AC 2011-2327: CURRENT TRENDS IN OSHA-AUTHORIZED CONSTRUCTION SAFETY EDUCATION

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Current Trends in OSHA-Authorized Construction Safety Education

Abstract Currently the U.S. Government has implemented and is continuing in developing substantial changes to the way that OSHA-authorized construction safety education is being taught in the United States. Faculty members teaching safety to construction students need to be aware of these significant changes taking place and not run afoul of federal requirements. A number of construction programs in the U.S. have safety education coursework whereby students, as an example, can obtain "OSHA 30-Hour" Cards. Numerous employers look more favorably upon hiring construction graduates that already possess the training represented by the "OSHA 30-Hour" Cards. In addition, some states such as Nevada and Missouri have implemented legislation requiring personnel on construction sites to possess either "OSHA 10-Hour" Cards or "OSHA 30-Hour" Cards dependent upon their role as either craft workers or managerial personnel. But requirements to obtain these Cards are being tightened. As an example, despite the fact that there are numerous websites offering on-line training to obtain these cards, very few of these online providers have obtained authorization from OSHA for this activity. Graduates of these online programs risk losing both the time and money invested in these online "credentials" since they will not be recognized by OSHA. New federal requirements effective October 1, 2010 mandate that now for classroom training, as an example, "OSHA 10-Hour" training programs be conducted over at least a two-day period with "OSHA 30-Hour" training over a least a four-day timeframe. Those conducting the training (e.g. college faculty) must be properly qualified through passing OSHA-authorized training programs. Criteria for trainers to pass these programs are being tightened considerably in these new regulations. In the U.S., there are 26 OSHA Training Institutes authorized by OSHA across the country. At one training institute, one construction director estimated that half of their past graduates would not be able to successfully renew their trainer credentials when they expire. Other requirements for "OSHA 10/30-Hour" training programs include the stepped up use of auditors to monitor the quality of this training and the furnishing of handouts or other media to the students that summarize key points. Faculty members or others sponsored by colleges/universities not adhering to these requirements run the risk of jeopardizing themselves and their students. This paper will focus on these issues and related concerns

Introduction

OSHA became effective in 1971 or approximately forty years ago. While some aspects of the OSHA laws and administration have been controversial, the goal of improving safety and health performance in the construction industry continues to be important. While some have discounted the continuing impact of OSHA, it must be realized that since OSHA's implementation the composition of the construction labor force has changed significantly with a much higher preponderance of non-English competent workers, a younger workforce, and a general lack of training in both safety and craft skills of this workforce.

Recently substantial changes have taken place in OSHA safety training requirements as applied to OSHA 10-Hour and OSHA 30-Hour requirements for both the construction industry and general industry. The focus of this paper is, of course, on the construction industry segment and therefore left unaddressed is the impact of changes in general industry requirements. OSHA 10 and OSHA 30 are the most popular safety training classes. Obviously other craft- and job-specific training exists but in sheer volume these two aforementioned classes have become the primary safety training classes for those in construction. Statistics from OSHA show that from Fiscal Year 2004 through Fiscal Year 2008, 2.3 million individuals were trained in OSHA 10 and OSHA 30 courses. Eighty percent of those 2.3 million underwent construction safety training. In Fiscal Year 2008, 680,000 student cards were processed for these courses with 80% again going towards construction industry personnel.

OSHA 10-Hour courses were developed for craft personnel in the construction industry. OSHA 30-Hour courses were developed for supervisory and managerial personnel in the construction industry. While there is not a blanket requirement for safety training on all U.S. construction sites, several states and private organizations have adopted requirements for all those employed in field construction work to have mandatory OSHA 10-Hour and OSHA 30-Hour training. An example of this was the State of Nevada wherein state legislation was passed to require, after January 1, 2010, all those on project sites whether craft or supervisory or non-direct managerial personnel had to have proof that they had successfully completed OSHA 10-Hour and OSHA 30-Hour training. Some New England states have required this training on all public-funded construction work. A number of private owners and contractors have mandated this training for all working on their jobsites including those for third-party organizations such as subcontractors.

Training-hour requirements changes

In the past, those in OSHA 10-Hour courses were able to receive the training in one day. Those in OSHA 30-Hour courses were able to complete the training over three days. However, this practice is not allowed after October 1, 2010. Instead a 10-Hour course must be held over two days. A 30-Hour course must be held over four days. No training in any one day can exceed seven and one-half hours in length as to actual class "face" time. With an OSHA 10-Hour class, for example, students with lunch breaks and coffee breaks could be looking at a 13-hour day for those courses held over one day given one hour for lunch and fifteen minute breaks after every hour of instruction. Especially for craft personnel not used to sitting in a classroom, learning fatigue can creep in to this type of a schedule. If a single safety instructor for the class has teaching responsibilities, this also makes it difficult for that person. Due to the overly-long days involved, there was also a tendency to cut the day short stemming from fatigue on the part of both the student and instructor. Recognizing these problems, OSHA mandated these changes to the two courses to ensure that safety instruction was effective for the student and the trainer. A sidebar benefit of this lengthening of the instruction period is that some additional "fillin" time may now be available to cover other topics so that an OSHA 10-Hour class now becomes an OSHA 11 or OSHA 12 class.

Instructor qualifications changes

New guidelines are being developed by OSHA in terms of those individuals that conduct OSHA 10-Hour and 30-Hour classes. To become an OSHA-certified trainer, currently an instructor must possess five years of construction safety experience. Then they must take and pass two courses, OSHA 510 (OSHA Standards for the Construction Industry) and OSHA 500 (Trainer Course for the Construction Industry) which are both thirty hours in length. Then those passing these two courses are OSHA-certified trainers for a five-year period before being required to update their certification via a refresher course (OSHA 502) or retaking OSHA 500. These OSHA-certified trainers are only allowed to teach the OSHA 10 and OSHA 30 courses. Only OSHA Training Centers (26 nationwide) may offer OSHA 510, 502, and 500 coursework themselves.²

The OSHA 500 course, as its trainer portion of the name implies, concerns itself with imparting training techniques to the courses' students. As part of this, students must conduct a brief presentation as part of a team before the class. Depending on class format a student may be before a class of their peers and the OSHA 500 instructor for as little as ten minutes. New requirements being developed by OSHA for their OSHA 500 graduates will have proposed instructors make a half-hour presentation on their own. Graduates must not only then pass a written examination on the overall course content but also pass this verbal presentation or not pass the class. One OSHA Center Construction Area Director has estimated, based on his experience, that only 50% of those currently certified as instructors could pass the new proposed requirements.¹

It must be emphasized that only those passing both the OSHA 510 and OSHA 500 courses along with the requisite safety experience have permission to conduct OSHA 10-Hour and OSHA 30-Hour courses. For every course conducted, at the completion of the course, the OSHA-certified instructor contacts their OSHA Training Center with a report of the course in terms of topical coverage, time per topic, and a listing of course students. The OSHA Training Institute than reviews the report for completeness and coverage of the mandatory topics. After their review, the Training Center then sends out cards based on this report. From here, the course instructor distributes the cards to the student. From time to time, one hears instances of instructors without requisite qualifications passing out OSHA 10 and OSHA 30 cards on their own without any involvement from an OSHA Training Center. Some of these instances have involved faculty at various higher education institutions. These individuals are placing themselves and the graduates of their classes at risk. OSHA has not authorized this practice and potential sanctions for those individuals could be severe. Individuals conducting other safety training are not bound by the strictures applied to OSHA 10 and OSHA 30-Hour courses but, by the same token, must not unfairly represent this training as equivalent to these courses.

On-line OSHA 10 and OSHA 30 courses

Online education in a variety of areas has become increasingly popular in American education. There are OSHA-certified OSHA 10 and OSHA 30 courses offered in an on-

line educational format. The number of these on-line providers has been limited by OSHA over the years to approximately ten organizations. However, on-line searches reveal hundreds of providers of these courses. It should be noted then that there is a vast discrepancy between certified on-line providers and those actually offering the courses. Additionally OSHA is currently not approving any additional providers of online instruction. Responsible individuals need to make potential students aware of this significant divide between legitimate and illegitimate course offerings. If someone is planning to conduct an OSHA course via videoconferencing, then they must provide a copy of all training materials and request prior permission from the OSHA Education Center.

Instructional language issues

A well-known fact in the U.S. construction industry is the prevalence of non-English language workers. The overwhelming majority of these workers are of a Spanishlanguage background. However, even some of these workers may have minimal background in their own native language. It would be wholly inappropriate to provide safety instruction to these non-English language workers in the English language. Instead these workers require instruction in Spanish. However, how this is accomplished can present difficulties. Those fluent in safety instruction may not be fluent in the native language of those being instructed in an OSHA 10 course, for example. This may require an interpreter with technical abilities to provide the translation to the course students. However, an OSHA 10 course requires ten hours of actual face time of instruction. If the instructor is stating a safety principle in English and then this is being translated to Spanish by an interpreter, it can be readily seen that the instructional time is doubled for this requirement. Therefore, in these situations, an OSHA 10 course would end up taking twice as long to conduct. It is obviously problematic if the entire OSHA 10 course including translation by an interpreter is limited to the ten hours of "face time" instruction. The over arching principles are to provide the required hours of instruction and in the worker's native language.

Course audits

OSHA has noticed Training Centers that their instructors in OSHA 10 and OSHA 30 coursework provide advance notice of their training activities. This then gives OSHA the opportunity to enroll individuals in the training class whose function is to audit the course. This audit process is to ensure that requisite training is being conducted in an effective manner by the course instructor. The procedure is for the OSHA instructor to notify their home OSHA Training Center. Without advance notice by the instructor, they may jeopardize their ability to obtain OSHA cards for their students.

Mandatory topic coverage

OSHA mandates certain topic coverage in their OSHA 10 and OSHA 30 courses. A review of fatality accident statistics in the construction industry finds that approximately 80% of accidents are in the categories known as "Focus Four." Focus Four concerns

electrical, falls, caught-in-between, and struck-by accidents. Approximately 1/3 of construction fatalities are related to fall issues. OSHA has had mandatory topic coverage in the past but the restrictions on course content have been increased in the past year.³

OSHA 10 Trainers must spend at least five hours of the ten required hours on the below four areas with these associated time requirements:

Focus Four (2 hours with at least 15 minutes on each area),

Introduction to OSHA (2 hours),

Personal Protective Equipment and Lifesaving Equipment (1/2 hour)

Health Hazards in Construction (1/2 hour).

OSHA 30 Trainers must spend at least twelve hours of the thirty required hours on the below five areas with these associated time requirements:

Focus Four (5 hours with at least 1/2 hour on each area),

Introduction to OSHA (2 hours),

Personal Protective Equipment and Lifesaving Equipment (2 hours),

Health Hazards in Construction (2 hours),

Stairways and Ladders (1 hour).

Notably with OSHA 10, mandatory content was increased in 2010 from three hours to four hours. With OSHA 30, mandatory content has been increased in 2010 from six hours to twelve hours. At the conclusion of safety courses, instructors must submit documentation to OSHA including certification that the class was conducted according to these and other OSHA requirements. With the Introduction to OSHA area, specific course content must be followed including worker's rights under OSHA, procedures to file safety complaints, and where workers can go for assistance. In this Introduction to OSHA, students are required to be provided with a thirty-page handout that they can keep outlining this material. In addition, for every topic area covered, students should receive at least a fact sheet summarizing this material.

Construction safety management education

The thrust of OSHA 10 and OSHA 30 safety training is to enable workers on construction sites to recognize safety and health hazards on a construction site. The goal is not to have these workers necessarily be conversant in specific rules and regulations as promulgated by OSHA and contained in the OSHA 1926 Construction Standards. Construction management and construction engineering programs that are educating their students in safety are concerned with safety management issues that go beyond just hazard recognition and awareness. Therefore, should a graduate with a construction management/construction engineering degree be granted, for example, an OSHA 30 card? Furthermore, would this OSHA 30 card be useful to the graduate? These are both sound questions. Certainly there is some overlap in safety education between what workers need to know and what professional personnel need to know for construction safety. Take a one-semester three credit class in construction safety as an example. This is typically taken to mean 45 class hours of instruction which on the basis of a fifty-minute class hour reduces to 37.5 hours instructional time. In a college classroom setting

the students are involved in studying, homework problems/questions, projects, and other work outside the classroom itself. However, for an OSHA 30 card, 30 of the 37.5 hours of time in the classroom would have to be devoted to the requisite OSHA topics. Therefore coverage in other areas such as safety training methods, OSHA recordkeeping, worker's compensation, and safety design/engineering would be compromised because of the OSHA requirements. Any educational course is about choices and based on this it is hard to justify the time to grant students an OSHA 30 card within the confines/limits of the standard four-year degree. It may be best for students then to obtain their OSHA 30 cards outside the traditional four-year degree requirements. A review of commonlyutilized construction safety texts finds that they themselves don't cover the OSHA 30 topics as required by OSHA. One potential alternative here is to provide supplemental training for these college students that pays attention to fill gaps between the academic construction safety education and the OSHA 30 requirements. If overlaps were avoided and gaps were filled then these college students could obtain their OSHA 30 cards in a shorter time frame. Obviously all instruction whether by teams or an individual instructor would have to be by OSHA-certified individuals.

Recordkeeping and administration requirements

Trainers must maintain these course records of attendees and topics covered for a five-year period. The course records include student sign-in sheets for each class day, student addresses, copy of the documentation sent in to request student cards, and records which indicate which card number was dispensed to each student.⁴ For student cards, the student names must be printed or typed along with the trainer's name and the date of the course completion. Trainers may not alter the cards or use correction fluid on them. If a class is to be held with over 50 students then attendance must be taken and prior permission secured from the OSHA Education Center. For both OSHA 10 and OSHA 30 coursework, instruction must be completed within a six-month timeframe unless prior permission is obtained from the OSHA Education Center. The only OSHA courses that an Outreach Trainer can teach are the OSHA 10 and OSHA 30 courses.

Summary

There are a number of significant changes to OSHA construction safety training that have been recently enacted. These changes include course content mandatory topic coverage, length of the course day and in most cases limited to fifty students in any one class. Instructors for OSHA 10 and OSHA 30 courses must be certified and this certification must be current (five-year expiration time period). Persons to be trained in OSHA 10 and OSHA 30 courses must be trained in their native language for the required time period. In addition, OSHA has stepped up their enforcement of these requirements.

References:

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