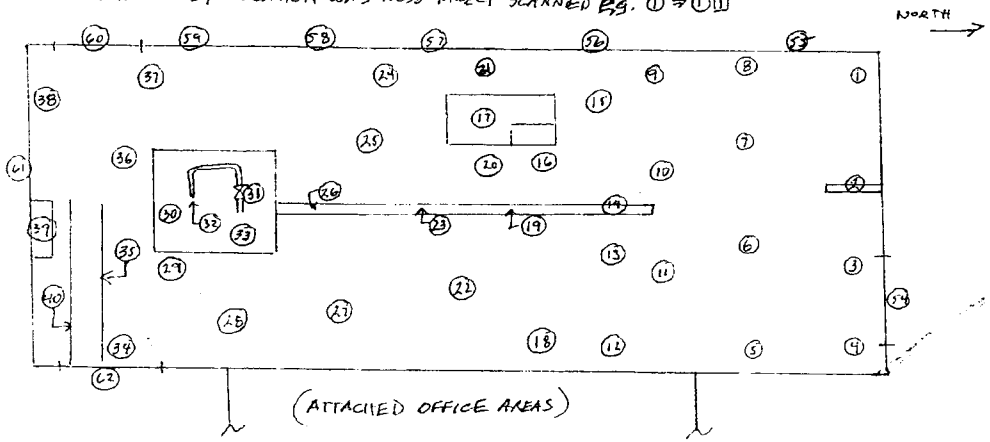
CHPRC RADIOLOGICAL SURVEY REPORT Map/Sketch – Continuation Sheet	RSR No. BE-09003	Page 3 of 36

Legend:	# Direct Measurement	Air Sample	Smear	LAW	Neutron	T= Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	- - - - - - (designation inside) - - - - - - - - Radiological Area Boundary							

Map/Sketch

200E AREA BUILDING 272E, MAIN BAY

ALL SMEARS WERE TAKEN ON THE FLOOR EXCEPT AS LISTED BELOW.
EACH SURVEY LOCATION WAS ALSO DIRECT SCANNED Eg. ① ⇒ ①[1]



BIASED SUSPECT LOCATIONS

(2) – LIFTED COVER ON SUMP AND TOOK SMEAR AND DIRECT

(14), (19), (23), (26) – LIFTED COVER OR SMEARED GRATING ON CHANNEL THAT DRAINS TO PUMP SUMP

(31), (32) - VALVE PACKING AND OPEN PIPE FROM PUMP TEST SUMP. NO ACCESS TO SUMP ITSELF

(35), (40) - CHANNEL FOR RAILROAD TRACK, RUMOR THAT A POTENTIALLY CONTAMINATED RAIL CAR MAY HAVE BEEN IN VICINITY OF SHOP

(39) - INSIDE WOOD STORAGE BOX

WALLS < 8 FEET HIGH

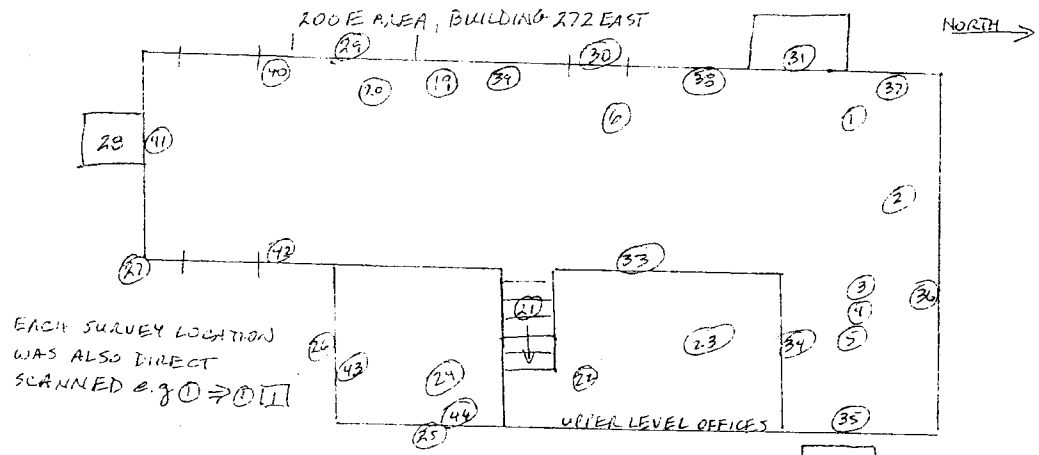
(59) - (62) -- SMEARS TAKEN AT ~4-6 FEET

A-6004-667 (REV 2)

CHPRC RADIOLOGICAL SURVEY REPORT Map/Sketch – Continuation Sheet	RSR No. BE-09003	Page 5 of 6

Legend:	# Direct Measurement	Air Sample	Smear	LAW	Neutron	T= Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	- - - - - - - - (designation inside) - - - - - - - - Radiological Area Boundary							

Map/Sketch



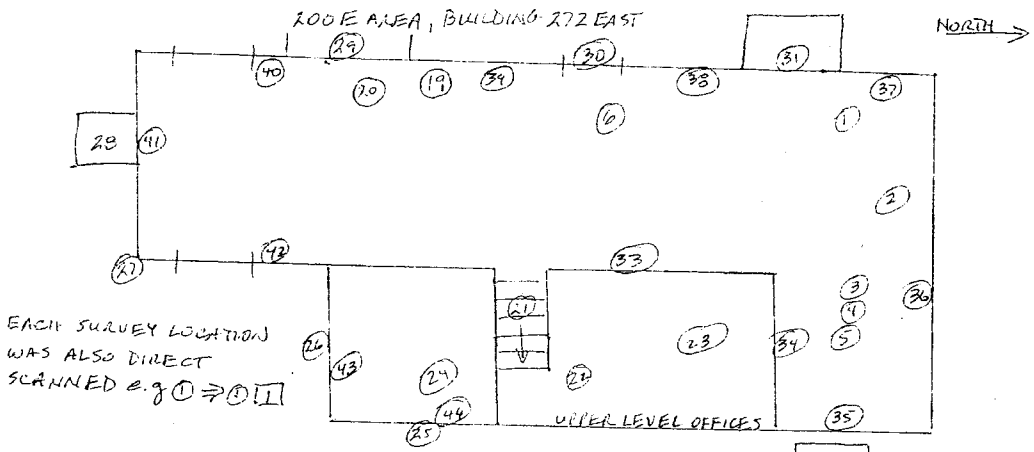
1. PIPE ON JIB CRANE
2. HOSE REEL
3. AIR MANIFOLD DRAIN
4. AIR FILTERS
5. AIR HOSE
6. DRAIN FOR SANITARY WATER
19. VENT DUCT EXHAUST
20. DRAIN FROM ROOF ?
21. STAIRS
22-24. FLOOR
25. EXTERIOR WALL
26. EXTERIOR WALL
27. DRAIN FROM ROOF
28. SHED
29. EXTERIOR WALL IN LEAN TO
30. EXTERIOR DOOR
31. EXTERIOR WALL
32. FAN ROOM FLOOR
33-44. INTERIOR WALLS ABOVE 8 FEET

A-6004-567 (REV 2)

CHPRC RADIOLOGICAL SURVEY REPORT Map/Sketch – Continuation Sheet	RSR No. BE-09003	Page 5 of 6

Legend:	# Direct Measurement	Air Sample	Smear	LAW	Neutron	T= Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	- - - - - - - (designation inside) - - - - - - - Radiological Area Boundary							

Map/Sketch



1. ROPE ON JIB CRANE
2. HOSE REEL
3. AIR MANIFOLD DRAIN
4. AIR FILTERS
5. AIR HOSE
6. DRAIN FOR SANITARY WATER
19. VENT DUCT EXHAUST
20. DRAIN FROM ROOF ?
21. STAIRS
22-24. FLOOR
25. EXTERIOR WALL
26. EXTERIOR WALL
27. DRAIN FROM ROOF
28. SHED
29. EXTERIOR WALL IN LEAN-TO
30. EXTERIOR DOOR
31. EXTERIOR WALL
32. FAN ROOM FLOOR
33-44. INTERIOR WALLS ABOVE 8 FEET

A-6004-667 (REV 2)

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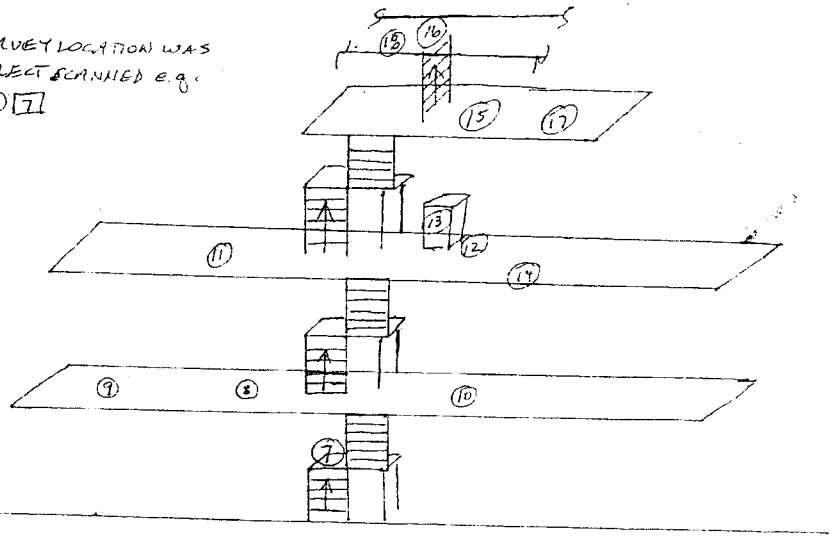
CHPRC RADIOLOGICAL SURVEY REPORT Map/Sketch – Continuation Sheet	RSR No. BE-09003	Page 4 of 6

Legend:	# Direct Measurement	Air Sample	Smear	LAW	Neutron	T= Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Map/Sketch

EACH SURVEY LOCATION WAS ALSO DIRECT SCANNED e.g. ⑦ ⇒ ⑦ [7]



200 EAST AREA, BLDG 272E, MAIN BAY "LOOKING WEST" AT THE SUPERSTRUCTURE WITH MEZZANINES FOR JIB BOOMS, ETC. MATERIALS ARE I-BEAM, STEEL PLATE, STEEL GRATING.

⑬ - INSIDE CABINET

ALL REMAINING SMEARS WERE ON HORIZONTAL SURFACES eg GRATING, I-BEAMS, RAILINGS, JIB BOOMS

A-6004-667 (REV 2)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0021	Page 1 of 2

Date	Start/Stop Time	Area/Location	RWP/Rev.
3/1/10	1330 / 1530	200E/272E Roof Survey	BE-09-001 / Rev. 1

Purpose of Survey

- ☐ Material Release
- Release Survey Plan #:
- Released to:
- ☐ RAM Shipment:
- ☐ Required Task:
- ☒ Job Coverage: DD-09-6400
- ☐ Other:

Description of Work/Comments:

Survey of first half of the roof of Building 272E. Surveyed roof according to survey plan CHPRC-04-JRM-09-002

No.	Description	Dose Rate Measurements (Note[1] F = Field (≥30 cm) C = Contact (≤1 cm))								Contamination Measurements							
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	Background cpm βγ	Background cpm α	Direct Gross cpm/PA βγ	Direct Gross cpm/PA α	Total dpm/100 cm² βγ	Total dpm/100 cm² α	Removable dpm/100 cm² βγ	Removable dpm/100 cm² α
1	Roof									400	3	400	3	<5K	<500	<1000	<20

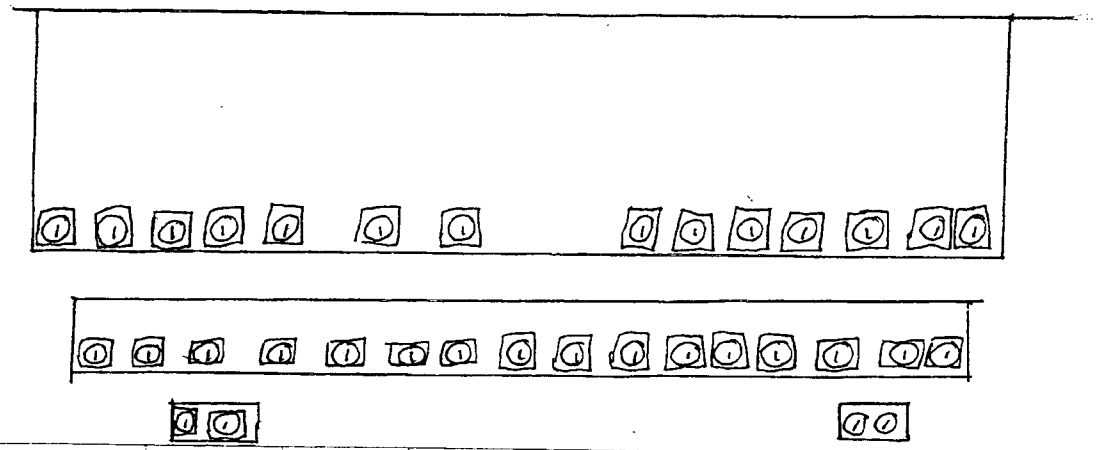
☐ Verification survey α= <D in/s inches away, count time (seconds). % of items surveyed or swiped. # of static counts, sq. feet. Area Swiped No Audible counts above background.

☐ Verification survey βγ= <D in/s inches away, count time (seconds). % of items surveyed or swiped. # of static counts, sq. feet. Area Swiped No Audible counts above background.

A-6004-663 (REV 3)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0021	Page 2 of 2

Map/Sketch



Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1		Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360	NA	NA	NA
2		Serial No.	NA	NA	SCLL8-0223			
3					DTLLP-0329			
4	NA	Efficiency (used)			10%			
5		**Smear Log Number**	HPT: Date 3-1-10	Payroll No		Review Date 3-4-10	Payroll N	
6		NA	HPT Name (Print) Diana King			Reviewer Name (Print) Laura U Ruckman		
7			Signature Diana King			Signature Laura U Ruckman		

A-6004-663 (REV 3)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BE-1000035	Page 1 of 3

Date	Start/Stop Time	Area/Location	RWP/Rev.
10/14/2010	0830 / 1030	200E / 272E / /	BE-10-010/3

Purpose of Survey

- ☐ Material Release
  - Release Survey Plan #: N/A
  - Released to: N/A
- ☐ Ram Shipment: N/A
- ☐ Required Task: N/A
- ☐ Job Coverage: N/A
- ☑ Other: Release Survey Plan: 10-RAD-2W-026

Description of Work/Comments:

-> Radiological Characterization survey performed on the 272E site.
-> See map for survey locations.
-> Performed scan surveys and removable contamination surveys at the indicated survey points. No contamination, fixed or removable, was found.
-> Surveys performed with the Ludlum 2360 performec IAW procedure PRC-PRO-RP-40050.

Comments:

Dose Rate Measurements

Note[1]: F = Field (≥30cm) C = Contact(≤1 cm)

No.	Description	Dist. (cm) Note[1]	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr
D1	Dose rate surveys of survey points 1,6,11,16,21,26,31,36, and 39	C	N/A	<0.5	2	1	N/A	<0.5	<0.5

Contamination Measurements

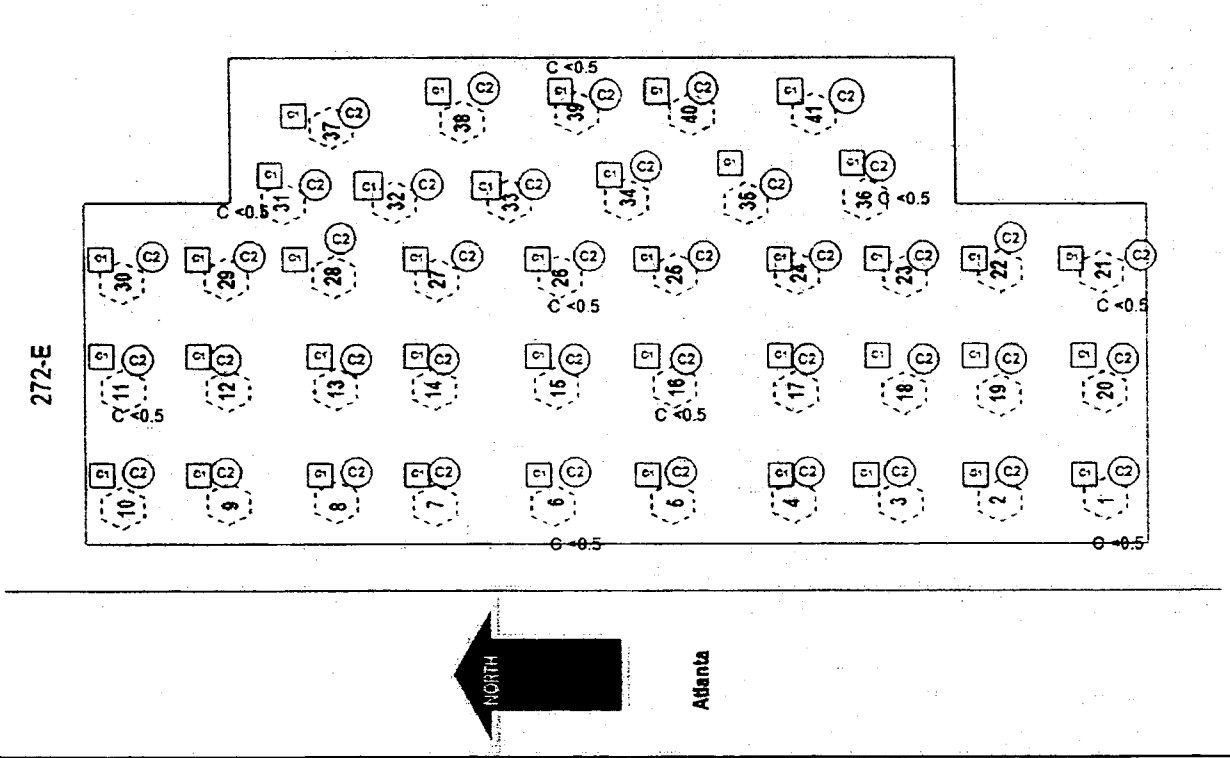
† Manually Calculated by RCT ‡ LAW

No.	Description	Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		βγ	α	βγ	α	βγ	α	βγ	α
C1	All direct surveys of survey points 1-41	360	3	360	3	<5000†	<500†	N/A†	N/A†
C2	All smear surveys of survey points 1-41	287	3	N/A	N/A	N/A†	N/A†	<1000†	<20†

A-6004-663-SS (Rev. 0)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BE-1000035	Page 2 of 3

Map/Sketch



Map Name: 272E	Map Description: Radiological Characterization Survey						
Legend	# Direct Measurement	Air Sample	Smear	# LAW	Neutron Dose Rate	T# Transferability	Field Dose Rate *Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	---------- (designation inside) ---------- Radiological Area Boundary							

Air Sample Measurements

Smear Sample Measurements

A-6004-663-SS (Rev. 0)

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BR-110[illegible]35	Page 3 of 3

Instruments

Instrument/Probe Model	Serial No.	Probe Serial No	Efficiency (Used)
Ludlum 2360	[illegible]-0581	DTLLP-0622	0.1
Ludlum 2360	[illegible]-0518	DTLLP-0622	0.1
RO-20	[illegible]-1592	N/A	N/A

Unless stated otherwise in the "Comments" section, contamination levels for C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, and Eu-155 are ≤ 10 times the b-g contamination levels shown above (see CHPRC-00073, Table 2-2).

Contributors

Name	HID	Date	Signature
Griffin, Jennifer		10-14-10	[illegible]
Gerg, David		10-14-10	[illegible]

Reviewers

Name	HID	Date	Signature
Jamie Green		10-18-10	[illegible]

A-6004-663-SS (Rev. 0)

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Facility Status Change Form

Date Submitted: January 31, 2011	**Area:** 200 East	**Action Memorandum:**
Originator: Michael R. Greene	**Facility ID:** 275E	"Action Memorandum for General Hanford Site Decommissioning Activities," DOE/RL-2010-22, Revision 0, March 2010
Phone: (509) 373-9900	**Control #** FSCF-2010-033-275E	

This form documents the status of facility decontamination, deactivation, decommissioning and demolition operations or debris removal in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

☒ All D4 operations required by action memo complete.

☐ D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

The required facility removal actions were performed in accordance with the *"Action Memorandum for General Hanford Site Decommissioning Activities,"* DOE/RL-2010-22, Revision 0, March 2010, and the *"Removal Action Work Plan for the Central Plateau General Decommissioning Activities,"* DOE/RL-2010-33, Rev. 0, April 2010. This removal action consisted of decontamination, deactivation and decommissioning, as required, and final demolition of Building 275E.

Building 275E was a Carpentry Shop located in the 200 East Area, near the corner of 3rd and Baltimore Avenue. It was built in 1943 and had basic water, sewer, and electrical service. It consisted of a raised (approximately 1.2 m [4 ft]) crawl space foundation with a concrete floor, a wood and metal framework with transite siding, and a flat, slightly sloped, asphalt roof. The building was remodeled over the years of use, and three additions were made. The dimensions of the building and additions were 11.9 by 29.3 m (39 by 96 ft).

Demolition of Building 275E started on June 9, 2010, and was completed on September 2, 2010. The entire abovegrade facility was demolished to include the concrete walls and elevated concrete floor. Soils remained under the concrete floor. Demolition of the raised concrete floor walls was to grade. The three building additions were left slab-on-grade. Belowgrade, portions of the foundation walls were left in place.

Wastes associated with this demolition were characterized under Waste Profile Number WPPRCIF001 and disposed at the Environmental Restoration Disposal Facility (ERDF). Waste materials from this demolition weighed approximately 369.0 tons.

Actions, as required, implemented for Building 275E were as follows:

- Hazardous substances (batteries, light bulbs, oils, grease, mercury, refrigerant, and polychlorinated biphenyls) were removed from equipment (or fixtures) within and around the structure. All hazardous substances removed were characterized and disposed in accordance with waste management applicable or relevant and appropriate requirements (ARAR) and receiving facility waste acceptance criteria.
- All utility connections (water, electrical, and sewer) were severed at their source (the service point). Connections were also severed at the building entry point at grade. All pipes and penetrations were plugged (at grade).

- Historic preservation and ecological resource evaluations were performed in accordance with NEPA requirements to address the impacts of demolition at the site. "Cultural Resources Review for Demolition of Miscellaneous Buildings/Structures in the 200, 400, and 600 Areas and the Removal of Debris from the North Slope, Hanford Site Benton County, Washington, HCRC 2009200-051)"; "Ecological Resources Review, ECR 2009-200-051B."
- The building was demolished to grade using heavy equipment (e.g. track hoes and excavators). The additions were demolished to slab-on-gradeAll wastes generated were characterized, shipped, and disposed of in accordance with waste management applicable or relevant and appropriate requirements (ARARs) and the ERDF waste acceptance criteria.
- The area was leveled and contoured using clean fill material to ensure that no safety hazard remained. Portions of foundation walls remain below-grade.

Description of Deferral (as applicable):

Not applicable. No activities were deferred for this removal action. Visual inspection of the area revealed no evidence of staining (e.g., potential hazardous substances resulting from spills or other events).

Section 2: Underlying Soils Status

☒ No waste(s) present. No additional actions anticipated.

☐ Documented waste(s) present. Cleanup and closeout to be addressed under separate CERCLA Response Action.

☐ Potential waste site discovered during D4 operations. Waste site identification number, <to be> assigned. Cleanup and closeout to be addressed under separate CERCLA Response Action.

Description of Current/As-Left Condition:

The underlying soils are within the building footprint of the raised concrete foundation removal area. The underlying soil of the raised concrete foundation area was visually inspected to verify that no staining was present. The slab-on-grade portion of the facility was inspected for staining and thoroughly cleaned. Portions of the slab were covered with a clean soil and gravel mix to bring to grade with the surrounding area and stabilize graded areas.

Post-demolition radiological surveys of the underlying soil and slab-on-grade (area) did not detect the presence of radiological contamination.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

Prior to the demolition of Building 275E, the location of identified or potential waste sites (including underground pipelines) within the demolition boundary or in close proximity to the demolition boundary was researched. It was determined that no documented waste sites were present . In addition, no potential waste site discoveries were identified during this review or as a result of implementation of the demolition activities.

Section 3: List of Attachments

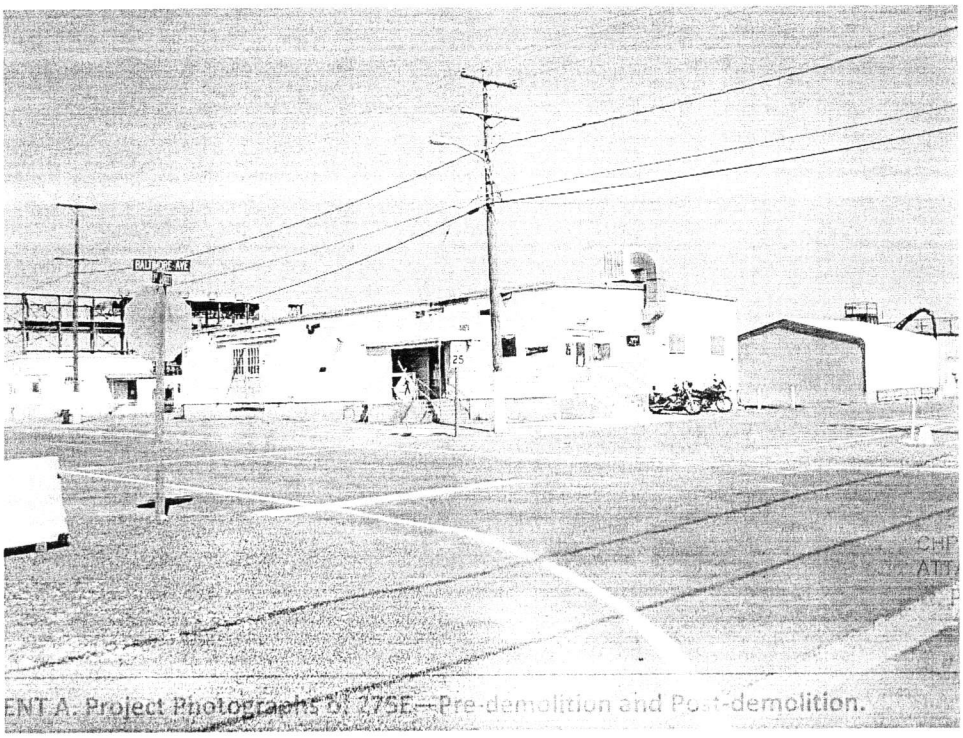
Attachment A. Project Photographs of 275E—Pre-demolition and Post-demolition.

Attachment B. Pre-demolition and Decommissioning Radiological Survey Report—RC-05919.

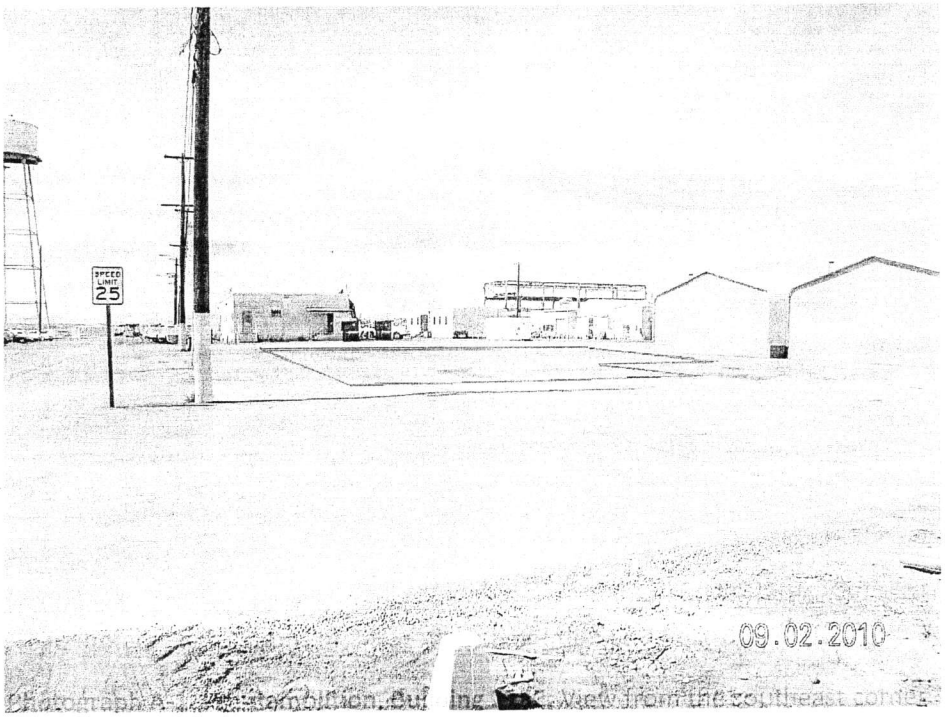
Attachment C. Post-demolition and Decommissioning Radiological Survey Report—BE-10-0539.

	2/8/2011
DOE-RL	**Date**

ATTACHMENT A. Project Photographs of 275E—Pre-demolition and Post-demolition.



Photograph A-1. Pre-demolition, Building 275E. View from the southeast corner.



Photograph A-2. Post-demolition, Building 275E. View from southwest to northeast. Demolition area outlined in red.

Attachment B. Pre-demolition and Decommissioning Radiological Survey Report—RC-05919.

ATTACHMENT 2: Pre-demolition and Decommissioning Radiological Survey Report, RC-05919

CH2M HILL PLATEAU REMEDIATION COMPANY
RADIOLOGICAL SURVEY REPORT

RSR No. RC-05919

Page 1 of 2

RWP/Rev. N/A

Date: 11/08/09 | Start/Stop Time: 0700 / 1300

Area/Location: 200 East / 275-E Carpenter Shop

Purpose of Survey
- ☐ Material Release
- Release Survey Plan #: 3B600-ANN-09-011
- Released to: N/A
- ☐ RAM Shipment: N/A
- ☐ Required Task: N/A
- ☐ Job Coverage: N/A
- ☐ Other: N/A

Description of Work/Comments:
Performed verification survey of building 275-E per the survey plan #3B600-ANN-09-011. 275-E is considered a Category 3 building and is unlikely to be contaminated. Both Direct and Scan surveys were performed inside and outside of the building. Two urinals, two sinks and one toilet had greater than background readings these appear to be natural radiation within the porcelain, rest of building no direct or removable contamination was detected. Smears were counted with portable instruments.
N/A

COPY

No.	Description	Dose Rate Measurements (Note: F = Field (≥30 cm) C = Contact (≤1 cm))								Contamination Measurements: Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	Spot check survey of walls, floor, ceilings, & equipment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	330	0	<5000	<100	<5/1AW	<5/1AW
2	Spot check survey of walls, floor, ceilings, & equipment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	300	0	<5000	<100	<1000	<20
3	Urinals, sinks & toilet (All)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	600	0	3000	<100	< 600	<20
4	Spot check surveys exterior walls, stairs & deck	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	N/A	N/A	<5000	<100	<5/1AW	<5/1AW
5	Spot check surveys exterior walls, stairs & deck	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	N/A	N/A	N/A	N/A	<1000	<20
6	Spot check ground survey out 10' from building	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	300	0	N/A	N/A	<5000	<100	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

☒ Verification survey α= <D 1 in/s 1/8 inches away, 10 count time (seconds) >10% of items surveyed or swiped N/A # of static counts, 10 sq. feet Area Swiped. No Audible counts above background

☒ Verification survey βγ= <D 2 in/s 1/8 inches away, 5 count time (seconds) >10% of items surveyed or swiped, N/A # of static counts, 15 sq. feet. Area Swiped. No Audible counts above background

A-6004-663 (REV 3)

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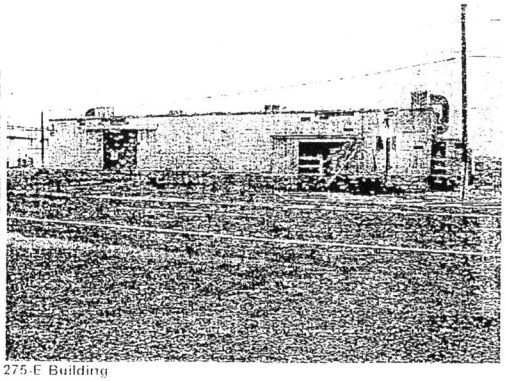
RADIOLOGICAL SURVEY REPORT

RSR No.

Page 2 of 2

Map/Sketch



275-E Building

COPY

Legend: Direct Measurement | Air Sample | Smear | Lead | Vertical | Transferable | Note: Dose Rates in mrem/hr unless otherwise noted

(designation inside) Radiological Area Boundary

Air Sample Log Number	Instruments					
1	Instrument/Probe Model	GM Model or Probe	Pump Probe			
2	Serial No.					
3						
4	Efficiency (used)					
5	Smear Log Number	HPT Date	Payroll No. 1	Review Date 11-10-01	Payroll No.	
6		HPT Name (Print)		Reviewer Name (Print) S Bowles		
7		Signature		Signature		

A-2004-662 (REV 3)

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Post Demo

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0539	Page 1 of 3

Date	Start/Stop Time	Area/Location	RWP/Rev.
09/26/2010	0830 / 1130	200E/275E Radiological Characterization/ Scoping Survey	

Purpose of Survey

☐ Material Release

Release Survey Plan #: 10-RAD-2W-026

Released to: See Comments

☐ RAM Shipment: NA

☐ Required Task: NA

☐ Job Coverage: NA

☐ Other: NA

Description of Work/Comments

-> Radiological Characterization survey performed on the 275E site.

-> Gravel removed from representitive places on the 275E site the size of 1ft x 1ft. See map for survey locations.

-> Performed scan surveys and removable contamination surveys at the indicated survey points. No contamination, fixed or removable, was found.

-> Dose rate surveys were performed as indicated on the survey map.

-> Surveys performed with the Ludlum 2360 performed IAW procedure PRC-PRC-RF-40050.

-> Survey points 1-20 were of soil and included transferability surveys. Performed IAW PRC-RP-40025 Appen. D. Survey points 21-30 were of concrete.

No.	Description	Dose Rate Measurements: Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Contamination Measurements: Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	All direct surveys of survey points 1-30	NA	NA	NA	NA	NA	NA	NA	NA	280	2	280	2	<5000	<500	NA	NA
2	All smear surveys of survey points 1-30	NA	NA	NA	NA	NA	NA	NA	NA	280	2	NA	NA	NA	NA	<1000	<20
3	Dose rate surveys of survey points 1,6,11,16,21, and 26	C	<0.5	NA	2	1	NA	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
4	Transferability surveys of survey points 1-20.	NA	NA	NA	NA	NA	NA	NA	NA	280	2	NA	NA	NA	Na	<1000	<20
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

☐ Verification survey α= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.

☐ Verification survey βγ= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.

A-6004-663 (REV 3)

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CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0539	Page 2 of 3

Map/Sketch

See Attached Map

Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	NA	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360 w/ 43-93	RO-20	NA	NA
2	NA	Serial No.	NA	NA	SCLL8-0521	ICEB4-1592	NA	NA
3	NA		NA	NA	DTLLP-0625	NA	NA	NA
4	NA	Efficiency (used)	NA	NA	101/101	NA	NA	NA
5	NA	Smear Log Number	HPT: Date: 9-26-2010	Payroll N		Review Date: 09/27/10	Payroll N	
6	NA	NA	HPT Name (Print): Jennifer Griffin			Reviewer Name (Print): [illegible]		
7	NA	NA	Signature: [illegible]			Signature: [illegible]		

A-6004-653 (REV 3)

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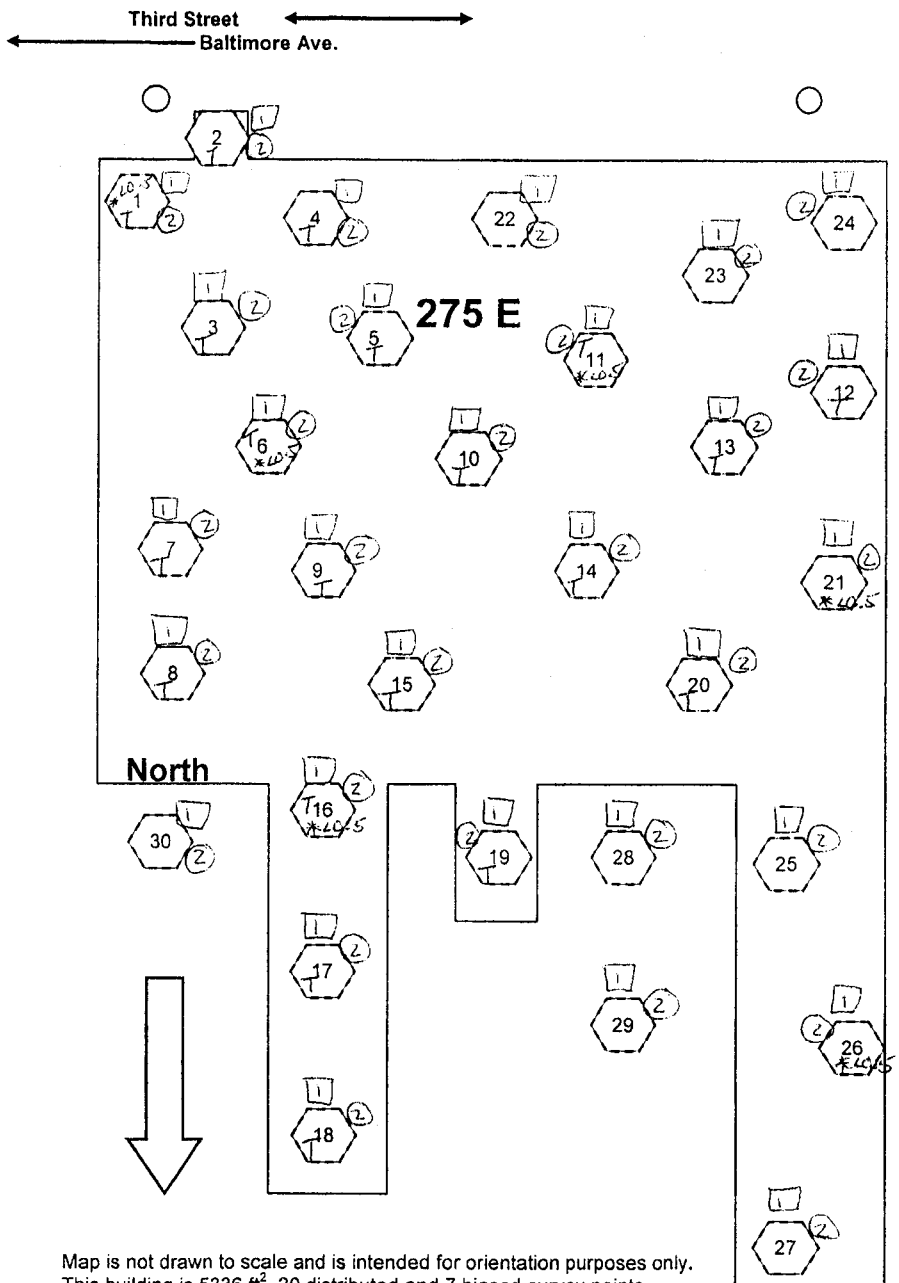


Map is not drawn to scale and is intended for orientation purposes only. This building is 5336 ft^2. 20 distributed and 7 biased survey points have been identified. Distance between survey points is approximately 10 feet.

Remove surface layer of gravel to access original grade of the building, clear an area ~~of 1 ft^2~~ at each survey point.

RSR No. BF-10-0539

Pg 3 of 3

Facility Status Change Form

Date Submitted: January 31, 2011	**Area:** 200 East	**Action Memorandum:**
Originator: Michael R. Greene	**Facility ID:** 2701M	"Action Memorandum for General Hanford Site Decommissioning Activities," DOE/RL-2010-22, Revision 0, March 2010
Phone: (509) 373-9900	**Control #** FSCF-2010-033-2701M	

This form documents status of facility decontamination, deactivation, decommissioning and demolition operations or debris removal in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

☒ All D4 operations required by action memo complete.

☐ D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

The required facility removal actions were performed in accordance with the *"Action Memorandum for General Hanford Site Decommissioning Activities,"* DOE/RL-2010-22, Revision 0, March 2010, and the *"Removal Action Work Plan for the Central Plateau General Decommissioning Activities,"* DOE/RL-2010-33, Rev. 0, April 2010. The removal action consisted of decontamination, deactivation, and decommissioning, (as required), and demolition of Building 2701M, 200 East Area.

The 2701M Guard Shack was a wood-framed structure that was approximately 5.5 m (16 ft) by 5.9 m (18 ft). It had a slab-on-grade foundation, transite siding, and a slightly sloped flat graveled asphalt roof. Building 2701M was built in 1953, was finished on the interior, and had basic water and electrical service connections. Building 2701M was located at Parts Drive and Mae Avenue, 200 East Area, and was part of the 2101M Fabrication Building Complex.

Demolition of 2701M was initiated on June 09, 2010, and completed on June 14, 2010. The entire structure was removed to slab-on-grade. The remaining slab was covered with gravel to prevent any potential safety hazards.

Wastes associated with this demolition were characterized under Waste Profile Number WPPRCIF001 and disposed at the Environmental Restoration Disposal Facility (ERDF). Waste materials from this demolition weighed approximately 6 tons.

Actions specifically implemented for Building 2701M were as follows:

- Hazardous substances (batteries, light bulbs, oils, grease, mercury, refrigerant, and polychlorinated biphenyls) were removed from equipment (or fixtures) within and around the structure. All hazardous substances removed were characterized and disposed in accordance with waste management applicable or relevant and appropriate requirements (ARAR) and receiving facility waste acceptance criteria. Equipment was removed and disposed to facilitate demolition.
- All utility connections (water, electrical, sewer) were severed at their source (the service point). Connections were also severed at the building entry point at grade. All pipes and penetrations were plugged (at grade).

- Historic preservation and ecological resource evaluations were performed in accordance with National Environmental Policy Act of 1969 (NEPA) requirements to address the impacts of demolition at the site. "Cultural Resources Review for Demolition of Miscellaneous Buildings/Structures in the 200, 400, and 600 Areas and the Removal of Debris from the North Slope, Hanford Site Benton County, Washington (HCRC 2009-200-051)"; "Ecological Resources Review, ECR 2009-200-051B."
- The structure was demolished to grade using heavy equipment (e.g. track hoes and excavators).
- All wastes generated were characterized, shipped, and disposed of in accordance with waste management applicable or relevant and appropriate requirements (ARARs) and the ERDF waste acceptance criteria.
- The area was leveled using clean fill material to ensure that no safety hazard remained.

Description of Deferral (as applicable):

Not applicable. No activities were deferred for this removal action. Pre and post-demolition radiological surveys were completed; no radiological contamination was detected. Visual inspection of the area revealed no evidence of staining (e.g., potential hazardous substances resulting from spills or other events). No visible contamination was left behind, on the basis of site inspections. Radiological surveys were completed to measure any elevated radiological contamination.

Section 2: Underlying Soils Status

☒ No waste(s) present. No additional actions anticipated.

☐ Documented waste(s) present. Cleanup and closeout to be addressed under separate CERCLA Response Action.

☐ Potential waste site discovered during D4 operations. Waste site identification number, <to be> assigned>. Cleanup and closeout to be addressed under separate CERCLA Response Action.

Description of Current/As-Left Condition:

The 2701M demolition was a slab-on-grade demolition project. No underlying soils were exposed. Adjacent soils around the slab were inspected and no visible staining was present.

Post-demolition radiological surveys of the underlying soils did not reveal any elevated radiological contamination. Radiological surveys did not reveal any radiological contamination conditions during pre-demolition or post-demolition activities. All post-demolition radiological surveys were conducted prior to backfilling operations.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

Prior to the demolition of 2701M, the location of identified or potential waste sites (including underground pipelines) within the demolition boundary or in close proximity to the demolition boundary was researched. It was determined that no documented waste sites were present. In addition, no potential waste site discoveries were identified during this review or as a result of implementation of the demolition activities.

Section 3: List of Attachments

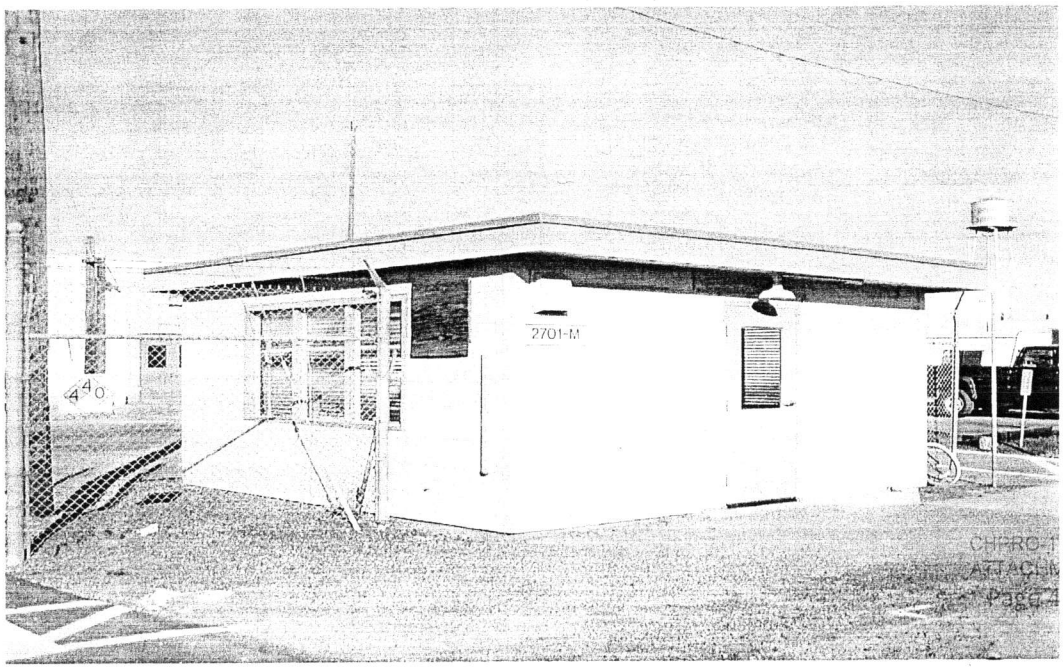
Attachment A. Project Photographs of 2701M—Pre-demolition and Post-demolition.

Attachment B. Pre-demolition and Decommissioning Radiological Surveys—BE-09-0002 and BE-10-0079.

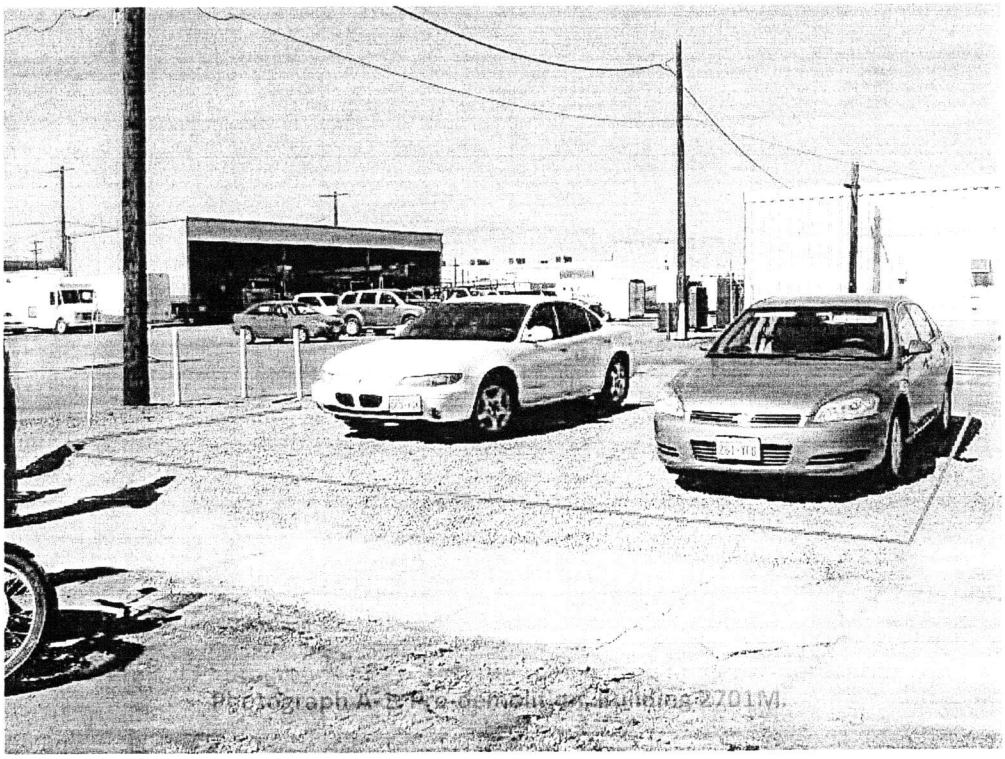
Attachment C. Post-demolition and Decommissioning Radiological Surveys—Report—BE-10-0535.

DOE-RL	2/8/2011 **Date**

ATTACHMENT A. Project Photographs of 2701M—Pre-demolition and Post-demolition.



Photograph A-1. Pre-demolition, Building 2701M.



Photograph A-2. Post-demolition, Building 2701M. Area under the two automobiles.

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-090002	Page 1 of 2

Date	Start/Stop Time	Area/Location	RWP/Rev.
12-17-09	0600/1630	200E/2701M & 2716E	BE-09-001

Purpose of Survey

☐ Material Release

Release Survey Plan #: 3B600-AMN-09-007

Released to:

☐ RAM Shipment:

☐ Required Task:

☐ Job Coverage:

☐ Other:

Description of Work/Comments:

Surveys of Buildings for D & D.
Outside ground surveys not performed due to ice/snow.

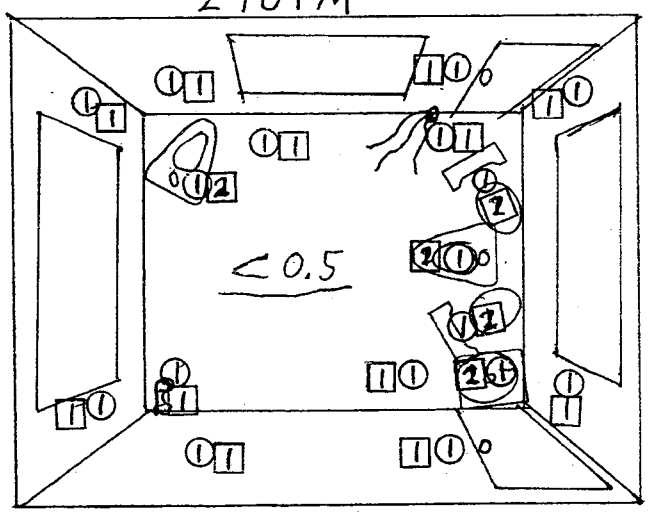
No.	Description	Dose Rate Measurements Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Contamination Measurements							
										Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	smears/scans				NA					200	0	200	0	<5000	<100	<1000	<20
2	smears/scans									200	0	500	0	<5000	<100	<1000	<20
3	Dose Rates	F	<0.5	<0.5	2	1	NA	<0.5	<0.5								
			NA											NA			

☐ Verification survey α= <D in/s inches away, count time (seconds), % of items surveyed or swiped, # of static counts, sq. feet Area Swiped. No Audible counts above background.

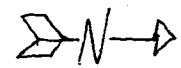
☐ Verification survey βγ= <D in/s inches away, count time (seconds), % of items surveyed or swiped, # of static counts, sq. feet Area Swiped. No Audible counts above background.

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-090002	Page 2 of 2

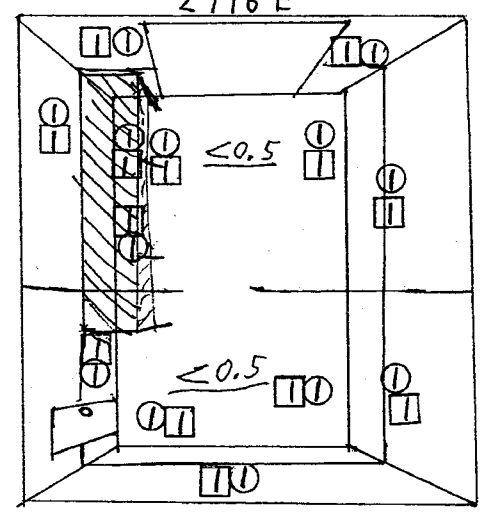
2701M



Map/Sketch



2716 E



Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number	
1	NA
2	
3	
4	
5	
6	
7	

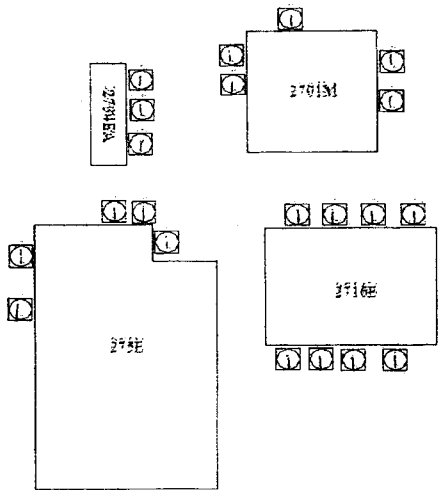
Instruments

Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360	RO-20	NA
Serial No.	NA		SCLL8-0188	ICE B4-1596	
			DTLLP-0297	NA	
Efficiency (used)			10%		

Smear Log Number	HPT: Date: 12-17-09 Payroll No:	Review Date: 12.22.09 Payroll No
NA	HPT Name (Print): Robert Paulsen	Reviewer Name (Print): Laura Duerman
	Signature: [signature]	Signature: [signature]

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0079	Page 2 of 2

Map/Sketch



Legend:	# Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	na	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360 / 43-93	na	na	na
2	na	Serial No.	na	na	SCLL8-0108	na	na	na
3	na		na	na	DTLL8-0219	na	na	na
4	na	Efficiency (used)	na	na	10% / 10%	na	na	na
5	na	Smear Log Number	HPT: Date: 04-14-10	Payroll No:		Review Date: 4/15/10	Payroll No	
6	na	na	HPT Name (Print): Ricardo L. Wilson			Reviewer Name (Print): Laura U Dickman		
7	na	na	Signature: Ricardo L. Wilson			Signature: Laura U Dickman		

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CH2M HILL PLATEAU REMEDIATION COMPANY
RADIOLOGICAL SURVEY REPORT

RSR No. BE-10-0079

Date	Start/Stop Time	Area/Location	RWP/Rev.
04-14-10	0700 / 1630	200E,275E 2701M 2716E 2734EA roof survey	na

Purpose of Survey

- ☐ Material Release
- Release Survey Plan #: na
- Released to: na
- ☐ RAM Shipment: na
- ☐ Required Task: na
- ☒ Job Coverage: DD-09-009
- ☐ Other: na

Description of Work/Comments:

Survey partially done on the roof of 275E and completed on 2701M, 2716E, 2734EA. Was conducted using a small scissor lift, a ladder, and a stepping stool approximately 1 foot away from edge of building. Survey altogether consisted of directs and smears (See Survey Plan CHPRC-D4-JRM-09-002)Static directs taken at roof and smears taken to ground level for 1 minute counts. Some smears were not less than contamination values on table 2-2. Smears were taken to count room to be decayed. All smears decayed to below contamination values on table 2-2 indicating radon.

No.	Description	Dose Rate Measurements: Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Contamination Measurements: Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	Roof Smears and Directs	na	na	na	na	na	na	na	na	450	3	450	3	<5000	<500	<1000	<20
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

☐ Verification survey α= <D na in/s na inches away, na count time (seconds), na% of items surveyed or swiped, na # of static counts, na sq. feet. Area Swiped. No Audible counts above background.

☐ Verification survey βγ= <D na in/s na inches away, na count time (seconds), na% of items surveyed or swiped, na # of static counts, na sq. feet. Area Swiped. No Audible counts above background.

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Post Demo

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0535	Page 1 of 3

Date	Start/Stop Time	Area/Location	RWP/Rev.
09/24/2010	0815 / 0920	200E/2701M Radiological Characterization/ Scoping Survey	

Purpose of Survey

☐ Material Release

Release Survey Plan #: 10-RAD-2W-026

Released to: See Comments

☐ RAM Shipment: NA

☐ Required Task: NA

☐ Job Coverage: NA

☐ Other: NA

Description of Work/Comments:

-> Radiological Characterization survey performed on the 2701M site.

-> Gravel removed from representitive places on the 2701M site the size of 1ft x 1ft. See map for survey locations.

-> Performed scan surveys and removable contamination surveys at the indicated survey points. No contamination, fixed or removable, was found.

-> Dose rate surveys were performed as indicated on the survey map.

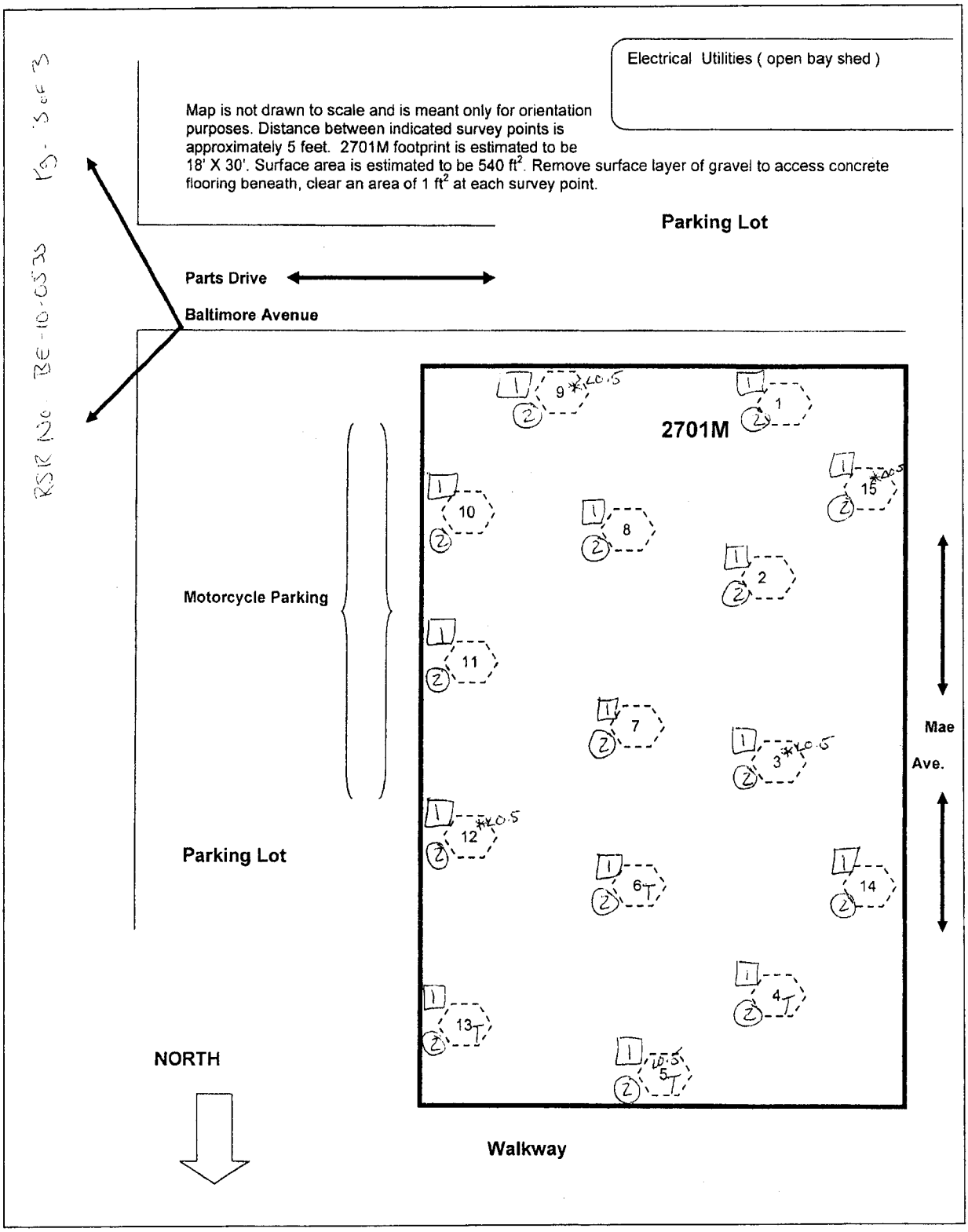
-> Surveys performed with the Ludlum 2360 performed IAW procedure PRC-PRO-RP-40050.

-> Survey points 4, 5, 6, and 13 were of the soil. Transferability survey conducted at these points performed IAW PRC-RP-40025 Append. D.

No.	Description	Dose Rate Measurements Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Contamination Measurements							
										Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	All direct surveys of survey points 1-15	NA	NA	NA	NA	NA	NA	NA	NA	270	1	270	1	<5000	<500	NA	NA
2	All smear surveys of survey points 1-15	NA	NA	NA	NA	NA	NA	NA	NA	270	1	NA	NA	NA	NA	<1000	<20
3	Dose rate survey of survey points 3, 9, 12, 15	C	<0.5	NA	2	1	NA	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
4	Dose rate survey of survey point 5	F	<0.5	NA	2	1	NA	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
5	Transferability Surveys of survey points 4,5,6, and 13.	NA	NA	NA	NA	NA	NA	NA	NA	270	1	NA	NA	NA	NA	<1000	<20
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

☐ Verification survey α= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.

☐ Verification survey βγ= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.


Electrical Utilities (open bay shed)
Map is not drawn to scale and is meant only for orientation purposes. Distance between indicated survey points is approximately 5 feet. 2701M footprint is estimated to be 18' X 30'. Surface area is estimated to be 540 ft². Remove surface layer of gravel to access concrete flooring beneath, clear an area of 1 ft² at each survey point.
Parking Lot
Parts Drive
Baltimore Avenue
2701M
Motorcycle Parking
Parking Lot
Mae Ave.
NORTH
Walkway

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0535	Page 2 of 3

Map/Sketch

See Attached Map

Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	- - - - - - - - (designation inside) - - - - - - - - Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	NA	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360 w/ 43-93	RO-20	NA	NA
2	NA	Serial No.	NA	NA	SCLL8-0516	ICEB4-1592	NA	NA
3	NA		NA	NA	DTLLP-0620	NA	NA	NA
4	NA	Efficiency (used)	NA	NA	10%/10%	NA	NA	NA
5	NA	Smear Log Number	HPT: Date: 9-24-2010	Payroll		Review Date: 09/27/10	Payroll N	
6	NA	NA	HPT Name (Print): Jennifer Griffin			Reviewer Name (Print): Jamie [illegible]		
7	NA	NA	Signature:			Signature:		

Facility Status Change Form

Date Submitted: January 31, 2011	**Area:** 200 East	**Action Memorandum:**
Originator: Michael R. Greene	**Facility ID:** 2734EA	"Action Memorandum for General Hanford Site Decommissioning Activities," DOE/RL-2010-22, Revision 0, March 2010
Phone: (509) 373-9900	**Control #** FSCF-2010-033-2734EA	

This form documents the status of facility decontamination, deactivation, decommissioning and demolition operations or debris removal in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

☒ All D4 operations required by action memo complete.

☐ D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

The required facility removal actions were performed in accordance with the *"Action Memorandum for General Hanford Site Decommissioning Activities,"* DOE/RL-2010-22, Revision 0, March 2010, and the *"Removal Action Work Plan for the Central Plateau General Decommissioning Activities,"* DOE/RL-2010-33, Rev. 0, April 2010. The removal action consisted of decontamination, deactivation, decommissioning (as required), and the demolition of Building 2734EA.

Building 2734EA was a single use structure for gas cylinder storage built in 1944. The structure area was approximately 15.6 m^3 (168 ft^2). Building 2734EA was located adjacent to the northeast corner of Building 272E near the intersection of Fab Drive and Atlanta Avenue.

The demolition of Building 2734EA was initiated on June 21, 2010, and completed on June 28, 2010.

Wastes associated with this demolition were characterized under Waste Profile Number WPPRCIF001 and disposed at the Environmental Restoration Disposal Facility (ERDF). Waste materials from this demolition weighed approximately 16.0 tons.

Actions specifically implemented for Building 2734EA were as follows:

- Hazardous substances (light bulbs) were removed from fixtures within and around the structure. All hazardous substances removed were characterized and disposed in accordance with waste management applicable or relevant and appropriate requirements (ARAR) and receiving facility waste acceptance criteria.
- Utility connections (e.g., electrical) were severed at their source (the service point). Connections were also severed at the building entry point at grade.
- Historic preservation and ecological resource evaluations were performed in accordance with *National Environmental Policy Act of 1969 (*NEPA) requirements to address the impacts of demolition at the site. "Cultural Resources Review for Demolition of Miscellaneous Buildings/Structures in the 200, 400, and 600 Areas and the Removal of Debris from the North Slope, Hanford Site Benton County, Washington (HCRC 2009-200-051)"; "Ecological Resources Review, ECR 2009-200-051A."
- The structure was demolished to grade using heavy equipment (e.g. track hoes and excavators).

- All wastes generated during demolition were characterized, shipped, and disposed of in accordance with waste management applicable or relevant and appropriate requirements (ARAR) and receiving facility waste acceptance criteria.
- Demolition of Building 2734EA left a concrete pad (slab) in place, at grade.

Description of Deferral (as applicable):

Not applicable. No activities were deferred for this removal action. Pre and post-demolition radiological surveys were completed; no radiological contamination was detected. Visual inspection of the area revealed no evidence of staining (e.g., potential hazardous substances resulting from spills or other events).

Section 2: Underlying Soils Status

☒ No waste(s) present. No additional actions anticipated.

☐ Documented waste(s) present. Cleanup and closeout to be addressed under separate CERCLA Response Action.

☐ Potential waste site discovered during D4 operations. Waste site identification number, <to be> assigned. Cleanup and closeout to be addressed under separate CERCLA Response Action.

Description of Current/As-Left Condition:

Demolition of Building 2734EA left a concrete slab, at grade. Visual inspection of the concrete slab revealed no evidence of staining (e.g., potential hazardous substances resulting from spills or other events).

Post-demolition radiological surveys of the area were conducted; no radiological contamination was detected.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

Prior to the demolition of Building 2734EA, the location of identified or potential waste sites (including underground pipelines) within the demolition boundary or in close proximity to the demolition boundary was researched. It was determined that no documented waste sites were present. In addition, no potential waste site discoveries were identified during this review or as a result of implementation of the demolition activities.

Section 3: List of Attachments

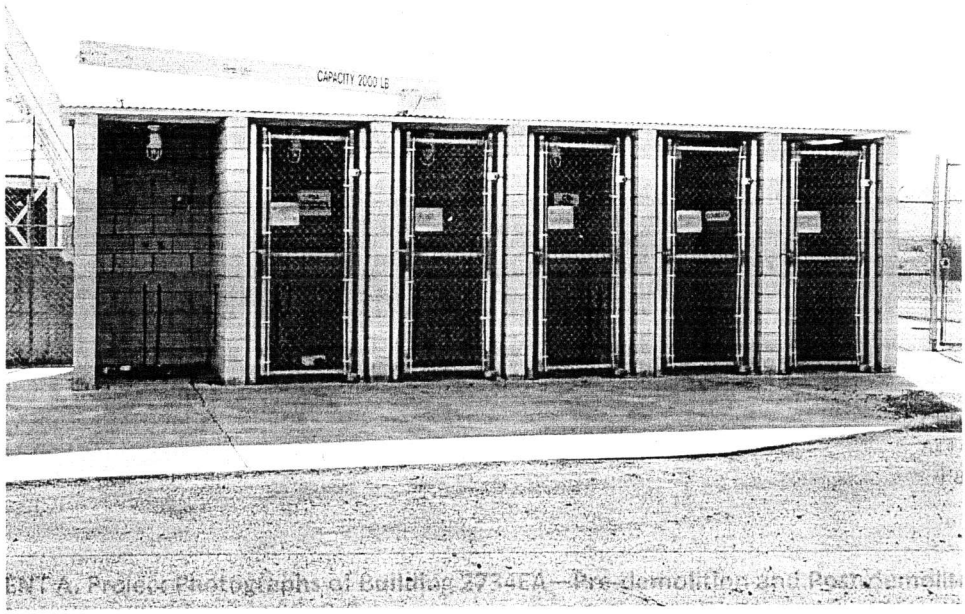
Attachment A. Project Photographs of Building 2734EA—Pre-demolition and Post-demolition.

Attachment B. Pre-demolition and Decommissioning Radiological Survey Report—BE-10-0110 and BE-10-0079.

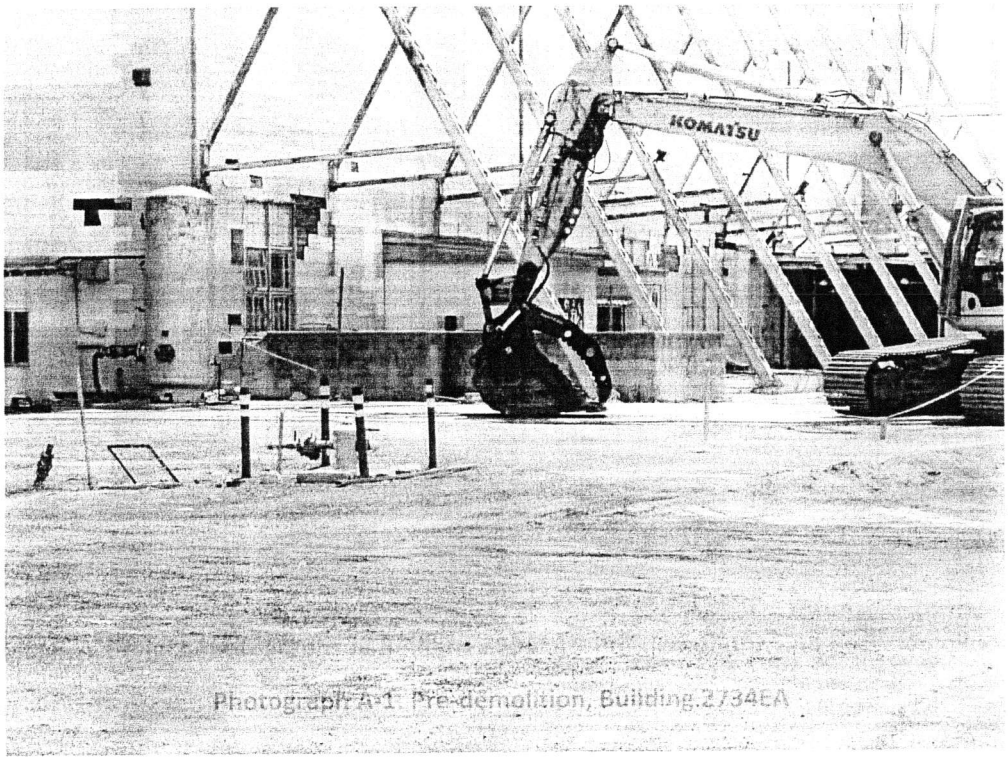
Attachment C. Post-demolition and Decommissioning Radiological Survey Report—BE-1000034.

	2/8/2011
DOE-RL	Date

ATTACHMENT A. Project Photographs of Building 2734EA—Pre-demolition and Post-demolition.



Photograph A-1. Pre-demolition, Building 2734EA



Photograph A-2. Post-demolition, Building 2734EA. Slab-on-grade area identified by track hoe shear.

CH2M HILL PLATEAU REMEDIATION COMPANY
RADIOLOGICAL SURVEY REPORT

RSR No. BE-10-0110

Page 1 of 2

Date	Start/Stop Time	Area/Location	RWP/Rev.
04/28/10	0120C / 1430	200E/ 2734 EA Storage Facility	BE-09-001/Rev 1

Purpose of Survey

- ☐ Material Release
- Release Survey Plan #: NA
- Released to: NA
- ☐ RAM Shipment: NA
- ☐ Required Task: NA
- ☐ Job Coverage: NA
- ☐ Other: NA

Description of Work/Comments:

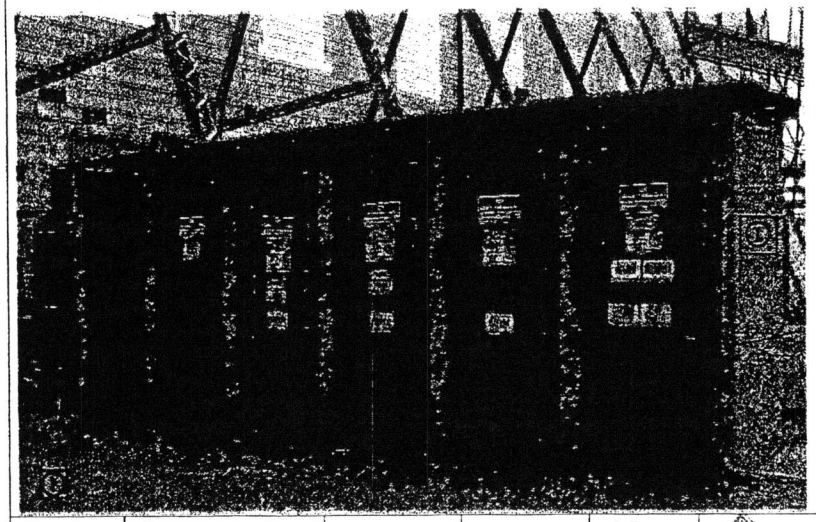
Performed contamination survey of 2734EA Storage facility according to survey plan CHPRC-D4-JRM-09-002 located 200 East as per task description. Survey of the walls up to 8 feet from the ground.

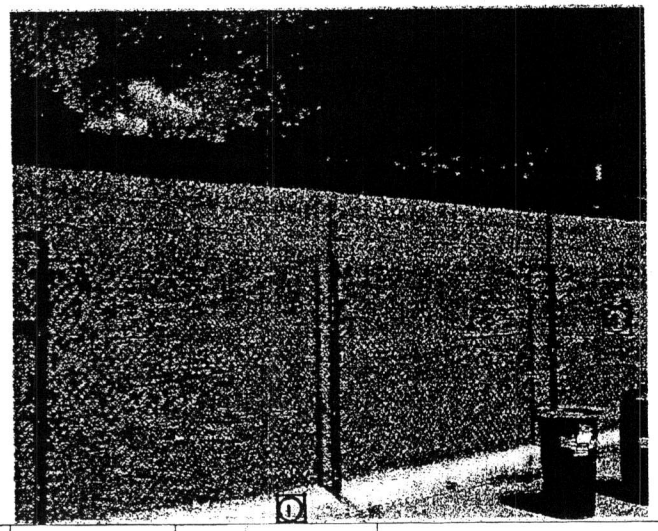
No.	Description	Dose Rate Measurements								Contamination Measurements							
		Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	All directs and Smears and dose	C/F	<0.5	<0.5	2	1	NA	<0.5	<0.5	350	3	350	3	<5000	<100	<1000	<20
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	Na	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

- ☐ Verification survey α= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.
- ☐ Verification survey βγ= <D NA in/s NA inches away, NA count time (seconds), NA% of items surveyed or swiped, NA # of static counts, NA sq. feet. Area Swiped. No Audible counts above background.

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0110	Page 2 of 2

Map/Sketch





Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	NA	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360	RO-20	na	na
2	NA	Serial No.	NA	NA	SCLL8-0113	ICEB4-1596	na	na
3	NA		NA	NA	DTLLP-0224	NA	NA	na
4	NA	Efficiency (used)	NA	NA	10%	NA	NA	na
5	NA	**Smear Log Number**	HPT: Date: 4/28/10	Payroll No: 73253,		Review Date: 04/28/10	Payroll No:	
6	NA	NA	HPT Name (Print): Diana King, Ryan Roberts			Reviewer Name (Print): LAURA U AUKERMAN		
7	NA	NA	Signature: Diana King Ryan Roberts			Signature: Laura U. Aukerman		

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0079	Page 1 of 2

Date	Start/Stop Time	Area/Location	RWP/Rev.
04-14-10	0700 / 1630	200E,275E 2701M 2716E 2734EA roof survey	na

Purpose of Survey

- ☐ Material Release

Release Survey Plan #: na

Released to: na

- ☐ RAM Shipment: na
- ☐ Required Task: na
- ☒ Job Coverage: DD-09-009
- ☐ Other: na

Description of Work/Comments:

Survey partially done on the roof of 275E and completed on 2701M, 2716E, 2734EA. Was conducted using a small scissor lift, a ladder, and a stepping stool approximately 1 foot away from edge of building. Survey altogether consisted of directs and smears (See Survey Plan CHPRC-D4-JRM-09-002)Static directs taken at roof and smears taken to ground level for 1 minute counts. Some smears were not less than contamination values on table 2-2. Smears were taken to count room to be decayed. All smears decayed to below contamination values on table 2-2 indicating radon.

No.	Description	Dose Rate Measurements								Contamination Measurements							
		Note[1] F = Field (≥30 cm) C = Contact (≤1 cm)								Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		Dist. (cm) Note 1	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr	βγ	α	βγ	α	βγ	α	βγ	α
1	Roof Smears and Directs	na	na	na	na	na	na	na	na	450	3	450	3	<5000	<500	<1000	<20
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

- ☐ Verification survey α= <D na in/s na inches away, na count time (seconds), na% of items surveyed or swiped. na # of static counts, na sq. feet. Area Swiped. No Audible counts above background.
- ☐ Verification survey βγ= <D na in/s na inches away, na count time (seconds), na% of items surveyed or swiped. na # of static counts, na sq. feet. Area Swiped. No Audible counts above background.

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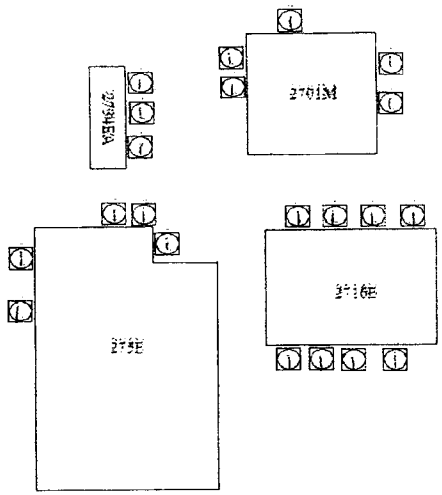
CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT	RSR No. BE-10-0079	Page 2 of 2

Map/Sketch



Legend:	Direct Measurement	Air Sample	Smear	LAW	Neutron	T = Transferability	Field Dose Rate * Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	-------- (designation inside) -------- Radiological Area Boundary							

Air Sample Log Number		Instruments						
1	na	Instrument/Probe Model	GM Model g-m Probe	PAM Probe	2360 / 43-93	na	na	na
2	na	Serial No.	na	na	SCLL8-0108	na	na	na
3	na		na	na	DTLLP-0219	na	na	na
4	na	Efficiency (used)	na	na	10% / 10%	na	na	na
5	na	**Smear Log Number**	HPT: Date: 04-14-10	Payroll No:		Review Date: 4/15/10	Payroll No	
6	na	na	HPT Name (Print): Ricardo L. Wilson			Reviewer Name (Print): Laura U Dulaman		
7	na	na	Signature: Ricardo L. Wilson			Signature: Laura U Dulaman		

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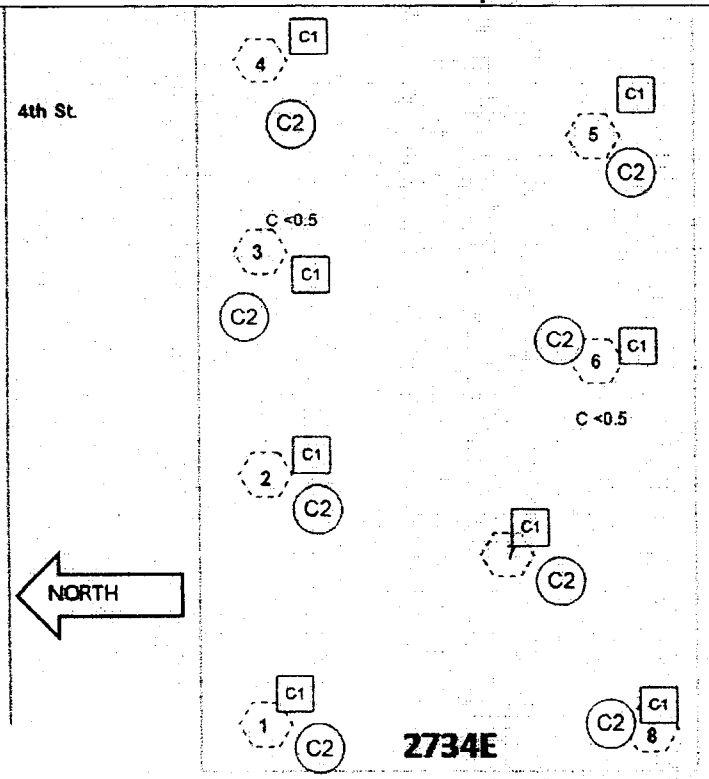
CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BE-1000034	Page 2 of 3

Map/Sketch



Map is not drawn to scale and is intended for orienatation purposes only. This building is 240ftx240ft. 4 distributed and 4 biased survey points will be required. Distance between samples is estimated to be 5 feet.

ATLANTA

Map Name: 2734E	Map Description: Radiological Characterization Survey							
Legend	# Direct Measurement	Air Sample	Smear	# LAW	Neutron Dose Rate	T# Transferability	Field Dose Rate *Contact Dose Rate	Note: Dose Rates in mrem/hr unless otherwise noted.
	---------- (designation inside) ---------- Radiological Area Boundary							

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BE-1000034	Page 1 of 3

Date	Start/Stop Time	Area/Location	RWP/Rev.
10/14/2010	0830 / 1030	200E / 2734E / /	BE-10-010/3

Purpose of Survey

- [ ] Material Release
  - Release Survey Plan #: N/A
  - Released to: N/A
- [ ] Ram Shipment: N/A
- [ ] Required Task: N/A
- [ ] Job Coverage: N/A
- [x] Other: Release Survey Plan: 10 -RAD-2W-026

Description of Work/Comments:

-> Radiological Characterization survey performed on the 2734E site.
-> See map for survey locations.
-> Performed scan surveys and removable contamination surveys at the indicated survey points. No contamination, fixed or removable, was found.
-> Surveys performed with the Ludlum 2360 performed IAW procedure PRC-PRO-RP-40050.

Comments:

Dose Rate Measurements

Note[1]: F = Field (≥30cm) C = Contact(≤1 cm)

No.	Description	Dist. (cm) Note[1]	WO mR/hr	WC mR/hr	CF β	CF γ	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr
D1	Dose rate surveys of survey points 3 and 6	C	N/A	<0.5	2	1	N/A	<0.5	<0.5

Contamination Measurements

† Manually Calculated by RCT ‡ LAW

No.	Description	Background cpm		Direct Gross cpm/PA		Total dpm/100 cm²		Removable dpm/100 cm²	
		βγ	α	βγ	α	βγ	α	βγ	α
C1	All direct surveys of survey points 1-8	360	3	360	3	<5000†	<500†	N/A†	N/A†
C2	All smear surveys of survey points 1 -8	287	3	N/A	N/A	N/A†	N/A†	<1000†	<20†

CH2M HILL PLATEAU REMEDIATION COMPANY RADIOLOGICAL SURVEY REPORT (Submitted)	RSR No. BE-1000034	Page 3 of 3

Air Sample Measurements

Smear Sample Measurements

Instruments

Instrument/Probe Model	Serial No.	Probe Serial No.	Efficiency (Used)
Ludlum 2360	SCLL8-0521	DTLLP-0625	0.1
Ludlum 2360	SCLL8-0518	DTLLP-0622	0.1

Unless stated otherwise in the "Comments" section, contamination levels for C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, and Eu-155 are ≤ 10 times the b-g contamination levels shown above (see CHPRC-00073, Table 2-2).

Contributors

Name	HID	Date	Signature
Griffin, Jennifer		10-14-10	
Gerg, David		10-14-10	

Reviewers

Name	HID	Date	Signature
JAMIE COTTON		10-18-10	