

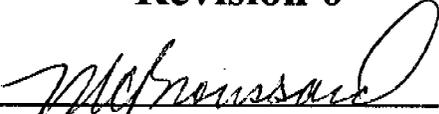


Rocky Flats Environmental Technology Site

Radiological and Non-Radiological Characterization Package for Trailers 112A, B, and C

July 1999

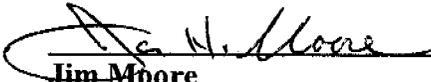
Revision 0



 Marla Broussard
 RMRS Responsible Manager

8/4/99

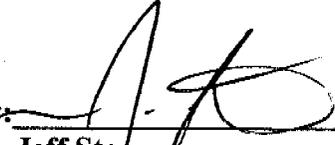
 Date



 Jim Moore
 RMRS Quality Assurance

8/4/99

 Date

Approved by: 

 Jeff Stevens
 Manager, D&D Advanced Planning
 Kaiser-Hill Company

8/4/99

 Date



ADMIN RECCRD

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for
Characterization Package for
Trailers T112A, T112B, and T112C

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8/4/99
RCS

1.0 INTRODUCTION

This Characterization Instruction is designed to describe the necessary surveys and sampling for characterization and ~~final status~~ ^{PRE-DEMOLITION} survey of RFETS Trailers T112A, B, and C in preparation for release to commerce.

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2.0 CHARACTERIZATION INSTRUCTION FOR RADIOLOGICAL SURVEYS

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Survey Area: T112	Survey Unit: Unit A	Building: T112A
Survey Unit Description: Office trailer – Pre Demolition Survey		

SURVEY PACKAGE COVER SHEET

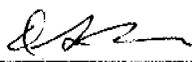
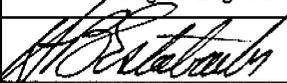
Building Information			
Classification: Type 1 <input checked="" type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/>			
Contaminants of Concern: Plutonium <input checked="" type="checkbox"/> Uranium <input checked="" type="checkbox"/> Other <input type="checkbox"/>			

Special Support Requirements
Survey points randomly generated by Radiological Engineering

Special Safety Precautions
Per 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP

Labeling Requirements
Not Applicable

Survey Package Implementation
This survey package is ready for implementation.

D. A. BARNES			8-3-99
Radiological Engineer Printed Name		Radiological Engineer Signature	Date
H. B. ESTABROOKS			8/3/99
RE Peer Review Printed Name		RE Peer Review Signature	Date

Survey Package Closure			
All required reviews are complete, and data analysis results meet RLCP criteria. Survey package is authorized for closure.			

Radiological Engineer Printed Name	Employee #	Radiological Engineer Signature	Date
RE Manager Printed Name	Employee #	RE Manager Signature	Date

4/23

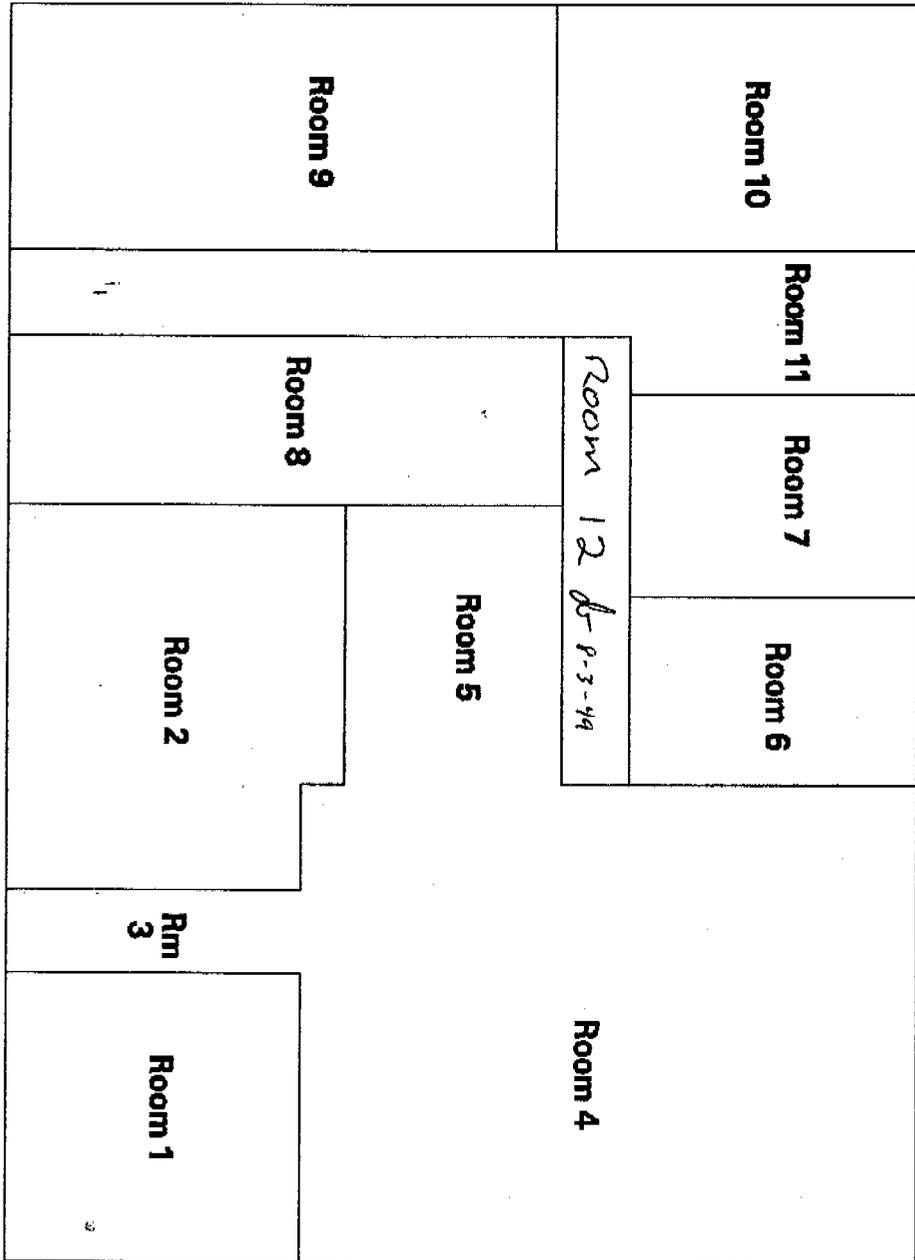
5

Survey Area: T112	Survey Unit: Unit A	Building: T112A
Survey Unit Description: Office trailer – Pre Demolition Survey		

SAMPLING AND SURVEY INSTRUCTIONS

Minimum Survey & Sample Measurement Requirements		
Measurement	Amount & Type	Comments
Surface Activity Measurements:	16 survey points (alpha & beta, direct & removable) on trailer surfaces. 5 duplicate survey points for QA purposes.	Representative surveys of the area will be taken for total and removable, alpha and beta contamination in accordance with 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP The RCT will document the readings of all surveys performed. QA survey points done by different RCT Duplicate smears will be taken at a directly adjacent location.
Surface Scanning:	10% scan surveys on trailer surfaces. 5% duplicate scan areas for QA purposes.	1 m ² scan surveys will be performed at locations indicated. Scan surveys of the area will be taken for alpha and beta contamination at a scan rate of 1.5 inches per second. QA scan areas done by different RCT
Media Samples:	None	None
Volumetric Samples:	None	None

Building T112A Floorplan



6/23

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
	T112A Room 1					T112A Room 3					T112A Room 5					T112A Room 6					T112A Room 8					T112A Room 9									
1	4			4						3	Floor	3								3															
2	3									2		2								2															
3	2			2						1		1								1															
4	1			1																															
5	A	B			A	B				A		A								A	B	C	D	E	F	G	H	I							
6	2																																		
7	1																			3						3									
8	A	B	C	D	E	F	G	H	I	J	K									2				Floor	2										
9	T112A Room 2					T112A Room 4					T112A Room 7					T112A Room 8					T112A Room 9														
10	4									4																									
11	3									3																									
12	2																																		
13	1									1																									
14	A	B	C	D	E					A	B	C	D	E																					
15	2																																		
16	1																																		
17	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	QA	R	S																
18	T112A Room 2					T112A Room 4					T112A Room 7					T112A Room 8					T112A Room 9														
19	8									8																									
20	7																																		
21	6	QA																																	
22	5									5																									
23	4									4																									
24	3									3																									
25	2									2																									
26	1									1																									
27	A	B	C	D	E	F	G			A	B	C	D	E	F	G																			
28	2																																		
29	1																																		
30	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	QA	R	S	T	U	V	W	X	Y	Z	AA	AB							
31	T112A Room 2					T112A Room 4					T112A Room 7					T112A Room 8					T112A Room 9														
32	4									4																									
33	3																																		
34	2	QA																																	
35	1									1																									
36	A	B	C							A	B	C																							
37	2																																		
38	1																																		
39	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	QA	R	S																
40																																			
41	T112A Room 2					T112A Room 4					T112A Room 7					T112A Room 8					T112A Room 9														
42																																			
43	7									7																									
44	6									6																									
45	5									5																									
46	4									4																									
47	3									3																									
48	2									2																									
49	1									1																									
50	A	B	C							A	B	C																							
51																																			

Survey Area: T112	Survey Unit: Unit B	Building: T112B
Survey Unit Description: Office trailer – Pre Demolition Survey		

SURVEY PACKAGE COVER SHEET

Building Information Classification: Type 1 <input checked="" type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/> Contaminants of Concern: Plutonium <input checked="" type="checkbox"/> Uranium <input checked="" type="checkbox"/> Other <input type="checkbox"/> _____
--

Special Support Requirements Survey points randomly generated by Radiological Engineering

Special Safety Precautions Per 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP
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Labeling Requirements Not Applicable
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Survey Package Implementation This survey package is ready for implementation.
--

<i>D. A. BARNES</i>			<i>8-3-99</i>
Radiological Engineer Printed Name		Radiological Engineer Signature	Date
<i>H. B. ESTABROOKS</i>			<i>8/3/99</i>
RE Peer Review Printed Name		RE Peer Review Signature	Date

Survey Package Closure All required reviews are complete, and data analysis results meet RLCP criteria. Survey package is authorized for closure.

Radiological Engineer Printed Name	Employee #	Radiological Engineer Signature	Date
RE Manager Printed Name	Employee #	RE Manager Signature	Date

Survey Area: T112	Survey Unit: Unit B	Building: T112B
Survey Unit Description: Office trailer – Pre Demolition Survey		

SAMPLING AND SURVEY INSTRUCTIONS

Minimum Survey & Sample Measurement Requirements		
Measurement	Amount & Type	Comments
Surface Activity Measurements:	16 survey points (alpha & beta, direct & removable) on trailer surfaces. 5 duplicate survey points for QA purposes.	Representative surveys of the area will be taken for total and removable, alpha and beta contamination in accordance with 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP The RCT will document the readings of all surveys performed. QA survey points done by different RCT Duplicate smears will be taken at a directly adjacent location.
Surface Scanning:	10% scan surveys on trailer surfaces. 5% duplicate scan areas for QA purposes.	1 m ² scan surveys will be performed at locations indicated. Scan surveys of the area will be taken for alpha and beta contamination at a scan rate of 1.5 inches per second. QA scan areas done by different RCT
Media Samples:	None	None
Volumetric Samples:	None	None

10/23

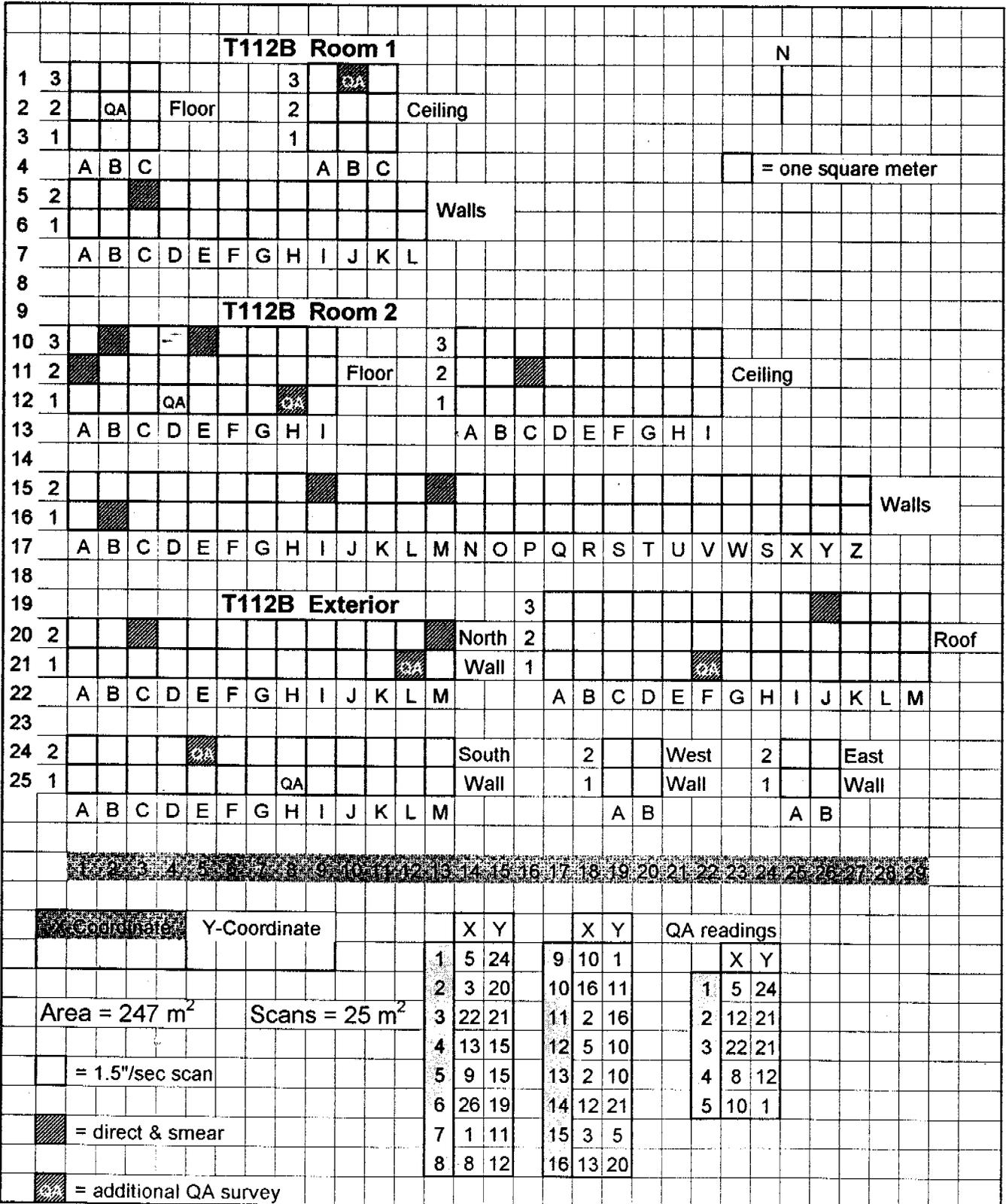
Building T112B Floorplan

Room 1

Room 2

11/23

**112 Trailers PDS
Unit B - T112B
SURVEY POINTS**



12/23

Survey Area: T112	Survey Unit: Unit C	Building: T112C
Survey Unit Description: Office trailer – Pre Demolition Survey		

SURVEY PACKAGE COVER SHEET

Building Information
 Classification: Type 1 Type 2 Type 3
 Contaminants of Concern: Plutonium Uranium Other

Special Support Requirements
 Survey points randomly generated by Radiological Engineering

Special Safety Precautions
 Per 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP

Labeling Requirements
 Not Applicable

Survey Package Implementation
 This survey package is ready for implementation.

<i>D. A. BARNES</i>		<i>[Signature]</i>	<i>8-3-99</i>
Radiological Engineer Printed Name		Radiological Engineer Signature	Date
<i>H. B. ESTABROOKS</i>		<i>[Signature]</i>	<i>8/3/99</i>
RE Peer Review Printed Name		RE Peer Review Signature	Date

Survey Package Closure
 All required reviews are complete, and data analysis results meet RLCP criteria. Survey package is authorized for closure.

Radiological Engineer Printed Name	Employee #	Radiological Engineer Signature	Date
RE Manager Printed Name	Employee #	RE Manager Signature	Date

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Survey Area: T112	Survey Unit: Unit C	Building: T112C
Survey Unit Description: Office trailer – Pre Demolition Survey		

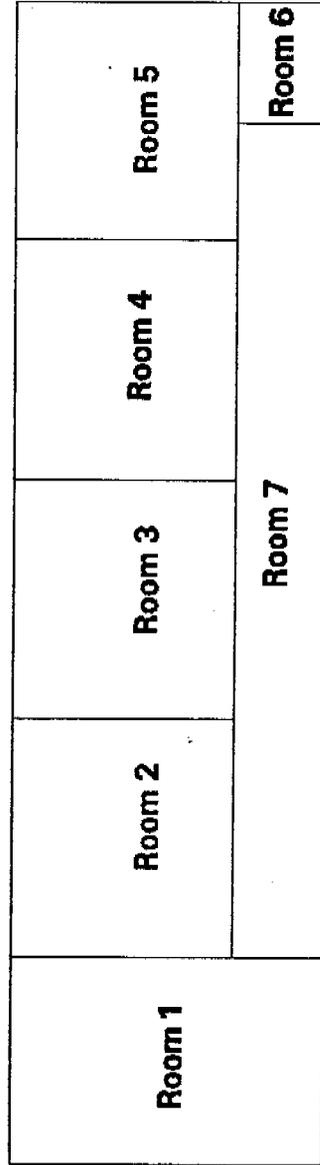
SAMPLING AND SURVEY INSTRUCTIONS

Minimum Survey & Sample Measurement Requirements		
Measurement	Amount & Type	Comments
Surface Activity Measurements:	16 survey points (alpha & beta, direct & removable) on trailer surfaces. 5 duplicate survey points for QA purposes.	Representative surveys of the area will be taken for total and removable, alpha and beta contamination in accordance with 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP The RCT will document the readings of all surveys performed. QA survey points done by different RCT Duplicate smears will be taken at a directly adjacent location.
Surface Scanning:	10% scan surveys on trailer surfaces. 5% duplicate scan areas for QA purposes.	1 m ² scan surveys will be performed at locations indicated. Scan surveys of the area will be taken for alpha and beta contamination at a scan rate of 1.5 inches per second. QA scan areas done by different RCT
Media Samples:	None	None
Volumetric Samples:	None	None

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Building T112C Floorplan



Survey Area: T112	Survey Unit: Unit D	Building: T112A
Survey Unit Description: Office trailer – Pre Demolition Survey		

SURVEY PACKAGE COVER SHEET

Building Information Classification: Type 1 <input checked="" type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/> Contaminants of Concern: Plutonium <input checked="" type="checkbox"/> Uranium <input checked="" type="checkbox"/> Other <input type="checkbox"/>
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Special Support Requirements Survey points randomly generated by Radiological Engineering

Special Safety Precautions Per 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP
--

Labeling Requirements Not Applicable
--

Survey Package Implementation This survey package is ready for implementation.
--

D. A. BARNES		<i>[Signature]</i>	8-3-99
Radiological Engineer Printed Name		Radiological Engineer Signature	Date
H. B. ESTABROOKS		<i>[Signature]</i>	8/3/99
RE Peer Review Printed Name		RE Peer Review Signature	Date

Survey Package Closure All required reviews are complete, and data analysis results meet RLCP criteria. Survey package is authorized for closure.

Radiological Engineer Printed Name	Employee #	Radiological Engineer Signature	Date
RE Manager Printed Name	Employee #	RE Manager Signature	Date

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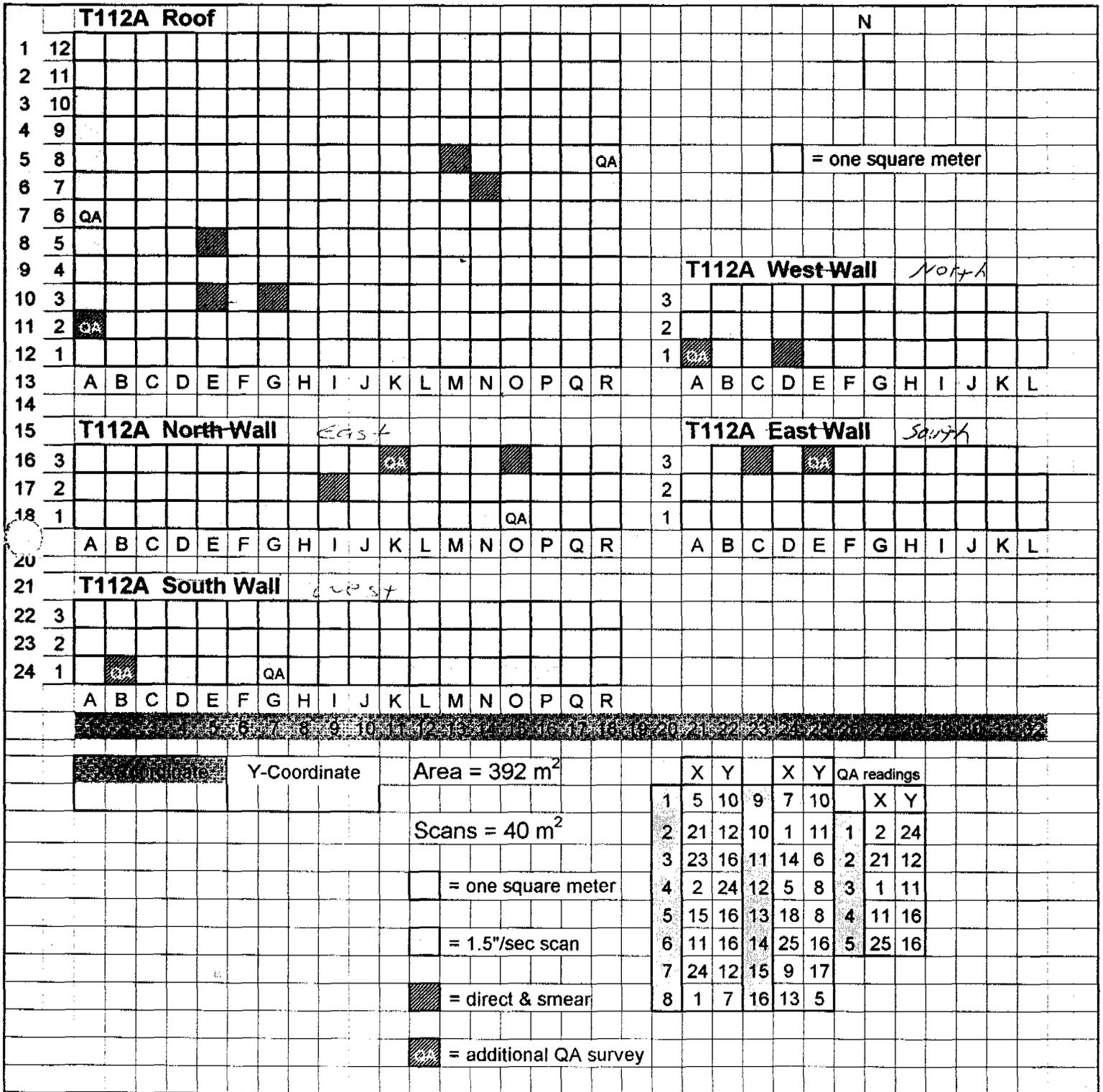
Survey Area: T112	Survey Unit: Unit D	Building: T112A
Survey Unit Description: Office trailer – Pre Demolition Survey		

SAMPLING AND SURVEY INSTRUCTIONS

Minimum Survey & Sample Measurement Requirements		
Measurement	Amount & Type	Comments
Surface Activity Measurements:	16 survey points (alpha & beta, direct & removable) on trailer surfaces. 5 duplicate survey points for QA purposes.	Representative surveys of the area will be taken for total and removable, alpha and beta contamination in accordance with 3-PRO-165-RSP-07.02, "Contamination Monitoring Requirements" and IWCP The RCT will document the readings of all surveys performed. QA survey points done by different RCT Duplicate smears will be taken at a directly adjacent location.
Surface Scanning:	10% scan surveys on trailer surfaces. 5% duplicate scan areas for QA purposes.	1 m ² scan surveys will be performed at locations indicated. Scan surveys of the area will be taken for alpha and beta contamination at a scan rate of 1.5 inches per second. QA scan areas done by different RCT
Media Samples:	None	None
Volumetric Samples:	None	None

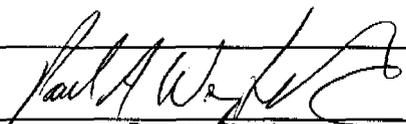
18/23

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3.0 CHARACTERIZATION INSTRUCTION FOR NON-RADIOLOGICAL SAMPLING

NON-RADIOLOGICAL CHARACTERIZATION PACKAGE COVER SHEET

Building Information			
Classification: Type 1 <input checked="" type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/>			
Contaminants of Concern: Plutonium <input checked="" type="checkbox"/> Uranium <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> RCRA Constituents, Lead, Beryllium, PCBs, Asbestos			
Special Support Requirements			
None.			
Special Safety Precautions			
None.			
Labeling Requirements			
None.			
Characterization Instruction Implementation			
This survey package is ready for implementation. Adequate detail is provided satisfy DQO's. These DQO's and data evaluation requirements are covered in the <i>Decontamination and Decommissioning Characterization Protocol, MAN-077-DDCP.</i>			
Paul A. Wojtaszek			08/04/99
Preparer Printed Name		Preparer Signature	Date
Jim Moore			8/4/99
Reviewer Printed Name		Reviewer Signature	Date

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SAMPLING AND SURVEY INSTRUCTIONS

<p>Sampling Requirements: No sampling for non-radiological contaminants is required for this characterization. All characterization for non-radiological contaminants will be done using historical data.</p>		
Measurement	Amount & Type	Comments
RCRA constituents	None	<p>According to historical data and process knowledge, no chemicals were used or stored in any of the three trailers (<i>D&D Facility Characterization Interview Checklist and Attached Facility Checklist and HRR Manager's Report</i>). Therefore, sampling for chemical contaminants is unnecessary and will not be conducted.</p>
Lead (Pb) in paint	None	<p>Wooden stairs and platforms have been attached to the trailers and are coated with paint which has not been characterized for Pb content. These stairs and platforms will be disposed of as waste. However, Environmental Waste Compliance Guidance #27, <i>Lead-based Paint (LBP) and Lead-based paint Debris Disposal</i>, has directed that LBP debris generated outside of currently identified HCA's shall be managed as non-hazardous (solid) wastes, and additional analysis for characteristics of hazardous waste derived from LBP is not a requirement for disposal. Therefore, analysis of Pb in paint from wooden stairs and platforms is unnecessary and will not be conducted.</p> <p>The paint on the interior and exterior surfaces of the trailers has not been characterized for Pb in paint. Such characterization is not required for release of the trailers to commerce. Therefore, analysis of Pb in paint from the interior and exterior surfaces of the trailers is unnecessary and will not be conducted.</p>
Beryllium	None	<p>There is no record of beryllium operations or storage being carried out in any of the three trailers (<i>D&D Facility Characterization Interview Checklist and Attached Facility Checklist and HRR Manager's Report</i>, and <i>List of Known Beryllium Areas</i>).</p> <p>Additionally, these trailers have been used as administrative office space since their arrival on site, and the <i>RFETS Administrative Equipment Characterization for Beryllium Contamination Project Plan Report</i> showed no detectable beryllium contamination in the 60 RFETS buildings with no record of beryllium activities that were studied.</p> <p>However, since T112 A, B, and C were not included in that study.</p>

		<p>the CBDPP conducted an independent beryllium survey of T112A, which confirmed absence of detectable beryllium contamination. The results of this survey will be included in the T112 RLCR.</p> <p>No additional beryllium sampling will be conducted as part of this characterization package.</p>
Polychlorinated biphenyls (PCBs)	None	<p>A high voltage electrical power transformer is mounted on a concrete pad outside the southwest corner of T112A, and is labelled "No PCBs." There is no record of PCB use or storage in any of the trailers (<i>D&D Facility Characterization Interview Checklist and Attached Facility Checklist and HRR Manager's Report</i>). Therefore, analysis for PCBs within the trailers is unnecessary and will not be conducted.</p> <p>Wooden stairs and platforms have been attached to the trailers and are coated with paint which has not been characterized for PCB content. These stairs and platforms will be disposed of as waste. However, Environmental Waste Compliance Guidance #25, <i>Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition</i>, has directed that applied dried paints, varnishes, waxes, or other similar coatings or sealants are acceptable for disposal (with notification) in a non-hazardous solid waste landfill as PCB Bulk Product Waste under 40 CFR 761.3 and 40 CFR 761.62 paragraph (b) and therefore need not be sampled as long as restrictions outlined in 40 CFR 761.62 regarding their disposal are met.</p> <p>Additionally, while the paint on the interior and exterior surfaces of the trailers has not been characterized for PCBs in paint, such characterization is not required for release of the trailers to commerce. Therefore, analysis of PCBs in paint from the interior and exterior surfaces of the trailers is unnecessary and will not be conducted.</p>
Asbestos	None	<p>Historical asbestos inspection data exist for T112 A,B, and C. Thirteen samples of floor tile, wall, and ceiling material were taken in T112A, and of these, 4 floor tile samples were determined to be asbestos-containing. Six samples of floor tile, wall, and ceiling material were taken in T112B, and of these, 1 floor tile sample was determined to be asbestos-containing. Nine samples of floor tile, wall, and ceiling material were taken in T112C, and no asbestos was detected. For release to commerce, this information must be disclosed, but further characterization is unnecessary. Therefore, no further asbestos inspection or sampling will be conducted.</p>