



Final Report to the U.S. Department of Transportation – PHMSA
Ms. Mahua, Agreement Administrator
Mr. Sam Hall, Agreement Officer's Representative

Technical Assistance Grant Number - DTPH56-13-G-PHPT03

May 29, 2015

The Department of Transportation, Pipeline Safety and Hazardous Materials Administration (PHMSA) awarded a grant to COGENT to: *Provide the NASFM/PHMSA Pipeline Emergencies Training to trainers and first responders in the tri-counties of Bradford, Sullivan, & Wyoming Counties target area of Pennsylvania's Northern Tier Marcellus Shale Region. An ambitious goal to train 75% of first responders in the target area. This is to be accomplished through five weekend training sessions coordinating through each county's EMS department. In addition, the goal to obtain regional support to extend the program to Susquehanna & Tioga Counties, the remaining two counties of our target area.*

The application milestones for the grant from the grant proposal are each stated and discussed below.

Expected Program Outputs

- *Provide the NASFM/PHMSA Pipeline Emergencies Training to trainers and first responders in the tri-county (Bradford, Sullivan & Wyoming) target area of Pennsylvania's Northern Tier Marcellus Shale Region.*

Effort

We coordinated with all five counties (Bradford, Sullivan, Susquehanna, Tioga & Wyoming) to contact first responders concerning our training opportunity. We contracted an instructor from the National Association of State Fire Commissioners.

Lessons Learned

Better attendance results when outreach is beyond sufficient. We mailed packets and emailed the information to the stations and county offices. We augmented with sending postcards. When possible, we learned that outreach during the Fireman's Association meetings were a good avenue, but that opportunity was not always

possible. We made phone calls to fire chiefs, law enforcement and emergency room managers.

When first responders have a good understanding what the training has to offer, they are more apt to participate.

Meeting locations that are close to pipeline dense areas work best, though due to the rural nature of our region, that is not always possible.

Participation buy-in to the project with the operators worked best. We met with operators and advised them of our project when possible. Some operators would not meet with us, or would only participate under conditions favorable to them. Having representatives from the pipeline companies or first responders who also happened to work for the pipeline companies present at the trainings was very valuable.

County outreach varies. Most county agencies provide training communications to first responders. They may utilize online calendars, weekly text messages, fax system, and social media. Not every county is identical in the manner in which they approach training. It appeared two counties where we had the most difficulty didn't seem to emphasize training. While our training was noted on their online calendar, they had a scrolling message that all training was canceled due to lack of enrollments across the webpage prior to reaching the actual online calendar where our training was noted. Another county, we had very low enrollment, we then learned from phone calls made that the county never circulated our training notice. Those two counties, we learned we needed to additional outreach. We employed a variety of emails, mailings and social media. We were not given the opportunity to reach out at the Fireman's Association meeting. As a result of our efforts we still managed to train several dozen responders in those two counties.

We learned to check with the agency to see whether any additional outreach may be needed. Some offered for us to speak at the Fireman's Association Meeting, which was a very good outreach opportunity.

Successes

"Pipeline Emergencies Training" was provided on ten dates during April, May and September, 2014 in all five counties. Due to a spring referral from the Tioga County training, we added an 11th training for state agencies, (DCNR, DEP & PUC) in September. At the request of Tioga County, we successfully applied for a grant extension and provided a third training date in Tioga County, February, 2015 resulting in a total of 12 trainings during the grant project. Full day trainings with a contracted instructor from the National Association of State Fire Marshalls provided the training at each location.

Part way through the grant period, the NASFM certified a new instructor based in Pennsylvania. We took advantage of this option which not only provided a cost

savings but also provided greater scheduling flexibility as we extended the grant into Susquehanna and Tioga Counties along with a special training session for state agencies (DCNR, DEP & PUC).

- *Provide training to 75% of identified first responders in the tri-county (Bradford, Sullivan & Wyoming) target area.*

Efforts

We knew early on that our goal was a high target. We felt that through our outreach efforts, an excellent training program, regional interest in pipelines, multiple training dates and convenient locations would result in good participation. What we didn't expect was that the estimates of active first responders were high and that it appears that there is no database that collects information on the actual number of active first responders. An additional problem is local attitudes towards training. Some fire companies have many fire fighter I and fire fighter II certified responders with full NIMS certification. Some have none and minimal NIMS. This was another unanticipated difficulty. However, we do know the number of fire companies in each county, and in some counties we actually exceeded the goal of 75% based on the number of fire companies participating. Some counties did emphasize training, and in one case as a result of renewed training emphasis, we ran into a problem with responders having more than one training opportunity on the schedule dates.

Lessons Learned

The high target was set to keep us motivated toward training every first responder who wanted training. This is training that is still not readily available in our Region. Throughout the year, we continued to be the first opportunity that first responders had to obtain this training in our Region and possibly within our Commonwealth.

We learned to value the success of not just how many had a successful training experience, but for how this would roll into more awareness and training at the local level, both local fire company and county emergency management agency. Providing training kits to each responding unit creates opportunities for continued training in-house. Trainers expressed they were especially eager to have the training kits.

Successes

We had a very successful *Pipeline Emergencies* training program. Overall, we provided training for 238 participants representing 51% of our Region's Fire Companies. Additionally, several paid, regional, local EMS and emergency squads participated. We provided training to 75% (all but Wyoming County) County EMS Agencies. We also provided training opportunity to Mansfield University Geosciences Department's Safety Management, Environmental and Gas Production Programs, future graduates who will enter the field and be involved in pipeline emergencies.

Most of the counties noted that we got a better response with training participation than they normally receive.

The areas having more unregulated Class 1 Area gathering lines, were the responders where we generally had the best success with participation.

We distributed 49 training kits to participating County EMS Agencies, fire companies, paid EMS, volunteer EMS, rescue squads, participating operators, and the Mansfield University Geoscience Department's Safety Management, Environmental and Gas Production Programs.

We had a very successful experience with two of our sponsoring operators, namely, Access Midstream and UGI Energy Partners LLC. These two operators participated fully in nine out of 12 training sessions. The participation was very valuable. They brought actual knowledge of company procedures, maps, 811 information, pipeline awareness information, gas meters for demonstration and pipeline marker props. Access Midstream had seven employees obtain the certification while UGI had one. Both want to utilize the Pipeline Emergencies training curriculum into their direct pipeline emergencies training with first responders. UGI is considering developing such a program for every 2-3 years. UGI pipeline safety personnel were so impressed with the quality of the training that they are considering becoming certified to instruct as part of their training program.

Access Midstream and UGI were very positive regarding the training curriculum and experience. They noted they were not having this amount of success in meeting with and training first responders.

MILESTONES:

- *Five training weekends, 10 training sessions; at the conclusion of each weekend training, an evaluation will be done as to what was achieved and what needs to be done better for the next training session.*

We surveyed participants for a variety of input regarding the training sessions. Our survey's indicated the following information. We made improvements as we went along, regarding available information and topic emphasis.

Participation (note some participants may meet more than one category)

County	Fire	EMS	Industry
Bradford	69%	17%	20%
Sullivan	92%	50%	4%
Susquehanna	80%	41%	1%
Tioga	81%	24%	3%
Wyoming	72%	13%	13%

County	Previous Training (by operator)	No Previous Training
Bradford	54%	46%
Sullivan	29%	67%
Susquehanna	26%	74%
Tioga	30%	70%
Wyoming	53%	44%

Overall, 60% of participants had no previous operator pipeline emergency training.

We asked first responders what is the best way to contact them about future pipeline emergency trainings? This is what we found. (participants may have checked more than one category) Email is the preferred method to contact first responders for pipeline emergency training.

County	Snail Mail	Email	Facebook
Bradford	14%	60%	23%
Sullivan	13%	63%	13%
Susquehanna	20%	72%	24%
Tioga	5%	70%	19%
Wyoming	13%	72%	9%

In Bradford County, the most likely ways first responders were advised about the Pipeline Emergencies training opportunity was word of mouth, mail/email and directly from their fire chief.

In Sullivan County, the most likely ways first responders were advised about the Pipeline Emergencies training opportunity was through County EMS Agency and their fire chief.

In Susquehanna County, the most likely ways first responders were advised about the Pipeline Emergencies training opportunity was through the County EMS Agency, email and Facebook posts.

In Tioga County, the most likely ways first responders were advised about the Pipeline Emergencies training opportunity was through their fire company, County EMS Agency and the County training calendar.

Sullivan, Susquehanna and Tioga Counties worked very effectively with C.O.G.E.N.T. to distribute information about the Pipeline Emergencies Training. Both Sullivan and Tioga County's Fireman's Association invited us to meet with them and explain the training opportunity. We were also invited to meet with the Bradford County Planning Commission's Natural Gas Subcommittee and provide a presentation on pipeline safety and the *Pipeline Emergencies* Training opportunity.

In Wyoming County, the most likely ways first responders were advised about the Pipeline Emergencies training opportunity was direct contact from C.O.G.E.N.T. either through a mailing or email sent directly to their fire company/office.

Respondents were asked to rate the knowledge gained from the Pipeline Emergencies Training. The rating system was 5 meaning a great deal and 1 meaning none. As noted, most participants gained a significant amount of knowledge.

County	Rating
Bradford	4
Sullivan	4
Susquehanna	4
Tioga	5
Wyoming	4

Each session concluded with at least three scenarios where the participants needed to work through a pipeline emergency exercise utilizing newly gained skills. The experience differed in each county.

During a Bradford County training, Access Midstream sent five pipeline safety field staff and two pipeline awareness staff to participate. During the scenarios segment, this provided an opportunity for each group to have a representative from Access Midstream participate with them. This provided a better opportunity for communication and understanding each other's roles. Access Midstream's participation really enhanced the quality of training at the session.

During a Sullivan County training, first responders enjoyed working through the scenarios so much that they requested to work through more. Several more scenarios were used until the participants felt confident of how to apply their new skills.

During a Tioga County training, the dialogue was so fluent on their newly acquired skills that one participant asked a question and all the participants chimed in with their insights as how to react, what to consider, what plan of action to take. At the end of the discussion, the instructor asked is there anything else anyone would care to share, any further actions to take? Everyone was in agreement that the course of action had been sufficiently determined. The instructor stated, "Congratulations you have not only completed your first scenario, but you have designed it!"

During a Wyoming County training, first responders learned that UGI Energy Services, had in fact odorized a gathering line within their fire company's jurisdiction. All other gathering lines lack odorant within their jurisdiction. They were greatly surprised as the previous winter they had a call about residents noticing a gas odor and they didn't understand why the 9-1-1 call would have such a description since they had the understanding gathering lines were not odorized.

There were many informative moments and ahHAs that occurred at every training session. Most surveys were positive about the training, noting at minimum they would recommend the training and that it was a worthwhile day.

As a result of referral to PA DEP and PA DCNR through our Tioga County training, we added an additional training for state agencies. Initially, our intentions were to include PA DEP, PA DCNR, PA PUC AND PHMSA CATS in our training. However, paid staff were not available for day-long weekend training sessions, and our volunteers were not available for day-long weekday training sessions. We chose centrally located Williamsport as the location for the agency training, a location beyond our five county focus area. We attempted on numerous occasions to reach out to the Lycoming County EMA as it was important to have at least one fire service first responder at this session. By the time Lycoming County EMA provided us with a definitive no, it was the day before the training lacking sufficient time to contact responders in our Region to see if anyone would be able to travel to Lycoming County and participate in this training. Hindsight being what it is, we should've contacted a retired first responder from our Region to attend this session. It was obvious during this session, that the participants were interested in what occurs at the local fire service level. This same interest was expressed by volunteers at the weekend trainings, concerning DCNR, DEP, PHMSA and PUC roles. Because of the lack of fire service first responders at the agency training, and the fact that the training scenarios are based on first responders actions, we were unable to share the benefit of scenarios with the agency staff.

Agency staff attending had a wide variety of skills that either had them directly involved with emergency response or environmental response. As a result, the knowledge gained varied greatly among participants.

We contacted several operators with pipelines in the state forest lands to participate in the training. The operators, although some had been contacted previously to be a

sponsor had declined to participate at that level with our grant project. Two operators did however, agree to participate with the state agency training.

The breakdown of participation was 21% DEP, 14% DCNR, 4% PUC and 11% industry.

We found that 39% of respondents had previous pipeline emergency training whereas, 61% did not.

Email was the preferred method of contact 54% and 14% regular mail as noted on survey forms.

Comments ranged from the “training didn’t pertain to me,” “training was too basic for my level of knowledge,” to “this training should be standardized in the northern tier.”

Respondents were neutral on the scale of knowledge gained with a rating of 3 given. There is no doubt, with the same complement of agency staff enhanced with fire service volunteers, the training would have been much more effective for everyone.

During the training it was noted by PUC staff that 90% of the gathering lines in the region remained unregulated for gas safety regulations. The industry was quick to point out they were not unregulated pipelines. The Federal code is clear on this matter, for now, Class 1 Area natural gas gathering lines in Pennsylvania do lack the same gas safety regulations afforded to natural gas gathering lines in Classes 2, 3 and 4.

- *Three Wrap-Up Evening Sessions, one per county to conclude the program, recognize achievements and disseminate information to the public.*

In recognition of how difficult it would be to do the Wrap-Up sessions, we determined to distribute our findings to each county, create a regional report for our assembly members, create a letter of recommendations accompanied by the database for our participating operators and recognize three counties where the county EMS agency went above and beyond in assisting us with outreach and location settings. (Sullivan, Susquehanna & Tioga). In addition as a service to the public we created a webpage <http://cogentpa.org/information-pipeline-emergencies-training-grant/> to disseminate this information to anyone interested. Included on our website is a county listing of County EMS Agency, fire companies, EMS, and governmental entities that participated in the training. Based on our experiences gained from the project, this will provide more people access to the information and recognize the efforts of those who participated. Based on concerns discussed during trainings, we also added a second webpage <http://cogentpa.org/pipeline-emergency/> advising the public how to recognize a pipeline emergency and what to do.

While our dissemination of information didn't follow the evening wrap-up session idea, it saved considerable funds and provided for improved outreach.

- *To gain regional support in order that we might extend this project to include the remaining two counties (Tioga & Susquehanna) Trainers and first responders training in NASFM/PHMSA Pipeline Emergencies Training.*

We reached out to operators in both Tioga and Susquehanna Counties. UGI offered to sponsor lunch in Tioga County and Williams and Access Midstream offered to sponsor lunch in Susquehanna County. With the aid and participation by local operators we were able to extend our training into Tioga and Susquehanna Counties.

- *MILESTONES*

- *Positive outcomes obtained from meetings with operators that extends the training into Susquehanna and Tioga Counties.*

We were able to train first responders in Susquehanna and Tioga Counties.



Our grant project trained 238 first responders, during 12 training sessions. Below noted is a breakdown by the number of fire companies per county, how many had personnel present at trainings. In addition to fire service and state agencies, those trained included volunteer and paid emergency services and rescue squad members, regional emergency task force, township supervisors, secretaries, roadmasters, road crew members, emergency management coordinator, county emergency management staff, county commissioner, local law enforcement, state police, Mansfield University Geoscience Department's Safety Management, Environmental and Gas Production Program students and industry staff.

County	Percentage of County Fire Companies Participating
Bradford	25%
Sullivan	67%
Susquehanna	83%
Tioga	35%
Wyoming	67%

Pipeline Emergencies Training was not being consistently provided in our area either by operators or the state training agency. It was our desire to bring excellent training into our Region so first responders would be prepared to understand the variety of infrastructure, the do's and don'ts and how to effectively respond for their safety and that of the public. Our survey's indicated that not only was this training

needed here as over 60% of responders lacked prior training but also knowledge gained rated 4 out of 5 (great deal). We had varying results as noted above county to county regarding the number of fire service involved in training, but beyond that we trained many other first responders as well. We wanted this training to be the gift that kept on giving. We supplied every participating station with a training kit and manual to keep in one emergency vehicle. It is our desire that each station will use these resources during in-house training sessions in years to come.

During trainings and on survey forms participants noted that they would like to have a similar training opportunity pertaining to compressor stations. Some participants were familiar with the use of composite pipe and stated they lacked confidence in the product. A level of concern was noted regarding the lack of regulatory gas safety oversight on Class 1 Area gathering lines. One municipality that attended in full complement, noted they would prefer to have input on gathering line routing within their township.

Please advise should you have any questions, comments or need further information for our final report. We very much appreciate the grant funding and the positive impact it has had on our five county region. Thank you.

Best Regards,

A handwritten signature in cursive script that reads "Emily E. Krajack".

Emily E. Krajack



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Final Cost Breakdown

Object Class Category	Cost
Personnel	0
Fringe Benefits	0
Travel	1,498.15
Equipment	0
Supplies	6,042.56
Contractual	22,074.59
Other	4,082.78
Indirect Charges	0
Total	33,698.08