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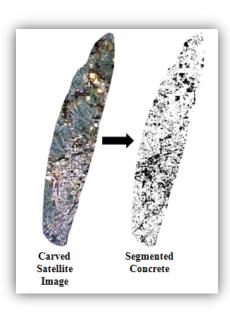
technicalBRIEF

WASTE ESTIMATION SUPPORT TOOL (WEST)

Management of waste from a Radiological Dispersal Device (RDD) incident would likely constitute a significant fraction of the total remediation cost and effort. The U.S. EPA's RDD Waste Estimation Support Tool (WEST) is a planning tool for estimating the potential volume and radioactivity levels of waste generated by a radiological incident and subsequent decontamination efforts. WEST supports decision makers by generating a first-order estimate of the quantity and characteristics of waste resulting from a radiological incident, and allows the user to evaluate various decontamination/demolition strategies to examine the impact of those strategies on waste generation.

Systems Approach for Wide-Area Remediation

- Initial development of remediation strategies for a wide-area radiological incident will start immediately following the contamination event
- Identification of the materials found in both the indoor and outdoor portions of the affected areas developing approaches for optimal cleanup of those surfaces and materials
- Decontamination and waste management processes are linked
- Prioritize remediation processes as soon as possible



WEST Components

- ArcGIS scripts
 - o Define contaminated areas and extent of contamination
- FEMA Hazus-MH Software
 - o Estimate building counts, square footage, and composition

Zone 2 (Orange) 2 Year PAG 240 µCi/m2

Zone 3 (Yellow) 50 Year PAG 112 uCi/m2

- Suite of applications
 - o Identify outdoor media based on satellite imagery
- Excel spreadsheet
 - o Estimate quantity, characteristics of the resulting waste
 - o Examine impact of various remediation scenarios on waste

This tool will aid responders and decision makers to implement an integrated response by effective analysis of many competing considerations, with a goal of a rapid, effective remediation that minimizes economic and health impacts to the affected community.

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