



Rocky Flats Environmental Technology Site

**RECONNAISSANCE LEVEL CHARACTERIZATION
TYPE I RADIOLOGICAL CHARACTERIZATION PLAN
GROUP 15 CLOSURE PROJECT**

(B880, T891B, T891D, T891E, T891F, T891P, T893A, T893B, T900E, & T904A)

REVISION 0

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Notes and Assumptions

- This characterization Plan was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols (07/26/00), and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities (02/14/01)
- PDSP Data Quality Objectives were used to develop this characterization plan
- Associated equipment located in T900E will be addressed as a part of the Pre-Demolition Survey for the facility

Instructions

- 1 Verify characterization activities are on the Plan-of-the-Day (POD)
- 2 Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual
- 3 Verify personnel have appropriate training for the applicable tasks they will be performing
- 4 Comply with RWP requirements, if applicable
- 5 Comply with JHA and facility PPE requirements, as applicable
- 6 Inform the Facility Manager, or designee prior to starting characterization activities
- 7 Follow applicable characterization and sampling procedures
- 8 Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs
- 9 Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal
- 10 Collect and maintain all characterization paperwork in the Project File(s)
- 11 All radiological surveys shall be conducted in accordance with the sampling and instruction forms included in Group 15 Survey Package numbers GR15-A-001, GR15-B-002, GR15-A-003 and GR15-A-004, GR15-A-005, GR15-A-006, GR15-A-007, GR15-A-008, GR15-A-009, GR15-A-010, & GR15-A-011. Sample locations are denoted on scaled maps attached to each survey package

Non-Impacted Areas										
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Non-Impacted Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification
Non-Impacted Totals										
										0

Class 1 Areas										
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 1 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification
Class 1 Totals										
										0

Class 2 Areas										
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Class 2 Areas identified in this characterization unit. Historical Site Assessment and process knowledge indicate no need for this classification
Class 2 Totals										
										0

Class 3 Areas

A	G15-A-001	3	B880 (Interior)	285	74	87 – Floor 46 – Walls / Ceiling	15-random 5-biased 2-QC	15-random 5-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 50% scan on interior floor surfaces is required. A 10% scan on interior wall/ceiling surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP
B	G15-B-002	3	B880 (Exterior)	224	82	12	15-random 2-QC	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on exterior surfaces will be biased towards areas of greatest potential for contamination

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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Class 3 Areas

A	G15-A-003	3	T891B (Interior & Exterior)	633	256	32	15-random 10-biased 2-QC	15-random 10-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on interior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
A	G15-A-004	3	T891D (Interior & Exterior)	545	122	28	15-random 10-biased 2-QC	15-random 10-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

Class 3 Areas

A	G15-A-005	3	T891E (Interior & Exterior)	846	242	43	15-random 10-biased 2-QC	15-random 10-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGLw. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGLw. A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
A	G15-A-006	3	T891F (Interior & Exterior)	474	126	24	15-random 10-biased 2-QC	15-random 10-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGLw. Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGLw. A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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Class 3 Areas

A	G15-A-007	3	T891P (Interior & Exterior)	628	174	32	15-random 10-biased 2-QC	15-random 10-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCG _{Lw} Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCG _{Lw} . A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP
A	G15-A-008	3	T893A (Interior & Exterior)	6764	2891	203	43-random 27-biased 4-QC	43-random 27-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCG _{Lw} Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCG _{Lw} . A 3% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

Class 3 Areas

A	G15-A-009	3	T893B (Interior & Exterior)	6750	2856	203	43-random 27-biased 4-QC	43-random 27-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 3% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.
A	G15-A-010	3	T900E (Interior & Exterior)	290	74	15 - Building Surfaces Additional scanning on interior & exterior of associated equipment	15-random 5-biased 2-QC	15-random 5-biased	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination. Additional biased measurements have been prescribed and will be collected to ensure uniform coverage of all building surfaces and equipment. Scan surveys are also required on all associated equipment. These additional biased measurements are above and beyond requirements set forth in the RFETS PDSP.

Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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Class 3 Areas

A	G15-A-011	3	T904A (Interior & Exterior)	223	63	12	15-random 2-QC	15-random	0	Areas are not expected to contain, or have ever contained, any residual radioactivity greater than the DCGL _w . Historical Site Assessment and process knowledge of this unit provide a high degree of confidence that no individual measurement will exceed the DCGL _w . A 5% scan on interior & exterior surfaces will be biased towards areas of greatest potential for contamination
Class 3 Totals				17662	6960	737	335	335	0	
All Class Areas				17662	6960	737	335	335	0	

* Biased measurement locations include high traffic areas such as building entrances, exits, and hallways, HVAC intakes and exhaust ducts, storage areas, areas of frequent personnel contact such as doors and door frames, and horizontal surfaces

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