Internal Report – Public Page

Date of Report: 2nd Quarterly Report – March 31, 2022

Contract Number: 693JK3211RA0001

Prepared for: *DOT PHMSA*

Project Title: Using Alternative-Steel and Composite Material in Gas and

Hazardous Liquid Pipeline Systems

Prepared by: Gas Technology Institute

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For quarterly period ending: March 31, 2022

1: Work Performed During this Quarterly Period

<u>Task 1- Conduct Kick-off Meeting and Form Technical Advisory Panel (TAP)</u>: This task is completed and it consisted of the following:

- Finalized project scope and analytical procedures.
- The Kickoff Meeting was held on November 8, 2021.
- Formed Technical Advisory Panel (TAP). A TAP group meeting was held on February 7th, 2022.
- Task 1 Review of current composite systems is in the Appendix.

<u>Task 2 – Evaluate Material Properties and Testing Procedures</u>: Work started in this task with a literature review of alternative-steel and composite materials for use in gas and hazardous liquid transmission pipeline systems. Work in this task includes:

- Review of existing standards, code requirements, and recommended practices for composite pipe materials
- Evaluation of existing testing procedures for composite pipe materials
- Gap analysis of 49 CFR Part 192 in relation to composite pipe materials
- A survey was delivered to four pipe manufacturers on March 2, 2022, to solicit research data, laboratory test data, and qualification procedure information from composite pipe manufacturers. One survey response has been received so far

2: Items Not Completed During this Quarterly Period

Started working on Task-2: Material Properties and Testing Procedures. Task 2 Interim Report on Product Performance Requirements is due on the 3rd Quarter 2022.

3: Project Technical Status

The Interim Report, in the Attachment, covers the following:

- Summary of Task 1 work: Review of Composite Systems in the Market.

4: Project Schedule

Figure 3 shows the project schedule and progress as of the end of this quarter. No time-related issues are reported in this quarter.

				03/3	1/2022	2							
,	Tasks	▼ Duration in Quarters											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Kickoff and Technical Advisory Panel (TAP)												
2	Material Properties and Testing Procedures												
3	Design for Max Allowable Operating Pressure												
4	Construction Damage and Quality Assurance												
5	Assessment of Corrosion/Erosion Damage												
6	Assessment of Other Integrity Threats												
7	Degradation of Composite Material												
8	Field Inspection and Monitoring for IM												
9	Review Code Requirements												
10	Project Management and Reporting												

Figure 3- Project time schedule