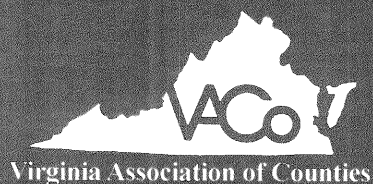


Recognizing the Best in County Government Programs!



## 2014 Achievement Awards



## 2014 VACo Achievement Awards

Deadline: June 2, 2014

### Application Form

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 2, 2014.**

#### Program Information

Locality Prince William County

Program Title Hazardous Materials Hazardous Materials E-Learning Program

Program Category 3. Criminal Justice & Public Safety

#### Contact Information

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Signature of county administrator or chief administrative officer

Name Christopher E. Martino

Title Deputy County Executive

Signature Christopher E. Martino

## Call for Entries

## **2014 VACo Achievement Awards Entry**

### **Prince William County Department of Fire and Rescue**

#### **Hazardous Materials E-Learning Program**

##### **PROGRAM ABSTRACT**

On January 1, 2012 the Prince William County Department of Fire and Rescue implemented a system for maintaining the qualifications for hazardous materials first responders by providing a consistent and unique approach to hazardous materials training for all career staff that exceeds the federal standards and regulations for such training. This training system incorporates a monthly online e-learning course created by the departmental hazardous materials professional staff that allows personnel to access and review the information at their own pace directly from their worksite. This program greatly exceeds the federal requirements for training with minimal impact in employee time and costs. It also enhances responder safety and the services the department provides to the community. Since incorporating this approach, the hazardous materials program staff have witnessed a more consistent hazardous materials response by the first responders who initially respond to hazardous materials incidents. This has resulted in a quicker and safer resolution to emergency calls with a faster return to normal operations while minimizing the impact of these incidents on the environment and property.

##### **NEED FOR THE PROGRAM**

The Department of Fire and Rescue employs over 500 career personnel whose job requires they respond to hazardous materials emergencies. Federal regulations known as the Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120) outlines the requirements for hazardous materials first responders. Typically this training requires an initial sixteen to twenty four hour training course be done in person, followed by annual refresher training consisting of eight hours per year. While the Prince William County Public Safety Training Academy coordinated the initial training, annual refresher training was more complicated as it required personnel to participate in the minimum training in person at the Academy annually. When the Department of Fire and Rescue began to investigate other methods to deliver training

to such a widely disbursed workforce, it was decided the department would invest in the Blackboard Learn system used by nearly all of the leading university and school systems in the country. The Department of Fire and Rescue Hazardous Materials Professional Staff modified the platform to allow for online training that would be informative and engaging on a monthly basis rather than the current single annual training class held at the Academy to meet the minimum. This alleviated the logistical issues of having to operate multiple training courses over the year to ensure all 500 plus personnel were effectively trained and it created a more centralized and comprehensive approach to the training. This program ultimately permitted personnel to remain in stations and worksites while exceeding the requirements for the annual refresher training.

## **DESCRIPTION OF THE PROGRAM**

The Department of Fire and Rescue Hazardous Materials First Responder Operations Training program begins with all uniform career staff completing their initial hazardous materials training as part of their recruit training. Upon completion of this course and graduation from recruit classes, these personnel enter the field and are assigned to the more than twenty stations and worksites throughout the county. These individuals immediately upon graduation along with the other already serving uniform personnel must complete annual refresher training as required by federal law. Federal Law 29 CFR 1910.120(q)(8) outlines the required refresher training for hazardous materials response personnel. Typically this refresher training is done in person and the standard within the Commonwealth of Virginia has been that the operations level training would consist of eight hours of in person training per year, typically done at a training site with a class consisting of approximately twenty to thirty students per session. The hazardous materials operations refresher system developed to meet and exceed this requirement is based upon the Blackboard Learn online education system. This system in use by many college, universities and school systems throughout the United States and abroad is a robust e-learning environment that is completely customizable and capable of delivering quality e-learning opportunities. The Department of Fire and Rescue hazardous materials professional staff manages the online training content, as well as manage course results and compliance with the program.

The program consists of monthly training courses delivered in quarterly blocks. Each month is designed to immerse the student in the hazardous materials training content for approximately one hour per month, resulting in approximately twelve hours of training each year. Each member of the career staff must log into Blackboard, review the monthly course content and then complete a course assessment for that month. Subjects for each month are developed in advance by the hazardous materials professional staff and include required topics as outlined in the federal regulations. While the program meets federal training requirements, the program has been expanded to include additional content based on current trends in hazardous materials emergency response or review a critical subject area as needed. As an example, over the past year there has been an increase in the number of clandestine methamphetamine labs discovered in the United States. The hazardous materials professional staff determined additional information was required for all responders to operate and mitigate these incidents safely. To address this concern, one month was dedicated specifically to this informative training. Another subject area of special interest was a recent chemical facility development that was planned in the community which required additional awareness about the particular hazards of ethanol and ethanol shipment. In response to this development, a course month was dedicated to the hazards associated with this product. In both cases, the department has the ability through this system to alter the monthly course subjects and information presented allowing for customization which has impacted the safety of responders and the community.

Personnel log onto this program at their worksites or at any location that has internet access; they complete the monthly course, and take the end of course assessment. The system is completely automatic and requires input from the hazardous materials staff to input the monthly course material, determine progress or reset failed assessment attempts. This program was placed into departmental policy and is a requirement for personnel to continue to serve as a first responder.

Each monthly course can be developed using the most appropriate multiple media formats for presenting the information including interactive graphic presentations, video and other multimedia content. This provides an immersive experience for the student. The program allows personnel to work at their own pace and provides links and access to additional information which was more difficult to do during the previous in-person annual training course. This

provides the individual with the opportunity to go beyond what is required and have access to much more information than what is typically provided in the classroom environment.

## **RESPONDING TO ECONOMIC DOWNTURN**

While Prince William County has enjoyed continuous growth and improvement, it too has had to deal with the impacts of a slow economy. This system keeps personnel in their stations and worksites allowing them to respond to calls when necessary and complete the training within the normal operating day. This has alleviated the costs of having to provide replacement staff at stations while personnel attended in-person training sessions at the Public Safety Training Academy. It has reduced the expenses in regards to consumable supplies, transportation and providing instructors for the course. Primarily the most significant impact is that we are able to keep personnel in their stations available to respond to emergency calls, therefore guaranteeing uninterrupted service to the community.

## **USE OF TECHNOLOGY**

The Blackboard Learn System is an online solution for training and education. Used by numerous educational entities throughout the world, the system sets the standard for all others to follow. All course work is done online through our county intranet already available at each worksite or through a regular internet connection available anywhere. This system has taken the entire hazardous materials refresher training program from its former in-person only format to a complete e-learning online program.

## **COSTS OF THE PROGRAM**

The Department of Fire and Rescue spends approximately \$68,000 dollars per year on the Blackboard Learn system. The Hazardous Materials Refresher program was one of the first programs implemented by the Department for all career staff. Additional programs have been and are being developed to be deployed through this system. Costs for Blackboard Learn were negotiated on a per user type agreement. Costs associated with development of the monthly hazardous materials training are incurred within the Department's hazardous materials professional staff. Costs associated with training programming development are incurred through the daily work of the personnel assigned to the program to include a Hazardous

Materials Program Manager who is independently certified by the Institute for Hazardous Materials Management which ensures the professional content meets and exceeds the federal regulations. All staff involved with course development have been identified in most cases as Hazardous Materials Specialist as outlined in the federal standards for qualifications.

## **RESULTS/SUCCESS OF THE PROGRAM**

The Department of Fire and Rescue Hazardous Materials Operations e-learning Refresher Program was developed in order to insure all personnel were consistently receiving informative and relevant training that would impact the way they operate on a daily basis when interacting with hazardous materials. The nature of the fire service and emergencies is that nearly all incidents we operate on contain a hazardous materials aspect. With the development and use of this e-learning system we are ensuring that all personnel have an immersive training experience that continually contributes to a fundamental understanding of the subject through the completion of monthly courses. This clearly keeps the subject of hazardous materials fresh in the minds of the responders ensuring they have the most up to date information to keep themselves and the community safe. This program has resulted in quicker responses to incidents by the personnel who initially respond before the Hazardous Materials Response Team is called. These initial arriving first responders now have the knowledge and ability to positively impact the incident within the scope of their training. This results in fewer numbers of incidents requiring the hazardous materials team to respond due to all department personnel being trained to handle most incidents prior to calling for advanced help. This also has resulted in quicker incident stabilization and resolution when the hazardous materials response team responds because the first responding personnel have a better understanding of their roles and responsibilities and are capable of providing greater assistance to the team. All career response personnel within the Department of Fire and Rescue have benefited from this training as has the community as a whole because personnel are better trained to handle the hazardous materials emergencies we may face.

## **WORTHINESS OF AN AWARD.**

This program takes a unique and advanced approach to ensuring consistent professional training to its staff in regards to hazardous materials emergency response. These types of incidents can be

extremely complex requiring additional technical knowledge in order to quickly resolve them. This program was developed using advanced technologies through the Blackboard Learn system and then specifically tailored by the Department's professional hazardous materials staff in a way that makes it unique and at the same time highly capable of impacting the capability of our personnel to respond to hazardous materials emergencies. This program has improved the way we administer our hazardous materials training, and in all cases has increased the training levels of all career public safety staff resulting in a greater ability to respond to these emergencies. This continues to result in greater public safety, saving additional lives, minimizing environmental impact and preventing property damage. This program continues to greatly exceed the requirements of the federal regulations with a minimal investment in costs in addition to actually decreasing the amount of staff time required to deliver the training. These aspects mentioned and the truly unique approach created here more than justifies an achievement award.