

Safeguarding: Are ANSI Standards Really Voluntary?

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Through a variety of avenues, these consensus standards can wind up having the force of law. Here's why.

by Joseph J. Lazzara

The American National Standards Institute (ANSI) has a difficult task: how can it promulgate consensus standards, written entirely by volunteers in subcommittees and with no enforcement authority? In the case of ANSI's safety-related standards, how does this organization still warrant the attention of machine builders, OSHA, users and labor? In short, how does ANSI obtain respect and avoid being the Rodney Dangerfield of safety standards? The answer revolves around whether ANSI standards are really voluntary, or something much more.

One area of confusion for safety professionals, design engineers, machine builders and users involved with the implementation of the ANSI documents revolves around the enforceability of these consensus standards. After all, these are just voluntary standards, right? Well, the real answer is yes – and no. Technically, ANSI standards are considered voluntary consensus standards and are not written as laws or regulations. In fact, the subcommittees that create the standards have no enforcement authority, much to the relief, I am sure, of the subcommittee members! Yet the standards themselves are widely recognized in industry as an excellent source of reference material, often with an easier-to-understand format than that of OSHA.

OSHA Adoption

The voluntary status of the standards can change significantly when OSHA adopts ANSI standards by reference. This is the case, for example, with OSHA 1910.215, Abrasive Wheel Machinery. The section, 1910.215(b)(12), requires abrasive wheel machinery guards to conform to the ANSI B7.1-1970 standard on abrasive wheels. By specifically incorporating the B7.1 standard in its regulations, OSHA has converted a voluntary standard into a federal requirement. Various state safety agencies may follow the same process as OSHA, and incorporate ANSI standard references in their respective state regulations, especially when taking the lead from OSHA. For example, California, Oregon and South Carolina all have similar rulings on the abrasive wheel machinery. What happens when the ANSI standard incorporated by OSHA is later revised? No problem, as OSHA can show a surprising ability to react to changes. In the case of the B7.1 standard, it was updated three times, in 1978, 1988 and 2000, and OSHA has issued directives to conform to the newer versions. Since OSHA is built for power and not for speed, agility is not one of its usual attributes. It may take a year or more for OSHA to officially recognize a newer standard. In the interim, compliance to either version of the standard would likely be acceptable, although one should verify this with the agency for their particular situation.

Let's consider another example to illustrate how the ANSI standards and OSHA regulations can interact. Assume that an OSHA compliance officer cites a company under 1910.212(a)(3)(ii), for failure to safeguard a machine at the point of operation. One way the company can abate the citation is to demonstrate the machine is guarded according to the appropriate B11 standard. In fact, the text in 1910.212(a)(3)(ii) includes, "The guarding device shall be in conformity with any appropriate standards..." Thus, here is a case where the voluntary B11 standard is used to correct a hazardous situation, and reduce a citation issued under the mandatory OSHA regulations.

Implicit Regulations

How is it that ANSI standards became part of the OSHA regulations? In the early 1970s, when OSHA was issuing new workplace safety regulations, it would often use what was available either as the basis for its new regulations, or incorporate by reference an existing standard. In either case, the ANSI voluntary standards would fill the bill, as they were considered best practices at the time. ANSI standards can also be interpreted as implicit regulations through our American legal system. The standards make a wonderful reference on how a machine should be, or more likely in the case of a trial, should have been, guarded. Employers or manufacturers who do not comply have a potential liability exposure if an ANSI standard indicates a method of machine design, operation or safeguarding that may have prevented an injury. It would be difficult to persuade a jury that a particular document is "just a voluntary standard" while the opposing lawyer advocates it is really the Holy Grail of safeguarding.

It is also very common to see a purchaser of equipment, raw material, fasteners or just about any conceivable item reference that it must meet a particular ANSI standard for the buyer's acceptance process. Consumers should insist on this as well. For example, one should require that the next pair of non-prescription sunglasses they purchase meet the requirements of ANSI Z80.3, to ensure the correct UV transmittance, cosmetic quality and lens durability.

ANSI and OSHA formalized their relationship in a one-page memorandum of understanding. The following key phrase describes how OSHA will use the ANSI organization in future standard development: "ANSI will furnish assistance and support and continue to encourage the development of national consensus standards for occupational safety and health issues for the use of OSHA and others." This certainly sets the stage for continued integration of OSHA regulations and ANSI standards and cooperation between these two organizations. OSHA's regulatory process will continue to have an impact, and a strong influence, on whether ANSI safety-related consensus standards remain truly "voluntary."

Be safe out there!

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Contributing Editor Joseph J. Lazzara has been the president and CEO of Scientific Technologies Inc. (STI) since 1993 and has been employed by STI since 1981. Prior to 1981, he was employed by Hewlett-Packard Co. in environmental, health, safety and process engineering management. Lazzara received a bachelor of science in engineering from Purdue University and a masters in business administration from Santa Clara University. He is a past member of the board of directors of the American Electronics Association, the board executive committee of the AEA and past chairman of the AEA's Competitive Excellence Committee. Lazzara also served as past chairman of the EHS Committee for the Association of Manufacturing Technology.