



# AMERICAN NATIONAL STANDARD

*ANSI/ASSE Z244.1 – 2016*  
*The Control of Hazardous Energy*  
*Lockout, Tagout and Alternative Methods*

ANSI/ASSE Z244.1 – 2016



AMERICAN SOCIETY OF  
SAFETY ENGINEERS

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**ANSI/ASSE Z244.1 – 2016**

**American National Standard**

**The Control of Hazardous Energy  
Lockout, Tagout and Alternative Methods**

Secretariat

**American Society of Safety Engineers**  
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# American National Standard

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## Foreword

(This Foreword is not a part of American National Standard Z244.1-2016.)

## History

In March 1973, the Accredited Standards Committee Z244 held its first organizational meeting in New York to develop a standard on lockout/tagout. The National Safety Council functioned as the initial secretariat and provided a draft document "Guidelines for a Lockout Program" dated November 1971 that was used as a reference for the committee's deliberations. By the end of 1975, the standard work was complete and public review and balloting was finished. However, various administrative and procedural problems precluded the standard from being officially released. In March 1982, the American National Standard for Personnel Protection - Lockout/Tagout of Energy Sources - Minimum Safety Requirements Z244.1 was finally approved and published.

In 1987, the standard was re-affirmed without any changes in content. In April 1988, the Occupational Safety and Health Administration (OSHA) released a proposed rule "The Control of Hazardous Energy Sources (Lockout/Tagout)" 29 CFR1910.147 which used ANSI Z244.1 as a principal reference source. The committee believed no consequential action should be taken on the Z244.1 standard while federal rulemaking was underway. In September 1989, OSHA promulgated its final rule 29 CFR1910.147, "The Control of Hazardous Energy Sources (lockout/tagout)." Again in 1992, the ANSI standard was reaffirmed without change.

During 1997, the committee was reconstituted and voted to revise the existing 1982 standard after over 20 years without change. Consequential meetings began in 1998 and the revision process began with writing task groups being formed and continued through 2003. The American Society of Safety Engineers became the secretariat of the Z244 Lockout/Tagout committee in 2003. The title of the standard was modified to recognize the broader universe of hazardous energy control. The standard more effectively addressed the need for greater flexibility through the use of alternative methods based on risk assessment and application of the hazard control hierarchy. In addition, the standard emphasized management's responsibility for protection of personnel against the release of hazardous energy.

The standard was processed and approved for submittal to ANSI by the Accredited Standards Committee (Z244) on Control of Hazardous Energy, Lockout/Tagout and Alternative Methods. The standard was approved by ANSI on July 29, 2003 with a publication date of April 14, 2004.

The Z244 committee and ANSI reaffirmed the standard without technical change in 2008 and again in 2014 with the stipulation that the ASC (Z244) committee begin meeting to revise the Z244 standard since no changes had been made since 2003. The ASC (Z244) committee agreed and began the revision process in July 2014.

## Need for a Standard

A wealth of casualty data exists in the private, public and governmental sectors related to the unexpected release of hazardous energy. In fact, the issue is of global concern since all of the major industrialized countries of the world are actively addressing the problem in various ways. The U.S. Occupational Safety and Health Administration provided persuasive injury data in its justification for a lockout/tagout standard for general industry in 1989.

In spite of substantial efforts by employers, unions, trade associations and government during the past 50 years, the annual toll of injury and death related to hazardous energy release incidents remains unacceptable. We now know that all forms of energy must be addressed; that operational personnel are injured as often as maintenance workers; that often thermal and