

# CoPS SH&E Report

Council on Practices & Standards (CoPS)

Volume 4, Number 1



## CoPS Ready for Safety 2009

Practice Specialty, Branch and Common Interest Group members will have plenty to look forward to at ASSE's Professional Development Conference in San Antonio, TX this June. To help you plan your time at the conference, below is a list of scheduled Practice Specialty, Branch and Common Interest Group meetings and activities for your quick reference.

<u>Date</u>	<u>Start Time</u>	<u>Room</u>
<b>Saturday, June 27, 2009</b>		
Management Practice Specialty Advisory Committee	1:00 p.m.	Grand Hyatt—Bonham B
<b>Sunday, June 28, 2009</b>		
Consultants Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Republic C
Engineering Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham A
Environmental Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham B
Healthcare Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bowie C
Industrial Hygiene Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham C
Manufacturing Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham D
Public Sector Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Crockett C
Risk Management/Insurance Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Crockett A/B
Service Branch Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham E
Women in Safety Engineering (WISE)	6:00 p.m.	Grand Hyatt—Lone Star B
<b>Monday, June 29, 2009</b>		
Blacks in Safety Engineering (BISE)	6:00 p.m.	Grand Hyatt—Lone Star A
Construction Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Republic B
Fire Protection Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham C
Mining Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Crockett A
Oil & Gas Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Goliad
Safety Professionals & the Latino Workforce (SPALW)	6:00 p.m.	Grand Hyatt—Lone Star B
Training & Communications Branch Advisory Committee	6:00 p.m.	Grand Hyatt—Crockett B
Transportation Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham B
<b>Tuesday, June 30, 2009</b>		
Academics Practice Specialty Advisory Committee	5:00 p.m.	Grand Hyatt—Republic C
Ergonomics Branch Advisory Committee	6:00 p.m.	Grand Hyatt—Bonham E
Human Resources Branch Advisory Committee	6:00 p.m.	Grand Hyatt—Presidio C
International Practice Specialty Advisory Committee	6:00 p.m.	Grand Hyatt—Presidio B
Young Professionals in SH&E (YP)	6:00 p.m.	Grand Hyatt—Crockett A/B
Academic Forum	12:00 p.m.	Grand Hyatt—Lone Star A

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## First Round of Practice Specialty Newsletters Published Electronically

The first round of electronic practice specialty newsletters has been published and distributed. The newsletters' new interactive, full-color format allows practice specialty members to:

- Zoom in and out of pages and turn them
- Navigate horizontally or vertically throughout the publication
- Click-navigate through an active table of contents
- Click on live links to SH&E documents, websites and videos
- Instantly e-mail practice specialty leadership or authors
- Search within the publication
- Download the entire publication as a PDF file

Practice specialty members have responded positively to the new format, and they appreciate the opportunity to include more links and color graphics with their newsletter article submissions.

## CoPS Holds Teleconference Call in Preparation for Safety 2009

The Council on Practices and Standards (CoPS) met via teleconference call on Friday, April 17, 2009 to confirm its plans and activities for Safety 2009. To learn more about practice specialty events at Safety 2009, visit <http://www.asse.org/education/pdc09/> or contact any of the practice specialty administrators through their respective websites (<http://www.asse.org/practicespecialties/>).

CoPS also agreed to rename the Hospitality Branch the "Service Branch" and will develop a proposed Utilities Branch.

## WISE to Hold Annual Networking Event During Safety 2009

The Women in Safety Engineering (WISE) common interest group will hold its annual networking event on Sunday, June 28, 2009 from 6:00 p.m.-9:00 p.m. at the Grand Hyatt in San Antonio, TX (Room Lone Star B).

Presentations at the event will cover:

- WISE committees and the work of WISE advisory committee members
- Establishing a chapter-level WISE group
- Networking with WISE members

Attendees will be able to earn CEU points, establish new contacts and explore new resources (vendors, consultants, clients, peers or suppliers).

For more information, contact Kelly Bernish, WISE Chair, at [kelly.bernish@seaworld.com](mailto:kelly.bernish@seaworld.com). ■

- Would you like to see your name in print?
- Do you have fresh and exciting news items or technical articles that you want to submit to the Practice Specialty/Branch/Common Interest Group newsletters or to *CoPS SH&E Report*?
- Do you know someone who would make a compelling interview candidate? Is that someone *you*?

## CoPS Wants Your Content!



For information on submitting editorial content to any of the CoPS publications, e-mail Jolinda Cappello at [jcappello@asse.org](mailto:jcappello@asse.org).

## *We Asked, You Answered*

*In the last issue of CoPS SH&E Report, we asked readers how they believe OSHA and the new presidential administration will influence safety in 2009. Responses are provided below...*

“I am highly encouraged by the president’s actions in the short time he has been in office, and I believe the new administration will have a positive influence on occupational safety and health this year.”

“Initially, I was concerned that new policies might overshadow OSHA’s and the new presidential administration’s safety initiatives for the year, but I have not seen that occur.”

“It is too early to tell how safety will change or improve in 2009.”

“Occupational safety and health suffered greatly under the previous presidential administration. This year has to be better.”

“I hope OSHA will do more to improve mine safety as well as women’s safety in the workplace.”

“Hilda L. Solis, the new Secretary of Labor, has a strong safety, health and environmental background, and I believe that her leadership will have a positive influence on safety in 2009.”

“The new presidential administration and OSHA should focus more on diacetyl and combustible dust exposures this year.”

“President Barack Obama should learn from the mistakes of prior administrations. If he wants ‘change’ to happen, in safety or otherwise, he needs to fulfill the promises he made during his campaign.”

“Government is government. Do you really think safety, or anything else for that matter, will change this year?”

“The new presidential administration and OSHA should make a concerted effort to listen to the needs of the workforce. They should not let lobbyists or special interests distract them from the task at hand.” ■

## *CoPS Wants to Know...*

Do you believe safety awards programs benefit or hinder workplace safety?

E-mail your responses to [jcappello@asse.org](mailto:jcappello@asse.org) by **July 27, 2009**.

Responses will be published in the next issue of *CoPS SH&E Report*.



# Update: ISO 31000 Activities

*Dorothy Gjerdrum is Chair of the U.S. Technical Advisory Group (TAG) for Risk Management, which worked on the draft standard, “Risk Management—Principles and Guidelines on Implementation” (ISO 31000).*

*In this interview, Gjerdrum provides a recap of the ISO 31000 working group’s November 2008 meeting in Singapore.*

***You and Wayne Salen attended the ISO 31000 working group’s sixth and final meeting held from November 24-28, 2008 in Singapore. Since this marked the first meeting the U.S. attended, what was your overall impression of it?***

The 18 countries represented at the meeting included Singapore, Malaysia, Austria, the Netherlands, Canada, Israel, South Africa, Japan, France, China, New Zealand, Germany, Switzerland, the United Kingdom, Brazil, Australia, Ireland and the U.S. This was the working group’s sixth meeting but the first meeting at which the U.S. had representation. The majority of the working group had already spent many hours working out detailed language related to the definition of risk, the outline of the framework and the risk management process.

My overall impression was that the group was both happy and puzzled that the U.S. had sent representatives to this meeting, and several delegates privately expressed their gratitude for our participation. However, the group as a whole rejected most of our substantive comments because they were submitted so late in the process. As a result, for future revisions, I would strongly suggest that the U.S. contribute throughout the entire process and participate in all working group meetings.

***Thirty risk management terms will be defined and included in ISO 31000 and Guide 73. How will these definitions help enhance both documents?***

It is important to define the key terms used in ISO 31000 so that all readers will have a common understanding. Thirty specific definitions are included in ISO 31000. Those 30 definitions are included in Guide 73, which adds another 20 definitions related to risk. Guide 73 is intended for broader use. The intention is that all other standards groups will be able to refer to Guide 73 for definitions related to the process of risk management (without having to follow ISO 31000). As an aside, ISO is currently building a terminology database, which will allow for easy reference to defined terms throughout ISO documents. Unless a more specific definition is

## **Dorothy Gjerdrum**

Dorothy Gjerdrum, ARM-P is the Executive Director of Arthur J. Gallagher Brokerage & Risk Management Services’ Public Entity and Scholastic Division. She works with public sector clients and brokers across the U.S., focusing on risk management, exposure identification, pool operations and enterprise risk management. She is also Chair of the U.S. TAG for Risk Management.



Gjerdrum has more than 20 years of industry experience, including ten years in risk management at the New Mexico Association of Counties insurance pools. She is a guest speaker and published author on current and emerging risk management issues in the public sector.

created within a specific standard, the definitions published in the guide will be normative.

***ISO 31000 will now be voted on as a final draft international standard (FDIS). How does the voting process for FDISs work?***

At this point, an editorial committee is reviewing the standard to ensure that all agreed-upon changes from the November 2008 meeting are included and in concurrence. The editorial committee can also correct grammatical errors. The document will also be translated into French. No more technical changes to the standard will be considered. As soon as the standard is prepared in final form, a final vote will be taken (one vote from each member country). The working group also urged ISO to adopt Guide 73 as quickly as possible so that the two documents can be concurrently published.

***As a liaison to the ISO 31010 working group, the ISO 31000 chair has proposed aligning the 31010 and 31000 standards. What does ISO 31010 cover, and what would be the benefit of aligning these standards?***

ISO 31010 is a draft standard on the risk assessment process. This originated as a proposal (from Canada) to the working group to be included in ISO 31000, but ISO decided to split it into a separate standard. There are good intentions to align the two, and the ISO 31000 Chair is a liaison to the 31010 working group. The risk assessment process is an important component of the overall risk management process, so the two must be aligned.

### ***Have other countries decided to reevaluate or revise their own risk management standards in light of ISO 31000?***

Yes, there is much activity! ISO 31000 will become the operating standard in many countries that do not currently have one. Great Britain has recently adopted a new risk management standard (November 2008). The UK began the process to revise their standard before the ISO proposal

emerged, although it references it. ISO 31000 will replace the popular Australia-New Zealand standard. The Institute of Internal Auditors in Australia has requested that COSO be revised in light of ISO 31000. And last but not least, the Canadian TAG is already working on a publication that will provide guidance for practitioners who want to implement ISO 31000. ■

### **Results of U.S. TAG Recommendations**

Thirty risk management terms used in ISO 31000 will be defined and included in the standard. They will also be included in Guide 73, which will add ~20 more definitions related to risk. Guide 73 is intended to be applied more broadly to all standards that address risk management. We tried to include all of Guide 73 in the risk management standard, but ISO rules prohibit that. Keeping both documents concurrent will be an issue in the future.

We helped add “risk financing” to the list of mitigation options but only as an example of “risk sharing.” Some of our editorial suggestions were accepted. The term “corporate governance” was changed to “organizational governance,” and some of the references to “business” were deleted where that was too limiting.

Two sections of the standard, 5.4.2 and 5.6, lack sufficient detail. In my opinion, this will become a deficiency in the standard.

### **What's Next?**

After the ballot process concludes, it will take approximately one month to finalize and publish it. ISO 31000 and Guide 73 are scheduled to be published this summer.

Guide 73 has entered the draft international standard stage (where both technical and editorial changes can be considered) and will be sent for another vote. To avoid holding another meeting on Guide 73, we authorized the editing committee, convenor and secretariat to review the comments to Guide 73 and to finalize the document.

ISO will consider revision of the 31000 standard in about three years.

### **Other Related Standards**

ISO 31010 (risk assessment process) originated as a proposal from Canada to be included in ISO 31000. However, ISO decided to split it into a separate standard. Kevin Knight, ISO 31000 Chair, is the liaison to the 31010 working group, and discussions have taken place about aligning the two standards. The intention is to adopt 31010 in a similar timeframe to the adoption of 31000.

Great Britain recently adopted a new risk management standard. They began the process to revise their standard before the ISO proposal emerged, and they feel it has better application for small- and medium-size organizations than ISO 31000.

The Institute of Internal Auditors (IIA) in Australia has requested that COSO be revised in light of ISO 31000. The Australian delegate urged us to influence the American IIA to consider that as well. It was suggested that IEC Guide 51 is out of date and should be revised to reflect this updated standard.

**—Dorothy Gjerdrum**

**Learn more about ISO 31000:**

- [Interview with Dorothy Gjerdrum & Wayne Salen](#)
- [U.S. TAG for Risk Management Website](#)

## News You Can Use

### Kidde Fire Extinguishers Recalled

The U.S. Consumer Product Safety Commission (CPSC), in cooperation with Walter Kidde Portable Equipment Inc., announced a voluntary recall of Kidde XL Fire Extinguishers. Consumers should stop using recalled products immediately unless otherwise instructed.

**Name of product:** Kidde XL Fire Extinguishers

**Units:** About 167,000

**Distributor:** Walter Kidde Portable Equipment Inc., of Mebane, NC

**Hazard:** The pressurized cylinders in the recalled fire extinguishers could lose pressure and fail to operate. In the event of a fire, this failure could put consumers and property at risk.

**Incidents/Injuries:** None reported.

**Description:** This recall involves Kidde XL Fire Extinguishers with model numbers FX340SC, FX340H, FX340GW, XL5MR, FX210R, FX340SC-2, FX210W, XL2.5TCZ-4, E-340-3 and with manufacture dates between October 2007 and April 2008. “Kidde” and the model number can be found on the label on the front of the extinguisher. The manufacture year is on the bottom of the extinguisher. If your extinguisher is one of the listed model numbers and is marked with the year 2007 or 2008, contact Kidde to determine if you have a recalled extinguisher.

**Sold at:** Department, home and hardware stores nationwide from October 2007 through April 2008 for about \$35.

**Manufactured in:** Mexico

**Remedy:** Consumers should immediately inspect the pressure gauge. If it points to the red zone, contact Kidde to receive a free replacement extinguisher. If the gauge is not in the red zone, but you have questions about an extinguisher within the listed model numbers, contact Kidde for additional information.

**Consumer Contact:** Contact Kidde at (888) 345-4407 between 8 a.m. and 5 p.m. ET Monday through Friday or visit <http://www.kidde.com>.

### U.S. Secretary of Labor Takes Action to Prevent Workers' Exposure to Diacetyl

U.S. Secretary of Labor Hilda L. Solis announced the withdrawal of an advance notice of proposed rulemaking (ANPRM) for occupational exposure to food flavorings containing diacetyl. The withdrawal facilitates OSHA's development of a standard to protect workers from bronchiolitis obliterans, a serious and potentially fatal lung disease associated with such an exposure.

Secretary Solis' interest in this issue began when she was a member of Congress, and workers in her former California district developed the lung disease after being exposed to this workplace hazard. At one time, she urged OSHA to issue an emergency temporary standard to protect these workers.

Withdrawing the ANPRM facilitates the convening of a small business advocacy review panel to determine the impact a proposed rule might have on small businesses and how those impacts can be reduced, consistent with the agency's statutory requirements. This panel process is required under the Small Business Regulatory Enforcement Fairness Act.

All materials submitted prior to this withdrawal, as well as any other information submitted directly to OSHA after the withdrawal, will be put in the public rulemaking docket and will receive appropriate consideration as a part of the overall rulemaking record.

—Adapted from U.S. Department of Labor (DOL) news release, “U.S. Secretary of Labor Hilda L. Solis Takes Action to Prevent Workers' Exposure to Food Flavorings Chemical,” March 16, 2009.

### European Workers Facing Health Risks from Hazardous Substances

Contact with a wide range of chemicals and other hazardous substances at work endangers the health of workers across Europe, and nanotechnology is one of the risks causing most concern to experts from 21 European countries.

A European Agency for Safety and Health at Work (EU-OSHA) report, “Expert Forecast on Emerging Chemical Risks,” identifies the main groups of substances that could pose new and increasing risks to workers and may contribute to diseases such as allergies, asthma, infertility and cancer. Dangerous substances are not only found in the chemical industry, but also in occupations such as farming, nursing, construction and in many small- and medium-sized enterprises (SMEs) outside the chemical industry.

About 15% of European workers report handling chemical products for a quarter of the time they spend at work, while 10% report inhaling vapors and 19% report breathing in dust, fumes and smoke in their workplaces.

The report, established by 49 experts across Europe, puts nanoparticles at the top of the list of substances from which workers need protection. For example, nanotechnology is used in cosmetics and information technology products and is expected to grow rapidly into a global, multibillion European market. While more research into the degree of damage from nanoparticles on human health is needed, sufficient information to develop interim working practices to reduce workplace exposure is available.

In many professions, workers' skin is exposed to chemicals, leading to an increase in the numbers affected by allergic diseases. It is estimated that chemicals are responsible for 80-90% of skin diseases, which rank second (13.6%) on the scale of occupational diseases, following musculoskeletal disorders. Even so, no agreed scientific methods exist for assessing the effect of these substances on the skin or for setting safe dermal exposure levels.

The forecast also highlights substances likely to cause cancers. With respect to reprotoxicants or substances that can damage reproductive health, the level of awareness is still low and is stigmatized as a women's health issue. They are rarely considered in workplace risk assessments and in prevention.

Occupations of emerging concern where workers face high risk of coming into contact with hazardous substances include waste management, construction and service activities, such as cleaning or home nursing.

Growing concern about multiple chemical exposures is also shown in EU-OSHA's forecasts on biological, physical and psychosocial emerging risks. A larger-scale foresight study will focus on workplace risks posed by new technologies over the next ten years.

—Adapted from EU-OSHA news release, “European Workers Face New and Increasing Health Risks from Hazardous Substances,” March 18, 2009.

### **CSHM Credential Receives Accreditation**

The new Certified Safety and Health Manager (CSHM) credential has received accreditation by the Council of Engineering and Scientific Specialty Boards (CESB). The CSHM credential recognizes safety and health professionals who demonstrate a high level of knowledge of health and

safety management and who display the ability to apply effective skills and techniques through examination and experience.

The CSHM certification program promotes the application of safety management principles throughout all levels and activities of an organization. In addition to technical knowledge of occupational safety and health, a successful safety and health manager must possess working knowledge of a broad range of business and financial principles and an understanding of related issues, such as hazard analysis and mitigation, incident/accident investigation, practice of safety audits/surveys, administration of workers' compensation, product safety, environmental laws, quality and labor relations. The CSHM program is designed to provide recognition of those who can apply such a broad range of health and safety management tools.

The **Institute for Safety and Health Management (ISHM)** is the credentialing organization that administers the CSHM to recognize safety and risk management professionals who, through demonstrated professional experience and the passing of a comprehensive exam, have met ISHM's requirements for mastering the safety management body of knowledge.

—Adapted from ISHM news release, “Safety and Health Manager Certification Now Accredited,” February 14, 2009.

### **Revised ISEA Standard Receives ANSI Approval**

The **International Safety Equipment Association (ISEA)** has received ANSI approval for *American National Standard—Minimum Requirements for Workplace First-Aid Kits and Supplies* (ANSI/ISEA Z308.1).

This standard, a revision to the 2003 edition, was prepared by members of ISEA's First-Aid Group, in conjunction with industry stakeholders and was reviewed by a consensus panel of users, health and safety professionals and government agencies. Significant updates incorporated into this version include the designation of new kit types, expansion of the required supply list to include a first-aid guide and a redesign of the product label.

Kits in compliance with this standard will provide a basic range of products to address most types of injuries encountered in the workplace. The kit label has been redesigned to draw specific attention to the fact that each workplace is unique, and as such, may necessitate the availability of additional first-aid supplies.

—Adapted from ISEA news release, “ISEA Announces Approval of Updated Standard for Workplace First-Aid Kits and Supplies,” May 12, 2009.

## ISO Publishes New Technical Report for Safer Manufacturing & Handling of Nanomaterials

The **International Organization for Standardization’s (ISO)** new technical report, *ISO/TR 12885:2008, Health and safety practices in occupational settings relevant to nanotechnologies*, focuses on the manufacture and use of engineered nanomaterials. The report is based on current information about nanotechnologies, including characterization, health effects, exposure assessments and control practices.

The report applies across a range of nanomaterials and applications, and it gives advice for companies, researchers, workers and others to prevent adverse health and safety consequences during the production, handling, use and disposal of manufactured nanomaterials.

The report will be revised and updated, and new safety standards will be developed as knowledge increases and experience is gained in the course of technological advance.

*ISO/TR 12885:2008, Health and safety practices in occupational settings relevant to nanotechnologies* was developed by ISO/TC 229, Nanotechnologies.

—Adapted from ISO news release, “New ISO Technical Report for Safer Manufacturing and Handling of Nanomaterials,” January 5, 2009.

## ISO Releases New Crane Safety Standards

ISO’s standards on crane inspections aim to reduce risks to those involved in or in the vicinity of lifting operations.

*ISO 23814:2009, Cranes—Competency requirements for crane inspectors* specifies the competency required of persons who carry out periodic, exceptional, alteration and thorough inspections of cranes. It excludes daily inspections and checks performed by crane operators and maintenance personnel. The standard addresses:

- Independence, impartiality and integrity
- Technical knowledge and experience
- Crane inspection techniques
- Crane inspector training

The objective of this standard is to achieve a uniformly high competency of crane inspectors worldwide. In some

countries, additional regulatory requirements may also need to be taken into account.

*ISO 9927-1:2009, Cranes—Inspections—Part 1: General* specifies the inspections to be conducted on cranes, excluding inspections conducted prior to first use. It covers:

- Inspection
- Methods of inspection
- Inspection personnel
- Inspection precautions
- Inspection results

*ISO 9927-3:2005, Cranes—Inspections—Part 3: Tower cranes* specifies regular inspections to be conducted on tower cranes, including daily, frequent, periodic and thorough inspections.

ISO 9927-1:2009, ISO 9927-3:2005 and ISO 23814:2009 were developed by ISO technical committee ISO/TC 96, Cranes, subcommittee SC 5, Use, operation and maintenance.

—Adapted from ISO news release, “New ISO Standards Lift the Safety Level of Cranes Worldwide,” April 15, 2009.

## Mine Deaths Fell to All-Time Low in 2008

The **U.S. Mine Safety and Health Administration (MSHA)** has released preliminary data indicating that in 2008, mine fatalities fell to an all-time low, recording a 31% drop from 2007. Metal/nonmetal mines recorded the lowest level of fatalities in that sector of mining since statistics were first recorded in 1910, and the fatality level in coal mines was the lowest recorded number since 2005.

The agency reached several milestones in 2008, including the first-ever completion of all mandated safety and health inspections, the first-ever issuance of a pattern of violation notice, the implementation of eight final rules and the collection of delinquent penalties from several scofflaw mine operators.

Of the 51 fatalities reported, 28 of the victims were at surface operations, while 23 miners died in underground mining accidents. Fifteen workers died in accidents involving powered haulage, ten in coal mines and five in metal/nonmetal mines, which was the leading cause of fatal mining accidents in the U.S. during 2008.

In 2008, MSHA assessed 198,700 civil penalties for violations of mine safety and health legal requirements, compared with 130,100 in 2007. The dollar amount of

assessed penalties more than doubled in that timeframe, from \$74.5 million in 2007 to \$194 million in 2008. The number and dollar amounts of civil penalties in 2008 are the most ever assessed in a single year.

Seventy-four flagrant violations were assessed in 2008, compared with 15 in 2007. They were assessed at a total for each year of \$11,474,400 and \$2,588,200, respectively.

For more information, visit <http://www.msha.gov/stats/charts/chartshome.htm>.

—Adapted from MSHA news release, “Mine Deaths Fell to All-Time Low in 2008,” January 8, 2009.

## **NIOSH Issues Updated Edition of Approaches to Safe Nanotechnology**

**The National Institute for Occupational Safety and Health (NIOSH)** has issued an updated and expanded edition of its document, “Approaches to Safe Nanotechnology.” The updated document reiterates NIOSH’s standing interim recommendation that employers take prudent measures to control occupational exposures in the manufacture and industrial use of engineered nanomaterials, as research advances for determining if such materials pose work-related health and safety risks.

The new document, which is available at <http://www.cdc.gov/niosh/docs/2009-125/>, reflects new scientific findings from ongoing research that have been published in the peer-reviewed scientific literature since the last revised draft version of the document was issued in 2006. These include findings from NIOSH’s own strategic research program as well as research by scientific partners from the U.S. and abroad.

The revised document:

- Includes an expanded section on risk management, with a detailed discussion of factors that may affect occupational exposure to engineered nanomaterials and expanded interim recommendations for controlling work-related exposures.
- Expands the discussion of exposure assessment and characterization for engineered nanomaterials, including a new summary table of instruments and measurement methods used in the evaluation of nanomaterial exposures.
- Is issued as a NIOSH numbered document so that it can be cited more easily as a resource in peer-reviewed scientific publications. The original draft version in 2004

and the previous revised draft edition in 2006 were web-based electronic documents that did not have a formal NIOSH publication number.

For more information about NIOSH’s strategic research program on the occupational health and safety implications and applications of nanotechnology, visit <http://www.cdc.gov/niosh/topics/nanotech/>.

—Adapted from NIOSH news release, “NIOSH Issues Updated ‘Approaches to Safe Nanotechnology,’ Reiterating Interim Guidance on Controlling Workplace Exposures,” March 31, 2009.

## **NIOSH Offers New Technical Guidance to Help Protect Healthcare Workers from TB**

NIOSH offers new technical guidance for using ultraviolet germicidal irradiation (UVGI) systems to help protect healthcare workers who may have an occupational risk of tuberculosis (TB) infection.

The guidance for using UVGI systems to kill or inactivate airborne TB bacteria is provided in *Environmental Control for Tuberculosis: Basic Upper-Room Ultraviolet Germicidal Irradiation Guidelines for Healthcare Settings*, which is available at <http://www.cdc.gov/niosh/docs/2009-105/>.

TB typically spreads from person to person as a direct result of breathing air contaminated with TB bacteria exhaled by an infectious person, often through coughing. Once airborne in a room, TB bacteria may remain airborne and infectious for hours. The HIV epidemic of the 1980s and 1990s was paralleled by a resurgence of TB and outbreaks in occupational settings, such as healthcare facilities and correctional institutions. Although TB cases have declined in the U.S. in recent years, the disease still endangers personnel in settings at high risk for exposure to persons with unsuspected or undiagnosed infectious TB. Disease transmission can occur in many types of healthcare facilities, including hospitals, nursing homes and outpatient clinics. It can also occur in other high-risk settings, such as correctional institutions.

The new guidance is consistent with and expands upon current guidelines by the Centers for Disease Control and Prevention (CDC) for reducing TB transmission in healthcare facilities. CDC recommends using administrative and environmental controls and personal respiratory protection, including ventilation as a primary environmental control. Use of UVGI systems may help employers provide effective TB infection control in some facilities, such as homeless centers

and older hospitals, which may not have mechanical ventilation systems. UVGI systems may also aid employers and workers where ventilation systems are not designed to meet the recommended criteria, and retrofitting these systems may be difficult and expensive.

The system described in the guidance uses UVGI lamps in fixtures on or near the ceiling. NIOSH-funded research by the University of Colorado helped develop the guidelines. The guidelines discuss factors influencing the effectiveness of UVGI, such as UVGI irradiance and dose, mechanical ventilation, air mixing, humidity and temperature. The guidelines recommend consulting with a professional knowledgeable in upper-room UVGI systems and their installation before instituting the controls. The guidelines explain:

- How to select UV lamps
- How to install the system
- How to maintain the system

While enough information is available to guide the installation and maintenance of UVGI systems, the document notes that additional research is needed to enhance the guidelines. This includes research on variables, such as air mixing and measurement of UV irradiance levels in the upper room. For more information, visit <http://www.cdc.gov/niosh/topics/tb/>.

—Adapted from NIOSH news release, “NIOSH Offers New Technical Guidance for Using UV Systems to Help Protect Healthcare Workers from TB Infection Risk,” March 31, 2009.

## OSHA Revises VPPs

The U.S. Occupational Safety and Health Administration (OSHA) has made final changes to its Voluntary Protection Programs (VPP) that, among other enhancements, allow participation by companies with mobile workforces.

VPP, the agency’s recognition initiative for workplace safety and health excellence, will provide new options for construction contractors and other employers who may have employees at various locations. Other VPP changes for eligible organizations include a streamlined application process, outreach and mentoring and onsite workplace evaluations.

VPP was established in 1982 to recognize employers and employees who focus on the prevention of injuries, illnesses and fatalities through the implementation of effective safety

and health management systems. Currently, there are 2,161 federal and state plan VPP participants.

Changes to the VPP took effect on May 9, 2009. For more information, visit <http://edocket.access.gpo.gov/2009/E9-165.htm>.

—Adapted from DOL news release, “U.S. Department of Labor’s OSHA Revises its Voluntary Protection Programs,” January 9, 2009.

## New OSM Rule Tightens Restrictions on Excess Spoil, Coal Mine Waste & Mining Activities

The U.S. Office of Surface Mining Reclamation and Enforcement (OSM) has issued a federal rule that places new restrictions on how coal mine operators can dispose of coal mine waste and the excess spoil created by mining operations. The rule also requires that mine operators avoid disturbing perennial and intermittent streams to the extent possible and clarifies when mine operators must maintain an undisturbed buffer between mines and adjacent streams.

The rule represents the culmination of a five-year process. OSM issued its first version of the proposed rule in January 2004 and a revised proposal in August 2007. While developing the rule, OSM solicited public input throughout the process. The agency received approximately 43,000 comments on the proposed rule during its comment period and held four public hearings attended by approximately 700 people. The rule took effect on January 12, 2009.

OSM prepared a detailed environmental impact statement (EIS) that was made available earlier this year. Of the alternatives considered in the EIS, OSM selected the most environmentally protective alternative. The EIS concludes that the preferred alternative’s net effect is positive because it requires coal mining operations to minimize certain impacts. During surface mining, operators remove rock that overlies the coal deposits. The process of removing this rock, commonly referred to as overburden, fractures the rock, which causes it to increase in volume. In areas with steep slopes, some of the overburden cannot be returned to the mined-out area. The remaining overburden, known as excess spoil, typically is placed in the upper reaches of adjacent valleys.

To minimize the size of the excess spoil fills constructed in stream valleys, the new rule provides that mining operations must return as much of the overburden as possible to the excavation created by the mine. The new rule also provides that the operator must avoid constructing fills in streams to the extent possible. When avoidance is not possible, the

operator must identify a range of reasonable alternatives for disposing of the remaining overburden and must select the alternative with the least overall adverse environmental impact.

—Adapted from OSM news release, “Office of Surface Mining Issues New Rule Tightening Restrictions on Excess Spoil, Coal Mine Waste and Mining Activities in or Near Streams,” December 12, 2008. ■

The new rule requires that the operator avoid disturbing land within 100 ft of a perennial or intermittent stream unless s/he can demonstrate that it is not reasonably possible to avoid disturbance or that avoidance is not necessary to meet environmental requirements. The new rule also reiterates that the operator must comply with all requirements of the Clean Water Act before conducting any activities that require authorization under that law.

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## Links:

### **Kidde Fire Extinguishers Recalled**

<http://www.cpsc.gov/CPSCPUB/PREREL/prhtml09/09151.html>

### **U.S. Secretary of Labor Takes Action to Prevent Workers' Exposure to Diacetyl**

<http://www.dol.gov/opa/media/press/osha/osha20090227.htm>

### **European Workers Facing Health Risks from Hazardous Substances**

[http://osha.europa.eu/en/press/press-releases/european\\_workers\\_face\\_new\\_increasing\\_health\\_risks\\_hazardous\\_substances\\_01.11032009](http://osha.europa.eu/en/press/press-releases/european_workers_face_new_increasing_health_risks_hazardous_substances_01.11032009)

### **CSHM Credential Receives Accreditation**

<http://www.ishm.org/pages/accreditation.html>

### **ISO Publishes New Technical Report for Safer Manufacturing & Handling of Nanomaterials**

<http://www.iso.org/iso/pressrelease.htm?refid=Ref1191>

### **ISO Releases New Crane Safety Standards**

<http://www.iso.org/iso/pressrelease.htm?refid=Ref1218>

### **Mine Deaths Fell to All-Time Low in 2008**

<http://www.msha.gov/stats/charts/chartshome.htm>

### **NIOSH Issues Updated Edition of Approaches to Safe Nanotechnology**

<http://www.cdc.gov/niosh/updates/upd-03-31-09.html>

### **NIOSH Offers New Technical Guidance to Help Protect Healthcare Workers from TB**

<http://www.cdc.gov/niosh/updates/upd-04-06-09.html>

### **OSHA Revises VPPs**

<http://www.dol.gov/opa/media/press/osha/archive/osha20090006.htm>

### **New OSM Rule Tightens Restrictions on Excess Spoil, Coal Mine Waste & Mining Activities**

<http://www.osmre.gov/resources/newsroom/News/Archive/2008/121208.pdf>

# Standards Update

## A10 ASC Concludes Public Review of A10.11, A10.16 & A10.37 Standards

The A10 Accredited Standards Committee (ASC) for Construction and Demolition Operations has concluded its public review of the following proposed/revised draft standards:

- Safety Requirements for Personnel and Debris Nets (ANSI/ASSE A10.11-200x)
- Safety Requirements for Tunnels, Shafts and Caissons (ANSI/ASSE A10.16-200x)
- Debris Net Systems Used During Construction and Demolition Operations (ANSI/ASSE A10.37-200x)

The committee is currently reviewing all comments received.

## New A10 Standards in Development

ASSE's A10 ASC for Construction and Demolition Operations is developing the new standard, "Safe Construction and Demolition of Wind Generation/Turbine Facilities" (BSR/ASSE A10.21-200x). This standard establishes the minimum requirements for protecting the safety and health of employees involved in the construction and demolition of wind generation/turbine facilities.

A10 ASC is also developing the new standard, "Safety Requirements for Railroad Construction, Maintenance, Analysis and Demolition Equipment" (BSR/ASSE A10.36-200x). This standard provides minimum guidelines for safe work practices in those operations involving railroad construction and maintenance of facilities, track and supporting equipment.

## ASSE Standards Awaiting ANSI Approval

The following ASSE standards are awaiting ANSI approval:

- **Sanitation for Construction and Demolition Operations (ANSI/ASSE A10.25-200x)** applies to all construction jobsites where more than four individuals are employed for more than one week. The standard covers potable water, toilet and hand-washing facilities located on a jobsite.
- **Safety Design Requirements and Specifications for Personal Fall Arrest Systems (PFAS) (ANSI/ASSE Z359.6-200x)** specifies requirements for the design and performance of complete active fall protection systems, including travel restraint and vertical and horizontal fall

arrest systems. It is intended for engineers with expertise in designing fall protection systems.

- **Safety Requirements for Lanyards and Energy Absorbers for Personal Fall Arrest Systems (PFAS) (ANSI/ASSE Z359.13-200x)** establishes requirements for the performance, design, marking, qualification, instructions, inspection, maintenance and removal from service of energy-absorbing lanyards and users of personal energy absorbers within the range of 130 to 310 lbs (59-140 kg).

## A10 Standards Under Revision

The following A10 standards are currently under revision:

- **Scaffolding Safety Requirements (ANSI/ASSE A10.8-200x)**  
This standard establishes safety requirements for the construction, operation, maintenance and use of scaffolds used in the construction, alteration, demolition and maintenance of buildings and structures. The standard does not cover permanently installed suspended scaffold systems or aerial platforms.
  - **Concrete and Masonry Work Safety Requirements (ANSI/ASSE A10.9-200x)**  
This standard establishes safety requirements pertaining to concrete construction and masonry work in construction.
  - **Safety and Health Program Requirements for Multi-Employer Projects (ANSI/ASSE A10.33-200x)**  
This standard sets forth the minimum elements and activities of a program that defines the duties and responsibilities of a construction project where a single project constructor supervises and controls the project.
  - **Rigging Qualifications and Responsibilities in the Construction Industry (ANSI/ASSE A10.42-200x)**  
This standard establishes minimum criteria of knowledge and performance requirements for a qualified rigger in the construction industry. This standard is designed to assist in achieving reasonable safety of all persons and materials during the process of or as the result of rigging, lifting or movement of loads.
- ## A10.47 Standard Out for Recirculation
- Public review of the draft standard, "Highway Construction Safety Practices" (ANSI/ASSE A10.47-200x), has concluded, and the standard has been recirculated to the A10 ASC for

Construction and Demolition Operations. This standard establishes the minimum requirements for the construction and maintenance of public and private highways and roads to:

1. Prevent worker injuries and illnesses resulting from working in work zones.
2. Establish safe work practices in highway work zones.
3. Prevent vehicular crashes in highway work zones.

### Reaffirmed Z244.1 Standard Now Available

The reaffirmed standard, “Control of Hazardous Energy—Lockout/Tagout and Alternative Methods” (ANSI/ASSE Z244.1-2003 R2008) is available for purchase on ASSE’s website. This standard establishes requirements for the control of hazardous energy associated with machines, equipment or processes that could cause injury to personnel.

For more information, visit <https://www.asse.org/cartpage.php?link=Z244-1-R2008>.

### ANSI Approves Revised Z490.1 Standard

On April 21, 2009, ANSI approved the revised standard, “Criteria for Accepted Practices in Safety, Health and Environmental Training” (ANSI/ASSE Z490.1-2009). This standard establishes criteria for SH&E training programs, including development, delivery, evaluation and program management.

ASSE will now publish the standard and will notify members once it is available for purchase.

*For more information on any of the abovementioned standards, please contact Tim Fisher at [tfisher@asse.org](mailto:tfisher@asse.org).*

### A10 ASC to Meet in July 2009

ASSE’s A10 ASC for Construction and Demolition Operations will meet on July 14, 2009 in Washington, DC at the International Brotherhood of Electrical Workers (IBEW).

A10 subcommittee meetings will be held on July 13, 2009. The subgroup meeting schedule will be provided upon request.

For more information, contact Tim Fisher at [tfisher@asse.org](mailto:tfisher@asse.org).

### Z359 ASC to Meet in November 2009

The Z359 Accredited Standards Committee (ASC) for Fall Arrest/Protection and its affiliated U.S. Technical Advisory Group (TC94/SC4) will meet at ASSE headquarters in Des Plaines, IL from November 10-12, 2009.

Subgroup meetings will be held from November 10-11 from 8:00 a.m.-4:00 p.m. The full committee will meet on November 12 from 7:30 a.m.-2:30 p.m. (tentative).

The subgroup meetings will likely be held at ASSE headquarters with the main meeting held at a hotel in the nearby Rosemont area.

If you would like to attend these meetings or to join the Z359 ASC, please contact Tim Fisher at [tfisher@asse.org](mailto:tfisher@asse.org).

### High Attendance at Z359 ASC Meeting

More than 60 people attended the Z359 ASC for Fall Arrest/Protection meeting at ASSE headquarters from April 14-16, 2009. Forty-six organizations are now represented on the committee. ■

## Have You Seen ASSE’s New Mini Tech-Briefs?

Our new mini tech-briefs cover the hot safety topics you’ve asked to learn more about:

- [Fall Protection](#)
- [Construction Safety & Health Management](#)
- [Lockout/Tagout & Alternative Methods](#)
- [Slips & Trips Prevention](#)

# Rules & Regulations

## Mine Safety & Health Administration (MSHA)

30 CFR Parts 6, 14, 18, 48 & 75  
RIN 1219-AB59

### MSHA Issues Final Rule for Flame-Resistant Conveyor Belts

MSHA has issued a final rule addressing the recommendations of the Technical Study Panel on the Utilization of Belt Air and the Composition and Fire-Retardant Properties of Belt Materials in Underground Coal Mining. The panel was established under Section 11 of the Mine Improvement and New Emergency Response (MINER) Act of 2006.

The final rule is consistent with the panel's recommendations and includes requirements for flame-resistant conveyor belts, training atmospheric monitoring system operators, levels of respirable dust in belt entries, airlocks along escapeways, minimum and maximum air velocities, approval for the use of air from the belt entry to ventilate working sections, monitoring point-feed regulators, smoke sensors, standardized tactile signals on lifelines, replacing point-type heat sensors with carbon monoxide sensors and belt conveyor and belt entry maintenance.

The rule took effect on December 31, 2008. Corrections to certain compliance dates given in the rule took effect on January 21, 2009.

30 CFR Parts 7 & 75  
RIN 1219-AB58

### MSHA Issues Final Rule for Refuge Alternatives for Underground Coal Mines

MSHA has issued a final rule that establishes the agency's requirements for refuge alternatives in underground coal mines and the training of miners in their use. It includes testing and approval requirements. The final rule implements Section 13 of the MINER Act of 2006. Consistent with the MINER Act, it includes MSHA's response to the National Institute for Occupational Safety and Health (NIOSH) Report on Refuge Alternatives.

30 CFR Part 74  
RIN 1219-AB61

### MSHA Proposes Rule on Coal Mine Dust Personal Monitors

MSHA has proposed a rule to revise requirements that MSHA and the National Institute for Occupational Safety and Health apply to approve sampling devices that monitor miner exposure to respirable coal mine dust. The proposal would establish criteria for approval of a new type of technology, the "continuous personal dust monitor," which would be worn by the miner and would report exposure to dust levels continuously during the shift. In addition, the proposal would update application requirements for the existing "coal mine dust personal sampler unit" to reflect improvements in this sampler over the past 15 years.

This rulemaking is limited to approval requirements and does not address requirements concerning how sampling devices must be used to determine compliance, e.g., who and when to sample. Those requirements are addressed in existing 30 CFR parts 70, 71 and 90.

## Occupational Safety & Health Administration (OSHA)

29 CFR Part 1910  
[Docket No. OSHA 2007-0007]  
RIN 1218-AC39

### OSHA Proposes to Add 2 Protocols to Respiratory Protection Standard

OSHA has proposed to add two PortaCount quantitative fit-testing protocols to its Respiratory Protection Standard (29 CFR 1910.134). The proposed protocols would apply to employers in general industry, shipyard employment and the construction industry.

The first of the two proposed protocols consists of the eight fit-testing exercises described in Part I.A.14 of Appendix A of the Respiratory Protection Standard, except each exercise would last 30 seconds instead of the currently required 60 seconds.

The second proposed protocol would eliminate two of the eight fit-testing exercises, and each of the remaining six exercises would last 40 seconds. In addition, this proposed protocol would increase the current minimum pass-fail fit-testing criterion from a fit factor of 100 to 200 for half masks and from 500 to 1,000 for full facepieces.

29 CFR Parts 1910, 1915, 1917, 1918 & 1926  
[Docket ID-OSHA-2008-0031]  
RIN 1218-AC42

### **OSHA Issues Clarification of Employer Duty to Provide PPE**

OSHA has amended its standards to add language clarifying that personal protective equipment (PPE) and training requirements impose a compliance duty to each and every employee covered by the standards and that noncompliance may expose the employer to liability on a per-employee basis. The amendments consist of new paragraphs added to the introductory sections of the listed parts and changes to the language of some existing respirator and training requirements.

This action is in response to recent decisions of the Occupational Safety and Health Review Commission indicating that differences in wording among the various PPE and training provisions in OSHA safety and health standards affect the agency's ability to treat an employer's failure to provide PPE or training to each covered employee as a separate violation. The amendments add no new compliance obligations. Employers are not required to provide any new type of PPE or training, to provide PPE or training to any employee not already covered by the existing requirements or to provide PPE or training in a different manner than that already required. The amendments clarify that the standards apply to each employee.

This final rule took effect on January 12, 2009.

29 CFR Parts 1917 & 1918  
[Docket No. S-025A]  
RIN 1218-AA56

### **OSHA Revises Longshoring & Marine Terminal Standards**

OSHA has revised the Marine Terminals Standard and related sections of the Longshoring Standard to adopt new requirements related to the practice of lifting two intermodal containers together, one on top of the other, connected by semiautomatic twistlocks. This practice is known as a vertical tandem lift (VTL). The final standard adopted permits VTLs of no more than two empty containers provided that certain safeguards are followed.

The final rule took effect on April 9, 2009.

## **Pipeline & Hazardous Materials Safety Administration (PHMSA)**

49 CFR Parts 171, 172, 173, 174 & 179  
[Docket No. FRA-2006-25169]  
RIN 2130-AB69

### **PHMSA Amends Hazardous Materials Regulations**

PHMSA, in coordination with the Federal Railroad Administration (FRA), has amended the Hazardous Materials Regulations to prescribe enhanced safety measures for rail transportation of poison inhalation hazard (PIH) materials, including interim design standards for railroad tank cars. Pending validation and implementation of the crashworthiness performance standard proposed in the Notice of Proposed Rulemaking issued under this docket on April 1, 2008, the rule mandates commodity-specific improvements in safety features and design standards for newly manufactured U.S. Department of Transportation specification tank cars. The rule also adopts a 50-mph speed restriction for loaded rail tank cars transporting PIH materials, an improved top fittings performance standard, an allowance to increase the gross weight of tank cars that meet the enhanced standards and adoption of the industry standard for normalized steel in certain tank cars.

The interim standards established in this rule will enhance the accident survivability of PIH tank cars when compared to existing regulations while providing tank car owners continued flexibility in car selection. Adoption of this interim standard will ensure the ongoing availability of tank cars while PHMSA and FRA complete research and testing on advanced tank car design to validate and implement a more stringent performance standard.

This rule took effect on March 16, 2009.

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## **ANSI/ASSE Z359 Fall Protection Code**



Call ASSE at (847) 699-2929 or visit

[https://www.asse.org/  
cartpage.php?link=Z359-PKG](https://www.asse.org/cartpage.php?link=Z359-PKG)

for more information.

## Links:

### **MSHA Issues Final Rule for Flame-Resistant Conveyor Belts**

<http://edocket.access.gpo.gov/2008/E8-30639.htm>

<http://edocket.access.gpo.gov/2009/E9-1087.htm>

### **MSHA Issues Final Rule for Refuge Alternatives for Underground Coal Mines**

<http://edocket.access.gpo.gov/2008/E8-30669.htm>

### **MSHA Proposes Rule on Coal Mine Dust Personal Monitors**

<http://edocket.access.gpo.gov/2009/E9-534.htm>

### **OSHA Proposes to Add 2 Protocols to Respiratory Protection Standard**

<http://edocket.access.gpo.gov/2009/E9-922.htm>

### **OSHA Issues Clarification of Employer Duty to Provide PPE**

<http://edocket.access.gpo.gov/2008/E8-29122.htm>

### **OSHA Revises Longshoring & Marine Terminal Standards**

<http://edocket.access.gpo.gov/2008/E8-28644.htm>

### **PHMSA Amends Hazardous Materials Regulations**

<http://edocket.access.gpo.gov/2009/E8-31056.htm>

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