



PROJECT PROFILE

Subject: Contamination Control – CC Wet & CC Fix

Project: ETPP, Oak Ridge, TN March, 2005
K-25 Building, Uranium/Tc-99 Contaminated Facility.

Project Contractor: Bechtel Jacobs Corp.

Scope of Work:

A project to demonstrate the effectiveness of InstaCote products (CC Wet and CC Fix) to control the spread of radiological contamination during D&D activities. Building K-25 is contaminated with the radioisotopes (Uranium & Tc-99). The coatings were applied over areas of highest contamination in Building K 25. Many of these areas had a film of dirt, oil and grease.

Products Used:

CC Wet prevented particulates from becoming airborne during work activities to prepare for demolition of the building. Indirect misting of this wetting agent provided a passive application approach that reduced the potential to create airborne activity during fixative application. This light, indirect pre-coat of CC Wet leaves a sticky film after curing. Subsequent coatings of permanent fixative (CC Fix) are applied directly at higher pressures. This sticky pre-coat prevents inadvertent re-suspension from the motive force of the final fixative application.

CC Fix re-hydrated the wetting agent CC Wet 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.

Epoxy 609 is a two-component, low viscosity epoxy used to pour into trays to lock down the oily substrate for contamination control.

Application Technique:

CC Wet - hand garden sprayers
CC Fix - airless sprayers
Epoxy 609 – bucket-mix and hand pour into trays

Results:

Technicians performed radiological surveys for removable activity on all surfaces after the application of the CC Wet, CC Fix, and the CC Epoxy 609. Survey results indicated no counts above instrument MDA.