
Transportation Safety Through Regulatory Compliance Training Is the Key to Success

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Introduction

The United States Department of Energy (DOE) has a strong commitment to ensure the safe and efficient transportation of hazardous materials, and achieves this goal through compliance with the regulations. DOE's commitment to excellence in this area is reflected by the Transportation Management Division's support of compliance training workshops for DOE/DOE contractor personnel. Training is the key to compliance. This paper will address the current compliance training program, and new initiatives by DOE.

Background

The compliance training program was initiated by DOE in 1981 with what is now the Radioactive Material Transportation Basic Workshop, in an effort to assure greater regulatory compliance, increase the level of knowledge of hazardous materials properties, and establish a vehicle for maintaining a knowledgeable and currently trained workforce. The overwhelmingly positive response to this training led to an expansion in the training program to include a five day advanced workshop for DOE and contractor personnel, and a one day emergency response orientation workshop for emergency response personnel. Access to these workshops is facilitated by conducting the workshops at locations near DOE field offices and other locations as needed to meet the needs of non-DOE participants, and by offering the workshops several times each year. Additionally, the Basic and Emergency Response workshops are open to non-DOE participants. This allows for additional interaction between DOE and regulatory, enforcement, and emergency response personnel, as well as commercial shippers and carriers. This interaction has not only led to a greater level of sensitivity and understanding among the various interest groups, but has established an important conduit for "grass-roots" communication between DOE and States and local communities.

These three training workshops, the Radioactive Material Transportation Basic and Advanced Workshops and the Radioactive Material Transportation Emergency Response Orientation, comprise the foundation of the DOE regulatory compliance training program. As the

regulatory environment changes, the training needs increase, new programs are developed to address the diverse needs and concerns of the participants. This is illustrated by the new initiatives DOE has undertaken in the training area in Fiscal Year, 1988, which are briefly described below.

Basic and Advanced RAM Transportation Workshops

The Basic workshop is conducted several times each year near DOE field offices. The workshop is designed to present the regulations in a non-threatening environment and in a uniform manner so that regulatory compliance is achieved through greater understanding. This is accomplished by utilizing workbooks that enhance the regulations and working through representative "real-life" shipping situations. Completion of the workshop provides the participant with an understanding not only of the regulations themselves, but also the underlying intent of the regulations. While the focus of the workshop is compliance, emergency response and enforcement personnel also benefit.

Due to the diverse backgrounds of the participants that typically comprise the workshop, the knowledge gained covers a broad spectrum. Shippers learn how to correctly package, mark, label and placard shipments, and prepare shipping papers for shipment of hazardous materials, hazardous wastes, and hazardous substances. Regulatory and enforcement personnel learn what responsibilities belong to the shipper and carrier, as well as the various requirements for compliance; and perhaps more importantly what exceptions to the regulations are available. Emergency response personnel leave with an understanding of what information will be communicated to them by the various requirements for shipping paper information, marking, labeling and placarding. Thus, all of the various interest groups leave with information they can directly use in the course of their respective duties.

The Advanced workshop is offered four times each year, and participation is limited to twenty DOE/DOE contractor personnel per session. The workshop content builds upon the knowledge base established in the Basic workshop, with a more comprehensive presentation of Federal regulations, DOE Orders, and site-specific shipping problems. Participants are evaluated on a pass/fail basis to measure comprehension. An added benefit of these workshops is the opportunity for greater communication among the various DOE field offices and site contractors.

Emergency Response Orientation

The Emergency Response Orientation is designed to provide first responders with information that will assist them in evaluating and mitigating accidents and incidents involving hazardous materials. DOE is a major shipper of hazardous materials by all modes, and this workshop helps emergency response personnel understand the hazards associated with these shipments, as well as direct them to Federal resources that are available to assist them. Over fifty of these workshops have been conducted to date in various parts of the country. They have been so well received that in addition to regularly scheduled workshops, several have been conducted by special request of States or local communities. Participants in this workshop are primarily paid and volunteer fire service personnel, emergency planners, medical technicians, and local police officers.

New Initiatives

In 1988, DOE expanded and enhanced its transportation training program by offering additional training in the areas of EPA and OSHA regulations, DOE Orders, Hazardous Material Resource Training, and IATA regulations. With the development of these courses, DOE now offers training on a spectrum of transport topics, from hazardous wastes to the international requirements.

DOE WORKSHOP (DOT, OSHA, EPA)

Due to an overwhelming number of requests for additional training on the transport of hazardous wastes and substances, and growing concern over the transport of mixed hazardous and radioactive wastes, a new course was developed to address DOT/OSHA/EPA regulations as they apply to the transport of these materials.

Generators, shippers, and carriers of hazardous materials and waste must comply with the regulations beyond DOT, NRC, and DOE. Specifically, they must follow the Resource Conservation and Recovery Act (RCRA) and the Superfund Amendments Reauthorization Act (SARA).

This three-day course covers the regulations of DOT, EPA, and OSHA as they apply to hazardous materials, worker exposure, and transportation. It is an integrating effort that focuses on the overlap of regulations from these three agencies. EPA has regulations covering hazardous materials and waste. OSHA covers hazardous materials communication standards, the area of "workers' right-to-know," mitigation of hazards, and procedures to follow in the event of exposure. DOT regulations cover the transportation of hazardous materials.

DOE Orders

This one-day course is designed to familiarize attendees with the development of DOE Orders that pertain to transportation. DOE Orders 1540.1, 1540.2, and 5480.3 are covered in detail. Other significant DOE Orders that impact transportation and the significance of DOT, EPA, and NRC regulations are also included. The course covers DOE Order history and definition and the significance and organizational structure of an Order. At the conclusion of the course, the participants are able to distinguish what Orders are applicable to their jobs, understand how and to what degree the Orders impact their jobs, where to find the information, and better understand the policies and procedures of employers and customers.

The participants represent contractor traffic managers and their staffs. This course is designed so that all changes and anticipated changes to DOE Orders will be disseminated to the attendees on a timely basis.

Hazardous Materials Resource Training

This two-day course is provided for on-line supervisors and occasional and full-time trainers at DOE field offices and contractor sites whose primary responsibility is in the area of transportation of hazardous materials. This is a resource course which provides up-to-date information on modifications to Federal Transportation Regulations, uses of instructional aids, and classroom dynamics/strategies.

The primary objective of this course is to explore various teaching strategies and supportive instructional aids that will enable the trainer to become more efficient and ultimately, to help return the trained worker to his work station better prepared and informed. The following areas are covered: 1) an introduction to the principles of adult learning, 2) an overview of the legal requirements specified for hazardous materials training, 3) how to make a more effective presentation, 4) an introduction to the use of "canned" hazardous materials training, 5) how to make a presentation more vivid by using audio visuals. A key activity in this course involves each participant developing and teaching a five minute presentation, which is videotaped and then reviewed with an instructor for constructive commentary.

A supplement to this course is the development and production of training modules. Each of these modules consists of text and audio-visual materials on a particular subject, such as Truck Drivers License and Disqualification, Driving and Parking Rules for Trucks, Emergency Equipment: Fire Extinguishers, and DOE 1540.1. Modules will be developed as needed.

International Air Transport Association (IATA)/International Civil Aviation Organization (ICAO) Training

IATA is an association consisting of member air carriers throughout the world. IATA publishes hazardous materials regulations annually. These regulations exceed the minimum requirements of ICAO. Member air carriers require the shippers to comply with IATA when shipments of hazardous materials are made.

ICAO consists of members from various countries and has developed and issued regulations applicable to the transport of hazardous materials in international/foreign commerce. The regulations are updated and published biennially.

Recently, most air carriers have extended the compliance requirements of their regulations to shipments that move domestically between points in the United States. The IATA regulations are quite specific in requiring that shippers and their packers receive training in the IATA regulations. The regulations also provide for a recurrent training period of not less than every two years.

This course involves the proper use of the IATA regulations and will be given two times per year at various locations for DOE and its contractors.

Conclusion

These courses comprise the current training program offered by DOE. The intent of the program is to provide a basis for field office development and implementation of more specific training programs tailored to their needs. The core program will continue to expand as new training needs are identified. The philosophy of DOE, as reflected in its training program, is to anticipate regulatory and operational developments and to take the initiative by developing training programs to meet these needs, rather than merely responding, after the fact, to the everchanging regulatory environment. Future trends being monitored include the performance-oriented packaging standards (HM-181), IAEA changes and training certification requirements.

The training program provides a solid basis of knowledge for DOE and its contractors and also serves the public at large in several respects. First, programs such as the Emergency response training are offered to personnel outside the DOE community. This provides an opportunity for exchange of information and expertise with state and local officials. Second, the training program is high-profile evidence to the public that DOE takes compliance seriously, and is taking the appropriate steps to ensure that compliance is maintained. Thus DOE is in the forefront of compliance training.