



Image Source: Columbiana County Commissioner's Office

### Norfolk Southern Railway Train Derailment with Subsequent Hazardous Material Release and Fires

June 22 & 23, 2023 | 9 a.m. Eastern  
East Palestine High School | East Palestine, Ohio

#### DAY 1: JUNE 22 Agenda, Panels, and Issue Areas 9:00 a.m – 7:15 p.m.

##### Opening Statements 9:00 a.m. – 10:00 a.m.

- Chair's Opening Statement
- Introduction of the Parties
- Introduction of the Exhibits
- Investigator-in-Charge (IIC) Opening Presentation

##### Panel 1 10:00 a.m. – 1:30 p.m. Hazard Communications and Emergency Responder Preparedness for the Initial Emergency Response

- Witnesses' Opening Statements
- Technical Panel Questions Witnesses

Break 11:30 a.m. – 11:45 a.m.

- Parties to the Hearing Question Witnesses
- Board of Inquiry Questions Witnesses

Witness Panel	Technical Panel
<b>Eric Brewer</b> , Beaver County Emergency Services <b>Scott Deutsch</b> , Norfolk Southern <b>Keith Drabick</b> , East Palestine Fire Department <b>Dan Haueter</b> , East Palestine Police Department <b>William Jones</b> , East Liverpool Fire Department <b>Dan Swords</b> , Ohio Department of Public Safety	<b>Troy Lloyd</b> , Chair <b>Ruben Payan</b> , IIC <b>Marc Dougherty</b> <b>Cyndi Lake</b>

##### Issue Areas

- Timeline of Events**
- » Timeline of the initial emergency response efforts from the derailment until the establishment of a Unified Incident Command Center
  - » Initial evacuation of residents in response to the derailment
- Hazard Communications**
- » Interagency communication and coordination, including the initial notification processes and activities
  - » Hazard Communications on scene, railcar placards, ability to obtain the Train Consist
  - » Protocols for emergency response used
- Emergency Responder Preparedness and Training**
- » Preparedness of East Palestine and other local jurisdictions concerning training, familiarization, and communication for hazmat response
  - » Hazmat response training offered by Norfolk Southern; emergency responder training exercises and hands-on familiarization with equipment
  - » Firefighter use of appropriate protective equipment, and access to and use of specialized equipment for hazmat response

Lunch (on your own) 1:30 p.m. – 2:30 p.m.

##### Panel 2 2:30 p.m. – 7:00 p.m.

##### Circumstances that Led to the Decision to Vent and Burn Five Vinyl Chloride Tank Cars

- Witnesses' Opening Statements
- Technical Panel Questions Witnesses

Break 4:45 p.m. – 5:00 p.m.

- Parties to the Hearing Question Witnesses
- Board of Inquiry Questions Witnesses

Witness Panel	Technical Panel
<b>William Carroll</b> , PhD, Department of Chemistry, Indiana University <b>Charles "Chip" Day</b> , Specialized Response Solutions <b>Keith Drabick</b> , East Palestine Fire Department Major General <b>John Harris, Jr.</b> , Ohio National Guard <b>David "Randy" Padfield</b> , Pennsylvania Emergency Management Agency <b>Drew McCarty</b> , Specialized Professional Services, Inc. <b>Steve Smith</b> , OxyVinyls <b>Paul Thomas</b> , OxyVinyls <b>Robert Wood</b> , Norfolk Southern	<b>Paul Stancil</b> , Chair <b>Ruben Payan</b> , IIC <b>Marc Dougherty</b> <b>Sean Lynum</b>

##### Issue Areas

- Timeline of Events**
- » Pool fire, PRD function, and tank car temperature monitoring
- Vinyl Chloride Monomer (VCM)**
- » Physical and chemical behavior in tank car environment, conditions under which polymerization of VCM may occur
  - » Inconsistent guidance: SDS vs. scientific data on the reactivity and behavior of VCM
  - » Evidence that VCM polymerization did or did not occur, post-accident examination findings
- Communications**
- » Communication and coordination between OxyVinyls, Norfolk Southern, SPSI, SRS, Explosives Systems International, and incident commanders about tank car conditions and likely outcomes, likelihood of polymerization reaction, conflicting opinions and guidance, ramifications of various options
- Vent and Burn Decisions**
- » Options for mitigating the 5 VCM tank cars: product transfer, hot tap, flare stack, vent and burn
  - » Available guidance for selecting vent and burn, and when appropriate to use
  - » How the vent and burn decision was made, who made the decision, when was the decision made, and why
  - » How the vent and burn was accomplished and what was released from each tank car

Chair Homendy's Closing Remarks 7:00 p.m. – 7:15 p.m.

**Day 1 Adjourns**



# Norfolk Southern Railway Train Derailment with Subsequent Hazardous Material Release and Fires

June 22 & 23, 2023 | 9 a.m. Eastern  
East Palestine High School | East Palestine, Ohio

**DAY 2: JUNE 23**      **Agenda, Panels, and Issue Areas**      **9:00 a.m – 6:00 p.m.**

**Opening Statements**      9:00 a.m. – 9:30 a.m.

**Panel 3**      9:30 a.m. – 1:00 p.m.  
**Wheel Bearings and Wayside Defect Detectors**

- Witnesses' Opening Statements
  - Technical Panel Questions Witnesses
- Break      11:00 a.m. – 11:15 a.m.
- Parties to the Hearing Question Witnesses
  - Board of Inquiry Questions Witnesses

Witness Panel	Technical Panel
<b>Jason Cox</b> , Transportation Communications Union/IAM <b>Christopher Hand</b> , Brotherhood of Railroad Signalmen <b>Jared Hopewell</b> , Norfolk Southern <b>Hans Iwand</b> , ESI <b>Michael Rush</b> , AAR <b>Constantine Tarawneh</b> , PhD, University Transportation Center for Railway Safety (UTCRS), University of Texas Rio Grande Valley	<b>Joey Rhine</b> , Chair <b>Ruben Payan</b> , IIC <b>Anne Garcia</b> , PhD <b>Adrienne Lamm</b> <b>Gregory Scott</b> <b>Abe Aronian</b> , TSB Canada

Issue Areas
<b>Freight Car Wheel Bearings</b> <ul style="list-style-type: none"> <li>» Failure modes of bearings, their causes, and how fast they can occur</li> <li>» Visual inspections of bearings—methods and limitations while on-car</li> <li>» Bearing preventative maintenance, rehabilitation, and typical life</li> <li>» Frequency of bearing failure</li> </ul>
<b>Wayside Defect Detector Systems</b> <ul style="list-style-type: none"> <li>» Industry standard for the detectors (maintenance, inspections, installation)</li> <li>» Criteria for detector spacing</li> <li>» Detector reliability (hot bearing)</li> </ul>
<b>ATC</b> <ul style="list-style-type: none"> <li>» Criteria used to determine the back-office parameters (critical and non-critical)</li> <li>» How ATC desk data is prioritized and handled</li> <li>» How data was handled the night of the derailment</li> <li>» ATC desk notification of the derailment (through alert or by train crew)</li> <li>» ATC desk staffing levels</li> </ul>

**Lunch** (on your own)      1:00 p.m. – 2:00 p.m.

**Panel 4**      2:00 p.m. – 5:30 p.m.  
**Rail Tank Car Safety**

- Witnesses' Opening Statements
  - Technical Panel Questions Witnesses
- Break      3:30 p.m. – 3:45 p.m.
- Parties to the Hearing Question Witnesses
  - Board of Inquiry Questions Witnesses

Witness Panel	Technical Panel
<b>William Schoonover</b> , PHMSA <b>Ken Dorsey</b> , AAR <b>Randy Keltz</b> , FRA <b>A.D. McKisic</b> , Trinity Rail <b>Karenanne Stegmann</b> , OxyVinyls <b>Paul Williams</b> , Norfolk Southern <b>Jeremiah Zimmerman</b> , Midland Manufacturing	<b>Paul Stancil</b> , Chair <b>Ruben Payan</b> , IIC <b>Marc Dougherty</b> <b>Sean Lynum</b>

Issue Areas
<b>Tank Car Derailment Damage</b> <ul style="list-style-type: none"> <li>» Post-accident tank car damage assessments and hazardous materials release</li> <li>» Description of tank car breaching damage</li> <li>» Aluminum fittings and protective housing covers</li> <li>» DOT-111 derailment-damage performance</li> </ul>
<b>Tank Car Crashworthiness</b> <ul style="list-style-type: none"> <li>» Authorization of the DOT-105 tank cars for VCM service, and compliance with federal regulations/ AAR standards, applicable tank car approvals</li> <li>» AAR efforts to improve thermal performance of tank cars in flammable liquids service</li> <li>» DOT-111 phaseout status, industry capacity to accelerate</li> </ul>
<b>Hazardous Materials Package Information</b> <ul style="list-style-type: none"> <li>» Compatibility of tank car service equipment with VCM, who ensures the loading is compatible with the service equipment</li> <li>» Pressure relief device function and design</li> </ul>
<b>Appropriate Tank Car Candidates for Vent and Burn Actions</b>

**Chair Homendy's Closing Remarks**      5:30 p.m. – 6:00 p.m.

**Hearing Adjourns**

Scan the QR codes for more information available on our website, [www.nts.gov](http://www.nts.gov)

Norfolk Southern Railway Train Derailment with Subsequent Hazardous Material Release and Fires



Investigative Hearing



Investigation Page