

Hanford Facility Beryllium Fact Sheet

Building Number/Name: 1706KE Rad Con Count Lab Facility
Date prepared: September 23, 1999
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): Start: 1960 End: 1960

Location(s) in facility that contained beryllium materials: Laboratory. No beryllium contamination areas were noted during 1999 assessment.

Description of beryllium activities: The Coolant Systems Development Operation tested the effects of decontaminating agents on fuel elements including 5% beryllium brazing smelter.

Building monitoring data summary: Surface samples were collected from 59 sites throughout the building on 6/29/99. Results reported for these samples were below the MDL of 0.5 $\mu\text{g}/100\text{ cm}^2$. The 1706KE hoods and ductwork were characterized in 2009.

Personnel monitoring data summary: Two air samples were collected in the chemist's breathing zone just outside the hood face where Turco 4512 and alkaline permanganate were being tested. The reported results were both below 0.01 $\mu\text{g}/\text{m}^3$. Ambient air samples were collected on 6/29/99 outside the entry to the Men's Locker Room and on the West wall of the Main Bay outside the entrance to Lab Number 2. A personal air sample was also collected on 6/29/99 in the breathing zone of a technician while wipe sampling surfaces for beryllium. Results reported for these samples were below the Method Detection Limit (MDL), 0.004 $\mu\text{g}/\text{m}^3$ for the ambient air and 0.006 $\mu\text{g}/\text{m}^3$ for the breathing zone sample.

Specify Engineering/Administrative controls used during operations: Work was conducted inside a ventilated hood with a reported average face velocity of 70 fpm.

Comments, including any additional information needed (specify): Correspondence with a retired manager at the facility could not identify any historic beryllium use in the building. It may have been present in ceramic research for NASA nose cones in the early 1960s. Portions of the facility were cleaned and remodeled for current activities.

Maximum Estimated Past Be exposure: NONE

CURRENT OPERATIONS

Building still present: NO

Beryllium present: NO

Current building occupancy/activity: Completed building demolition on 9/30/2009.

Maximum Estimated Current Be Exposure from Routine Operations: NONE

Basis for current information: Reference information is documented in the Beryllium Characterization Report 1706KE 9/20/2009 and the Beryllium Facility Assessment 6/8/2010.

For questions or comments, please send email to Kristy_J_Kimmerle@rl.gov