



**CPUC Railroad Safety Oversight:
State and Federal Jurisdiction over Railroad and Tank Car Safety**

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Overview

- Major rail tank car accidents.
- State and Federal jurisdiction over rail and tank car safety.
 - Federal jurisdiction.
 - State jurisdiction.
 - Shared jurisdiction.
- CPUC railroad safety oversight.
 - FRA/State Safety Participation Program.
 - Public Utilities Code, regulations.
 - CPUC rules, regulations, decisions, practices.
 - What's needed to ensure public safety in light of projected increases in hazmat/crude rail shipments.

Major crude oil train derailments, July 2013 to January 2014



July 2013, Lac-Mégantic, Quebec



October 2013, Gainford, Alberta



November 2013, Aliceville, Alabama



December 2013, Casselton, North Dakota



January 2014, Plaster Rock, New Brunswick

Major ethanol railroad derailments, 2006 to 2012



June 2009, Cherry Valley, IL



February 2010, Tehachapi, CA



February 2011, Arcadia, OH



October 2011, Tiskilwa, IL



July 2012, Columbus, OH



August 2012, near Plevna, MT

See also: http://www.huffingtonpost.com/2014/02/07/oil-train-accidents-petition_n_4747510.html?utm_hp_ref=green

Federal Jurisdiction over Railroad Safety

- Safety Appliance Act of 1893, 1910.
 - Requirements for interstate commerce.
 - Railcar air brakes, minimum working percentage.
 - Automatic couplers, ladders, hand-holds.
- Boiler Inspection Act of 1911.
 - “Extends to the design, the construction and the material of every part of the locomotive and tender and all appurtenances.”
- Federal Railroad Safety Act of 1970.
 - Subject matter coverage, local safety hazard exemption.
 - 49 U.S.C. § 20106:
 - A State may adopt or continue in force a law, regulation, or order related to railroad safety until the Secretary of Transportation prescribes a regulation or issues an order covering the subject matter of the State requirement.
 - A State may adopt or continue in force an additional or more stringent law, regulation, or order related to railroad safety when the law, regulation, or order –
 - is necessary to eliminate or reduce an essentially local safety hazard;
 - is not incompatible with a law, regulation, or order of the United States Government; and
 - does not unreasonably burden interstate commerce.

Federal Regulations*

Federal Railroad Administration:

Title 49 Code of Federal Regulations Ch. II (10–1–13 Edition)

Part

- 200 Informal rules of practice for passenger service
- 207 Railroad police officers
- 209 Railroad safety enforcement procedures
- 210 Railroad noise emission compliance regulations
- 211 Rules of practice
- 212 State safety participation regulations
- 213 Track safety standards
- 214 Railroad workplace safety
- 215 Railroad freight car safety standards
- 216 Special notice and emergency order procedures: Railroad track, locomotive and equipment
- 217 Railroad operating rules
- 218 Railroad operating practices
- 219 Control of alcohol and drug use
- 220 Railroad communications
- 221 Rear end marking device—passenger, commuter and freight trains
- 222 Use of locomotive horns at public highway-rail grade crossings
- 223 Safety glazing standards—locomotives, passenger cars and cabooses
- 224 Reflectorization of rail freight rolling stock
- 225 Railroad accidents/incidents: Reports classification, and investigations
- 227 Occupational noise exposure
- 228 Hours of service of railroad employees; record-keeping and reporting; sleeping quarters
- 229 Railroad locomotive safety standards
- 230 Steam locomotive inspection and maintenance standards
- 231 Railroad safety appliance standards
- 232 Brake system safety standards for freight and other non-passenger trains and equipment; end-of-train devices.
- 233 Signal systems reporting requirements
- 234 Grade crossing safety, including signal systems, state action plans, and emergency notification systems

- 235 Instructions governing applications for approval of a discontinuance or material modification of a signal system or relief from the requirements of part 236
- 236 Rules, standards, and instructions governing the installation, inspection, maintenance, and repair of signal and train control systems, devices, and appliances
- 237 Bridge safety standards
- 238 Passenger equipment safety standards
- 239 Passenger train emergency preparedness
- 240 Qualification and certification of locomotive engineers
- 241 United States locational requirement for dispatching of United States rail operations

- 242 Qualification and certification of conductors
- 244 Regulations on safety integration plans governing railroad consolidations, mergers, and acquisitions of control

Pipeline and Hazardous Materials Safety Administration:

Title 49 Code of Federal Regulations Ch. I

- 171 General information, regulations, and definitions
- 172 Hazardous materials table, special provisions, hazardous materials communications, emergency response information, training requirements, and security plans
- 173 Shippers—general requirements for shipments and packagings
- 174 Carriage by rail
- 178 Specifications for packaging
- 179 Specifications for tank cars

* Most relevant regulations, not a comprehensive list.

State Jurisdiction over Railroad Safety

CPUC: Began as California Railroad Commission in 1911.

Public Utilities Code Sections:

- Section 309.7 - Broad authority and some inspection mandates.
- Section 315 - Accident investigation.
- Section 421 – Funding
- Section 761 – General authority over infrastructure and operations
- Section 765 – Mandates to staff, needed safety activity, FRA/State Safety Participation Program, report to the legislature.
- Section 768 – Broad authority
- Section 7711 – Determination and reporting of hazardous railroad sites, near-miss recording.
- Section 7712 – Adopt regulations based on hazardous site determinations.
- Section 7662 – Placement of crossing whistle boards, work area warning flags, milepost markers.

General Orders:

- GO 22-B – Reports of accidents on railroads
- GO 26-D – Clearances on railroads and street railroads a to side and overhead structures, parallel tracks and crossings
- GO 27-B – Filing and posting of railroad timetables and changes
- GO 118-A – Construction, reconstruction and maintenance of walkways and control of vegetation adjacent to railroad tracks
- GO 135 – Occupancy of public grade crossings by railroads
- GO 161 – Rules and regulations governing the transportation of hazardous materials by rail.
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Decisions:

Decision D.97-09-045, as modified by D.06-02-013, addressing state-wide risk assessment based on PU Code Sections 7711 and 7712 following the 1991 Dunsmuir tank car derailment and toxic spill.

- Regulations for dynamic brakes, end-of-train devices, track standards, training found preempted.
- Regulation for defect detector not preempted.
- Settlement approved to regulate process of ensuring safety train make-up and track-train dynamics are safe.

Shared Federal/State Jurisdiction, Activity:

Enforcement of FRA regulations, and PHMSA's railroad regulations – CPUC railroad safety inspectors inspect, investigate, and enforce in the five “disciplines:

- Track and structures
- Motive Power and Equipment
- Operating Practices
- Signal and Train Control
- Hazardous Materials Shipments

Note: FRA's Emergency Order 28 (EO-28) – Issued in response to Lac-Mégantic tragedy – FRA/State enforcement.

FRA trains and certifies state inspectors to implement State Safety Participation Agreements.

Federal Rulemakings:

Rail Safety Advisory Committee (RSAC):

- Consists of about 50 members from railroads, unions, shippers, car owners, equipment suppliers.
- States have one “seat” or vote – Association of State Rail Safety Managers (ASRSM).
- ASRSM managers from the 30 states with FRA/State Participation Program.
- CPUC Deputy Director, Office of Rail Safety, is current ASRSM representative in RSAC.
- RSAC workgroups to advise on making EO-28 permanent:
 - Hazardous materials issues.
 - Train securement.
 - Crew size.
- Full RSAC membership votes on workgroup recommendation – if a workgroup consensus is achieved.
- Formal advisory submitted to FRA if RSAC membership approves workgroup recommendation.
- FRA can expedite adoption of new regulation if it follows RSAC advisory.

Notices of Proposed Rulemakings (NPRM):

- CPUC can comment and provide testimony in FRA's formal rulemakings.
- CPUC can petition the FRA for a new rulemaking.

California Congressional Delegation:

- Congress can pass federal laws directly without FRA's rulemaking procedures.
- Example: Positive Train Control requirements passed after the 2008 Chatsworth passenger train collision.

What's needed to ensure public safety in light of projected increases in hazmat/crude rail shipments?

General: Risk Assessment/Management:

- Reduce the probability (chances) of an accident.
- Reduce the consequences (impact) of an accident.

Probability: Derailment/collision prevention:

- Maintenance practices.
 - Inspection – track, locomotives and rail cars, signals
 - Training
- Operations.
 - Operational reliability

Consequences: Tank car standards, accident response.

Issues of concern:

- Increased risk:
 - Increased number of trains.
 - Increased tonnage
 - Increased hazardous materials exposure.
 - Service demands.
 - Cost/benefit of safety measures.
- Maintenance of expertise.
 - Retirements.
 - CPUC recruitment and retention problems.
 - Training, including lead time.