

Hazard Analysis Challenges Involving Non- Fixed “Facilities”

EMI – SIG
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OVERVIEW



- EMERGENCY PLANNING HAZARD ASSESSMENT
 - HOW THE OFFICE OF SECURE TRANSPORTATION DIFFERS
 - HOW THE OST HAZARD ASSESSMENT IS PERFORMED
 - CONCLUSIONS/ASSUMPTIONS
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EMERGENCY PLANNING HAZARD ASSESSMENT



- DOE ORDER 151.1C DIRECTS REQUIREMENTS
- ADAPTED FOR OST NEEDS
- THE “FACILITY” AT RISK IS MOBILE
- HSS-63 FEEDBACK USED
 - TAKE CREDIT FOR MITIGATION
 - ENGINEERED PROTECTION
 - SECONDARY PROTECTION



OFFICE OF SECURE TRANSPORTATION



- THE MATERIAL AT RISK IS PROTECTED
- THREE LEVELS OF ENGINEERED MITIGATION
 - SGT
 - TYPE B CONTAINERS
 - RESTRAINTS
- TWO LEVELS OF ADMINISTRATIVE MITIGATION
 - PROCEDURES
 - FEDERAL AGENT TRAINING

- USE OF DOCUMENTED SAFETY ANALYSIS
- NO MORE “PARKING LOT ACCIDENT”
- KNOWN MAR
- FAILURE POINTS KNOWN AND TESTED
 - SGT TESTING IS QUITE RIGOROUS
 - TYPE B CONTAINERS – CERTIFIED
 - TIE DOWNS – TESTING AND DESIGN



HAZARD ASSESSMENT



- HOTSPOT USED FOR MODELING OF ACCIDENTS
- WORST CASE SCENARIOS USED AS BOUNDING CASE
- DESIGN BASIS ACCIDENT IS CATASTROPHIC TO PUT MATERIAL AT RISK
- AVOID EXTREME METEOROLOGICAL CONDITIONS

CONCLUSION



- DOE O 151.1C SHOULD HAVE AN OST SPECIFIC ANNEX
- A MORE PRACTICAL APPROACH IS APPLIED TO ACCIDENT ANALYSIS
- CANNOT CONTROL OUTSIDE RISKS
 - TRAFFIC
 - ROAD CONDITIONS
 - WEATHER



Questions?

