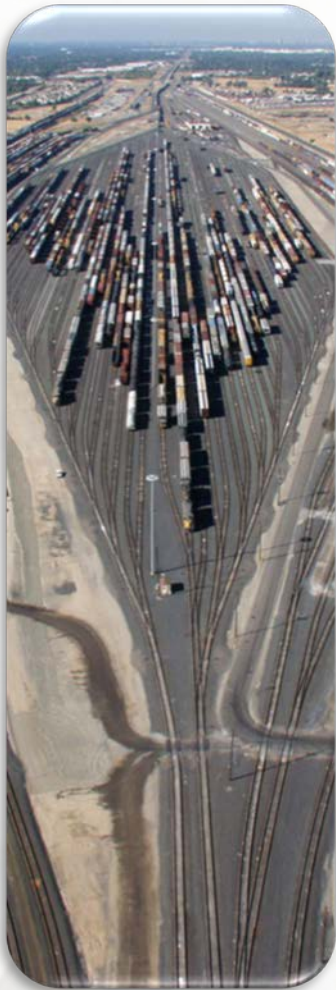




U.S. Department  
of Transportation  
**Federal Railroad  
Administration**



# **TRANSPORTATION SECURITY PLAN REQUIREMENTS**

**HZ1837**

**FRA HAZARDOUS MATERIALS SEMINAR**

**AUGUST 2018**

**HOUSTON, TX**



# 49 CFR§ 172.800-804

## SECURITY PLANS

- You *must* develop and implement a security plan if you offer for transportation or transport the following types or quantities of hazmat. “Large bulk quantity” refers to a quantity greater than 3,000 kg., (6,614 lbs.,) for solids or 3,000 liters (792 gal.,) for liquids and gases in a single packaging such as a cargo tank motor vehicle, portable tank, tank car, or other bulk container:



# 49 CFR§ 172.800-804

## SECURITY PLANS

- Any Division 1.1, 1.2, or 1.3 material;
- A quantity of a Division 1.4, 1.5, or 1.6 material requiring placarding
- A large bulk quantity of Division 2.1 material;
- A large bulk quantity of Division 2.2 material with a subsidiary hazard of 5.1;
- Any quantity of a material poisonous by inhalation as defined in §171.8 of this subchapter;
- A large bulk quantity of a Class 3 material meeting the criteria for Packing Group I or II;



# 49 CFR§ 172.800-804

## SECURITY PLANS

- A quantity of a desensitized explosive meeting the definition of a Division 4.1 or Class 3 material requiring placarding
- A large bulk quantity of a Division 4.2 material meeting the criteria for Packing Group I or II;
- A quantity of a Division 4.3 material requiring placarding
- A large bulk quantity of a Division 5.1 material in Packing Groups I and II: perchlorates; or ammonium nitrate, ammonium nitrate fertilizers, or ammonium nitrate emulsions, suspensions, or gels;





# 49 CFR§ 172.800-804

## SECURITY PLANS

- Any quantity of organic peroxide, Type B, liquid or solid, temperature controlled;
- A large bulk quantity of Division 6.1 material
- A select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR Part 73 or the U.S. Department of Agriculture under 9 CFR Part 121;
- A quantity of uranium hexafluoride requiring placarding under §172.505(b);
- International Atomic Energy Agency (IAEA) Code of Conduct Category 1 and 2 materials including Highway Route



# 49 CFR§ 172.800-804

## SECURITY PLANS

- Controlled quantities as defined in 49 CFR 173.403 or known as radionuclides in forms listed as RAM-QC by the Nuclear Regulatory Commission; and
- A large bulk quantity of Class 8 material meeting the criteria for Packing Group I.
- To avoid unnecessary duplication of security requirements, security plans that conform to regulations, standards, protocols, or guidelines issued by other Federal agencies, international organizations, or industry organizations may be used to satisfy the requirements in this subpart, provided such security plans address the requirements specified in this subpart.



# SECURITY PLAN RISK ASSESSMENT

Before you create your security plan, Do the risk assessment first.

Includes:

...site- or location-specific risks associated with facilities where hazmat is prepared for transportation, stored, or unloaded; and measures to address the assessed risks.

...critical infrastructure



# SECURITY PLAN REQUIREMENTS

- Name/job title of senior official responsible for developing/implementing the security plan;
- Specific security duties for each position/department responsible for implementing the plan, or a portion thereof, and the process of notifying employees when specific elements must be implemented;
- A plan for training hazmat employees in accordance with §172.704(a)(4) and (5);





# SECURITY PLAN REQUIREMENTS

- The security plan, including the transportation security risk assessment, must be in writing and retained as long as in effect;
- The security plan must be reviewed at least annually, and revised and/or updated as necessary;
- The security plan must be available to responsible employees—consistent with security clearance/ background investigation/need-to-know;



# SECURITY PLAN REQUIREMENTS

- When updated/revised, the most current copies of the security plan must be maintained, and responsible employees must be notified; and Persons responsible for developing/implementing a security plan must maintain copies, including electronic, that are accessible at/through their place of business, or make available, upon request, to authorized officials of DOT or the Department of Homeland Security.



# SECURITY PLAN COMPONENTS

- *Personnel Security (Consider background investigations, hiring/firing practices, vetting contractors/vendors who interact with your employees, expectations of employees, etc.)*
- *Unauthorized Access (Consider facility and IT security measures, trespassing/vandalism policies, interactions with police, etc.)*



# SECURITY PLAN COMPONENTS

- *En Route Security (Consider your train securement policies and locations, locking equipment, removing locomotive reversers, use of derails/switches, shipment seal controls, etc.)*



# SECURITY ROUTING REGULATIONS

Located in **49 CFR 172.820**, 172.822 &  
Appendix D to Part 172

- Applicability
- Primary and alternate rail route analysis
- Route selection
- Route analysis completion
- Rail carrier POC's on routing issues
- Storage, delays in transit and notification
- Recordkeeping
- Compliance and enforcement
- **Applies only to Railroads**





# SECURITY ROUTING REGULATIONS

- Collect data annually
  - Certain high hazard materials
  - By route
- Use previous years data to analyze routes safety and security
- Analyze for a primary and alternate route
- Choose safest/most secure route – primary and alternate
- Allow DOT/DHS to see the data and analysis
- Reduce storage/delays in transit
- Perform security inspections
- Separate appeal process (49 CFR 209.501)



# SECURITY ROUTING REGULATIONS

## 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 NH<sub>3</sub>)
  - High Hazard Flammable Trains as defined 49 CFR§ 171.8
  - 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
- Collected by route, line segment or series of line segments
- Commodity data by UN number
- Identified by geographic location



# ROUTING ANALYSIS

- In Writing
- Analysis must include Appendix D factors
  - 27 factors are minimum
- Includes:
  - Classification/Switching Yards
  - Sidings
  - Storage Facilities
- Excludes:
  - Offeror/Consignees Facilities
  - Private Sidings/Tracks



# 27 RISK FACTORS

## APPENDIX D TO PART 172

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





# 27 RISK FACTORS

## APPENDIX D TO PART 172

- Passenger traffic
- Train speed
- Proximity to 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

## Considerations

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





# CONSULTATION REQUIREMENTS

- 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



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# 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





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