



**Rocky Flats Environmental Technology Site**  
**CHEMICAL CHARACTERIZATION PLAN**  
**(PACKAGE)**

**Group 12 CLOSURE PROJECT**  
**(Buildings 452, S452, T428B, and T452A-G)**

**REVISION 0**

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## CHEMICAL CHARACTERIZATION PACKAGE

**BUILDING(s):** Group 12 (452, S452, T428B, and T452A-G)

- \* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities
- \* RLCP and PDSP Data Quality Objectives were used to develop this characterization package

**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), and all electronic data in the appropriate D&D RISS subdirectory

<b>ASBESTOS</b>		
Sample Location	Estimated Number of Samples	Sample location and justification/rational
452	20	Asbestos inspection has not been performed. As a result, a comprehensive, invasive inspection will be performed to determine the presence of friable building materials. Suspect friable materials such as drywall & joint compound, drop ceiling tiles, thermal systems insulation, and surfacing materials will be sampled. Suspect non-friable materials will be noted in the survey, but not sampled. Approximate square and lineal footage of homogeneous materials will determine the number of bulk samples.
S452	0	No building materials suspected of containing friable asbestos were observed. This building is a wooden storage shed (36 SF) on a concrete slab with rolled-roofing material.
T428B	3	Asbestos inspection has not been performed. As a result, a comprehensive, invasive inspection will be performed to determine the presence of friable building materials. Suspect friable materials such as drywall & joint compound, drop ceiling tiles, thermal systems insulation, and surfacing materials will be sampled. Suspect non-friable materials will be noted in the survey, but not sampled. Approximate square and lineal footage of homogeneous materials will determine the number of bulk samples.
T452A-G	54	Asbestos inspection has not been performed on these seven (7) similar office trailers. As a result, a comprehensive, invasive inspection will be performed to determine the presence of friable building materials. Suspect friable materials such as drywall & joint compound, drop ceiling tiles, thermal systems insulation, and surfacing materials will be sampled. Suspect non-friable materials will be noted in the survey, but not sampled. Approximate square and lineal footage of homogeneous materials will determine the number of bulk samples.

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<b>Total Samples</b>	77	The exact number of samples and their locations cannot be determined until a comprehensive, invasive inspection of Group 12 is performed in accordance with 40 CFR Part 763, Subpart E. Sample locations will be specified on sample map(s) during characterization efforts. Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763.
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<b>BERYLLIUM</b>		
<b>Sample Location</b>	<b>Number of Samples (smears)</b>	<b>Sample location and justification/rational</b>
452	15 Biased	Based on the Historical Site Assessment Report (HSAR) and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building. Therefore, biased sampling will be conducted.
S452	5 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building. Therefore, biased sampling will be performed.
T428B	5 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building. Therefore, biased sampling will be performed.
T452A-G	35 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in these buildings. Therefore, biased sampling will be performed.
<b>Total Samples</b>	60 Biased	The exact number of samples and their locations cannot be determined prior to the investigative inspection. Samples locations will be specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure. Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition.

<b>LEAD</b>		
<b>Sample Location</b>	<b>Number of Samples</b>	<b>Sample location and justification/rational</b>
Group 12 Cluster, all locations	0	Lead sampling is not required in the Group 12 Cluster. Based on the HSAR, Interview Checklists, and facility walkdowns, the only potential for a lead hazard would be in the paint. For example, no lead-containing solutions were processed in the building. However, all paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No. 27, Lead Based Paint (LBP) and LBP Debris Disposal. Sampling for lead for IH requirements will be at the discretion of the demolition contractor.

<b>RCRA/CERCLA CONSTITUENTS</b>		
<b>Sample Location</b>	<b>Number of Samples</b>	<b>Sample location and justification/rational</b>
Group 12 Cluster, all locations	0	Based on the HSAR, Interview Checklists, and facility walkdowns, no process activities resulting in a release of RCRA constituents or CERCLA hazardous substances occurred in this building. Therefore sampling is not required.
<b>Total Samples</b>	0	

<b>PCBs*</b>		
<b>Sample Location</b>	<b>Number of Samples</b>	<b>Sample location and justification/rational</b>
Group 12 Cluster, all locations	0	Based on the age of the facilities (post-1980-construction), it is assumed that no PCBs are present in the paint, therefore no sampling is required
<b>Total Samples</b>	0	Note These buildings may contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts Care will need to be taken to ensure these wastes are managed properly

\* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition

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