

**Office of Hazardous Materials Safety  
Research & Development Forum  
March 23-24, 2016**

**Day 1**

**Welcoming and administrative remarks (9:00 - 9:30)**

- Opening of forum: Marie Therese Dominguez, PHMSA Administrator
- Magdy El-Sibaie, Associate Administrator, OHMS

**OHMS Research and Development Program Overview and Objectives (9:30 – 10:15)**

- Rick Boyle, Chief of Research and Development branch OHMS

**Electronic Hazard Communication (10:15 – 10:45)**

- HM-ACCESS (Phase I Summary and Phase II plan) – Mark Raney, Volpe
- Electronic Reporting - Sam Elkind, UPS

***Break (10:45-11:00)***

**Lithium Batteries (11:00 – 11:45)**

- Large format Li-ion battery research – Daphne Fuentesvilla, Naval Surface Warfare Center, Carderock)
- Thermal runaway involving Li-ion batteries – Corey Love, Naval Research Laboratory
- Briefing from Industry Representative -- George Kerchner, PRBA

**Liquefied Natural Gas (LNG) Containment and Transportation (11:45 – 12:30)**

- Transportation Risks Associated with Small Scale LNG Facilities – Dawn Johnson, Volpe
- Transportation risks associated with the transport of LNG in intermodal containers
  - Francisco Gonzalez, FRA
  - Leonard Majors, Engineering Branch
- Summary and research path forward – Veda Bharath, R&D Branch

***Lunch (12:30 – 1:30)***

**Compressed Gas Research (1:30 – 2:15)**

- Cylinder Failure – Brian Moore, Engineering Branch
- Cylinder testing and evaluation – Refaat Shafkey, Engineering Branch
- Briefing from Industry Representative – Jack Wert (CGA)

**Crude Oil Classification (2:15 – 3:00)**

- Briefing from Industry Representative – David Lord, Sandia National Laboratory

- W-Ink Crude Classification - Michael Klem, Sciences Branch

***Break (3:00 to 3:15)***

**Energetic Materials (3:15 – 3:45)**

- Chained and Unchained Fireworks – Richard Tarr, Sciences Branch
- Black Powder Equivalency – Richard Tarr, Sciences Branch
- Enhancing the Classification and Testing of Energetic Materials – Andrea Dunham, Sciences Branch

**Emergency Response (3:45-4:15)**

- Toxicology classification and testing – Dave Brown, Argonne National Laboratory
- Interactive ERG – Rick Boyle, Chief of Research and Development Branch

**Emerging Risks (4:15 to 5:00)**

- Emerging Technology for Natural Gas - Britain Bruner, Sciences Branch
- Explosives Transportation – Cynthia Hilton, IME
- Open for participant's briefings, comments or open discussion

## Day 2

### Welcome Remarks (9:00 to 9:10)

- Lad Falat, Director of Engineering and Research Division

### Transportation Research Board – Hazardous Materials Committee (9:10 to 9:40)

- Rick Bornhorst, Hazardous Materials Committee Chair
- Scott Babcock, Transportation Research Board

### OHMS R&D Forum Objectives for Day 2 (9:40 to 9:55)

- Rick Boyle, Chief of Research and Development Branch

### Small Group Discussions (10:00 to 11:00)

Time	Strategic Priority	Potential Topics
10:00-10:30	Risk Management and Communication	<ul style="list-style-type: none"><li>• Electronic Hazard Communication</li><li>• GHS and PHMSA HM Communications</li></ul>
	Emerging Technologies Risk Mitigation	<ul style="list-style-type: none"><li>• Energy Products Classification</li></ul>
	Packaging Integrity	<ul style="list-style-type: none"><li>• Bulk Packaging</li></ul>
	Technical Analysis of Risks	<ul style="list-style-type: none"><li>• Energetic Materials</li></ul>
10:35-11:05	Risk Management and Communication	<ul style="list-style-type: none"><li>• Emergency Response</li></ul>
	Emerging Technologies Risk Mitigation	<ul style="list-style-type: none"><li>• Energy Products Packaging</li><li>• Batteries/Fuel Cell</li></ul>
	Packaging Integrity	<ul style="list-style-type: none"><li>• Non-Bulk Packaging</li></ul>
	Technical Analysis of Risks	<ul style="list-style-type: none"><li>• Compressed Gases</li></ul>

### Presentations from Small Groups (11:15 to 12:15)

### Discussion/Path Forward (12:15 to 12:45)