



From A to Veck:
Standardization and the Law

2005 ANSI Annual Conference



Welding Rod Litigation

Challenge To American Welding
Society's Role In Health Monitoring
And Voluntary Standard Development

Theodore Voorhees, Jr.
Covington & Burling
October 6, 2005

Major Policy Issue

The easier it is for plaintiffs to sue standard setting organizations ...
the greater the danger that society will ultimately lose the benefit of
safety standards



Standard Setting Under Assault -- Competition Law Arena

Standards Development Organization
Advancement Act of 2004, Public Law 108-237

Sec. 102. The Congress finds the following:

* * *

(5) Technical standards are written by hundreds of nonprofit voluntary consensus standards bodies in a nonexclusionary fashion, using thousands of volunteers from the private and public sectors, and are developed under the standards development principles set out in Circular Number A-119, as revised February 18, 1998, of the Office of Management and Budget, including principles that require openness, balance, transparency, consensus, and due process. Such principles provide for—

* * *

(7) Standards developed by government entities generally are not subject to challenge under the antitrust laws.

(8) Private developers of the technical standards that are used as Government standards are often not similarly protected leaving such developers vulnerable to being named as codefendants in lawsuits even though the likelihood of their being held liable is remote in most cases, and they generally have limited resources to defend themselves in such lawsuits.

(9) Standards development organizations do not stand to benefit from any antitrust violations that might occur in the voluntary consensus standards development process.



Same Is True In Product Liability Arena

“Furthermore, we have some concern that requiring Pfizer to stand trial for civil conspiracy and concert of action predicated solely on its exercise of its First Amendment freedoms could generally chill the exercise of the freedom of association by those who wish to contribute to, attend the meetings of, and otherwise associate with trade groups and other organizations that engage in public advocacy and debate.”

In re Asbestos School Litigation,
46 F.3d 1284, 1295-96 (3d Cir. 1994).



History of AWS and American National Standards Institute (ANSI) Involvement with Z49.1 Committee

- 1919 AWS Founded
- 1943 AWS asks American Standards Association (ASA) to initiate development of American War Standard for welding safety
- 1944 American War Standard Z49.1 published
- 1946 ASA Sectional Committee Z49 organized under sponsorship of AWS
- 1966 ASA name changed to ANSI
- 1983 Accreditation Standards Committee (ASC) Z49 accredited by ANSI
- 1991 AWS accredited as an ANSI organization



AWS/Z49 Standards Are Voluntary

Policy Statement on Use of AWS Standards

All standards of the American Welding Society (codes, specifications, recommended practices, methods, etc.) are voluntary consensus standards that have been developed in accordance with the rules of the American National Standards Institute.

ANSI/ASC Z49.1 - 1983
An American National Standard
Safety in Welding and Cutting



USAS Z49.1-1967
U.D.C.621.791:614.8

USA Standard

Safety in Welding and Cutting

*Third Edition
Superseding 1958 Edition*

Prepared by USA Standards Committee Z49

Under the Sponsorship of American Welding Society

Edward A. Fenton
Technical Director

Price \$4.00

Copyright 1968 by

AMERICAN WELDING SOCIETY, INC.
345 East 47th Street, New York, N. Y. 10017

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ANS00006258



8.1.7 Manufacturers' cautions pertaining to fluxes and electrode coverings should be carefully observed. See also 8.1.6.

8.1.8 Precautionary Labels: A number of potentially hazardous materials are employed in fluxes, coatings, coverings and filler metals used in welding and cutting, or are released to the atmosphere during welding and cutting. These include but are not limited to the materials itemized in 8.5 through 8.14. The suppliers of welding materials shall determine the hazard, if any, associated with the use of their materials in welding, cutting, etc.

8.1.8.1 All filler metals and fusible granular materials shall carry the following notice, as a minimum, on tags, boxes, or other containers:

CAUTION
Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. Use adequate ventilation. See USA Standard Z49.1, "Safety in Welding and Cutting" published by the American Welding Society.

8.1.8.2 Brazeing (welding) filler metals containing cadmium in significant amounts shall carry the following notice on tags, boxes, or other containers:

WARNING
CONTAINS CADMIUM
HAZARDOUS FUMES MAY BE FORMED ON HEATING

8.1.8.1 All filler metals and fusible granular materials shall carry the following notice, as a minimum, on tags, boxes, or other containers:

CAUTION
Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. Use adequate ventilation. See USA Standard Z49.1, "Safety in Welding and Cutting" published by the American Welding Society.

249.1 Incorporated into OSHA Regulations for Welding in 1971 29 C.F.R. § 1910 subpart Q

- Requires Z49.1 General CAUTION Notice for all exposures
- Requires Z49.1 Special WARNING Notice for Cadmium
- Requires Z49.1 special CAUTION notice for fluorides
- OSHA separately highlights the “Major Six” (fluorine, zinc, lead, beryllium, cadmium, mercury)
- No separate mention of manganese or any of the “Other Twelve”



The “Top Two”

--First paired for special warnings Z49.1 (1967)

The “Major Six”

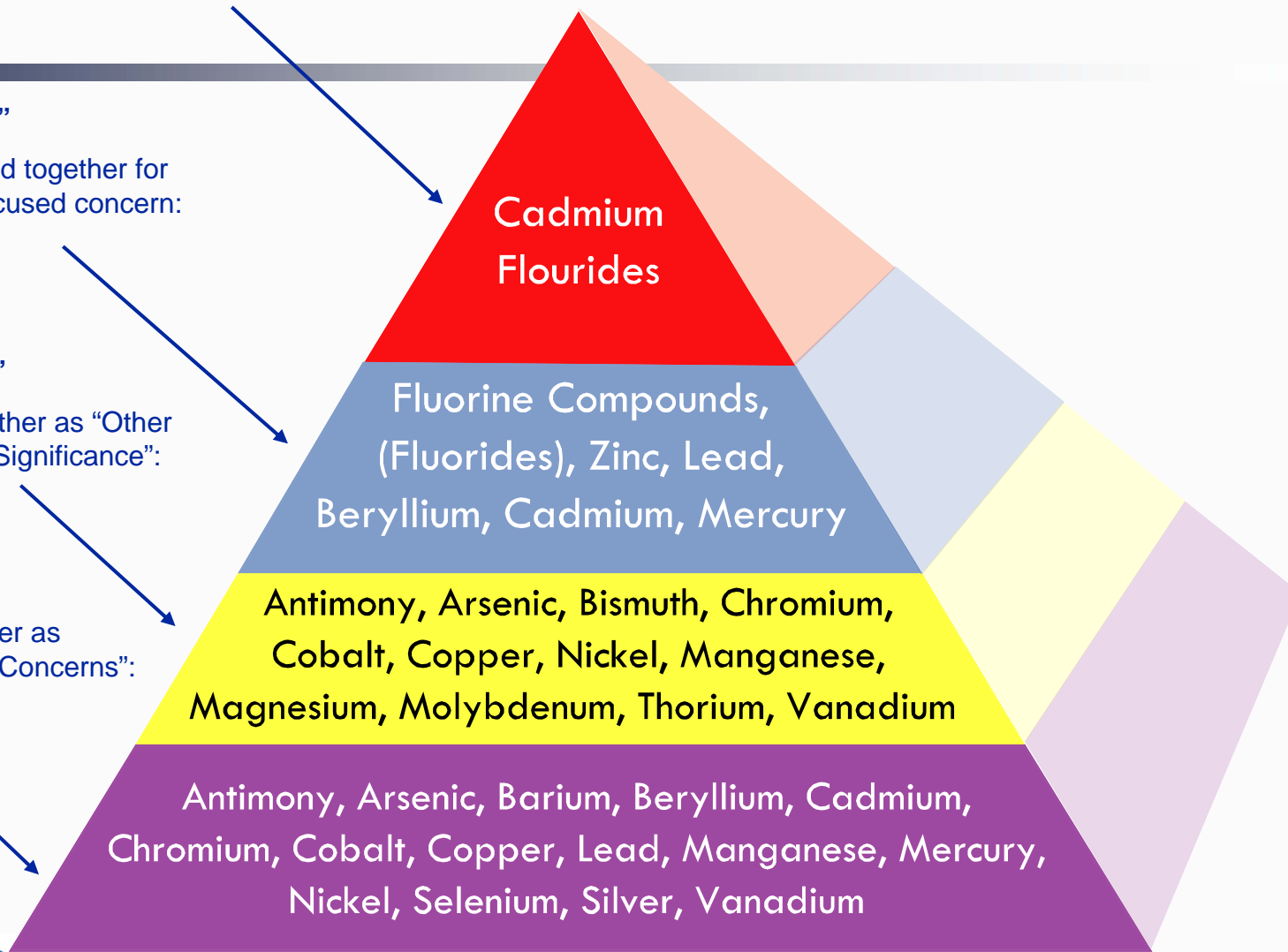
--First highlighted together for Z49.1 (1958) focused concern:

The “Other Twelve”

-- First grouped together as “Other Materials of Toxic Significance”: Z49.1 (1958)

The “Other Fifteen”

-- first grouped together as “Special Ventilation Concerns”: Z49.1 (1983)



FILE COPY
DO NOT REMOVE

ANSI/ASC Z49.1-1983
An American National Standard

**Safety
in
Welding and
Cutting**



AMERICAN WELDING SOCIETY, INC.



ANSI Annual Conference – October 6, 2005
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Slide 11

INTERNATIONAL ASSOCIATION OF MACHINISTS AND AEROSPACE WORKERS

D. Spencer, International Association of Machinists and Aerospace Workers

MECHANICAL CONTRACTORS ASSOCIATION OF AMERICA, INCORPORATED

E. Deeb, Sr., Kerbu

J.R. N

FACTORS ASSOCIATION OF AMERICA, INCORPORATED

ASSOCIATION OF THE U.S., INCORPORATED

INTERNATIONAL ASSOCIATION OF MACHINISTS AND AEROSPACE WORKERS
D. Spencer, International Association of Machinists and Aerospace Workers

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J. Olejniczak, National Training Fund

U.S. DEPARTMENT OF THE NAVY

D.A. Macys, Navy Department

A.E. Johnston (Alternate), Navy Environmental Health Center

U.S. PUBLIC HEALTH SERVICE (NIOSH)

W.E. Murray (Alternate), PAEB/NIOSH Taft Center

U.S. PUBLIC HEALTH SERVICE (NIOSH)
W.E. Murray (Alternate), PAEB/NIOSH Taft Center



AWS Is A Professional Society, Not A Trade Association

Mission: “... to advance the science technology and application of welding and allied processes including: joining, brazing, soldering, cutting and thermal spray.”

Membership: 50,000

“Membership consists of engineers, scientists, educators, researchers, welders, inspectors, welding foremen, company executives and officers, and sales associates.”

Source: www.aws.org/about



Effects of Welding on Health Vols. I-XII

- Series begun with first edition in 1979
- Collects and summarizes all significant published literature on welding and health
- Updated every few years
- Available in AWS catalog



Effects of Welding on Health I (1979)

- Prepared by AWS Safety and Health Committee
- Based on research performed at Franklin Research Center
- Includes lengthy section on “Nervous System” effects
- Includes sub-section on “manganese intoxication”
- Cites Beintker (1932) and multiple other published case studies
- Describes symptoms of manganese intoxication

