

# Hanford Facility Beryllium Fact Sheet

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Building Number/Name: 2736ZB Plutonium Storage Support Facility  
Date prepared: June 30, 2004  
Date revised: January 26, 2012  
Responsible Contractor: CHPRC  
Contact: Kristy Kimmerle, CIH

## **PAST OPERATIONS**

Beryllium brought in facility: YES  
Form of beryllium: SOLID  
Period of beryllium operations (dates): Unknown

Location(s) in facility that contained beryllium materials: Gloveboxes 642A through F in Room 642 were used to stabilize plutonium-containing waste material and repackage plutonium material. Miscellaneous plutonium products were stored in sealed 3013-type containers in Room 637. A stacked red tool box and one drawer in a cabinet next to the toolbox in Room 638 contained beryllium alloy hand tools.

Description of beryllium activities: Glovebox 636 and Gloveboxes 642A through F processed miscellaneous plutonium-containing residues, some of which may have contained trace amounts of beryllium contamination. These waste residues may have included Rocky Flats Environmental Technical Site (RFETS) incinerator fly ash known to contain beryllium contamination. Glovebox 636 was also used to repackage stabilized plutonium waste material stored in 3013-type containers. All of these gloveboxes and most of the associated systems including ventilation ducting, feed lines and drain lines have been removed from the facility. All plutonium material stored in the 2736ZB facility was removed by the end of 2009. Toolboxes containing beryllium alloy hand tools have been removed and sent to ERDF for disposal.

Building monitoring data summary: Intrusive decommissioning work activities involving breaching of glovebox and glovebox systems in Room 636 and 642 were routinely monitored. Monthly wipe sampling campaigns collected wipe samples from step-off pads at the perimeter of Room 636 and 642, the 2736ZB lunchroom and other miscellaneous locations. Wipe samples were collected on anti-personnel ADS units prior to removing these systems from 2736ZB. Wipe samples were collected on toolboxes believed to contain beryllium alloy hand tools. Beryllium results above the pertinent Laboratory Quantification Limit (LOQ) have never been found in 2736ZB.

Personnel monitoring data summary: None.

Specify Engineering/Administrative controls used during operations: Continuous negative building ventilation with separate negative ventilation of glovebox systems was used. Sealed glovebox and other process equipment enclosures have been required during the handling of plutonium with potential beryllium impurities. Intrusive work activities into systems with Potential Internal Beryllium Contamination (PIBC) required additional engineered isolation.

Administrative controls were established by the Beryllium Work Permits (BWPs) associated with this operational facility until late 2011. 2736ZB entered the final stages of D&D operations at that time, with BWPs governing demolition work.

During the demolition of the facility, the rubble pile containing debris from 2736ZB is comingled with rubble from 2736ZA and 2736Z. The perimeter of the D&D site encompassing these buildings is controlled as a BCA until D&D operations are complete and all debris from these facilities has been removed.

**Maximum Estimated Past Be exposure: None known**

**CURRENT OPERATIONS**

Building still present: YES (Demolition in process with estimated completion by the end of March 2012)  
Beryllium present: Yes

Current building occupancy/activity: Limited access to the facility is allowed in support of demolition operations. Beryllium controls are per BWPs written to cover this work scope.

**Maximum Estimated Current Be Exposure from Routine Operations: NONE**

Basis for above information: Beryllium Characterization Report ADS Unit Building 2736ZB 5/1/2011 and reference information from the Beryllium Facility Assessment Form on 1/4/2010.

Comments, including any additional information needed (specify): None.

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*For questions or comments, please send email to [Kristy\\_J\\_Kimmerle@rl.gov](mailto:Kristy_J_Kimmerle@rl.gov)*