**Date:** Tuesday, January 12, 2016, 3:00 pm to 4:30 pm ET

**Attendees:**

Participants invited/participated listed at the conclusion of this document (*participants shown in gray highlight)*.

**Meeting Action Items**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Description** | **Responsible** | **Complete** |
| 1 | Finalize group mission statement* Members to provide any comments on the draft Mission Statement
 | Dane Spillers |  |
| 2 | Work with industry representatives to identify potential operator candidates to address overview topics at the upcoming February meeting in Houston | **Gas -** Erin Kurilla, Wendy Wagster and Gas Oprs. (Dane Spillers and Steve Nanney)**Liquid** – Stuart Saulters and Liquid Oprs.(Chris McLaren and Steve Nanney) |  |
| 3 | Identify candidates to invite for technical working group meeting briefings | All |  |
| 4 | Summarize state program experience in gas transmission inspections – gaps, etc. identified during state program audits | NAPSR/Steve Allen |  |
| 5 | Provide location details for the February 8-9 work group meeting in Houston. | Mark Clayton | In meeting minutes |
| 6 | Doodle survey to identify most favorable date for the March/April work group meeting. | David Kuhtenia | Sent 1/14/16 |
| 7 | February 8-9 work group physical meeting in Houston. | All | Scheduled |
| 8 | Identify location for the March/April work group meeting in Washington, D.C. area. | Vince Holohan |  |

**Conference Call Agenda for Tuesday, January 12**

1. Introductions/Past Business
	1. Meeting minutes from last conference call were previously distributed via e-mail.
* This meeting used the screen sharing **“join.me,”** service, which does not require an app to be installed for viewing. No technical issues were noted.
1. A draft RMWG page has been added to the PHMSA Pipeline Technical Resources (PTR) site. (David Kuhtenia)
	1. What “privacy” norms should the RMWG apply to publicly posted work products? *Group discussion indicated it would be overall positive to post work group documents for transparency and to share group progress and activities with interested parties.*
	2. What should group policy be with respect to posting minutes containing e-mail addresses and phone numbers to this public web site? *Names and associated companies can be listed, but phone numbers and e-mail addresses should not be included.*
2. Work Scope/Timeline Comments (Attachment 1)
	1. Mission Statement status (Dane Spillers) (Attachment 2) *Draft RMWG mission statement was distributed to the team prior to the conference call. Discussion items included:*
		1. *Use of the term “state of art”. Does that preclude small operator resource limitations and approaches? No, the term “spectrum” was also purposely used to address that concern.*
		2. *Previously received comments included clarification that gas distribution is not part of work group activities, and that data input should also be included.*
		3. *\*\* Dane Spillers will finalize the Mission Statement based on member comments; any additional comments should be e-mailed to Dane.*
	2. Road Map/Timeline – Group comments
		1. Initial work group physical meeting / Overview of RMWG Tasks \*\**Steve Nanney has requested: Gas Transmission- Erin Kurilla, Wendy Wagster and Gas Operators; Liquid – Stuart Saulters and Liquid Operators to assist in identifying potential operator candidates to address the below topics at the upcoming February meeting in Houston. PHMSA will also participate in these discussions (Steve Nanney/Dane Spillers for gas transmission; Steve Nanney/Chris McLaren for hazardous liquid).*

*Work group comments in addition to the detail for the items shown in Attachment 1:*

* + - * Summarize compliance requirements for risk model performance
		- *State program experience in GT inspections – gaps, etc. identified during state program audits? \*\* NAPSR requested to provide input.*
		- *Characteristics of a good risk model*
			* Gas vs. liquid modeling
		- *Specific consideration of HVLs should be included*
			* Opportunities for benchmarking/model performance evaluations?
				+ *Industry efforts to establish validity of approaches taken to-date would be helpful*
				+ *Process to do so*
				+ *Industry-wide approach? Potential topic for discussion*
			* Overview of likelihood modeling challenges
				+ Human performance impact

*SME input to risk models*

*Approach for evaluating controller/operator personnel*

* 1. Potential topics and presenters to invite to future technical meetings[[1]](#footnote-1). *\*\* Members were requested to identify specific candidates to invite for technical working group meeting briefings after the initial February work group meeting.*

*The group also discussed the potential for revising the topical order of the meetings to put the data technical meeting first. PHMSA direction was that the order of technical working meetings would remain as originally ordered.*

* + 1. Improved Approaches for Likelihood Modeling (Scenario-Based Models, Relative Assessment Models (“index” models), Probabilistic Models, Others)
		2. Improved Approaches for Consequence Modeling - GT & HL SPLIT SESSIONS
		3. Improved Approaches for Facility Risk Modeling
		4. Data Needs for improved risk modeling
1. Location and Date of First Work Group Physical Meeting
	1. February 8-9, 2016, CenterPoint Energy, Houston, Texas*. \*\* Mark Clayton provided location details for the meeting. Basic information: CenterPoint Energy, 1111 Louisiana St., Houston, Texas 77002. The meeting will be held on the 13th floor in room 1355 (will be set up for group members in a U shape). A limited number of extra participants can attend, but space is somewhat limited. A list of attendees will be provided to security to allow members to proceed to the meeting room.*

*Meeting will start at 12:30 PM on Monday, February 8, and conclude at 3:00 PM on February 9.*

*Hyatt Regency is most convenient location for lodging. Parking for locally-based participants is recommended in Hyatt parking garage. Other lodging options are available within walking distance. The CenterPoint building is also connected to the downtown tunnel system (including the Doubletree hotel).*

1. Location and Date of Second Work Group Physical Meeting

Note: Subsequent work group technical meetings are anticipated to be longer in duration to allow for a thorough discussion of various aspects of risk modeling, and to establish what level of group consensus can be achieved.

* 1. A Doodle.com survey will be sent out to identify the best dates – March 22-24, April 5-7, April 12-14, or April 19-21.
	2. Location: Washington, D.C. area; specific site is to be determined. *AGA volunteered to potentially host, if that option is desired.*

**Attachment 1 – Draft RMWG Roadmap & Timeline**

| **Activity** | **Details** | **Timeline** |
| --- | --- | --- |
| Establish Work Group participants | * Goal is to keep the Work Group to a manageable size (20 to 25) to allow for active participation and still allow work to progress in a timely fashion. A proposed breakdown of work group members that mirrors the structure utilized by consensus standards bodies:
	+ 1 – Pipeline Safety Trust
	+ 1 – NTSB
	+ 5 – PHMSA
	+ 2 – NAPSR
	+ 3 – AGA + 2 Members ( 4-5 nominees, PHMSA to select)
	+ 3 – INGAA + 2 Members (4-5 nominees, PHMSA to select)
	+ 3 – API + 2 Members (4-5 nominees, PHMSA to select)
	+ 1 – APGA
	+ 2 – National Labs (Idaho, Brookhaven)
	+ 1 – Work Group support
* There will also be opportunities to invite guests to speak at Work Group meetings to assist the group in their efforts (e.g., service providers).
 | November 2015 |
| Initial Work Group Introductory Conference Call | * Establish PHMSA goal(s) for the Work Group
* Introduce Work Group participants
* Review tentative roadmap/timeline
* Industry recommendations for service provider input and specific topics to present (PHMSA to select)
* After this call will schedule conference call with Service Providers – mid December or early January
 | December 2015 |
| Initial Work Group Physical Meeting | * Summarize compliance requirements for risk model performance *No comments*
	+ Related NTSB recommendations *(some from accident investigations)*
	+ Relevant industry standards
	+ Need for sensitivity of respective approaches to be investigate/predictive
	+ *State program experience in GT inspections –*

*gaps, etc. ID’d during state program audits? \*\* NAPSR requested to provide input.** + *Characteristics of a good risk model*
* Gas vs. liquid modeling
	+ Areas of overlap
	+ Areas of difference
	+ gas transmission vs. hazardous liquid pipeline modeling
	+ *Specific consideration of HVLs should be included*

Note: gas distribution pipeline modeling not included at this time* + Facilities IM risk approaches and differences
* Opportunities for benchmarking/model performance evaluations?
	+ *Industry efforts to establish validity of approaches taken to-date would be helpful*
	+ *Process to do so*
	+ *Industry-wide approach? Potential topic for discussion.*
* Overview of likelihood modeling challenges (lead-in for next meeting) – invite service providers to present (select presenters)
	+ Types of models
	+ Treatment of interactive threats
	+ Human performance impact
	+ *SME input to risk models*
	+ *Approach for evaluating controller/operator personnel*
 | Late January 2016 or early February 2016 |
| Improved Approaches for Likelihood Modeling Meeting | * Types of likelihood models
	+ Respective advantages/disadvantages
* Combination of threat-specific approaches?
* Treatment of interactive threats
* Human performance impact
* Identification of critical likelihood parameters
* Risk Mitigation Criteria - Criteria for addressing risks (inputs and criteria for determination of when potential risks become significant enough to have to address).
* Overview of consequence modeling challenges (*lead-in for next meeting*)
	+ Types of models
	+ Gas / Hazardous Liquid / HVL
 | Mid-March to Mid-April 2016 |
| PHMSA R&D Project Briefings- - - - - - - - - - - - - GT & HL SPLIT SESSIONS – Improved Approaches for Consequence Modeling Meetings  | * PHMSA R&D Project Briefings

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - GT & HL SPLIT SESSIONS* Types of consequence models & respective advantages/disadvantages
	+ Gas (population impact)
	+ Liquid (population, unusually sensitive areas, commercial navigable waterway)
	+ Emergency response performance impact
* Identification of critical consequence parameters
* Improved approaches for facility risk (*lead-in for next meeting*)
 | Mid-June to Mid-July 2016 |
| Improved Approaches for Facility Risk Meeting | * Types of models & approaches
	+ Respective advantages/disadvantages
* How to treat threats in conjunction with line pipe risk modeling?
* Data needs for improved risk modeling (*lead-in for next meeting*)
 | Mid-September to Mid-October 2016 |
| Data Needs for Improved Risk Modeling Meeting | * Threat-specific data
* Consequence-specific data
* Potential industry efforts
* Potential regulator efforts
 | November 2016 |
| Work Group Conclusions and Recommendations to PHMSA Meeting | * Summary of the four key areas of evaluation –
* Likelihood, Consequence, Facility, and Data
* Conclusions
* Recommendations
 | Mid-January to Mid-February 2017 |
| Concluding Public Workshop | * Summary of the four key areas of evaluation
* Likelihood, Consequence, Facility, Data Needs and Quality
* Work Group Conclusions
* Work Group Recommendations
* R&D project presentations
* Discussion of “next steps” by industry, public
 | March 2017 |
| Risk Modeling Guidance Document Issuance | * PHMSA pipeline system risk modeling technical guidance document
	+ Posted to public web site
	+ Anticipated review/update cycle
 | Mid-April to Mid-May 2017 |

**Attachment 2 Draft Mission Statement**

**Preamble**

PHMSA has identified a need to provide technical guidance on

* methods and tools to be used in pipeline risk modeling, and
* application of these methods and tools in pipeline risk management.

PHMSA’s technical guidance needs to be based on the state of the art of pipeline risk modeling, as reflected in the views of the technically informed community of practice.

**Risk Modeling Work Group Mission Statement**

The mission of the Risk Modeling Work Group is to:

* **characterize the state of the art of pipeline risk modeling**,
* **identify** and, if necessary in specific areas, develop **a range of state-of-the-art methods and tools capable of addressing the spectrum of pipeline risk management applications,**
* **provide recommendations** to PHMSA regarding the use of these methods and tools.

**Attachment 3 Meeting Participants**

|  |
| --- |
| **Pipeline Risk Modeling Work Group Conference Call; January 12, 2016 (gray highlight indicates were present)** |
|  | **Name** | **Company**  |
|  | Toby Fore (outgoing); Charlie Childs (incoming) | Kinder Morgan  |
|  | Matt Nicholson | Columbia Gas  |
|  | Wendy Wagster | INGAA |
|  | Mark Hereth | INGAA |
|  | Peter Chace | PUC of Ohio (NAPSR) |
|  | Steve Allen | URC of Indiana (NAPSR) |
|  | Erin Kurilla | AGA |
|  | Mark Clayton | CenterPoint Energy  |
|  | Jacob Steere | Consumers Energy  |
|  | Pranab Samanta | Brookhaven National Laboratory |
|  | Mason Matthews | Athens Utilities Gas (APGA) |
|  | Bob Youngblood | Idaho National Laboratory |
|  | Stuart Saulters | API |
|  | Chris Foley | Phillips 66  |
|  | Jill Watson | Marathon  |
|  | Pat Westrick | Marathon |
|  | Mark Piazza  | Colonial   |
|  | Vinnie Holohan | PHMSA |
|  | Chris McLaren | PHMSA |
|  | Dane Spillers | PHMSA |
|  | Steve Nanney | PHMSA |
|  | **“Alternate and Support Participants”** |
|  | John Erickson (Alt.) | APGA   |
|  | Kenneth Lee | PHMSA |
|  | Martin Sattison (Alt.) | Idaho National Laboratory  |
|  | David Kuhtenia | Cycla (PHMSA) |

1. Refer to spreadsheet of abstracts submitted to PHMSA prior to the 2015 Risk Modeling Workshop as previously provided to the RMWG and also posted on the draft RMWG web page. [Not all abstracts were invited to present at the workshop.] [↑](#footnote-ref-1)