

UN Package Testing

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Objective

- **Better understanding of a wide range of hazardous materials packaging for transportation performance issues**
- **Improve test standardization across industry**
- **Recognize and understand testing complications**



Background (Problem)

- **Performance oriented packaging was introduced in 1990 through harmonization with the UN**
- **Few changes in testing and construction since then**
- **Variations in testing methods are common between test facilities**



Project Schedule/Funding Estimates

- Initial funding of \$165,000, approximately \$74,000 remaining
- Multiple projects completed since the start of research and development program
 - Pail closure methods
 - IBC cold conditioning methods
 - Multiple container leakproofness testing
 - Variation 2 drop test methods
 - Multiple container stack testing
 - Multiple container vibration testing, Phase I
- Ongoing and upcoming testing
 - Multiple container vibration testing, Phase II underway, Phase III to be performed
 - Multiple container hydrostatic pressure testing underway
 - Hydrostatic pressure test fittings locations underway



Outputs (Expected)

- **Better understanding of various testing methods**
- **Whether certain methods affect testing outcomes**
- **Potential regulation changes, if warranted**
- **Improved testing standardization**

