December 2015

**Significant News - Revision of the ANSI/ASSE Z490.1 is APPROVED!!!**

**Criteria for Accepted Practices in Safety, Health, and Environmental Training**

The American Society of Safety Engineers (ASSE) is committed to assisting safety, health, and environmental (SH&E) professionals in creating high-caliber training programs. To that end, a revision of the ANSI/ASSE Z490.1-2009 Criteria for Accepted Practices in Safety, Health, & Environmental Training Standard was approved by the American National Standards Institute (ANSI) on December 7th and will be published during early Calendar Year 2016. The ANSI/ASSE Z490.1-2016 standard applies to a broad range of training and training programs and specifies how to adequately design, develop, deliver and evaluate training.

Interest is growing from OSH professionals and the OSH profession in this revised standard. This document is widely used and recognized in a variety of industries and in both the public and private sector in regards to safety training.

The charter of the American National Standards Committee Z490 on Criteria for Accepted Practices in Safety, Health, and Environmental Training was accredited by ANSI on April 1, 1998. This standard grew out of the recognized need for improvement in SH&E training. Quality training
is required to ensure that workers and SH&E professionals have the knowledge, skills and abilities necessary to protect themselves and others in the workplace. The first standard was published in 2003, a revision was released in 2009, and this revision was approved in December 2015 with a release for early 2016.

Training is an important element of an effective overall SH&E program. Historically, SH&E training has been specifically addressed by only a few regulations with limited scope, such as asbestos, hazard communication and storm water management. The regulations usually specify the technical topics to be covered in a training course, but do not stipulate how to adequately design, develop, deliver and evaluate training.

This standard covers all facets of training, including training development, delivery, evaluation and management of training and training programs. Thus, the criteria were developed by combining accepted practices in the training industry with those in the SH&E industries. The standard is intended to apply to a broad range of training and training programs.

The standard may be used by organizations in several ways, such as:

- industry employers, to assess the services of external training providers or to audit or improve their own corporate training programs;
- training providers, to assess and improve their training services; and,
- corporations, to serve as a basis for the development and management of training programs.

Governmental regulations specify mandatory requirements for various SH&E training. Likewise, the training program may be embedded in a larger safety, human resources or other organizational structures. As a broad-based voluntary consensus standard, this document complements the regulations and organizational policies. However, compliance with this standard does not ensure compliance with governmental regulations or organizational policies, or vice versa.

Of key importance is the fact that this standard provides a 30,000 foot view of SH&E training. One of the issues brought up during committee debate was that the Z490 standard is similar to many other training standards, so it really does not have a direct impact on specific applications of SH&E training. Before going any further, it is important to point out again that the broad applications of the standard are designed that way by intent. It is not the intention of the Z490 committee to attempt to address every aspect of SH&E training in one comprehensive document. Such an approach would not be effective and would be a disservice to the key objectives it is trying to achieve.

The standard has annexes and references that provide additional information and details. On a scale of 1-10, with “10” being the highest on the revision scale, this revision probably comes in at about a “6”. There are some significant changes and the document is much stronger than past versions.
“The Z490 was written to provide a guide for the development and presentation of comprehensive HSE training events,” said Z490 Committee Chair John W Mroszczyk P.E., CSP and President of Northeast Consulting Engineers. “As health, safety and environmental professionals, we have all had the opportunity to conduct compliance training at one time or another. Occasionally we were less than satisfied with either our presentation or with the organization of the training materials. The Z490 is a high-caliber guide you can use to develop, present and evaluate each training event. If one is using a third-party trainer, the Z490 can be used as a yardstick to ensure that you are truly getting what your organization requires and what you are paying for. We have now seen many examples of companies looking for third-party validation via Z490.1 and we think this is positive for the OSH Profession overall. I use this standard on a consistent basis in my own practice and it gives a solid professional framework to use in creating a quality training product.”

Z490.1 Scope and Application
This standard establishes criteria for SH&E training programs, including development, delivery, evaluation and program management. The purpose of this standard is to provide accepted practices for SH&E training. This standard is recommended for voluntary application by providers of SH&E training, and it is intended to apply to a broad range of training and training programs. If any of the provisions of this standard are not applicable, the other requirements of the standard still apply.

What is in the Standard?

1. Scope, Purpose and Application
   1.1 Scope
   1.2 Purpose
   1.3 Application
2. Definitions
3. Management of a Comprehensive Training Program
   3.1 Accountability & Responsibility
   3.2 Minimum Training Requirements
   3.3 Resource Management and Administration
   3.4 Program Evaluation
4. Training Program/Course Development
   4.1 Training Development
   4.2 Needs Assessment
   4.3 Learning Objectives
   4.4 Course Design
   4.5 Evaluation Strategy
   4.6 Criteria for Completion
   4.7 Continuous Improvement of the Training Course
5. Training Delivery
   5.1 Trainer Qualifications
   5.2 Training Delivery Methods and Materials
6. Training Evaluation
   6.1 General Criteria
   6.2 Evaluation Approaches
   6.3 Continuous Improvement
7. Documentation and Recordkeeping
   7.1 Systems and Procedure
   7.2 Records
   7.3 Record Confidentiality and Availability
   7.4 Issuing Certificates

Annexes:
Preface to Use of Annexes
Annex A References
Annex B Training Course Development Guidelines
Annex C Safety, Health and Environmental Trainer’s Checklist
Annex D Virtual Learning

**Key differences between the 2009 and 2016 versions**
Section #1: There were some basic editorial changes but the overall focus and direction of the standard did not change.

Section #2: There were some edits to the definitions. The definition of a training program was changed based upon public feedback since the 2009 version. A definition for “virtual learning” was also included since this aspect of training continues to change and evolve.

Section #3: This section was extensively changed because the committee believed the focus needed to shift from that of coordination to comprehensive management, which requires a different mindset. Several members have commented that, in their opinion, these changes will be significant for OSH training in the future.

Section #4: The changes were substantive in some areas but there were a number of editorial changes. This section was changed to include both program and course development. There is also language coordinating governmental regulations with the standard. This was an issue of contention for a number of committee members and language in the standard should hopefully address that issue.

Section #5: There were a number of changes to this section of a substantive and editorial in nature. Training delivery continues to be an ongoing focus of the committee. The most significant/substantive changes to Section #5 address the requirements for trainer planning and preparation and for managing the learning environment. The committee discussions revolved around how much control trainers have over the actual environment. The language in the standard was changed to address part of this dynamic.
Sections #6 & #7: The changes and edits to these sections were considered to be mostly editorial in nature. There was a small section added on the need for incident investigations, but overall the committee was satisfied with the existing language.

Appendices: There are significant changes to the appendices to address some of the changes in the standard.

Other Key Issue(s)
Perhaps the key topic of discussion for the Z490 ASC during the revision process of the current ANSI/ASSE Z490.1 Standard dealt with the issue of virtual learning, and how best to address it. Several committee members took the position that the Z490.1 Standard should be expanded and a whole series of appendix materials added. A number of committee members countered that this issue is too significant to be a section and a whole new ANSI/ASSE Standard or technical report should be generated.

Eventually, the committee reached consensus that this is an important issue for Z490 and the OSH Profession, and agreed to launch a new project addressing OSH virtual training. This new standard would apply to all occupational SH&E training, whether separate or as a part of other training being given on a virtual basis. The scope and purpose of this new project are described below.

Proposed Title/Scope:

Scope:
This standard establishes criteria for SH&E virtual training programs, including program management, development, delivery, evaluation and documentation.

Purpose:
The purpose of this standard is to provide criteria for accepted practices for SH&E training programs including development, delivery, evaluation and program management, which are delivered via virtual means.

Links and information related to ANSI/ASSE American National Standards
- Official Memorandum of Understanding Between OSHA & ANSI
- Office of Management & Budget Circular OMB-A119
- Safeguarding: Are ANSI Standards Really Voluntary?
- Standards History Article
- Position Statement on Consensus Standards
- What’s the Difference Between an OSHA Rule and an ANSI Standard?

Examples of Recognition
Where to go for more information?
The ASSE website has various documents describing the use and impact of Z490.1 Standard. However, note that this is for the 2009 version of the standard since the new standard is now being prepared for publishing:

- Referencing Z490.1 in NIOSH Communications (01/16/2003)
- Referencing Z490.1 in OSHA Rulemaking and Web Site Training Materials (10/31/2002)
- American Society of Safety Engineers Announce Newly Revised Standard on Accepted Practices in Safety, Health and Environmental Training
- Draft Rulemaking on Silica Standard for General Industry (11/25/03)
- Walking and Working Surfaces; Personal Protective Equipment (Fall Protection Systems)
- ASSE Insight on NIOSH Toolbox Safety Training Study (3/2001)
- Petition To Recognize Revisions Of ANSI Voluntary Consensus Standards: safety stand petition
- Use of the Proposed Z490 Voluntary National Consensus Standard to Improve Safety, Health, and Environmental Training in Both the Private and Public Sectors: NACOSH PRESENTATION
- List of committees ASSE serves as secretariat: Secretariats

For more information on the Z490.1 Standard and the Z490 committee overall please contact ASSE.

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