Crude by Rail

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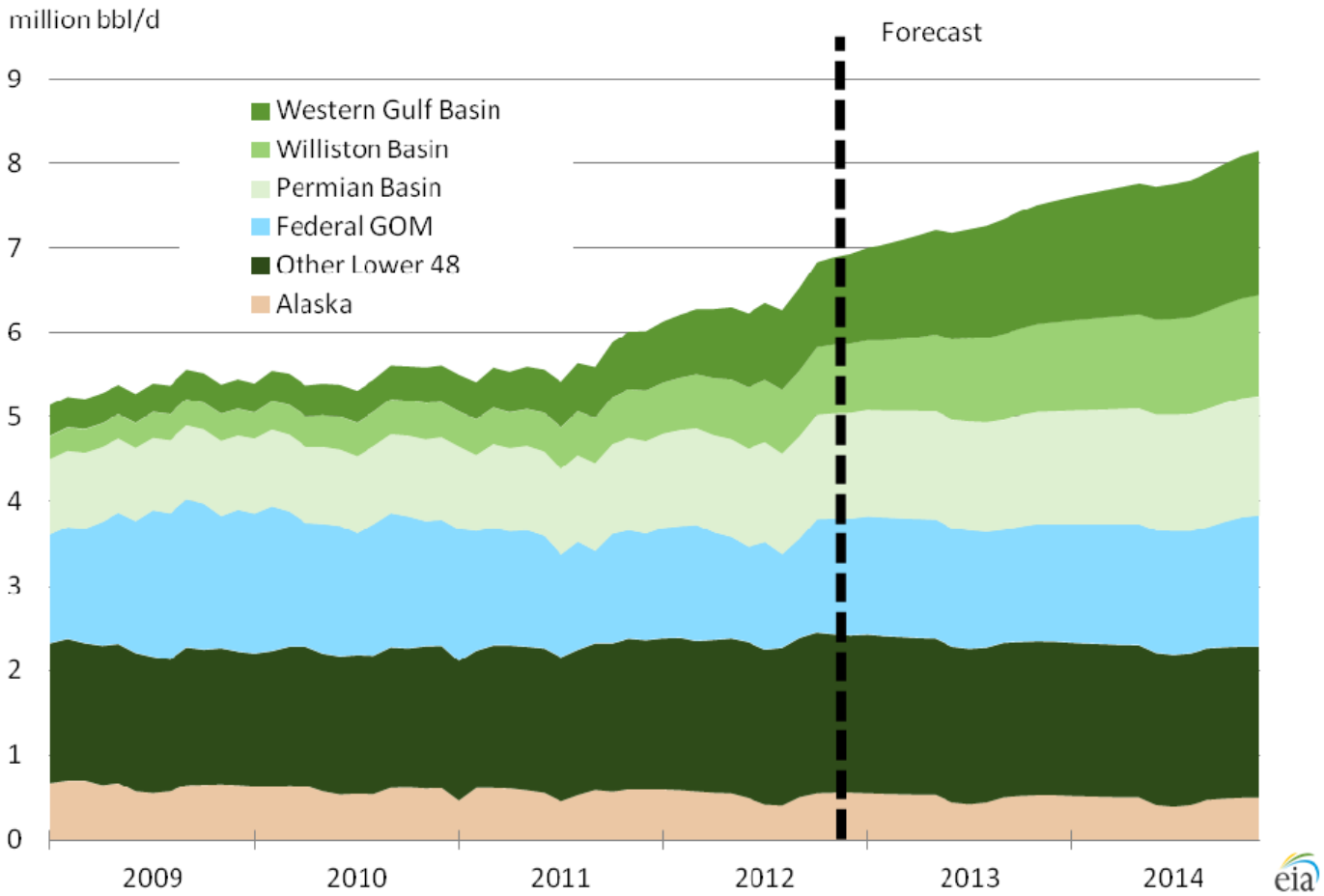
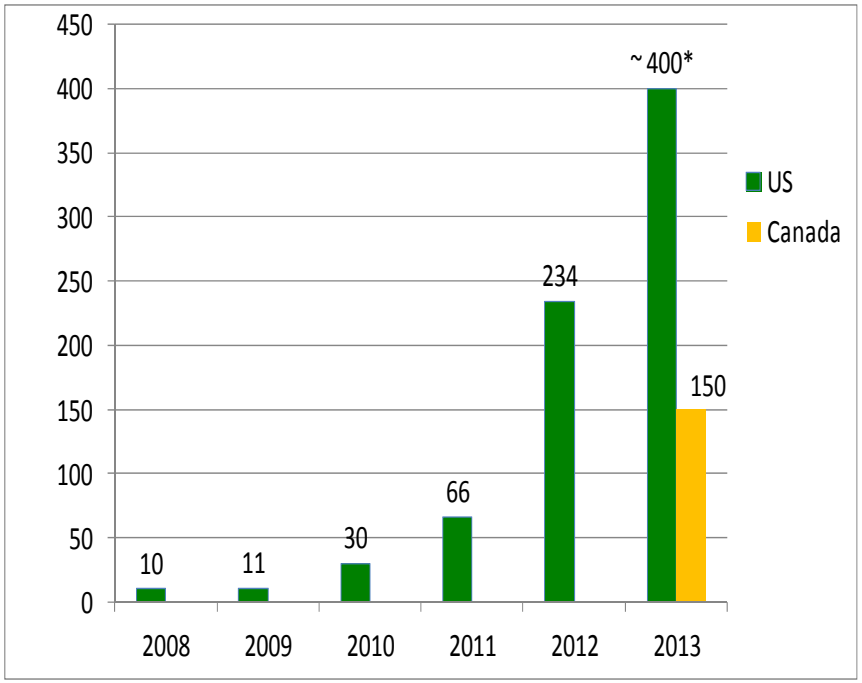
Regional Oil Production Forecast

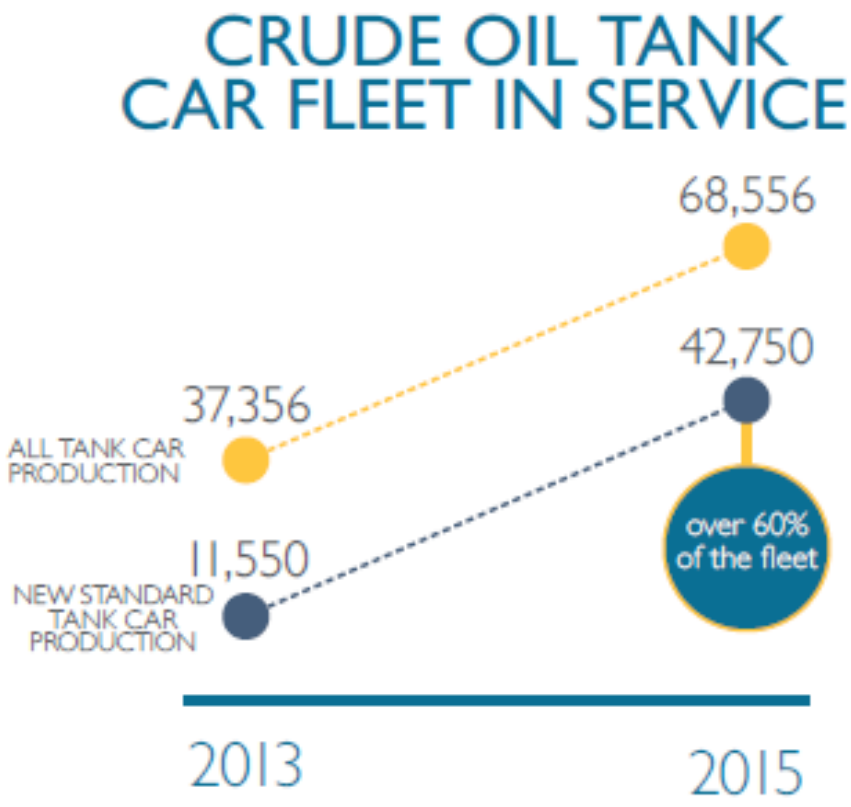


Source: http://www.eia.gov/forecasts/steo/special/pdf/2013_sp_02.pdf

Growth of Crude by Rail Carloads



Originated Carloads on Class I Railroads (1,000's)



Sources: "RSI Survey of RSI Car Builders for Cars on Order," Railway Supply Institute, August 2013; "3rd Quarter 2013 Data from AAR 11/9/13 Fleet Analysis," Association of American Railroads & University of Illinois at Urbana-Champaign, November 9, 2013

Industry Focus on Safety

Safety is a core value of the oil and natural gas industry, zero incidents is our goal

- Rail moves 99.997% of hazardous materials without incident but one incident is too many
- The oil and natural gas industry is on the leading edge of improving safety by addressing **prevention, mitigation, and response**
- We remain committed to working with the regulators and the railroads to improve safety even further

Holistic Approach to Safety

- Focus on holistic and systematic approach to safety improvements
- Solutions must be data-driven with measurable improvements to safety without creating new risks or inadvertently shifting the risks to other businesses or operations (i.e., CPR review, Integrated Risk Assessment and Management)
- Collaboration is needed among government, shippers, owners/lessors, railroads, and tank car builders

Industry Improvements to Rail Safety: Prevention and Mitigation

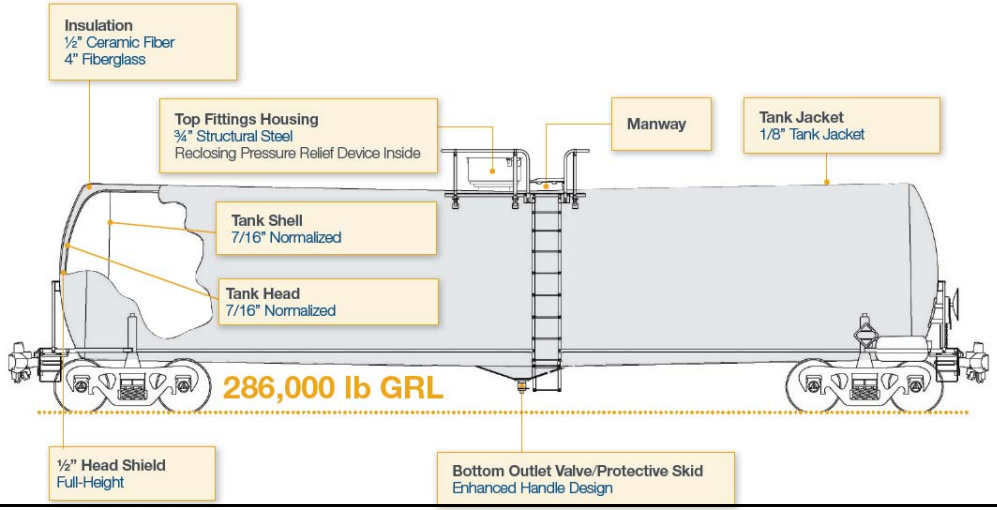
Prevention:

- "Getting a new tank car is not a silver bullet; first we need to prevent derailments." – Administrator Quarterman, House Hearing February 26, 2014

Mitigation: Tank Car Design and Classification

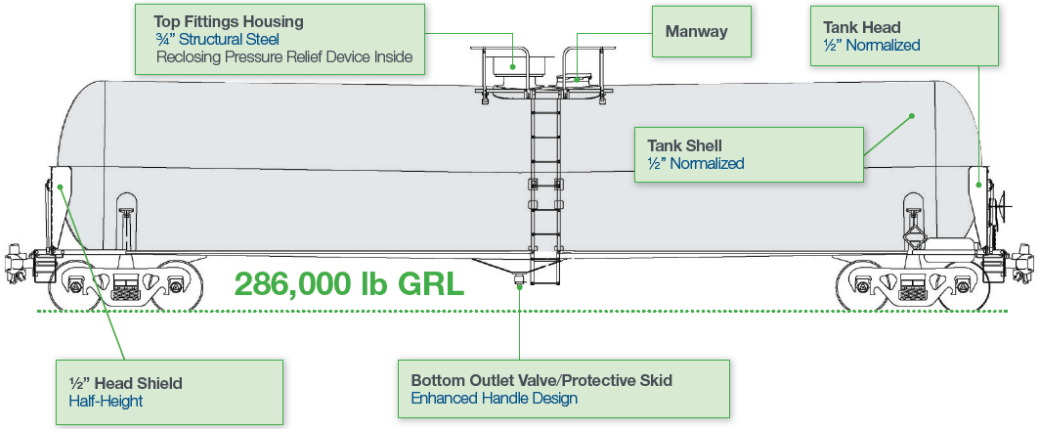
- Shippers / Owners have been building state-of-the-art CPC-1232 tank cars (Jacketed/Non-Jacketed) to new standards since 2011
- CPC-1232 exceeds current DOT requirements
- API is developing a standard for classifying, loading/unloading, and transporting crude oil to ensure it is moved safely
  - Assessment of physical properties of crude oil in transportation
  - Crude oil quality data (PHMSA, NDPC)

Oil & Gas Industry Improvements to Rail Safety: Tank Car Design



Jacketed Petition Car

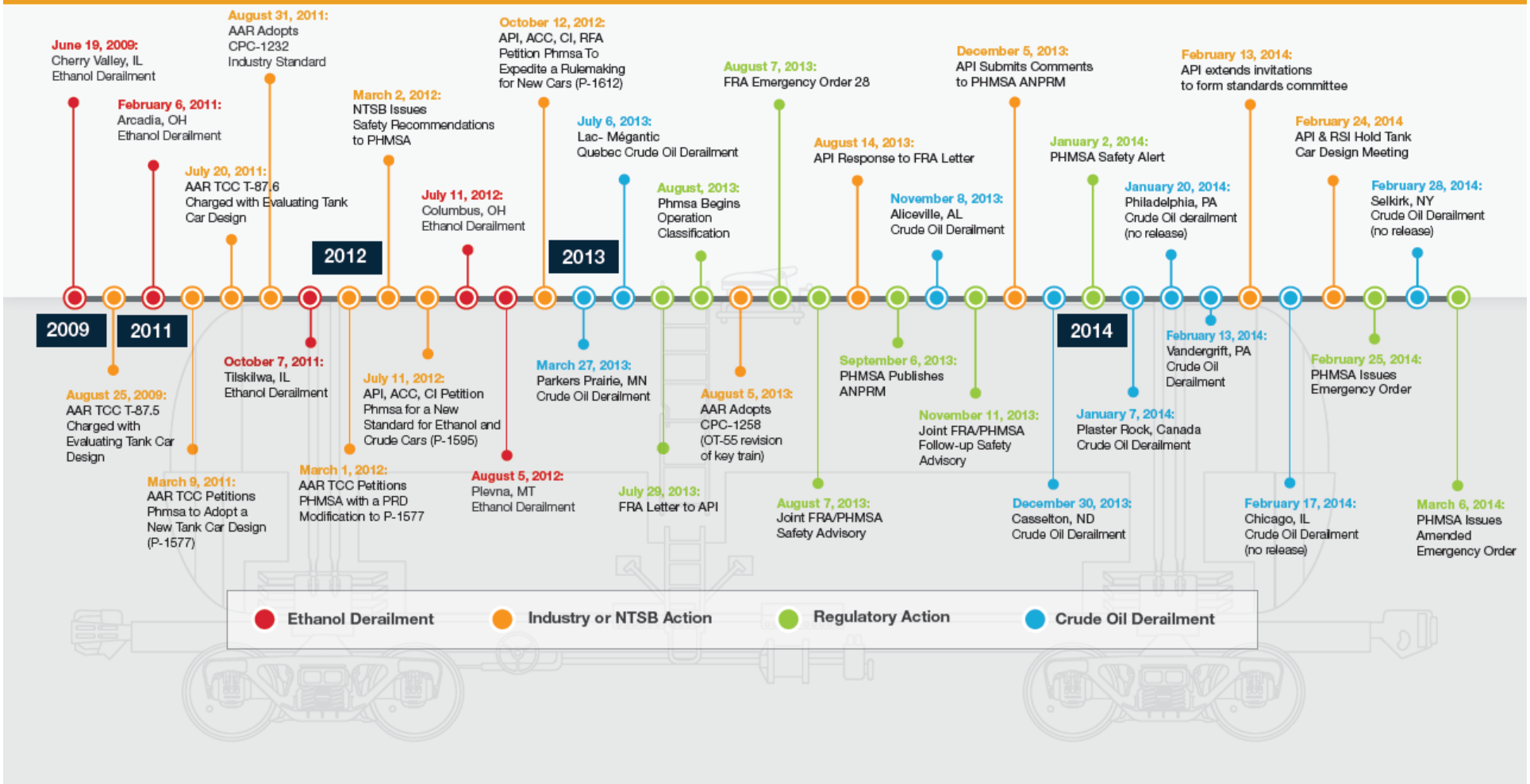
Non-Jacketed Petition Car



Emergency Response

- API is collaborating with railroads, first responders, and USDOT to improve emergency responder training
- API is considering all options and how to utilize each for maximum benefit:
  - TRANSCAER
  - National Association of Fire Marshals
  - Security and Emergency Response Training Center
  - Individual Rail Company Programs

Timeline of Rail Events



Short-Term Action

- PHMSA should write an **interim final rule** adopting the CPC-1232 industry standard for new tank cars and allow the use of cars built in good faith to those standards remain in service for their useful life
- Benefits
  - Adopts a safe state-of-the-art tank car design
  - Ensures that only these cars are built
  - Enables certainty for those who have already made significant long-term investments and those who want to continue building these cars
  - Provides certainty today, while allowing review of tank car design and retrofit requirements
- API finalize Crude Oil Classification Standard

Long-Term Action

- Shippers (API, ACC, AFPM) and RSI are assessing tank car design for new and retrofit tank cars. Until that work is complete, modifications to that fleet should not be prematurely imposed
  - ~190,000 DOT-111 tank cars in hazmat service by end of 2015
  - Approx. 55k CPC-1232 tank cars by end of 2015
  - The AAR CPR Model (TWP-17) is not completed or available for review by shippers
- Bring stakeholders and industry experts together to ensure a science based risk management approach to assessing and/or enhancing rail car design
- We are working as quickly as possible to ensure the science is completed that supports any changes

Background

Industry Petitions PHMSA Four Times

- 2009 – 2011 – Industry (railroads, shippers, tank car manufacturers, regulators) designs state-of-the-art tank car
- March 9, 2011 – Industry petitions PHMSA for new tank car (P-1577)
- August 31, 2011 – AAR adopts the CPC-1232 tank car as an interchange standard
- 2011 – 2012 – Industry reassesses the design and determines only needed change is for new pressure relief device. Committee led by FRA
- March 1, 2012 – Industry petitions PHMSA to modify March 2011 petition to add a new pressure relief device (mod to P-1577)
- July 6, 2012 – AAR requests FRA convene a meeting to obtain prompt action by DOT on standards
- July 11, 2012 – API, ACC, CI petition government to only address crude oil and ethanol (P-1595)
- October 2012 – ACC, API ,CI, RFA petition PHMSA to expedite rulemaking and separate it from retrofit considerations (P-1612)