September, 2016

To:  Members, ASSE
     ANSI/ASSE Standards Participants

From: ASSE Standards Secretariat Staff

**ANSI/ASSE Standards Update**

Companies and other organizations use national voluntary consensus standards to establish good industry practices, enhance compliance with OSHA standards, reference as the latest state-of-the-art practices and technology. ASSE supports the increased use of consensus standards in the formulation of legislation and regulation for occupational safety and health. Governmental agencies, such as OSHA, CPSC, NHTSA, etc., should be encouraged to use these consensus standards, as they provide an efficient/effective alternative to traditional public sector rulemaking.

ASSE currently serves as secretariat for a number of ANSI accredited Standards Committees (ASC’s). ASSE’s standards activities have had a long, rich history dating back nearly 90 years. As secretariat for multiple standards projects, ASSE organizes the committees that develop and maintain the standard(s), ensures that the process of revision is timely and in accordance with ANSI procedures, and publishes the final product of the consensus process.

The purpose of the Standards Insider is to give ASSE members an update on what is taking place with the development of occupational safety and health national voluntary consensus standards and prepare for their use and implementation.
The Use of Voluntary National Consensus Standards by the ASSE Standards Development Committee (ASSE-SDC)

The ASSE Standards Development Committee (SDC) is the lead entity for the Society to participate globally in all aspects of standards development to expand the body of knowledge to protect people, property and the environment.

Use Standards to Achieve Excellence

How does one gain the knowledge, experience, and mastery of a subject to become a recognized expert? Learning may begin in a university, with a single course, or with a self-study course. Generally, there is a lot of time involved with learning theory and technical details of a topic. Mastery of a subject requires lots of time, additional work experience, and often being mentored by others. Now, consider the numerous safety topics you have been exposed to over your career and how much is forgotten over time, or how rapidly new advances can render older ideas obsolete. How is it possible to maintain a current high level of competency for a myriad of safety topics? What if you are assigned a safety topic that is new for you or one you haven’t handled recently? What is the quickest way to refresh your skills and experience the benefits of benchmarking without leaving your desk? Use Consensus Standards as a primary resource! Standards provide up-to-date, collaborative guidance that can assist with the overall mastery of the topic. These guidance documents broaden the insights of the user because they are based on diversity of thought collected through collaboration of topic experts.

What is a Consensus Standard?

Consensus Standards are guidance documents developed by a committee representing a broad cross-section of experts, industries, and organizations including: professional societies, industry, insurance, consultants, government agencies, and service organizations. Standards provide guidance on how to achieve excellence for a particular safety topic. Standards, unlike regulatory requirements, are not required by law. The rigorous approach for creating a consensus standard is systematic and methodical, with the American Society of Safety Engineers (ASSE) acting as Secretariat and the
American National Standards Institute (ANSI) approving each ANSI/ASSE Standard.

**Why are Standards Important?**
Standards go beyond regulatory requirements. While regulations often reflect minimum requirements, Standards provide comprehensive guidance necessary to achieve excellence. When discussing ANSI/ASSE Z117.1-2009 (R2016) for Confined Spaces, Terry Krug, Standards Committee Chair states the standard “is of critical importance to get it right to ensure safe practices and protect workers.” For some Standards such as Z15.1-2012 Safe Practices for Motor Vehicle Operations, regulations do not exist. Bill Hinderks, Z15.1 Chair states “Better management of vehicle operations will lead to results.” Standards are reviewed and accepted as written, revised, or rescinded every five years.

**How Does the Public Sector Use Our ANSI/ASSE Standards?** This is perhaps the most common question asked by OSH professionals about the use of voluntary national consensus standards. We think the articles listed below should assist you:

- Safeguarding: Are ANSI Standards Really Voluntary?
- Position Statement on Consensus Standards
- What’s the Difference Between an OSHA Rule and an ANSI Standard?

To master the highest level of knowledge and expertise for a safety subject, seek guidance from the current Consensus Standard. Read the different “Tech Briefs” to identify the appropriate Standard to meet the current requirements of the job. For additional information, visit: [http://www.asse.org/standards/](http://www.asse.org/standards/).

**ANSI/ASSE Technical Committee Updates**

- Safety Requirements for Construction and Demolition Operations, A10
The ANSI/ASSE A10 ASC has a whole series of new, revised, and reaffirmed standards coming forth that should be of significant interest to OSH professionals. Some of the newly approved standards include:

**ANSI/ASSE A10.43-2016 Confined Space Entry for Construction and Demolition Operations** (new standard); Approval Date of Final Action: 8/4/2016; Standards Action Publication Date: 8/12/2016

Scope: This standard sets forth the minimum elements and activities of a program that defines the duties and responsibilities of construction employers to be followed while entering, exiting and working in confined spaces at normal atmospheric pressure.

An extensive article was published by ASSE in May and should be of interest to OSH professionals dealing with confined space hazards and exposures.


The newly approved ANSI/ASSE A10.48 is now final, and ASSE will now move to publish the standard. This is great news since the A10.48 Subgroup has put in a tremendous amount of work with the support of the full A10 Committee.

Scope: This standard establishes minimum criteria for safe work practices and training for personnel performing work on communication structures including antenna and antenna supporting structures, broadcast and other similar structures supporting communication related equipment.

There is an article in the July A10 Standards Update. The National Association of Tower Erectors has also already released a statement supporting the standard.
Finally, we have had a lot of questions about the ANSI/ASSE A10.34 Standard and how it is recognized in both the private and public sectors. Recently, there was a request for examples of such recognition due to a discussion on whether or not the standard should be included in a contract specification for a large railroad construction project. Due to these requests and an increased number of member inquiries, we are providing an update/article on the standard, its current status, and examples of current recognition.

**Protection of Floor and Wall Openings, ANSI/ASSE A1264 ASC**

A1264.1-2007 Safety Requirements for Workplace Walking/Working Surfaces & Their Access

Update: The standard is currently in a state of revision. The standard has been balloted and the comment resolution process is currently taking place. There will be a committee held to address the final comment and to try and resolve objections. We do not have any estimate on the final revision, but there will be an update on the standard is we get closer in the revision process.

This standard is widely used and recognized in both the private and public sectors. We expect the new revision to be fairly significant in regards to changes and expect the private and public sector to actively use the standard.

**Ventilation Systems, Z9**

The Z9.1 standard has recently been approved for publication by ANSI. This standard was transferred from AIHA to ASSE in 2012, and the subcommittee was able to finish updating it in May of this year. The published document is expected to be available in by late 3Q16.

This standard establishes minimum control requirements and ventilation system design criteria for controlling and removing air contaminants to protect the health of personnel engaged in open-surface tank operations.
The standard was last published in 2006, so much of the work focused on incorporating successful current practice in the control of health hazards resulting from open-surface tank operations and updating the references throughout the standard.

**Safety Management, Z10**

In May, ASSE made a call for materials from the Management Practice Specialty showing how the Z10 Standard has been implemented on worksites. This is something we are really looking for in regards to Z10 implementation examples/stories and case studies. If you should have any examples of such recognition, please send them to Tim Fisher via the Z10 Secretariat at TFisher@ASSE.Org.

Finally, we have continued to receive numerous inquiries about the future of Z10 in light of the proposed ISO 45001 OHSMS Project. The United States TAG (Technical Advisory Group) has continued to identify the ANSI/ASSE Z10 Standard as one of the critical standards to be considered and referenced in the proposed ISO 45001 Standard. This was also one of the key positions raised by ASSE during the initial discussions and debates leading to the launching of this development effort. This position was verified during a number of meetings, and we will include some additional information about Z10 to advocate for more inclusion of Z10 language in the proposed ISO 45001 Standard.

**Respiratory Protection, Z88**

The Z88 standards were transferred from AIHA to ASSE in 2012. These standards define the minimum requirements for respiratory protection.

The revised version of Z88.2 was published in 2015. According to James S. Johnson, the Chair of the ANSI/ASSE Z88 Committee this new standard sets the pace for the respirator program for the next decade. It incorporates regulatory and national standards changes that have occurred in the workplace during the past 23 years, and serves as the umbrella for the other standards the committee is currently working on.
As such, several subcommittees have been created to work on revising existing standards of creating new standards:

Z88.6 (Revision): Respiratory Protection Use - Physical Qualifications for Personnel

ANSI/ASSE Z88.10 (Revision): Respirator Fit Test Methods

ANSI/ASSE Z88.15 (New): Respirator fit capability test for half-mask air-purifying particulate respirators

ANSI/ASSE Z88.16 (New): Assigned Protection Factors (APFs) for Respirators

Z88.17 Respirator Protection (New): Terms, definitions, graphical symbols and units of measurement

The Z88.15 work is particularly significant because it is the first time NIOSH contacted ASSE expressing an interest in collaborating with us to prepare a national consensus standard establishing a respirator fit capability test for half-mask air-purifying particulate respirators.

All the subcommittees are still in the early phase of beginning their work, so the expectation is that the results will be available in 18 – 32 months.

**Motor Vehicle Safety, Z15**

The Z15.1 standard was last revised in 2012, so the committee has created a task group to begin the revisions before the five-year expiration deadline. The task group has been focusing on updating various sections to reflect changes in technology as well as ensuring consistent use of terminology throughout the document.

The draft is currently being prepared for ballot by the main committee, with the expectation that the updated version will be published in 1Q17.
In addition, the Z15.3 subcommittee has been formed to work on a technical report defining safe practices for motor vehicle operations of autonomous vehicles on public thoroughfares.

The movement to roll out autonomous vehicles has intensified in recent years with several major technology and automotive companies investing heavily in this technology. Guideline regulations to allow the testing of autonomous vehicles in traffic have already been established in other countries.

Although this technology is new, we are fortunate that the National Safety Consul agreed to chair the subcommittee. This brings both credibility and provides access to the necessary subject-matter expertise needed to complete the work. The recruitment process has recently began, but it’s too early to determine when the report will be completed.

**Confined Spaces, Z117**

We received notification from ANSI that our two ANSI/ASSE Confined Spaces standards have been approved. The approved standards include the revised ANSI/ASSE Z117.1 addressing confined spaces overall and the newly created ANSI/ASSE A10.43 standard addressing construction and demolition operations. Confined spaces is always a huge issue for OSH professionals, and Z117.1 has historically been of significance. A10.43 is expected to have positive impact on construction and demolition operations.


ASSE will now move forward to publish the standard, and OSH professionals will see that document sometime during Fall 2016. ASSE wrote an extensive article about the revision during April 2016:
The revision of this standard continues to move forward, and we are looking for a final approval hopefully sometime during the latter part of 2016.

Z244 member Todd Grover wrote a detailed article on the current revision, which should interest OSH professionals working with LOTO-related hazards and exposures.

The Society also wrote an article about the revision and included it as part of its Standards Snippets during April 2016.

**Fall Protection, Z359**

The ANSI/ASSE Z359 Committee continues to move forward with a complete revision of the historic Z359.1 standard. The revision of the ANSI/ASSE Z359.1 standard is at ANSI right now, and we are awaiting final administrative review/approval. The Z359.1 standard is fundamentally changing from the structure you have seen in the past, with the most recent version published in 2007.

Scope from the pending revised standard: “The Fall Protection Code is a set of standards that covers program management; system design; training; qualification and testing; equipment, component and system specifications for the processes used to protect workers at height in a managed fall protection program. This standard identifies those standards and establishes their role in the Code and their interdependence.”

Historic scope, which is changing: “This standard establishes requirements for the performance, design, marking, qualification, instruction, training, inspection, use, maintenance, and removal from service of connectors, full body harnesses, lanyards, energy absorbers, anchorage connectors, fall arresters, vertical lifelines, and self-retracting lanyards comprising personal fall arrest systems for users within the capacity range of 130 to 310 pounds (59 to 140 kg).”
Recognition and use of ANSI/ASSE Z359.2 *Minimum Requirements for a Managed Fall Protection Program* also continues to grow. We saw the recent example from a large company requiring the use of the standard as listed in one of their work agreements:

_Notwithstanding any other requirements identified in this document, training will be sufficient to qualify the trainees to meet the requirements in the following regulations and standards._


   a. ANSI/ASSE Z359.2, *Minimum Requirements for a Comprehensive Managed Fall Protection program*.


_The USACE EM 385-1-1 manual requires that all personnel involved in fall-protection be trained as described in ANSI/ASSE Z359.2._

_ANSI/ASSE Z359.2 requires a fall-protection training guide, and resultant training, that will follow the requirements of ANSI/ASSE Z490.1._

**Safety, Health and Environmental Training, Z490**

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 sectors in regards to safety training. The revision of the ANSI/ASSE Z490.1 was approved by ANSI on December 7, 2015 and was published during Spring 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.

Z490.1 continues to be cited in public and private sector contracts and work agreements. The standard was recently required in a large scale construction project, and the reference is listed in this report in the Z359 section.

**Hydrogen Sulfide Training**

The revision of ANSI/ASSE Z390.1-2006 (R2010) *Accepted Practices for Hydrogen Sulfide (H2S) Training Programs* continues to move forward. The revision of the standard will be extensive, and potential users of the standard can look forward to a new version of the standard sometime during 2017.

ASSE was recently apprised by ANSI staff that an estimated 200,000-300,000 workers in the Middle East are trained against the Z390.1 standard each year.

**Competence and Certification in the Safety Profession, Z590**

ANSI/ASSE Z590.3-2011 (R2016) *Prevention through Design Guidelines for Addressing Occupational Hazards and Risks in Design and Redesign Processes*

Interest is growing in Prevention through Design (PtD). The goal is to integrate design and engineering concepts to move high-caliber occupational safety and health management forward. There is no question that this concept is growing in importance with the OSH profession and ASSE members overall. It is safer and more cost effective to implement safety before structures or processes are built. Companies which have incorporated safety into the design process have shown that costs are lowered, task performance is improved and life-threatening work hazards are reduced.

This standard provides guidance on including prevention through design concepts within an occupational safety and health management system. Through the application of these concepts, decisions pertaining to
occupational hazards and risks can be incorporated into the process of design and redesign of work premises, tools, equipment, machinery, substances and work processes, including their construction, manufacture, use, maintenance and ultimate disposal or reuse. This standard provides guidance for a lifecycle assessment and design model that balances environmental and occupational safety and health goals over the lifespan of a facility, process or product. It complements but does not replace performance objectives existing in other specific standards and procedures.

The goals of applying prevention through design concepts in an occupational setting are to:

- Achieve acceptable risk levels
- Prevent or reduce occupationally related injuries, illnesses and fatalities
- Reduce the cost of retrofitting necessary to mitigate hazards and risks that were not sufficiently addressed in the design or redesign processes

This standard was developed to provide consistent procedures for addressing occupational hazards and risks in the design and redesign processes and to replace the Technical Report originally published by ASSE.

Global Standards Update

Proposed ISO 45001 Occupation Health and Safety Management Systems (OHSMS): Requirements with Guidance for Use: ASSE is the TAG Administrator to ANSI for this project (Technical Advisory Group).

ISO released a presentation in June giving a status/update on the project and current progress. In addition, ASSE has created an ISO 45001 website that ASSE members should review in order to get timely updates on the proposed standard.

The ISO/ANSI/ASSE Risk Management and Risk Assessment Standards

Used globally and domestically by those engaged in managing and assessing risks, these standards can be applied throughout the life of an organization and
to a wide range of activities, including strategies and decisions, operations, processes, functions, projects, products, services and assets.

The ISO 31000 standard is currently being revised by the TC 262 committee, and the US TAG has been active in providing comments to the latest version of the committee draft (CD3).

The last CD received over 1,000 comments from 28 countries, so the final version of the standard is not expected for at least another year.

**ASSE Technical Publications**

Remember that many of the ANSI/ASSE Standards are also supported and complemented by our numerous ASSE technical publications. ASSE carries books, CDs, and e-books about accident investigation and prevention, construction, exam prep, fall protection, hazards and hazardous materials, business and management, safety engineering, and more. You can find a complete catalog [here](#).