

MITIGATION - SCIENCE AND TECHNOLOGY ADVANCES FOR CHEMICAL AND BIOLOGICAL HAZARD MITIGATION

Mitigating Aerosolized Threats With The Spray Knockdown System In A Wide Area Urban Transportation Environment

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Mitigating aerosolized threats involving chemical or biological weapons in wide area urban transportation environments remains a concern in the U.S. due to complexities in critical infrastructure and population density. For the past two decades, Sandia National Laboratories has investigated, patented, and modeled the use of the Spray Knockdown (SKD) mitigation prototype to reduce and isolate aerosolized threats in a wide area environment where either physical or mechanical mitigations are improbable. As part of the Chemical and Biodefense Testbed (CBT), three prototypes were designed and implemented in an operational subway system to better understand the performance of the SKD prototypes as a particle scavenging non-physical containment strategy during a terrorist event. This presentation/poster will elaborate on design features and preliminary results from the multiple subway experiments for future applications.

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