

### Liquefied Natural Gas Research and Development Public Meeting and Forum

**Working Group #1 – LNG Facility Design & Construction** 

November 15, 2022



Pipeline and Hazardous Materials Safety Administration



### **Good Afternoon & Welcome!**

- PHMSA Leader: Seth Schreiber, LNG Engineer
- Industry Co-Leader: Sanjay Ganjam, Technology Manager – Process Safety, Kiewit Engineering Group, Inc.
- 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 nonduplicative/complementary technical gaps for future PHMSA research funding.



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# Agenda at a Glance



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4

## Agenda at a Glance – Day 1

Time	Agenda Item	Role
1:00 PM	Introduction to Working Group	Working Group Leadership
	Facility Challenges & Research Funding Organization Presentations	Various Presenters
	Question and Answer Session	All
	<b>Research Gap Brainstorming Introduction</b>	PHMSA Support Contractor
	<b>Research Gap Brainstorming Session</b>	All
	Break*	
	<b>Research GAP Review/Consolidation</b>	All
4:00 PM	Day 1 Closeout/Adjourn	Working Group Leadership

\*Break taken as needed.



5

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2

## Agenda at a Glance – Day 2

Time	Agenda Item	Role	
10:00 AM	<b>Review of Consolidated Research Gaps</b>	Working Group Leadership	
	<b>Research Gap Prioritization Introduction</b> PHMSA Support Contra		
	<b>Research Gap Prioritization Round 1 &amp; 2</b>	All	
12:00 PM	Lunch		
	<b>Research Gap Roadmapping*</b>	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**



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## Working Group #1 Relevant R&D (\$1.1 M)

	Prj #	Project ID and Title	Status	Contractor	Funding
1.	<u>947</u>	693JK32110004POTA, Developing Performance Criteria	Active to	Simpson Gumpertz &	\$424,429
		for External Loading Factors on External Steel Shell	9/14/2023	Heger	
		Tanks			
2.	<u>948</u>	693JK32110005POTA, Liquefied Natural Gas Tanks	Active to	Blue Engineering and	\$331,760
		Without Bottom Fill	6/14/2023	Consulting Company	
3.	<u>980</u>	693JK32210005POTA, Determine the Maximum	Active to	Simpson Gumpertz &	\$350,574
		Permissible Temperature Drops for Steel when Exposed to	12/29/2023	Heger	
		Cryogenic Liquid			

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

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## Research Knowledge Transfer

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



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# **PHMSA Compliance Review**



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## 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**

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