

Public Quarterly Report

Date of Report: 8th Quarterly Report – September 30, 2023
Contract Number: 693JK3211RA0001
Prepared for: DOT PHMSA
Project Title: *Using Alternative-Steel and Composite Material in Gas and Hazardous Liquid Pipeline Systems*
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For quarterly period ending: September 30, 2023

1: Work Performed During this Quarterly Period

Task 4 - Assessment of Construction Damage and Quality Assurance: This task assessed the construction damage of these systems resulting from third-party excavations. An evaluation of using Ground Penetrating Radar (GPR) technologies to locate non-metallic composites has been investigated. The project team is also monitoring another PHMSA-funded project on non-destructive testing of composite material to evaluate their use in field inspection.

Task 5 - Assessment of Corrosion/Erosion Damage: Work in this task will assess the likelihood and severity of corrosion damage in alternative-steel systems. Work included a literature review of relevant corrosion of alternative-steel pipes and erosion in non-steel composite pipe materials under various operating conditions and environments.

Figure 1 presents the related deliverable milestones.

2: Items Not Completed During this Quarterly Period:

Work in Task 6 is in progress. This task evaluates the assessment of other integrity threats. Risk-based assessment in light of the threats identified in API 1160 is being reviewed to identify how alternate materials could affect the methods used to evaluate these threats compared to steel pipe.

3: Project Technical Status

The report, in the Attachment A, covers Task 5, item 14 deliverable:

- Interim Report: Assessment of Corrosion/Erosion Damage

4: Project Schedule

Figure 1 shows the project schedule and progress as of the end of this quarter. The project duration was extended in a modified agreement for 2 quarters (13 and 14). Task-6 work schedule will be completed in the following quarter.

Figure 1 - Project time schedule

