



November 5, 2018

Ms. Karen Lynch and Mr. Dwayne Cross  
U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
Office of Pipeline Safety, PHP-20  
1200 New Jersey Avenue, SE, E22-230  
Washington, D.C. 20590-0001

RE: Vineyard City Technical Assistance Grant, Agreement No. DTPH5617SN0004

Dear Ms. Lynch and Mr. Cross,

Vineyard City has completed a successful Pipeline Safety Assessment project in their community funded by the USDOT Pipeline and Hazardous Materials Safety Administration's Technical Assistance Grant program. This Final Report details the tasks completed as part of this project.

# FINAL REPORT

## Vineyard City Technical Assistance Grant

Pipeline Safety Assessment, GIS Mapping and Public Awareness

### Background

---

Vineyard City, Utah is situated between Utah Lake on the west and Orem and Lindon Cities on the east. Vineyard is moving into a new realm of growth and change; given the availability of developable land close to jobs and other population centers, the population of Vineyard is expected to balloon to over 27,000 within the next ten years. This new growth has brought challenges for City officials, especially in regard to public safety. Dominion Energy has three large diameter gas pipelines installed in Vineyard; one distribution main gas pipeline runs the entire length of the City from north to south. The two other high pressure gas pipelines located on the north and east run through brand-new development areas and near critical utility locations, transportation corridors, and schools. Overall, Vineyard is bordered on the north and east entirely by Dominion Energy large diameter distribution or high pressure gas pipelines which, if one were to rupture or fail, would impede evacuation out of the City and emergency response entering the City.

To prevent and be prepared for emergencies associated with the hazardous pipelines, Vineyard City requested a Technical Assistance Grant from PHMSA.

## Task 1 Project Kickoff Meeting

---

A project kickoff meeting was held to discuss the specific needs and details of the project.

## Task 2 Data Collection and GIS Map Updates

---

Collected data was converted from raw GPS files/AutoCAD into GIS. Additional GPS collection was also performed as features were identified, and hazardous pipeline locations were put into GIS, as well.

## Task 3 Manage Access to Information

---

Web maps were prepared for access by staff in the field and the staff were trained on how to manage and access the maps. System pipe alignments and features were drawn and populated, and maps and datasets were updated.

## Task 4 Software and Equipment Purchases

---

ArcGIS software, licenses, and R-10 Trimble GPS grade receiver unit were purchased.

## Task 5 Onsite ArcGIS/ArcGIS Online Training and Installation

---

City staff received basic training on how to use and update the GIS maps.

## Task 6 Pipeline Risk Assessment Study

---

A GIS-based pipeline safety risk assessment, including proximity to existing infrastructure and identification of evacuation zones and routes, was undertaken. Paper maps for handouts were produced, and an interactive web map showing evacuation routes was created and published on the City's website.

## Task 7 Public Involvement/Education Community Outreach

---

Public involvement for educational outreach to the community included an informational postcard sent to Vineyard City residents, fliers, and City website updates. One meeting was held on August 28, 2018 with City staff and leaders, Orem City Fire Departments, County Sheriff, other emergency response personnel, and educational groups (schools and university) to share and discuss the findings of the risk assessment.

## Task 8 Reporting to Comply with Grant Requirements

---

Mid-term progress reports, mid-term financial reports, final reports and final financial reports were created and submitted.

### Summary

---

Vineyard City appreciated this opportunity to work with the Pipeline and Hazardous Materials Safety Administration on this successful project. We now have a better understanding of the locations of critical infrastructure and utilities, an emergency response plan with evacuation routes and zones identified, and improved public awareness of the “811 Call Before You Dig” program to prevent accidental damage to hazardous pipelines in our community. With this foundation in place, Vineyard City will be able to keep this information up-to-date and continue making safety a priority in our community.

Sincerely,



Chris Wilson  
Assistant City Engineer  
Vineyard City

Enclosures:   Evacuation Buffer Area  
                  Evacuation Zone  
                  Evacuation Zone Alt1  
                  Evacuation Zone Alt2  
                  Evacuation Zone Alt3  
                  VineyardCity-PublicOutreach  
                  Vineyard-PipelineSafety-Invite  
                  VineyardPostcard