

## Office of Hazardous Materials Safety (OHMS)

### Research & Development (R&D) Forum Agend

National Transportation Safety Board Conference Center 420 10<sup>th</sup> Street SW, Washington, DC 20594

#### **DAY 1 - WEDNESDAY, MAY 16, 2018**

7:45 AM - 8:30 AM Sign In

8:30 AM - 8:40 AM Safety Briefing and Forum Overview

Rick Boyle, Chief, R&D Branch, OHMS

8:40 AM - 9:00 AM Welcome and Administrative Remarks

Skip Elliott, PHMSA Administrator

Rachel Meidl, Deputy Associate Administrator, OHMS

Kim Curry, Associate Administrator, Office of Planning & Analytics

9:00 AM - 9:30 AM OHMS R&D Program Overview

Rick Boyle, Chief, R&D branch, OHMS

9:30 AM - 10:00 AM Hazmat Transportation Research Future Needs

Mark Lepofsky, FACTOR, Inc.

10:00 AM - 10:15 AM Break

10:15 AM - 10:45 AM OHMS R&D Strategic Plan and Q & A

Veda Bharath, OHMS R&D

10:45 AM - 11:15 AM 2017 Broad Agency Announcement (BAA) and Q & A

Eva Rodezno, OHMS R&D

11:15 AM – 12:00 PM Lithium Battery Transportation Safety Research and Q & A

Jonathan Ko & Christopher Hendricks, Naval Surface Warfare Center & Corey Love, Naval Research Laboratory

12:00 PM - 1:00 PM Networking Lunch

1:00 PM - 3:00 PM Emerging Packaging Research and Q & A

Facilitator: Brian Moore, OHMS Engineering

- High strength steel cylinders for transporting hydrogen-bearing gas Andy Slifka, National Institute of Standards and Technology (NIST)
- Fiber reinforced polymer materials for cargo tank motor vehicles Laura Sullivan, Volpe National Transportation Systems Center
- Composite metal foams for impact mitigation in rail cars Afsaneh Rabiei, North Carolina State University
- Shape charge packaging research Scott Mullin, Southwest Research Institute
- LNG tank car research: thermal and mechanical testing *Melissa Shurland, Federal Railroad Administration*

3:00 PM - 3:15 PM Break

3:15 PM - 4:30 PM Safe Transport of Energy Products and Q & A

Facilitator: Lad Falat, Director, Sciences, Engineering and Research, OHMS

- LNG risk study <u>David Willauer</u>, <u>Cambridge Systematics</u>, <u>Inc.</u>
- Crude oil characterization David Lord, Sandia National Laboratory
- W-ink crude oil characterization technology *Ian Burgess, Validere, Inc. & Ida Pavlichenko, Harvard University*



# Office of Hazardous Materials Safety (OHMS)

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#### **DAY 2 - THURSDAY, MAY 17, 2018**

7:45 AM - 8:30 AM Sign In

8:30 AM - 8:40 AM Safety Briefing and Forum Structure

Rick Boyle, Chief, R&D branch, OHMS

**Welcome Remarks** 8:40 AM - 8:50 AM

Drue Pearce, PHMSA Deputy Administrator

**DOT Safety Council LNG Workshop Outcomes** 8:50 AM - 9:20 AM

Bill Stuckey, Office of the Chief Safety Officer, PHMSA

9:20 AM -11:45 AM Small Group Discussions - Conference Phone Number: 202-366-6338

> Risk Management and Mitigation Passcode: 742156 Conference Room A & B

> Moderators: Rick Boyle & Shelby Geller This session will discuss how to fully integrate technologies in all aspects of transportation for a smart transportation network to be used by first responders, shippers, drivers and the public. Topics of discussion include electronic hazard communication and smart cities.

**Emerging Technologies** Passcode: 633437

Moderators: Eva Rodezno & Michael Klem New fuels (biofuels, natural gas hydrates and other energy products) lack proper definition and classification in the HMR. Research is needed to better classify these materials.

Package Integrity Passcode: 801364 **Conference Room D** 

Moderators: Victor Casillas & Leonard Majors OHMS seeks to identify a suitable performance standard, classification, size limit, material limitations and performance of novel bulk packages (i.e., cylinders) after prolonged use. Passcode: 801364

**Technical Analysis to Aid Risk Assessments** Passcode: 606624

Moderators: Brian Vos & Andrea Dunham This discussion will review gaps and vulnerabilities in the testing and transport of energetic materials from the user community.

Auditorium

11:45 AM - 12:45 PM **Networking Lunch** 

12:45 PM - 2:30 PM Small Group Discussions - Conference Phone Number: 202-366-6338

> Risk Management and Mitigation Passcode: 742156 Conference Room A & B

Moderators: Joe Nicklous & Tom Kiddy Emergency Response Guidebook (ERG) helps first responders take appropriate protective actions during an incident in an easy-to-use form. OHMS is interested in ideas to further strengthen the ERG.

**Emerging Technologies** Passcode: 633437 **Conference Room C** 

Moderators: Veda Bharath & Michael Klem There is a definite need to analyze the risks posed by lithium ion batteries and natural gas hydrates during transport. Additionally, packaging requirements for both hazmat require further investigation.

Passcode: 801364 Package Integrity Conference Room D

Moderators: Ben Moore & Rick Boyle Regulations for non-bulk packages such as boxes, drums, IBCs, etc., need to be updated. OHMS is seeking ideas for improvements to nonbulk packages.

Technical Analysis to Aid Risk Assessments Passcode: 606624

Moderators: Eva Rodezno & Britain Bruner OHMS is soliciting new research ideas that analyze how to prevent different hazmat (fuels and toxics) from becoming more dangerous during transportation to reduce the risk of dangerous incidents.

2:30 PM - 2:45 PM **Break** 

2:45 PM - 3:45 PM **Presentations from Small Groups** 

3:45 PM - 4:30 PM **RNS Path Forward** 

Eva Rodezno, R&D branch, OHMS







