

**From:** Robert Shewmaker -nmss  
**To:** RTA/SFPO SUPPORT GP  
**Subject:** MTG TODAY (WED, 1/23/02) AT 2:00PM, O-14B10

Please attend if you are available.

**AGENDA:**

- Discuss mat'l I E-mailed yesterday
- Discuss new mat'l I hope to E-mail before the mtg or hand out at mtg
- Hand out Draft Program Plan and Rpt Outline from Non-Spent Fuel Transportation Group for Format and any content implications for us
- Discuss Program Plan and Rpt Outline development for Spent Fuel Storage Group

Note: The attached is a work in progress so mark up, add, change etc and bring to mtg.

A/12

Draft 1/23/02

**ELEMENTS OF VULNERABILITY ASSESSMENT  
FOR SPENT FUEL DRY STORAGE**

**POPULATION OF STORAGE CONTAINERS**

- Single Container/Cask
- Double Container/Cask and Canister
- Number Now in Use
- Number in Future Use
- Materials of Construction

**CONTAINED/STORED SOURCES**

- Spent Fuel
- GTCC Material

**THREATS/SCENARIOS**

- Airborne
- Waterborne
- Truck Bomb
- Insider
- Ground Assault

**INDUCED ENVIRONMENT/LOADINGS**

- Pressure vs Time
- Temperature vs Time
- Mass and Velocity of Missiles/Objects
- Geometry and Physical Properties of Missiles/Objects

**CASK BREACHING**

- Cask Failure Modes
  - Gross Overpressure from Undirected High Energy Blast
  - High Energy Jet by Shaped Charge
  - Directed Projectile/Missile from High Energy Blast/Propellant
  - Crash Impact of Deformable Objects
  - Gross High Temperature/Fire
- Breached Cask Opening Size/Geometry
- Internal Cask Conditions Created by Cask Breach

**CANISTER BREACHING**

- Canister Failure Modes
  - All Cask Failure Modes as Continuation
  - Missiles Generated by Cask Breach

**DAMAGE TO CONTAINED/STORED SOURCES**

**DISPERSAL OF SOURCES**

## **CONSEQUENCES OF SOURCE RELEASES**

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**NOTE: All assumptions used in the vulnerability assessments must be identified.**

**FILE:ElementsVulnAssess**