



Liquefied Natural Gas Research and Development Public Meeting and Forum

Working Group #3 – LNG Facility Fire Protection System Design

November 15, 2022



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



Good Afternoon & Welcome!

- **PHMSA Leader:** Katherine Roth & Yunmiao Liang, LNG Engineers
- **Industry Co-Leader:** Casey Briseno, Director - Regulatory Affairs, Tellurian
- Thank you for choosing this Working Group
- We have an important charge for you:
 - Listening/Learning
 - Assist in developing PHMSA's future research agenda
- All presentations posted and available after the forum.



Working Group Objective

Learn about technical challenges, known research investment and success to date within the Working Group subject matter and to identify non-duplicative/complementary technical gaps for future PHMSA research funding.



Agenda at a Glance



Agenda at a Glance – Day 1

Time	Agenda Item	Role
1:00 PM	Introduction to Working Group	Working Group Leadership
	Flame Shielding Presentation	Bryant Hendrickson
	Question and Answer Session	All
	Research Gap Brainstorming Introduction	PHMSA Support Contractor
	Research Gap Brainstorming Session	All
	Break*	
	Research GAP Review/Consolidation	All
4:00 PM	Day 1 Closeout/Adjourn	Working Group Leadership

*Break taken as needed.



Agenda at a Glance – Day 2

Time	Agenda Item	Role
10:00 AM	Review of Consolidated Research Gaps	Working Group Leadership
	Research Gap Prioritization Introduction	PHMSA Support Contractor
	Research Gap Prioritization Round 1 & 2	All
12:00 PM	Lunch	
	Research Gap Roadmapping*	All
4:00 PM	Day 2 Closeout/Adjourn	Working Group Leadership

NOTE: Remember to use the MS Teams meeting link for Day 2 – See provided agenda

NOTE: A summary report containing the roadmapped gaps will be posted 1 week after the forum.

*Afternoon break taken as needed.



PHMSA Funded Research

7



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



Working Group #3 Relevant R&D (\$630 K)

Prj #	Project ID and Title	Status	Contractor	Funding
1. 847	693JK31910003POTA, Evaluation of the Efficacy and Treatment of Hazard Mitigation Measures for LNG Facilities	Closed	Gas Technology Institute	\$319,707
2. 852	693JK31910008POTA, Develop a Risk-Based Approach and Criteria for Hazard Detection Layout	Closed	Blue Engineering and Consulting Company	\$310,544

Research Project Pages found via: <https://primis.phmsa.dot.gov/matrix/>



Research Knowledge Transfer

- Project results utilized for:
 - Policy and rulemaking development
 - Revision of consensus standards such as with the National Fire Protection Association



PHMSA Compliance Review



Siting and Design Compliance

- Subpart B - Siting
 - Issued 25 letters of determination under MOU with FERC
 - Assist state partners with 3 LNG projects
- Subparts C and E - Design and Equipment
 - Completed 1 design compliance review
 - Closing out 3 compliance review
 - Reviewing 8 projects under construction



Thank You!

Program Contacts

Sentho White

Director – Engineering & Research
Department of Transportation
Pipeline & Hazardous Materials
Safety Administration
Office of Pipeline Safety
(202) 366-2415
sentho.white@dot.gov

Robert Smith

R&D Program Manager
Department of Transportation
Pipeline & Hazardous Materials
Safety Administration
Office of Pipeline Safety
(919) 238-4759
robert.w.smith@dot.gov

Kandilarya Barakat

R&D Operations Supervisor
Department of Transportation
Pipeline & Hazardous Materials Safety
Administration
Office of Pipeline Safety
(202) 941-8623
kandilarya.barakat@dot.gov

Thach Nguyen

LNG Team Operations Supervisor
Department of Transportation
Pipeline & Hazardous Materials Safety
Administration
Office of Pipeline Safety
(909) 262-4464
thach.d.nguyen@dot.gov

