

Department of Energy Training Institute Improves Delivery of Training-17040

Theodore P. Giltz

DOE Training Institute, Volpentest HAMMER Federal Training Center,
2890 Horn Rapids Road, Richland, WA 99354

Theodore_P_Ted_Giltz@rl.gov

ABSTRACT

The Department of Energy Training Institute (DTI) was established in March 2016 to provide training enhancements for the DOE enterprise. Effective training improves worker safety and directly supports the completion of DOE missions. The overall intent of DTI is to reduce redundant training, improve safety, and avoid duplicate course training development and subsequently reduce future training maintenance costs. Implementation of the DTI initiatives of training reciprocity, common core fundamental course materials, instructor certification, and providing training support tools such as the Course and Related Data System (CARDS) has resulted in direct and indirect cost avoidances.

INTRODUCTION

The Department of Energy (DOE) and its contractors utilize thousands of employees to safely and successfully complete field and laboratory missions. The safety of these workers is paramount. DOE protects the safety and health of every employee primarily through implementation of its integrated safety management systems and by providing direction through contract safety and health requirements.

Informal benchmarking conducted in 2012 among 12 major contractors identified that there were over 50 separate Radiological Worker Training courses based on the same set of DOE requirements and training guides. Similar course duplication exists in many other environmental, safety, and health courses routinely used across the DOE enterprise. At the same time contractors used local processes to grant equivalency or reciprocity for courses. For example, 44 point-to-point reciprocity agreements for Radiological Worker Training were identified in the sampling of 12 DOE contractors. This indicated that contractors were generally comfortable recognizing that course content contained equivalent material.

In March 2016, Glenn Podonsky, Director of Enterprise Assessments, and Monica Regalbuto, Assistant Secretary for Environmental Management, signed a strategic plan establishing DTI [1].

DTI is a virtual organization comprised of staff from the National Training Center (NTC) in Albuquerque, New Mexico, and staff from the Volpentest HAMMER Federal Training Center (HAMMER) in Richland, Washington. DTI was established as part of Secretary of Energy Ernest Moniz's continuing commitment to provide training to personnel at all DOE sites to support the safe completion of various DOE missions. DTI expands the capabilities and reach of the well-established and highly-successful

partnership between the NTC and HAMMER. DTI leverages the strengths and capabilities of both training centers to provide high-quality training resources to the entire DOE complex. As expressed in the DTI Strategic Plan for FY2016-2018, DTI is currently focused on four primary areas:

1. Expanding Training Reciprocity
2. Developing and Expanding Common Core Training (fundamental content)
3. Expanding the DTI Instructor Certification Program
4. Developing and Promulgating DTI Tools and Services

By leveraging resources from across the complex, DTI provides high-quality training that improves worker safety and health while avoiding redundant training development and maintenance costs. Using DTI-maintained or certified fundamental training courses across the complex more efficiently utilizes taxpayer dollars and allows contractors to focus on developing site-specific training for the hazards of their particular job site and focus efforts on the mission. Line management remains responsible for determining training requirements for specific activities. DTI advocates the use of a blended learning approach which ensures students master the desired knowledge, skills, and abilities.

DTI promotes the expansion of the highly-effective, cost-efficient, peer-to-peer or worker-trainer model widely used at HAMMER. The peer-to-peer model promotes employee involvement in safety and health and allows local instructors or subject matter experts to deliver materials with knowledge of local policies, procedures, hazards, and processes. The secondary benefit is that collateral-duty, certified instructors return to the field and mentor their peers on the job. Instructor Certification offers employees growth and communication skills which benefit their employers and their peers.

DTI has achieved its success thus far by partnering with the Energy Facility Contractors Group (EFCOG) and organized labor. Working with topical task teams DTI has assisted in the development of a common core laser safety course and updates to several NFPA-70E electrical courses. Over 15 contractor training providers have achieved DTI training provider certification. Working with various EFCOG member organizations, DTI is providing training expertise to the subject matter expert community.

DESCRIPTION/DISCUSSION

By participating in DTI programs, DOE offices, contractors, and labor unions improve the quality and consistency of safety and health training while increasing employee mobility and avoiding many of the costs associated with redundant training development and maintenance. Contractors who embrace DTI, its mission, and programs, demonstrate to DOE their commitment to avoid unnecessary and redundant training costs while maintaining a commitment to safety. Local providers can focus their limited training resources on contractor-specific and mission-specific training needs to ensure the workforce is prepared to complete assignments safely and efficiently.

With over 400 developed courses at HAMMER and over 100 courses at the NTC, DTI has access to training materials on a wide array of topics as well as access to established subject matter experts. In addition, DTI is able to accept course materials from other DOE sources and provide broader access to the material for the overall benefit of the DOE enterprise. DOE, in a 2016 report to the Secretary of Energy, identified HAMMER training as a DOE enterprise best practices in the areas of peer-to-peer trainers (also known as worker-trainers), collaboration and facilitation, and access to subject matter experts. Both HAMMER and NTC are experienced in developing instructors. NTC's instructor certification and HAMMER's worker-trainer model serve as the basis for DTI's peer-to-peer instruction model. Once qualified, these instructors can provide a wide array of DTI approved courses to the employees at their site.

Training Reciprocity

Prior to *DOE Policy 364.1. Health and Safety Training Reciprocity* [2] workers who traveled between sites or between contractors at multi-contractor sites were required to retake fundamental training such as Radiological Worker Training (RWT) I/II. DTI training reciprocity requires that all sites accept reciprocity-certified training, allowing workers to move between sites and contractors without retaking fundamental training courses. Training reciprocity improves safety by improving training consistency. Training reciprocity also avoids costs and reduces redundancy. The training provider develops and maintains the course materials and provides their own qualified instructors.

Training reciprocity allows certified training providers to continue to use their course materials provided they meet fundamental training requirements as verified through the DTI certification process. Contractors are still expected to evaluate the need for specific gap training to address local processes, hazards, and controls implemented through their respective Integrated Safety Management Worker Safety and Health Plan.

In addition worker utilization and project mobilization are improved because the qualified worker requires only contractor-specific gap training prior to work. This portable training approach is used by the Nuclear Regulatory Commission licensees, the Department of Defense, and commercial industry. This approach particularly benefits building and construction trades and personnel who routinely support short-term projects or contracts.

Currently reciprocity certification is available for over two dozen courses as listed on the DTI training catalog at <https://DTI.doe.gov>.

Common Core Training

DTI Common Core Training is defined as DOE-wide, standard version courses which may be augmented with site-specific modules. Under *DOE Policy 364.1. Health and Safety Training Reciprocity*, each DOE organization maintains its own version of a course that addresses the same standard and is certified by DTI. Where practical, however, it is significantly more efficient and cost effective for the Department to develop and maintain a single, standard, common core course that is available to all DOE organizations.

The delivering organization provides individuals to be certified as DTI instructors, or the course material is delivered through a DTI mobile training team (visiting instructors). This approach has been successfully used by the National Training Center for over 25 years and eliminates redundancies and inconsistencies that occur when each organization develops and maintains its own course. The certified instructor should be from the subject community and ideally selected from the site where the training being delivered. Additionally, maintaining a single common core course allows for rapid distribution of lessons learned and good practices applicable to the entire DOE enterprise.

DTI maintains the courses, providing updates as changes are made in requirements and regulations. This cost avoidance allows contractors to focus their training development dollars on site-, job- and hazard-specific training for their job sites.

Once fully implemented, common core fundamental training through DTI will avoid several million dollars in duplicate course costs throughout the enterprise by allowing contractors to retire several hundred safety and health courses currently developed and maintained on sites across the country.

Instructor Certification

HAMMER developed an Instructor Certification Program (ICP) modeled after the NTC's longstanding Lead Instructor Certification Program, Site Certification Program, and Training Approval Program (TAP). The Instructor Certification Program establishes knowledge, skill experience, training, and expertise requirements for instructors, including worker-trainers supporting the NIEHS worker training grant program and apprentice/journey instructors qualified by national labor unions.

DTI adapted this certification model to serve the entire DOE complex. Once instructors are certified, they have the authority to teach DTI courses developed by HAMMER, the NTC, and/or EFCOG, and to issue a valid DTI course completion certificate. DTI Instructor Certification provides significant flexibility, allowing instructors to modify the presentation of standard content to meet the needs of their students. DTI maintains an equivalency process to evaluate training and experience for individuals that may have received instructor training through other sources.

DTI Instructor Certification promotes peer-to-peer training, in which workers from the field deliver training to their peers. Peer-to-peer trainers have credibility, experience, and personal knowledge of the challenges at their specific site. DTI provides these workers with the tools to effectively teach their peers and meet their training needs.

The immediate cost avoidance from Instructor Certification is realized by contractors who do not maintain their own Instructor Fundamentals course. These organizations can use the DTI course and eliminate development and/or maintenance of a duplicate course. Using a local instructor avoids the cost of student travel and the cost of brokered training.

Employing the peer-to-peer training model reduces or eliminates the need for professional instructors or subcontracted training providers, who may not be familiar with DOE-specific elements of the training.

Training Tools and Services

As a national training institute, DTI can provide training tools and services across the DOE enterprise beyond the training materials it maintains. The DTI will provide services to facilitate best practices and improve existing systems, assist in collaboration and communications between local entities such as contractor, employees, labor, and DOE. DTI can make a significant contribution in improving and updating training delivery modality and adult interactive learning for today's students and technology.

NTC has the ability to provide training information technology. DTI provides technical training support and tools including a learning management system, training development support, access to eLearning courses, retention of training records, and a variety of other training support capabilities.

Mobile Training Teams are available to DOE locations that do not maintain the capability to deliver specific courses. Courses are delivered by DTI-certified instructors who are subject matter experts in the topical area.

Course sharing via the Course and Related Data System (CARDS) is available. Contractors are encouraged to load their training catalog and all government-owned course material and media for use throughout the DOE enterprise.

CONCLUSION

DTI's training resources and instructional services are provided at little or no cost to DOE Environmental Management offices and contractors. DTI services are available to the entire DOE enterprise.

ELearning courses are accessible through the NTC's learning management system at no cost. In order to receive other DTI training services, a representative contacts DTI through email, the DTI website, or by phone. DTI works with individual training providers to assess their needs and provide the best resources to serve the provider and its employees. For additional information see the DTI WEB page at <https://DTI.doe.gov>.

REFERENCES

1. *DOE Training Institute Strategic Plan 2016-2018*, March 2016, Department of Energy.
2. *DOE Policy 364.1. Health and Safety Training Reciprocity*, April 14, 2014, Department of Energy Office of Information Resources.
<https://www.directives.doe.gov/directives-documents/300-series/0364.1-APolicy>