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# Develop an Evaluation Protocol for Non-LNG Release Hazards – Modeling

Agreement #693JK31910009POTA

Quarterly Status Report – Q1

Public

December 20, 2019

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## 1 Items Completed During this Quarterly Period

The performance period for the research project “Develop an Evaluation Protocol for Non-LNG Release Hazards – Modeling” (Project) is 22 months, from September 30, 2019 through July 31, 2021 as outlined in PHMSA Agreement #693JK31910009POTA (Agreement). The current quarter closes on December 31, 2019. The PHMSA Agreement Officer’s Representative (AOR) for this project is Mr. Thach Nguyen.

Table 1-1 shows the items and deliverables that were completed during this Quarter.

Table 1-1. Items Completed During This Quarterly Period

Item No.	Task No.	Activity	Deliverable	Due Quarter No.	Completion %
1	1	Conduct kick-off Team meeting to review scope, tasks, deliverables and schedule, and to gather initial insights.	Kick-Off meeting minutes	1	100%
2	8	1st Quarterly Status Report	Submit 1st quarterly report	1	100%

## 2 Items Not Completed During this Quarterly Period

There were no items and deliverables that were scheduled to be completed during this Quarter that were not completed during this Quarter.

## 3 Project Financial Tracking During this Quarterly Period

The contract for this research project is fixed-price. The current project financial tracking is shown in Figure 3-1. Work for the project is currently on schedule and projected to remain on schedule.



Figure 3-1: Project Financial Tracking

## 4 Project Technical Status

### 4.1 Task 1 – Project Initiation

The goal of Task 1 was to build a Technical Advisory Panel (TAP) with representatives from regulatory agencies, facility operators, and other key stakeholders in the LNG industry, as well as finalize cost-sharing requirements to fund the project. During this quarter, BLUE has received written commitments to the project TAP and all cost-sharing requirements have been satisfied.

BLUE hosted a project kickoff meeting with PHMSA and the TAP on November 22, 2019 via WebEx. During this meeting, BLUE reviewed the project background and scope of work to familiarize the TAP with PHMSA’s goals for this research project. Thus far, the project has received strong support and participation from the TAP. The meeting minutes for the TAP kick-off call are being submitted with this Quarterly Report.

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BLUE has also been in contact with additional potential TAP members and will continue the conversation to potentially add one or two more members to the TAP during the next Quarter.

#### **4.2 Task 2 – Model Evaluation Methodology**

Work on Task 2 is in progress, consistent with the project schedule. BLUE performed a comprehensive literature review on existing model evaluation protocols; a summary of the literature findings and a proposed model evaluation methodology are being prepared and will be discussed with the TAP during the next call. Work on task 2 will continue into the next Quarter and will be detailed in a summary report at the end of Quarter 2.

#### **4.3 Task 4 – Model Validation Databases**

Work on Task 4 has begun. BLUE is reviewing the literature for publicly available experimental test series, and has begun reaching out to the respective organizations to obtain the test data. Work on this will continue as detailed in the project schedule.

#### **4.4 Task 8 – Project Management**

BLUE has developed an internal project schedule and manpower allocation to support the proposed project timeline and has internal team meetings as necessary.

The next phone call with the project Technical Advisory Panel (TAP) is planned for the end of January 2020.

The first quarterly report was submitted on December 20, 2019.

### **5 Project Schedule**

The project team’s efforts to advance the project schedule are summarized below:

- The project is on schedule;
- The overall schedule shown in Figure 5-1 remains on track and no changes in the project schedule have been required;
- The project team remains highly engaged.

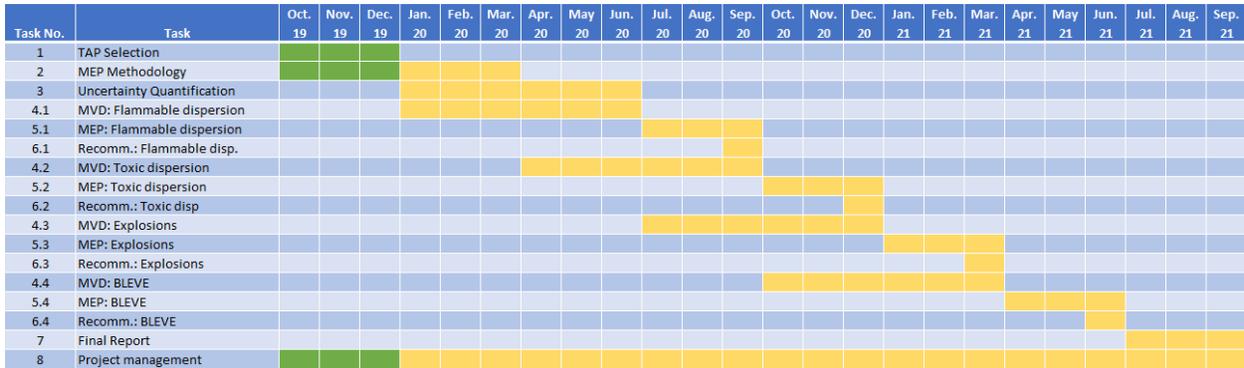


Figure 5-1: Project Schedule

### 5.1 Future Activities

Project team resources in Quarter 2 will be focused on completing Task 2 ‘Model Evaluation Methodology’ and beginning Task 3 ‘Uncertainty Quantification Protocol’ and Task 4.1 ‘Model Validation Database for Non-LNG Flammable Dispersion’.