



Rocky Flats Environmental Technology Site

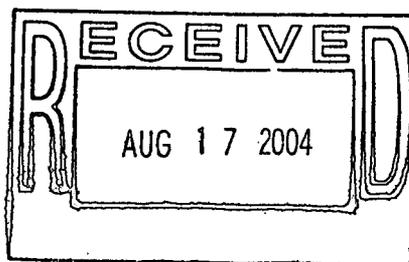
PRE-DEMOLITION SURVEY REPORT (PDSR)

BUILDING 701

REVISION 1

August 12, 2004

**Classification Review not required per
Exemption number CEX-005-02**



ADMIN RECORD

B776-A-000208

1/3

4.1 Asbestos

No asbestos-containing materials are present in these areas. Asbestos abatement was successfully completed.

4.2 Beryllium (Be)

Building 701 was not on the KH list of historical areas with potential beryllium contamination as referenced in the site Occupational Safety & Industrial Hygiene Program Manual, Chapter 28. The 776/777 Reconnaissance Level Characterization Report indicated there may be beryllium contamination from the laundry water from building 730. The building has never been posted as a Beryllium Controlled or Regulated Area.

Therefore, per the Beryllium Sampling Decision Tree in the PDSP, random beryllium smear samples were collected in accordance with the PDSP and the *Beryllium Characterization Procedure*, PRO-536-BCPR, Revision 0, September 9, 1999.

Following building strip-out and asbestos abatement, a final beryllium survey was conducted. Samples were collected in the overhead as well as the floor. All samples were below the analytical detection limit of 0.1ug/100 cm².

The discovery of radiological contamination in the northeast corner of the building prompted additional beryllium surveys of the building. All follow-up samples collected were below the analytical detection limit of 0.1 ug/100 cm².

All beryllium smear sample results were less than the investigative limit of 0.1 µg/100cm². PDS beryllium laboratory sample data and location maps are contained in Attachment E, *Chemical Data Summaries and Sample Maps*.-RCRA/CERCLA Constituents [including metals and volatile organic compounds (VOCs)]

4.3 Polychlorinated Biphenyls (PCBs)

Based on historical knowledge, personnel interviews, and 776/777 Environmental Compliance Personnel walk-downs, Building 701 has never used/transferred free flowing/exposed PCB's. At one time the facility may have used PCB ballasts in its fluorescent light fixtures, however, all of these have been removed, and compliantly disposed of, resulting in no impact on demolition activities in Building 701.

4.4 Freon

Freon has been removed from air conditioning units in Building 701 by Colorado licensed technicians. Based upon personnel interviews, facility walk-downs, and historical process knowledge, as well as a review of WEMS and the Site RCRA Master List, B701 did not contain hazardous waste storage units. Building components and fixtures containing hazardous substances, such as fluorescent tubes, incandescent bulbs, and batteries, have been removed.

4.5 Concrete

All paint from the floor has been removed as described in section 2. Contaminated concrete that has been covered with metal plating will be segregated and disposed of as radioactive waste. The uncontaminated concrete generated from the demolition of Building 701 may be used for onsite recycling in accordance with the Concrete Recycling RSOP.

7 FACILITY CLASSIFICATION AND CONCLUSIONS

Based on the analysis of radiological, chemical and physical hazards, B701 is classified as a RFCA Type 2 facility pursuant to the RFETS Decommissioning Program Plan (DPP; K-H, 1999). Based upon the results of this PDSR, the majority of B701 meets the unrestricted release limits specified in the site Pre-Demolition Survey Plan and is ready for demolition. One area clearly identified within this report includes contamination above the release limits. This slab area has been marked, encapsulated and plated for removal by RISS under the direction of ER in connection with under slab soil contamination. A contact record was written to document the agreement with ER to oversee the removal of this portion of the building. The PDS for B701 was performed in accordance with the DDCP and PDSP, all PDSP DQOs were met, and all data except as the plated portion of the slab satisfied the PDSP DQA criteria. Environmental media beneath and surrounding the facilities will be addressed at a future date in accordance with the ER RSOP.

A facility walkdown and historical review indicates that no RCRA/CERCLA constituents exist on the B701 structural surfaces by KH. Any potentially PCB-containing fluorescent light ballast and hazardous waste items (e.g., mercury thermostats, fluorescent light bulbs, mercury vapor light bulbs, mercury-containing gauges, circuit boards, leaded glass, and lead-acid batteries) were previously removed from the building, therefore, do not impact demolition activities.

Using standard protocol, the contaminated sanitary drain, which connects to B730, has been grouted with cement, and marked appropriately. It will be carefully removed as part of the slab demolition process, and processed separately as radioactive waste.

As described previously, the contaminated portion of the floor in room 101 has been encapsulated, covered with metal plating, and marked appropriately. It will be carefully removed after the building demolition process, and processed separately as radioactive waste.

Radiological contamination in excess of the PDSP Table 7-1 limits does not exist in B701 with exception of the plated over contamination in room 101, and the sanitary drain, which was discussed above.

Based upon this PDSR, B701 can be demolished, the clean waste managed as sanitary waste, and the clean concrete can be used for backfill on-site per the RFCA RSOP for Recycling Concrete. All remaining contaminated concrete and soil will be managed as radioactive waste. Under-slab utilities and piping systems shall be managed as radioactive waste, unless additional data collected prior to waste disposition proves otherwise. To ensure that the facility remains free of contamination and that PDS data remain valid, Level 2 isolation controls have been established, and the area posted accordingly.