

Technical Assistance Grant – Demonstration Grant - Final Report
Funding Opportunity Number: DTPH56-09-SN-0002

Award Number: DTPH56-09-G-PHPT03
Project Title: Underground Pipeline Inventory and Assessment for Incident Management in Montgomery County, VA
Date Submitted: February 26, 2010
Submitted by: Steven M. Sandy, Planning Director, Montgomery County

Specific Objective(s) of the Agreement

Montgomery County will increase communication with existing pipeline operators within the County, increase Geographic Information System (GIS) mapping database, analysis and modeling capabilities and knowledge of pipeline characteristics and properties, increase awareness of pipeline safety, increase planning awareness adjacent to pipelines and increase public safety awareness and response to a potential incident.

Expected Program Outputs

- A review of pipeline mapping database will be conducted with pipeline operators in the community to identify locations of pipelines and characteristics for County mapping
- Map existing pipelines and easements as well as proposed pipeline easements, consultation zone buffer, and pipeline characteristics and create GIS mapping database layer to be used during land use planning process
- Analyze pipeline consultation zone and determine hazards within the zone such as existing structures, major roadways, critical facilities, etc.
- Revise current development review process to incorporate increased awareness of pipeline into the planning and development process
- Explore model zoning ordinance and subdivision regulations related to PIPA best practices and determine potential legal issues associated with implementation
- Collaborate with pipeline operators to develop educational materials for developers and landowners about safety issues regarding development around pipelines and the importance of a Consultation Zone and/or Planning Zone
- **Work with County emergency services coordinator, Sheriff's Office and other local and State emergency service providers to develop an emergency response plan for a pipeline incident using a table-top exercise and an "in the field exercise"**

Results of Grant Activities

As a result of this grant Montgomery County was able to initiate communication and establish a working relationship with the various pipeline operators within the County. The operators were more than willing to communicate with the County and provide information on the pipeline as requested. The County GIS staff and pipeline operators communicated about the pipeline database to confirm pipeline location(s) and pipeline characteristics. County mapping was updated to include pipeline information to assist the County with land use planning and building permit reviews. Educational materials were discussed with pipeline operators and are now being distributed by County staff.

Based on a pipeline incident that occurred in nearby Appomattox County, Virginia in the fall of 2008, the County coordinated an informal table-top exercise with local emergency responders, VA 811 and pipeline operators. Montgomery County staff visited the site of the Appomattox County incident and discussed the emergency response activities undertaken by the Appomattox County staff, emergency responders and the pipeline operators. The purpose of the Montgomery County exercise was to give participants an opportunity to evaluate current response rates, plans, and capabilities while responding to an underground gas pipeline incident. The drill focused on four main areas: 1) pre-incident response, 2) initial response by county agencies, 3) actions taken toward incident and hazard mitigation and 4) restoration of services for county. The exercise proved very beneficial to pipeline operators and County emergency personnel. Communication was improved between the two groups and several barriers to response were identified. Emergency service personnel are refining their emergency response plans based on findings of this table-top exercise. County planning staff has initiated a potential project with VA 811 to coordinate the flow of permit data from the County to VA 811 on a timelier basis.

Below is a brief listing of some items that were completed as a result of this project:

- Communication with pipeline operators was established.
- Existing pipeline easement and consultation zone was mapped in GIS.
- Mapping inconsistencies were found in the data and corrections were made as necessary.
- Photos and video were taken to inventory all transmission pipeline crossings of roads.
- GIS layers of pipeline, easements, consultation zone, pipeline buffers were created for land use decision-making.
- Table-top exercise was performed with pipeline operators and emergency service personnel.
- Development review process now includes review of pipeline location and potential impacts from and to the pipeline.
- Educational materials for developers and builders have been made available.
- County attorney reviewed legal implications of possible zoning and subdivision ordinances

Description of Efforts to Disseminate Technical Findings (see Article V. Dissemination of Technical Findings of your grant agreement)

All technical and pipeline mapping information found or determined to be incorrect on the National Pipeline Database Mapping System (NPMS) was coordinated with the pipeline operators to make certain correct information was displayed. County staff will continue to work with pipeline operators and VA 811 to make sure all information used by all is accurate.

Issues, Problems or Challenges

There are no issues, problems or challenges to report.

Final Financial Status Report

The final financial report has been sent as a separate attachment.