



Center for Regional Disaster Resilience

# *Oil Train Safety Symposium*

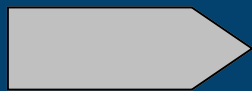
## *April 27, 2016*



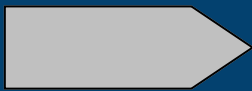
*Lakewood, Washington*  
*9:00am - 4:00pm*

## **OBJECTIVES**

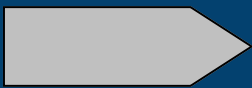
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**Provide comprehensive overview of current and emerging issues regarding oil by rail transportation to a broad range of regional stakeholders**



**Develop a common understanding of the current and future status of oil by rail transportation**



**Foster dialogue between disparate sectors and interest groups**

# INTRODUCTION: OIL TRAIN SAFETY SYMPOSIUM



Transportation of oil by rail has greatly increased over the past several years with significant impacts for the region. To address emerging issues regarding safety procedures, incident response, and regulation development, the Transportation Working Group of the **Pacific Northwest Economic Region (PNWER)** is organizing an “Oil Train Safety Symposium” to be held at **Clover Park Technical College on April 27, 2016 in Lakewood, Washington from 9:00am to 4:00pm**. The symposium will provide a comprehensive overview of the current and future status of oil by rail transportation and emphasize partnerships to help ensure oil transport safety is being addressed across the region.

## AUDIENCE

### PUBLIC SECTOR

- NW state legislators
- Municipal leaders
- First responders and emergency management sector
- Tribes
- State transportation and ecology agencies
- Ports
- Utilities

### PRIVATE SECTOR

- Railroad companies
- Terminal operators
- Refineries
- Tank manufacturers
- Oil shippers

### NGO

- Safety organizations
- Economic development
- Agencies
- Environment organizations



## BACKGROUND

Demand for crude oil and derivatives has increased oil by rail shipments in the Northwest. Recent derailments of crude oil trains have led to new tank car construction standards and updated regulatory measures which will impact operations along major rail corridors and at ports within the Pacific Northwest. These developments will lead to changes in how private railway operators and public entities cooperate with one another, and will likely present new challenges and opportunities in the near future.

## ECONOMIC IMPACT

**\$28.5 BILLION IN ECONOMIC ACTIVITY IN WASHINGTON**

**RAIL FREIGHT SUPPORTS MORE THAN 10% OF THE STATE WORKFORCE**

**INTEGRAL PART OF THE MOVEMENT OF GOODS ON THE DOMESTIC AND INTERNATIONAL MARKETS**

# THE CHALLENGES



## **POSSIBLE CHANGES TO RAIL FREIGHT REGULATIONS DUE TO LEGAL CHALLENGES**

### **OVERALL VOLATILITY OF DOMESTIC AND GLOBAL MARKETS AND NATURAL RESOURCE SUPPLY CHAINS**

## **CHANGES IN INFRASTRUCTURE INVESTMENT**

### **POTENTIAL IMPACTS TO PUBLIC SAFETY & ENVIRONMENT**

## **LOCAL COMMUNITY CONCERN**

# THE ISSUES

## **NEED FOR TRANSPORTATION OF CRUDE OIL BY TRAIN**

Why do we transport hazardous material by rail and not truck?  
Current and projected size and scale of shipments

## **HISTORY OF MOVING HAZARDOUS MATERIAL BY RAIL AND INTERSTATE COMMERCE**

## **OVERVIEW OF ROLES AND RESPONSIBILITIES**

Energy companies, railroads, states/provinces, federal governments, and tank car manufacturers

## **POTENTIAL SAFETY HAZARDS STEMMING FROM TRANSPORTATION OF OIL BY TRAIN**

## **OIL TRAIN SAFETY REGULATIONS, CURRENT AND PROPOSED**

Canadian federal regulations  
United States federal regulations  
States and provinces regulations

## **EVOLVING OIL TANKER CAR SAFETY STANDARDS**

Current planning initiatives

## **SPILL RESPONSE: LOCAL CAPABILITIES AND CAPACITIES TO RESPOND**

Canadian federal and provincial  
United States, Coast Guard  
Washington State Department of Ecology  
Washington State Emergency Management Division

## **PLANNING FOR THE FUTURE MOVEMENT OF OTHER FUEL PRODUCTS**



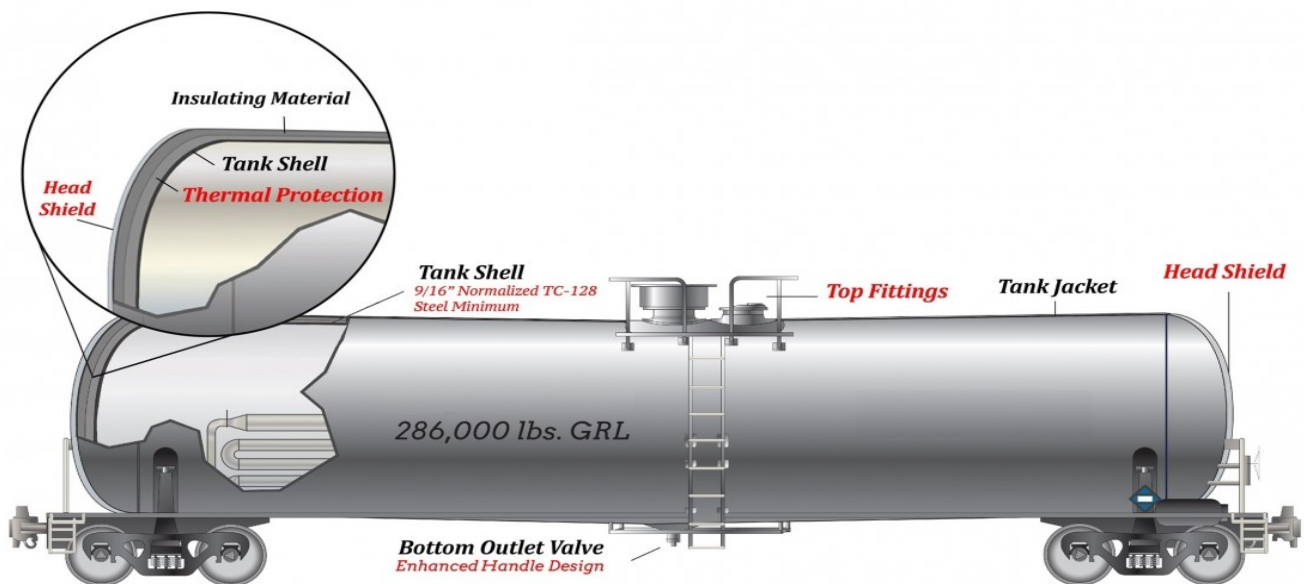


# NEW TANK CAR REQUIREMENTS



In an effort to mitigate the impact of future oil rail car derailments, Transport Canada and U.S. DOT, in collaboration with the Greenbrier Companies, introduced new tank car standards: TN/DOT-117, 117R, and 117P. The new regulations require all HHFT tank cars built after October 1, 2015 to meet the DOT-117 standard, with existing cars to meet the DOT-117R retrofit standard on a two to ten-year schedule based on tank car construction. **Greenbrier estimates the total number of flammable liquid tank cars in the North American fleet to be retrofitted or phased out to be 154,500 cars, 87,500 of which are used for crude oil shipments.** Greenbrier estimates construction costs of \$160,000-\$180,000 for each new DOT-117 tank car and \$60,000-\$80,000 for each DOT-117R tank car retrofit.

## DOT 117 Specification Car



### Safety enhancements of DOT Specification 117 Tank Car:

- Full-height ½ inch thick head shield
- Tank shell thickness increased to 9/16 inch minimum TC-128 Grade B, normalized steel
- Thermal protection
- Minimum 11-gauge jacket
- Top fittings protection
- Enhanced bottom outlet handle design to prevent unintended actuation during a train accident

*PNWER is a statutory public-private partnership chartered by Washington, Oregon Idaho, Alaska, Montana, British Columbia, Alberta, Saskatchewan and the Yukon and Northwest Territories. PNWER promotes best practices and greater regional collaboration in order to enhance the economic competitiveness of the region while maintaining the natural resources of the Pacific Northwest. PNWER has addressed oil by rail concerns at recent meetings with regional stakeholders and has endorsed the development of an Oil Train Safety Symposium to provide current information to key parties and further response plans.*

### Supporters

Contact: Eric Holdeman  
 Director, Center for Regional Disaster Resilience  
 (206) 443-7723, eric.holdeman@pnwer.org



UNITED TRANSPORTATION  
 UNION

