

MULTIPLE REGULATION TRAINING: A MIXED BAG FOR MIXED WASTE

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ABSTRACT

Compliance goals, aimed at achieving the minimum level of control necessary to protect public health and welfare, were established early in the development of regulatory controls. Since the establishment of these goals, this protection has become less defined and employees, stockholders, and the public, have mandated a greater degree of assurance. The area of environmental and hazardous waste training is no exception. "Minimum required" training is no longer the approach many companies and the U.S. Department of Energy (DOE) take to meet the increasing needs of its employees and the public.

The 1990's begins a new era for environmental protection in the United States. Costs are increasing at a staggering rate. The United States spent approximately \$85 billion in 1990 (about \$380 for every man, woman, and child in the country) on environmental protection activities. Studies suggest that there will be an increase of about \$146 billion. Also, it is estimated that \$22 billion of \$146 billion will be needed to meet the requirements of new regulations and about \$40 billion to maintain current levels of environmental protection. Some difficult decisions will be made as the Federal government wrestles with huge budget deficit.

The relationship between our environment and the environmental protection regulations is changing. Companies are becoming more proactive in compliance issues. This change is the result of the shift in public sentiment and not a change in corporate conscience. The destruction of our environment and untrained employees working with hazardous materials are unacceptable practices in the workplace today. Increasing stringent requirements have led many organizations to re-evaluate their training philosophies and to apply continuous improvement tools to the training models used.

TRAINING

Numerous training laws and regulations affect organizations and companies' mission goals in both the private and the public sector. The problem of regulatory compliance from a managers' perspective is recognizing the employees who must receive training and identifying the regulatory agencies and regulations that mandate training. Training requirements are not always called out in a clear manner and because it is the employer's responsibility to determine which employees need training, and identify the areas to train, the waters can be murky at best (see Table I).

This confusion is compounded when waste management and environmental restoration activities take place at the U.S. Department of Energy facilities. Training is not only required by federal environmental regulations (RCRA, CERCLA, CAA, CWA, SDWA, SARA Title III, etc.), the Department of Transportation, ASME NQA-1, ASME Section III (for the design and construction of storage tanks), OSHA, and state requirements for asbestos removal and other safety and health areas as well as applicable DOE orders on conduct of operations and conduct of maintenance. Training may be required for over six regulatory agencies covering over 70 different regulations with the exception of state and local requirements. How do organizations handle these wide spread requirements? How do companies stay in business when training is so exorbitant and expensive?

Training managers must work with compliance personnel in carefully reviewing the provisions of a large array of environmental statutes and regulations. This must be accom-

plished in two ways: from a compliance standpoint and, from a prevention standpoint. Employee health and safety regulations, DOE and state requirements, and quality assurance determine the minimum training requirements must be reviewed to ensure compliance. However, compliance is not enough. Training organizations must be teaching prevention skills to help cut the cost of operations by lessening the risk of environmental incidents.

Hanford contractors, located at Richland, Washington, struggle with meeting these requirements on training budgets that diminish every year. Training for some regulations meet the intent of other regulations and need only be taught one time. This paper discusses the way Hanford contractors integrate training activities by way of single point training courses and the incorporation of multiple training requirements into those courses, lessening the impact of employees being away from their work locations. This inter-contractor/multiple regulation training model cuts down on redundant training, saves money, and increases the productivity of training organizations across the site.

LEGAL FRAMEWORK

Congress frequently specifies in environmental statutes that regulatory agencies must establish standards and enforce employee training requirements. The critical environmental statutes, which specify training requirements include:

- The resource Conservation and recovery Act (RCRA) - employee training at facilities that generate, treat, store, or dispose of hazardous waste;

TABLE I
ES and H Training

Source of Regulation	Frequency of Training			
	I	Ann.	BiAnn	Other
29CFR1910.20 - Access to Employee Exposure and Medical Records	X	X		
29CFR1910.38 - Employee Emergency Plans and Fire Prevention	X			X
29CFR1910.94 - ventilation	X			X
29CFR1910.95 - Occupational Noise Exposure	X	X		
29CFR1910.96 - Ionizing Radiation	X		X	
29CFR1910.110 - Storage and Handling of Liquified Petroleum Gases	X			X
29CFR1910.111 - Storage and Handling of Anhydrous Ammonia	X			X
29CFR1910.120 - Hazardous Waste Operations and Emergency Response	X	X		
29CFR1910.133 - Eye & Face Protection	X			X
29CFR1910.134 - Respiratory Protection	X	X		
29 CFR1910.1002 - Asbestos, Tremolit, anthophyllite, Actinolite	X	X		
29CFR1910.1025 - Lead	X	X		
29CFR1910.1028 - Benzene	X	X		
29CFR1910.1200 - Hazard Communication	X			X
29CFR1926.58 - Asbestos, tremolite, X anthophyllite, and Actinolite	X			X
40CFR Subchapter D - Water Programs, Oil Pollution Prevention				X
40CFR-266.16 and 265-16 Resource Conservation and Recovery Act	X	X		
49CFR.1731 - Shipper's General Requirements for Shipments Packaging	X			X
49CFR177.816 Drivers	X		X	
49CFR SubPart E - Welding of Steel in Pipelines	X	X		
49CFR Part 195 Subpart F - Operation and Maintenance of Pipelines	X			X

- The Superfund Amendments and Reauthorization Act (SARA) - training workers engaged in hazardous site operations, such as emergency response and remedial actions under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA);
- The Hazardous Materials Transportation Act and the Motor Carrier Safety Act - training for transporters of hazardous materials;
- The Occupational Safety and Health Act (OSHA) directs that health and safety standards shall protect workers and training requirements have been established under this authority;
- SARA directed that OSHA standards be expanded to include workers involved in cleanup of toxic waste dumps and similar hazardous waste operations.

Although Congress enacted general provisions that require adequate training, the specific training requirements for employees (i.e., content of training program, number of hours, covered employees) must be decided by the regulatory agencies. The United States Environmental Protection Agency (EPA), the U.S. Department of Transportation (DOT), and OSHA are responsible for establishing training standards for employees of regulated entities.

A United States court ruled in 1984 that DOE's hazardous waste was subject to provisions of RCRA. The Department found its operations increasingly subject to Federal and state regulation. If DOE does not comply with environmental laws, including training requirements, a broad range of enforcement actions may be taken by the EPA and state governments.

DOE's programs are carried out through a nationwide network of government-owned, contractor operated facilities. Almost 90% of the approximate 147,000 persons employed by DOE, either directly or indirectly, work as employees of the DOE contractors. DOE's mission dramatically changed on hazardous waste issues, impacting DOE's operations involved in the treatment, storage, disposal, and cleanup of hazardous materials and wastes.

The DOE Management and Operating (M&O) contractors are responsible for ensuring that day-to-day operations are conducted by fully a trained, qualified staff. The DOE management also is responsible for ensuring that contractors execute environmental compliance programs and policies by providing guidance, confirmation, and independent verifications of contractor programs.

The primary purpose of statutory environmental training requirements is to teach employees hazardous materials handling. Noncompliance with hazardous materials handling requirements could increase risks to worker's safety and health. In today's business industry, noncompliance with these requirements is unacceptable because the Department, its contractors, and employees are vulnerable to enforcement actions.

The Department of Justice publicly stated that violations of environmental laws at DOE facilities will be evaluated by the Justice Department on an equal basis with other violations of environmental law. The EPA will use all enforcement authorities to ensure compliance with Federal facilities. A violation of environmental law can result in a fine and/or imprisonment, depending on the nature and severity of the conviction. It follows that an inadequate DOE training pro-

gram undermines DOE's efforts to manage its affairs in an environmentally safe manner.

HIGHER RETURNS/LOWER COSTS

Training budgets are shrinking about as fast as increased training costs are rising. How are we going to assure ourselves that our workers are receiving the proper kinds and amounts of training so employees perform jobs as safely and efficiently as possible? All of us must comply with the environmental laws and regulations. Training organizations must not use excuses of not enough budget or headcount when it comes to compliance with critical environmental laws and regulations. We are going to have to be smarter so we can work faster, better, cheaper, and safer.

DOE Richland and the Hanford contractors are struggling with with these same issues but, have begun to see the fruits of some early controversial programs. Faster, better, cheaper, safer: these are the words that are driving DOE programs. We must be innovative in our approaches to resources. We know that training is resource intensive.

One way in which Hanford contractors are attempting to lower costs of training through improved planning is multiple regulation training. Kaiser Engineers Hanford Company currently is aligning the due dates of refresher training so that employees complete training in one week instead of spreading training out over a ten day period throughout the year. The first year of the Kaiser program some personnel will receive annual refreshers only after six or seven months. The program was reworked to align all due dates for outgoing years. Training also was aligned to coincide with typical slack periods of time during the year. Westinghouse Hanford Company is examining the Kaiser training process.

The model assumes that a number of training regulations require refreshers or updates at certain intervals. Some are annual and others are biennial while others are not prescriptive as to when updates are needed. This makes cost effective training much harder to accomplish. The area number of areas of overlap as to what requirements must be met by training. 49CFR170. (HM-126 F), for instance, not only allows but encourages organizations to take credit for training that is required and has already been taught under the auspices of other regulatory agencies and requirements.

So far we have only been talking about hazardous waste and environmental courses. What about the training required under DOE Orders such as 5700.6C, Quality Assurance; 5480.18A, Conduct of Operations Requirements for DOE Facilities; 5480.20, Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Facilities; 5480.11, Radiation Protection for Occupational Workers; 5500.3A, Planning and Preparedness for Operational Emergencies; and 4330.4A, Maintenance Management Program?

If an employee has been trained in respirators, the training should be applicable to all requirements where respirator training is required. This also would include safety training such as hearing conservation, first aid, CPR and so on. Proper planning on these issues may save time and resources. The same logic works with 29CFR1910.1200. Employees must be aware of the hazardous in there work place. This requirement not only is in the OSHA Hazard Communication Standard cited above but, in HM126F.

Another example of scheduling is with the new DOE Rad-Con manual. This method requires all employees to

receive general radiation worker training. This course is a very broad overview of radiation work and may be from one to two hours in length. Radiation could be considered a hazard and this training could be accomplished under the Hazard Communication Standard even though the Standard was developed for workers who handle chemicals. OSHA is not overly prescriptive as to what can be taught.

CONCLUSION

Training organizations must become a part of the solution to the massive amounts of resources being expended in the area of training. Organizations cannot continue in the mode of "training multiplicity." More is not always better. We cannot afford the viewpoint that if the training organizations mandate enough training in enough environmental subject areas, management will be able to discourage unethical business practices and discourage abhorrent employee behavior. Training must show a return on investment; that is, return increases as redundant training decreases.

The benchmark of any training organization is its ability to offer relevant, high quality training that meets the regulatory and human resource needs of the organization. Upon successful completion of meeting these two needs, training

adds to the bottom line of the organization. It is imperative that the training organization maintains strategic direction in relation to regulatory requirements, staffing plans, and the organization's mission.

With hard work, ethical training practices, knowledgeable employees, and common sense, your organization will become more efficient and productive. Work will be done faster because multiple regulation training will require less time away from the job to meet their training requirements. Employees will gain more confidence in their work because of more efficient training. Training will be cheaper because less time in redundant training means more productivity and less time to complete the work. Finally, training will improve employee safety because of the knowledge and awareness taught in training classes.

Use the regulations as resources. Work within the bounds of requirements to become more efficient in the training required. When a regulation such as HM126F allows Westinghouse Hanford Company Technical Training to use the training received under 1910.120 management must assure that it happens. Training is too expensive to not use common sense in training practices.