Public Quarterly Report

Date of Report: 5th Quarterly Report –December, 2023

Contract Number: 693JK322RA0001

Prepared for: US Pipeline and Hazardous Materials Safety Administration

Project Title: Rapid Ultraviolet (UV) Cured Adhesive for Gas Main Cured-in-Place-Lining (CIPL)

Prepared by: <u>Progressive Pipeline Management</u>

Contact Information: Casey Giambrone, cfg@progressivepipe.com, 631-339-3075

For quarterly period ending: <u>December 31, 2023</u>

1: Items Completed During this Quarterly Period:

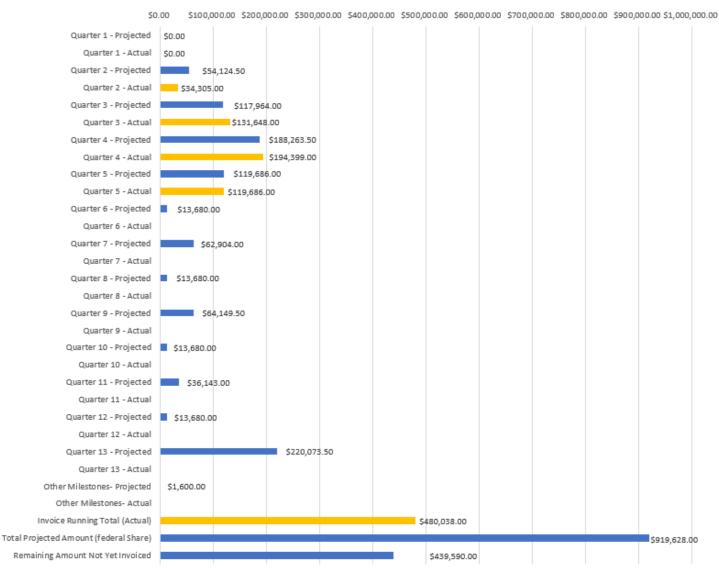
Item #	Task #	Activity/Deliverable	Title	Federal Cost	Cost Share
32	29	Initial Test Specimen Prep (Cast Iron Test)	Initial Test Specimen Prep (Cast Iron Test)	\$53,140.50	\$53,140.50
		Vortex Travel to PPM for above ground pipeline fabrication	Vortex Travel to PPM for above ground pipeline fabrication	\$475.00	\$475.00
34	31	Test Specimen fabrication for CU (10 ft length, steel or CI) (2" Separation test to be performed at PPM facility)	Test Specimen fabrication for CU (10 ft length, steel or CI) (2" Separation test to be performed at PPM facility)	\$52,390.50	\$52,390.50
35	5th Quarterly Status Report & Data Analysis		5th Quarterly Status Report & Data Analysis	\$13,680.00	\$13,680.00

2: Items Not-Completed During this Quarterly Period:

- Study was running behind schedule by one quarter.
- Will be back on track as of Q6.
- No items previously scheduled for Q5

3: Project Financial Tracking During this Quarterly Period:

Quarterly Payable Milestones / Invoices



4: Project Technical Status -

Item # 32.29

Initial Test Specimen Prep (Cast Iron Test)

Item 32.29 calls for the fabrication and assembly of the test specimen that will be used to test the wavelength resistance of the UV adhesive.

- Cast Iron inserts were used to simulate the host pipe interior wall.
- 10ft of impregnated liner with new resin, will be exposed to 8hrs of direct sunlight.
- The impregnated liner will then be installed into the 10ft test specimen and UV cured.
- 5-peel & 5-lapshear tests will be performed on the cast iron inserts.
- The test will quantify whether the direct sunlight effected the resin.





Item # 34.31

Test Specimen fabrication for CU (2" Separation test)

2207/06 is designed primarily to simulate a catastrophic weld failure. The premise of the 2-inch separation is to simulate the maximum possible longitudinal pull out of the pipe. The test consists of a 100-psi hydro test simulating a high-pressure gas main. The test duration is designed to withstand the 100-psi internal pressure for a 24-hour period while the 2-inch separation is observed.

To achieve this goal, the liner must disband allowing for the disbanded liner to stretch the required 2" gap, while holding 100 psi pressure.



5:



Project Schedule –

• Items not complete in Q5, expected to be included in the Q6 report are as follows:

Item#	Task #	Activity/Deliverable	Title
N/A	N/A	N/A	N/A