



U.S. Department of Transportation Federal Railroad Administration

National Transportation Safety Board Rail Safety Forum

Transportation of Crude Oil and Ethanol Industry Standards and Regulatory Oversight

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Overview

FRA101

Philosophy regarding tank car safety

Regulations vs Industry Standards

Railroad Safety Advisory Committee

Enforcement Initiatives

Specification vs Performance Std.

NTSB Recommendations





Federal Railroad Administration 101

- 1 of DOT's 13 operating administrations
- Safety Disciplines
 - Hazardous Materials
 - Operating Practices
 - Motive Power & Equipment
 - Signal and Train Control
 - Track
 - Rail Integrity and Infrastructure
 - Industrial Hygiene
- Interface with PHMSA and AAR
 - Roles with respect to Class 3 tank car regulations
 - Tank Car Committee (Task force T87.6)



49 CFR 100-199

49 CFR 200-299



Tank Car Safety

- **Prevention of derailments**
 - Eliminate single point of failure
 - Rail inspection frequency and operator qualification (Rail Integrity Rule)
- **Mitigation**
 - Improve crashworthiness
 - Decrease energy and increase energy dissipation
 - Minimize effects of pool fire
- **Response**
 - Training
 - Communication
 - Resources



Regulations vs Industry Standards

- Industry standards
 - AAR Interchange Standards
- Voluntary actions
 - Secretary of Transportation's "Call to Action"
- Incorporation into regulations
 - Frequency of updates
 - Basis of changes
 - Delegations to AAR
- Enforcement of industry standards/voluntary actions
 - Tank car quality assurance program
 - Voluntary action are not enforceable



Railroad Safety Advisory Committee

- March 25, 1996 FRA established RSAC
- Recommendations to FRA Administrator
 - New regulations
 - Review and revise existing regulations
 - Identify non-regulatory alternatives
- Task statements – Working groups
- Emergency RSAC (49th meeting)
 - 13-02 - Hazardous materials
 - 13-03/04 - Securement and operational testing
 - 13-05 - Crew Size



Enforcement Initiatives

- Security and Securement Plan Audits
- Automated Track Inspection Program (ATIP)
- Penalty schedule (49CFR 209, Appendix B)
 - Guideline amounts
 - \$450 - \$110,000
- Enforcement Tools
 - Civil penalties
 - Individual liability
 - Rail worthiness directive
 - Emergency order



Specification vs Performance Std.

Specification Standard

- Pros
 - Uniformity in design and construction
 - Limit proof of compliance required
- Cons
 - Limited innovation

Performance Standard

- Pros
 - Encourage innovation
- Cons
 - Determining appropriate performance metric(s)
 - Builder must demonstrate compliance



NTSB Recommendations

- R-14-01 Route planning and selection requirements
 - AAR commitment (crude oil trains)
- R-14-02 Program to audit oil spill response plans
 - Currently auditing basic plans in conjunction with Security plan audits
- R-14-13 Classification, security plans, and provisions for safety and security
- R-04-07 fracture toughness performance criteria
- R-08-12 crew/hazmat separation requirements
- R-07-02 accurate real-time information for First responders



Questions?

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Thank you!