Georgia WIPPTREX 2015

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What is WIPP?

The U.S. Department of Energy’s (DOE) Waste Isolation Pilot Plant (WIPP) is a deep geologic repository for permanent disposal of a specific type of waste that is the byproduct of the nation's nuclear defense program.

WIPP is the nation's only repository for the disposal of nuclear waste known as transuranic, or TRU, waste. It consists of clothing, tools, rags, residues, debris, soil and other items contaminated with small amounts of plutonium and other man-made radioactive elements.
25 Counties on Route in Georgia

- I-20W from SRS to WIPP
- I-75S from the north to SRS
- I-59S from Oak Ridge to WIPP
Radiation Detection Devices
Provided to First Responders

• Ludlum 14c – Contamination surveys
• Ludlum 2241 – Dose rate & contamination
• Ludlum 26-1 – Dose rate & contamination
Modular Emergency Response Radiological Transportation Training (MERRTT) Series

- Provided by DOE WIPP and TEPP programs
  - Radiation fundamentals and hazards
  - Use of detection equipment
  - Incident management
  - Decontamination procedures
  - Hands on exercises
- GA on track to train 400+ responders in 2015
Setting the Foundation

• Numerous organizational meetings with County.
  • Determine capabilities, equipment and training needs.

• Conducted 11 training sessions:
  • 6 – 8 hour CMERRTT sessions
  • 3 – 8 hour TMERRTT sessions using high activity sources.
  • 2 – 8 hour hospital training sessions.
Radiological Response Focus

• Previous GA WIPP exercises included removal of TRU Pack, mass casualty and vehicle extrication.
• While valuable, responders train for extrication and mass casualty scenarios frequently.
• Rad response ends up being a minor part of exercise.
• First WIPP/TEPP combined WIPP full scale exercise using high activity sources.
Objectives

- On Scene Incident Management
- Fire Incident Response Operations
- Emergency Triage and Rescue
- Hazardous Materials Response and Decontamination
Scenario

• 3 vehicle accident involving a WIPP truck, delivery van carrying radioactive material and a passenger car.
• Delivery van was hit by passenger car ejecting the driver of the passenger car.
• Radioactive packages were ejected from the delivery van.
• WIPP truck drove onto the road shoulder to avoid contact with passenger car.
Carroll County - Sept 9, 10 & 11

3 days of exercises - Morning tabletop (TTX) and afternoon full scale exercise (FSX) so the entire department could participate.

- The TTX is conducted in the morning and is designed and presented in a question and answer format.
- Morning TTX allows response agencies to "practice" what they will do in the afternoon.
- After morning TTX, afternoon full scale goes much smoother.
Response Activities

• Extinguish a vehicle fire.
• Rescue and decon an accident victim.
• Retrieve the shipping papers for the transport vehicles.
• Perform surveys and package accountability for radioactive packages.
• Coordinate response operations with the State Radiation Authority.
• Perform surveys of and decon hot zone responders.
• Perform survey and level VI inspection of WIPP Vehicle
In total 85 representatives from 10 different local, state, and federal government contractors supporting the various agencies/organizations, participated in the tabletop and full-scale exercises.

• All three shifts of local responders were able to participate.
Lessons Learned

• Discussions and actions from the first arriving fire units:
  • appropriately described the scene,
  • established command,
  • recognized that hazardous materials were involved, and
  • established appropriate control zones.
Lessons Learned (cont.)

• Responders explained the need to promptly conduct rescue, treatment, and transport of the victims to the hospital.

• Responders explained the need for recovering the shipping papers from both vehicles transporting radioactive material, reviewing the shipping papers, and working with the local and state emergency services to resolve the accident.
Areas for Operational Improvement

• Consider expanding the hazardous materials team radiological equipment inventory and availability.
  • Minimum 2 survey meters in hot zone and 2 meters for decon.
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Video

https://captureit.wistia.com/medias/il8fo71k8h
Questions?