



High Hazard Risk Reduction

Routing and Design Enhancements



Non-Accident Releases vs. Safe Shipments

- Railroads transport approximately 1.7 million shipments of Hazardous Materials each year
- 85% of these shipments are in tank car quantities
- Fewer than 50 shipments experience accident caused releases each year during transportation
- When they do occur the results can be disastrous as demonstrated by recent accidents.





Hazardous Materials Routing

- **NPRM Issued by PHMSA and FRA**
- **TSA companion NPRM**
- **To enhance the safety and security of certain highly hazardous materials during transit**
- **Issued December 21, 2006**
- **Comments Closed February 20, 2007**
- **70 Comments Received**
- **Final Rules expected Fall 2007**



Proposed Rule Requirements

- **High Hazard Materials**
- **Railroads would be responsible for:**
 - Identifying and evaluating the routes
 - Requires collecting data
 - Analyzing next “most commercially practical” route (Alternate route)
- **Would require use of Safest/Most Secure route**
- **Allows Mitigation of Risks**



Additional Measures Proposed

- **Measures to reduce delays in-transit**
 - **Enhanced communication procedures between rail carriers, shippers and consignees**
 - **Written Procedures**
 - **Supports SAI's issued by TSA earlier in year**
- **Security Inspections**
 - **In conjunction with safety inspections**
 - **Tampering or Suspicious items require following plans**



TIH Enhancements

- Response to:
 - Minot, Macdona, Graniteville Accidents
 - Industry Activity in 2006
 - Public Outcry for Improvements





TIH Enhancements

- Two-Fold Approach to improved TIH Transportation Safety
 - Better Packages (Tank Cars)
 - Operating Requirements to Reduce Risk
- Public Meetings
 - 3 Held (2 in 2006, 1 in 2007)
 - Next Public Meeting TBD
 - Seek Industry Input into Process



Where we were...

- Prior approach was –
 - Careful balancing of costs and benefits
 - Emphasis on working with existing tank car designs and design practices
 - Reliance on industry cooperative approach through the Tank Car Committee
- Weaknesses of the approach—
 - Time and societal demands do not allow normal process
 - Wide disagreement between industry sectors prevents consensus
 - Working with existing design practices forecloses options



Where we are going... (Car Enhancements)

- 50 mph maximum train speed
- Set performance standard to resist head/shell puncture or other catastrophic loss under forces at 50 mph (closing speed is $\sim \frac{1}{2}$ of train speed)
- Apply to all cars carrying TIH materials
- Change out fleet within reasonable time frame, constrained by production capacity



Where we are going... (Operations)

- Interim measure—
 - 30 mph speed restriction in dark territory based on
 - Higher train mile collision risk
 - Derailment risk absent broken rail detection
 - Make exceptions for territories with PTC, SPMS, track integrity circuits, other measures?





Timeline

- The rulemaking team is currently circulating drafts within the Department.
- Additional testing is scheduled for early July at TTCI (Test 2).
- A public meeting is being discussed after testing to gain industry input.
- We are on schedule to meet our commitments for a new rule.



Closing

Questions?

