Enhancing Railroad Hazardous Materials Transportation Safety

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Our Regulated Community

- More than 550 railroads
  - 170,000 miles of track
  - 220,000 employees
  - 1.3 million railcars
  - 20,000 locomotives
- 3,500 chemical shippers
- Roughly 2 Million annual HM shipments
HM-232E Introduction

- Notice of Proposed Rulemaking
  - Issued December 21, 2006

- Interim Final Rule
  - Issued April 16, 2008
    - Effective June 1, 2008
    - Voluntary compliance May 16, 2008
  - IFR because of 9/11 Act requirements

- Final Rule
  - Issued November 26, 2008
Need for a National Approach

- At least 14 cities and 1 state considered routing requirements
- Potential Impact on National Transportation System
- Need arose for national uniformity
  - Criteria for analyzing risk
  - Central Arbiter of routing decisions
  - Methodology and tools
Rule Requirements

- Collect data
  - Certain high hazard materials
  - By route

- Use data to analyze route safety and security

- Analyze an alternate route

- Choose safest/most secure route

- Let us see the data and analysis

- Reduce storage/delays in transit

- Perform security inspections

- Separate appeal process
Applicability

Applies to Carriers transporting:

- Security Sensitive Materials
  - Designated by DHS
- Includes:
  - >5,000 lbs Division 1.1, 1.2, or 1.3 (single carload)
  - A bulk quantity of PIH (includes NH₃)
  - A Class 7 material in HRCQ Quantity
Collecting Data

- Commodity data must be kept and compiled by carriers for the previous *calendar* year
  - Complete by 90 days after end of CY
  - 2008 contains only 6 months (7/1 to 12/31)
    - Unless using delay provisions
- Collected by route, line segment or series of line segments
- Commodity data by UN number
  - Can include all Class 7 and 6.1
- Identified by geographic location
Route Analysis

• In Writing
• Analysis include appendix D
  • 27 factors are minimum
• Includes:
  • Classification/Switching Yards
  • Sidings
  • Storage Facilities
• Excludes:
  • Offeror/Consignees Facilities
  • Private Sidings/Tracks
27 Risk Factors

- Volume
- Traffic density
- Trip length
- Facility presence/location
- Track Type/Class/Main. Sch.
- Track grade/curvature
- “Dark” vs “Signaled”
- Wayside detector presence
- Grade crossing #/types
- Single vs. Double track
- Turnout freq./ location
- Iconic target proximity
- Env. Sensitive areas
- Population density
- Venues along routes

Emer. Response Capability
High Consequence areas
Passenger traffic
Train Speed
Proximity of storage/repair facilities
Known threats
Safety/Security measure in place
Availability of practical alternate routes
Past incidents
Transit times
Crew training & skill levels
Impact on rail network traffic & congestion
Selecting the Route

- Select safest/most secure route
- Annual review required
- Restrict disclosure (SSI)
  - Comparative analysis
  - Charts and Graphs
  - System Maps
Consultation

- Identifying High Threat Targets
- Requires RRs to consult with State, Local, and Tribal Officials
- Two Options
  - Fusion Centers
  - Direct
- Carriers must provide name, title, telephone number, and e-mail address to fusion centers and those officials who contact them
Security Inspections

• By carriers
  • Acceptance
  • Placed in trains

• Specifics
  • Tampering
  • Suspicious items
  • Compromised security

• Indications
  • Follow security plan

• Commodities
  • 172.820 Materials
  • Ammonium Nitrate
  • HM of Interest (Threat based)
Storage/ Delays in Transit

• Written Revisions to Security Plan
  • Procedure for consulting with shippers and consignees
    - Mutual consent required
    - Measures for minimizing
  • Preventing unauthorized access to §172.820 materials
  • Mitigating storage risk in population centers
  • Procedures for notifying consignees of delays
Upcoming Compliance

- September 1, 2009
  - Initial Analysis
    - Uses July-December, 2008 data
    - Full Compliance with Rule
  - Written Notification of Delay
    - Can delay analysis until March 31, 2010
    - Must include full 2008 data

- March 31, 2010
  - Compilation of 2009 shipment data
Enforcement Approach

- Early (pre-deliverable) start to ensure appropriate approach
  - Coordinated with TSA and PHMSA
    - Uniformity
    - Security Expertise for balanced approach
- Enforcement program similar to Security Plan Reviews
  - More resource intensive
- Tool being developed to enable national approach
  - DHS funded
  - Production version online June 1, 2009
Introduction

The Rail Corridor Risk Management System (RCRMS) is a tool to be used by rail carriers to:

1. Maintain HAZMAT commodity flow information
2. Analyze and compare alternative route risks

RCRMS assists in complying with the Pipeline and Hazardous Materials Safety Administration’s (PHMSA’s) regulation entitled “Enhancing Rail Transportation Safety and Security for Hazardous Materials Shipments”
Thank You

Still have Question?

- Contact me at 202.493.6315
- Visit FRA’s web page at www.fra.dot.gov
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