PROJECT PROFILE

Project: White Shell Labs, Manitoba, Canada Date: March 2010 - Present

Project Contractor: Atomic Energy of Canada, Ltd. (AECL)

Engineers: Richard (Dick) Hogue; Rock Neveau

Scope of Work:

Participate in strategy meetings with project management to determine best means approach for stabilizing contaminated reactor facilities. Perform walkdowns and review of drawings with a deliverable of recommendations for engineered contamination controls. Train AECL workers in the use of equipment and methods to apply and deliver selected engineered controls.

Engineered Controls:

InstaCote *CC WET* TM was selected to prevent loose radiological contamination from becoming airborne during demolition. Use of this wetting agent provided a passive approach to reduce the potential for creating airborne radioactivity during demolition work. This wetting agent was introduced into the ventilation systems.

A fogging technology was used to stabilize the exhaust ducts from glove boxes, down draft hoods and other contaminated areas of the reactor.

Application Technique:

InstaCote CC WET TM was applied using both garden sprayers and Dynafoggers®

The ventilation systems were isolated from the HEPA filter exhaust plenum using gas plugs. Access for both garden sprayer and fogging was provided at various locations throughout the facility to insure coverage using UV technology.

Results:

Recommendations for engineered controls were implemented. The use of the fogging technology allowed for the exhaust ducts, down draft hoods and associated systems to be stabilized remotely eliminating the potential for worker exposure and risk. To date there has been no airborne re-suspension or spread of contamination.

The use of *Dynafoggers*® and garden sprayers to remotely apply InstaCote *CC WET* TM and InstaCote *CC FIX* TM in other contaminated areas at White Shell Lab Reactor facilities has become a standard engineered control prior to any work activity.