

ENGINEERING SERVICES & ENVIRONMENTAL COATINGS

PROJECT PROFILE

Subject: - Contamination Control – CC Wet & CC Fix

Project: The Hanford Site – Richland, WA March, 2005

Building 313, Beryllium Contaminated Facility.

Project Contractor: Bechtel-Hanford, Inc.

Scope of Work:

Building 313 was located in the 300 area of the Hanford site. This facility was a large, beryllium contaminated facility that was slated for controlled demolition. A technology was needed that would protect the workers and ensure loose beryllium contamination would not be released into the environment during aggressive demolition methods.

Products Used:

A two phased approach developed by InstaCote was used to address this problem. The first phase of application involved the use of a wetting agent. CC Wet H was applied as a fine mist over all surfaces of the building, including the normally inaccessible surfaces inside ventilation ducting. A second coat of CC Fix is applied over the first coat of CC Wet H.

CC Wet H prevented loose beryllium particulates becoming airborne during demolition of the building. Use of this wetting agent provided a passive approach which prevented or reduced the potential to create an airborne problem. A fine mist of CC Wet H proved especially useful for stabilizing the interior surfaces of ductwork – were traditional latex-based fixatives could not be effectively delivered.

CC Fix re-hydrated the wetting agent (CC Wet H) and absorbed the particles of beryllium up into the fixative coating. This process ensured the surface contamination (dust mixed with beryllium) was permanently fixed under a hard-coated surface.

This system developed by InstaCote allowed for controlled demolition of Building 313 without risk of re-suspension to the workers or the environment.

Application Technique:

CC Wet H - Hand garden sprayers and airless paint sprayers CC Fix - Hand garden sprayers and airless paint sprayers

Results:

The use of these InstaCote products allowed the contractor to perform open-air demolition of a large contaminated facility without requiring tents or other forms of containment. Beryllium sampling conducted during the application of these products (and during demolition of Building 313) showed no positive "hits" for beryllium.