

Tank Car Committee: An Overview and the Importance of its Ongoing Oversight

History & Overview

Freight railroads have long been committed to the safe transportation of hazardous materials. During the early 1900s, a predecessor of the Association of American Railroads' (AAR) Tank Car Committee (TCC) began developing tank car specifications as part of a voluntary industry effort to improve safety. In 1927, the Interstate Commerce Commission, the precursor to the Surface Transportation Board, not only adopted these standards, but also required that future tank car designs be approved by the TCC prior to construction or modification because of the TCC's technical expertise. The TCC continues to perform these safety-critical functions and remains essential to the safe transportation of hazardous materials.

The current system of oversight for rail tank cars is multi-faceted, with federal minimum standards at times being exceeded by industry best practices. In this system, the Department of Transportation (DOT) retains regulatory authority over the safety of rail transportation, including setting minimum specifications for tank cars. Due to its technical expertise, DOT has delegated its authority on certain tank car safety matters to the TCC, including technical design review and quality assurance program certification for tank car facilities. Separate from this delegated authority, the TCC also reviews and sets industry-wide interchange standards for the design and operation of tank cars in North America pursuant to voluntary agreement of the rail industry. While these interchange standards can at times require the tank car industry to exceed, or more quickly meet, DOT's regulations, they can never relax DOT's minimum requirements or degree of oversight.

This system has ensured that today's tank cars are built with better thermal protection, higher grade steel, and better valves and fittings, and has improved tank car safety at a speed not otherwise possible through the traditional regulatory process. As a result of these efforts, as well as the rail industry's \$25 billion in annual investments for infrastructure and technological innovation, rigorous employee training, and community safety efforts, more than 99.999% of rail hazardous materials shipments have reached their destination without a train accident-caused release.

Interchange System & the Manual of Standards & Recommended Practices (MSRP)

Because no one railroad covers the entire country, railroads are often required to interchange equipment, including tank cars, during their operations in order to transport goods to their destinations. To facilitate these interchanges, the rail industry, including rolling stock owners and repair facilities, voluntarily agreed to accept and transport shipments that meet a consistent set of standards contained in the MSRP.

Furthermore, these interchange system standards have often formed the basis for later-adopted DOT safety regulations. For example, in an effort to improve the puncture resistance of tank cars carrying crude oil and ethanol, the TCC voluntarily promulgated improved tank car safety interchange standards (CPC-1232) four years before the Pipeline and Hazardous Materials Safety Administration (PHMSA) published its final rule setting forth similar DOT-117 tank car specifications.

The TCC: Stakeholders & Functions

The TCC is composed of representatives from the railroads, shippers, and tank car builders and owners. Additionally, representatives from the Federal Railroad Administration, PHMSA, the National Transportation Safety Board, Transport Canada, and the Transportation Safety Board of Canada regularly attend and participate in many of the TCC's quarterly meetings.

The TCC has two primary functions. First, the TCC develops and enforces the tank car section of the MSRP. Proposed changes to tank car standards in the MSRP are developed through the TCC, which follows a notice and comment process and considers the cost of such a change and what improvements would be made.

The TCC docket also includes public and private enforcement portions which complement DOT's safety regulation efforts. Private enforcement of safety matters by the TCC often deals with non-compliance with DOT minimum standards or interchange agreement standards. Outcomes of such proceedings can include the removal of an entity's certification or the removal of certain equipment's free interchange status.

Second, the TCC reviews tank car designs and facility quality assurance programs, as delegated by DOT. To carry out these functions, AAR employs 16 auditors with technical and quality assurance expertise.

The Importance of Ongoing TCC Oversight

Railroads generally do not own the tank cars they transport; rather, tank cars are often purchased and maintained by shippers or equipment leasing companies. Railroads, as common carriers, are instead obligated to transport any freight, including hazardous materials, properly tendered on reasonable terms and conditions. Should a derailment, especially one involving hazardous materials, occur during transportation, railroads incur significant costs and operational disruptions, and are the primary target for public scrutiny and legal action. As a result, the interests of railroads, which need tank cars to be as safe as reasonably practicable, and shippers or equipment leasing companies, which sometimes must pay for needed safety enhancements, are not always perfectly aligned.

These competing concerns have repeatedly been reconciled by the TCC, and the safety of hazardous materials transportation has undeniably been improved as a result. For example, when permitting the gross weight of rail tank cars to be increased from 263,000 to 286,000 pounds, the TCC required one-third of the additional weight be used for safety. This resulted in tank cars with thicker shells and improved puncture resistance, and this voluntary safety improvement was then adopted by both DOT and Transport Canada.

Ongoing Efforts to Eliminate or Alter TCC Oversight

In 2016, a group of shippers and tank car owners filed a petition for rulemaking with PHMSA that challenged the current system of oversight for rail tank cars and requested PHMSA to adopt regulations prohibiting any entity from requiring compliance with tank car specifications more rigorous than the minimum DOT safety standards. The filing of this petition was in direct response to efforts at the time by the TCC to adopt improved standards for tanks used to transport toxic inhalation hazards.

DOT should deny this petition. Public interest and confidence in rail safety is not advanced by federal regulation or legislation that limits private industry's ability to voluntarily adopt higher safety standards. Moreover, this petition calls for DOT to regulate the terms of private interchange agreements which DOT does not have the authority to do. Shippers can challenge railroad practices they believe to be unreasonable at the Surface Transportation Board. Finally, shippers unwilling to abide by the MSRP's safety standards can instead negotiate terms of service with each railroad they wish to transport their cargo.

More recently, some shipper organizations have demanded that the TCC incorporate full regulatory impact-type analyses into its consideration of any proposed standard changes to the MSRP. However, in light of what is at stake and the voluntary nature of the interchange system, the TCC has chosen not to incorporate formal cost-benefit analyses. The TCC does consider costs and benefits of proposed changes. Conducting formal cost-benefit analyses would substantially slow down the process of incorporating safety improvements and spawn endless disputes over modeling and assumptions. The railroads are the first, primary, and sometimes only party held responsible for the impacts of derailments. The TCC works to reduce the probability of such disasters by taking all reasonable safety precautions that can significantly lower the risk of a high-consequence event from occurring, while also considering the costs of implementing those precautions. The existing interchange agreement system permits the TCC to operate quickly in response to developing risks and safety information, and its long history of success in doing so supports its well-established processes and procedures.