

INSTACOTE



ENGINEERING SERVICES/ENVIRONMENTAL COATINGS

PROJECT PROFILE: Richard Hogue/Rock Neveau

Project: Subway Security Initiative Metro North Railway System N.Y. City

Contractor: LLNL, NYC and EPA “Dirty Bomb Recovery”

Date: February, 2010 – June, 2010

Scope of Work:

A radiological dispersal device (RDD) or dirty bomb is a mix of explosives, such as dynamite, with radioactive powder or pellets. When the dynamite or other explosives are set off, the blast carries radioactive material into the surrounding area.

Scenario: An RDD event has occurred that has been determined to impact the Metro North rail fleet in Grand Central Terminal (GCT). The RESORT team is dispatched to stabilize and move the most heavily contaminated cars out of the facility in order for decontamination work to begin. This demonstration will take place at the Stamford Rail Yard, New York City.

InstaCote to provide engineering, materials and labor to perform a demonstration to quickly stabilize and make safe for transport rail cars contaminated in the event of a radioactive contamination event. The disposition of rolling stock will be critical in returning a rail facility to service. In the disposition of rolling stock there are two basic approaches to recovery. The first is to set-up and decontaminate rail cars at the site of the event the second is to stabilize the railcars, do a minimum amount of decontamination at the event site and transport the stabilized cars to another facility where more extensive decontamination can be conducted. This later approach is the focus of this exercise.

Stabilization Methods and Materials:

The rail cars were coated with a UV powder to simulate contamination.

InstaCote *CC STRIP*TM was applied using paint rollers then striped off to demonstrate the ability to decontaminate the rail car surfaces. UV technology was used to verify the effectiveness of this process. InstaCote *CC WET*TM was sprayed, using garden sprayers other areas of the rail car to prevent re-suspension of the powder. InstaCote *CC FIX*TM was applied using garden sprayers for the purpose of providing a permanent coating.

Results:

The Methods and materials selected for this project met the criteria for stabilization of the contamination on the rail cars. This approach provided the foundation for a plan to respond to a RDD incident.