

Protection 10TH ANNIVERSARY UPDATE

NEWS FROM THE INTERNATIONAL SAFETY EQUIPMENT ASSOCIATION **OCTOBER 2011**

Layer Up for Cold Weather

Wind- and fire-resistant fleece from True North doubles as a middle and outer layer for this oil refinery worker.

PHOTO COURTESY OF TRUE NORTH.

By **Steve Misiano**
True North

Weather conditions and workloads can change significantly during the work day. It's not uncommon to have a cold, blustery morning turn into a warm, dry afternoon. A cornerstone of maintaining worker comfort and protection in a changing environment is to ensure that your employees are provided with the right combination of work-wear layers for every situation.

One of the most effective means of providing this adaptability is through the technique of layering. The significant advantage of layering clothing is that it allows for quick adjustments based on activity level and changes in the weather. Typically there are 3 layers in a layering system and each layer has a distinct function:

- The Base Layer (next to your skin) manages moisture;
- The Middle Layer is the insulating layer and protects you from the cold, and
- The Outer Layer shields you from wind and rain.

You simply add or subtract layers as needed when the weather or workload changes.

The Base Layer – Next to Skin

More than any other layer, the base layer helps regulate body temperature by moving perspiration away from the skin. Trapped inside your clothing, perspiration can leave you cold or damp, no matter how well your outer layer fends off rain and snow. Keeping dry is not only a matter of comfort, but important for avoiding hypothermia in cold weather.

If you've ever worn a cotton T-shirt under your raincoat while working up a sweat, you probably remember feeling wet and clammy, even though you weren't getting wet from the rain itself. Cotton is an example of a slow drying fabric that retains perspiration, which can leave workers vulnerable to unwanted chills.

Keeping your skin dry is the cornerstone of comfort and safety. Moisture management is a multi-step process. It involves pulling moisture (wicking) off the skin, and then moving the moisture to the outer surface of the garment, where it then can evaporate or move into the next layer of clothing.

Unique blends of hydrophobic (water-hating) and hydrophilic (water-loving) fibers and bi-component fabric constructions can help make the magic happen. By combining water-loving fibers (that pull moisture away from the skin) with water-hating fibers (that push the moisture to the outside of the garment), the worker and the garment dry more quickly. Chemical finishes on fabrics such as cotton can mimic this process, but don't work as well and tend to lose functionality over time and with multiple washings.

Examples of comfortable base-layer fabrics include polyester/polyester blends, wool or silk. There are also some excellent fire-resistant (FR) fabrics for moisture transport, which include various FR modacrylic blends and bi-component knits.

Moisture management should be a key testing metric when comparing base layer fabrics for your employees. The test is best measured in accordance to standardized test AATCC 195.

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COLD WEATHER

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The Insulating Middle Layer – Helps Retain Heat by Trapping Air Close to the Worker’s Body

In the past, natural fibers such as wool and goose down were the most common insulators. Wool sweaters and shirts offered soft, reliable warmth that retained their insulating ability even when wet. For very cold and dry conditions, goose down was an excellent choice; it offered an unbeatable warmth-to-weight ratio and is highly compressible.

Down and wool largely have been replaced by synthetics such as polyester, which is used as insulating filler, or made into fleece for vests and jackets. This type of insulation was pioneered in the recreational market for activities like hiking and hunting, and been adopted for work wear because of its combination of low cost and high performance.

Synthetics are popular insulators because they are lightweight, breathable and insulate even when wet. They also dry faster and have very high warmth-to-weight ratios. Though polyester fleece and other synthetic insulations provide warmth for a variety of conditions, they are highly flammable. Consequently, their suitability should be carefully evaluated based on the work environment in which they are to be used.

Examples of middle-layer fabrics with excellent breathability, warmth-to-weight ratios, and quick-drying characteristics include fleece made with polyester and polyester-blends, and even some made with merino wool. There are also a few fire-resistant fleece fabrics that offer similar performance characteristics to polyester with the added benefit of protection from accidental flame contact. These fabrics include Nomex®, Lenzing FR®, and FR Modacrylic blends.

The garment’s breathability, warmth-to-weight ratio, and ability to move moisture and dry quickly should be evaluated when comparing middle-layer apparel for your employees.

The Outer Layer – Protects from Wind, Rain or Snow

Outer layers range from pricey technical rain gear to simple windproof jackets. The best outer layers are designed to block precipitation and hold in body heat, while allowing water vapor to escape. An outer

shell is an important piece in bad weather, because if wind and water are allowed to penetrate to the inner layers, workers will get cold and risk becoming hypothermic. Just as important as preventing water from getting in from the outside is preventing sweat from getting workers wet from the inside. Without proper ventilation, perspiration will be trapped next to the body and will not evaporate. Without a means of escape, the sweat condenses on the inside of the jacket, making workers uncomfortable and more vulnerable to the cold.

Outer Layers can be lumped into the following categories:

- **Water-resistant and Breathable:** These are usually the most functional and most expensive garments. Waterproof/breathable fabrics are ideal for conditions where there is strong rain and heavy work activity. Though these garments are the best available combination of keeping rain off and letting perspiration escape, they are not perfect and workers who perspire heavily will still feel damp because most waterproof/breathable membranes have a limited rate at which moisture passes through. There have also been reports of membranes that do not hold up to contamination by oil and dirt, and begin to leak as a result. Examples of outer-layer garments that provide waterproof and breathable protection include laminate fabrics that feature a nylon or polyester on the inner and outer layers, with a waterproof breathable membrane in the center.

- **Water Resistant and Breathable Shells:** These are best for mild weather, light precipitation and high activity levels. Less expensive than waterproof/breathable shells, they’re usually made of tightly woven fabrics that block wind and light rain.

Instead of a waterproof barrier in the garment’s construction, the exterior of the fabric is treated with a DWR (Durable Water Repellent) coating such as Teflon®, which causes the water to bead-up and run off. Over time and repeated washings these coating tend to lose their effectiveness.

- **Waterproof and Non-Breathable:** These more economical shells are ideal for rainy days with light duty work. These garments are usually made with a PVC or other coated fabric, which is inexpensive but has little resistance to tearing and due to the

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Protection Update

is intended for anyone who specifies, purchases or uses personal protective equipment, and those who regulate it.

Protection Update is available via ISEA’s website, www.safetysitequipment.org.

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lack of breathability can leave workers feeling clammy and uncomfortable. However, this can be an excellent choice for situations such as being worn for limited periods of time; the need to be disposed of due to contamination; or light workloads (such as flaggers on road crews).

- **Soft Shells:** These offer good wind and rain resistance and excel at breathability. Soft shells usually offer protection from the weather and insulating properties, so effectively they combine two layers into one. Most feature stretch fabric or stretch panels for added comfort during heavy work activities. They are ideal for light precipitation and the heaviest workloads. These have grown in popularity for uniforms and are now available with inherently fire-resistant fabrics as well. Soft shell jackets come in several styles, either a single layer or a composite construction with multiple layers. The single-layer soft shells are good for moderate cold, light wind and typically have a durable, water-repellant (DWR) coating suited to light rain conditions. The composite/multi-layer soft-shell jackets have a waterproof/breathable membrane that provides up to 98% protection against wind and rain, as well as a DWR coating that prevents the outer fabric from getting wet and heavy.

- **Insulated:** Some outer layer jackets have a

layer of insulation built in, making them convenient for cold, wet conditions, but reducing their versatility in environments where temperatures and precipitation can fluctuate.

For work environments where accidental flame contact is an issue, outer layers are available that provide similar protection from the elements, but are made with FR materials. These FR work wear include the full range of waterproof/breathable, non-breathable and soft shells. The construction may feature a Nomex® knit inner, a PTFE membrane, Nomex®, FR polyester, FR modacrylic or Lenzing FR®.

Summary

A cornerstone of maintaining worker comfort and protection in a changing environment is to ensure that employees are provided with the right combination of work-wear layers for every situation.

International Safety Equipment Association (ISEA) companies that make protective apparel realize that with all the choices of cold-weather protective clothing on the market it can be difficult to compare their insulating qualities. For that reason, they are working together on an American National Standards Association (ANSI)/ISEA standard, which will make it easier for workers to compare insulating apparel used in cold work environments. ●

Look for Protective Apparel from ISEA Members

Protection Update readers are encouraged to specify protective apparel from ISEA members, as follows:

- 3M Company (www.mmm.com/occsafety)
- Ansell Protective Products (www.ansell.com)
- DuPont Personal Protection (www.dupont.com)
- Gentex Corporation (www.gentexcorp.com)
- International Enviroguard Systems, Inc. (www.int-enviroguard.com)
- Honeywell Safety Products (www.honeywellsafety.com)
- Kappler, Inc. (www.kappler.com)
- Kimberly-Clark Professional (www.kcprofessional.com)
- Lakeland Industries, Inc. (www.lakeland.com)
- NASCO Industries, Inc. (www.nascoinc.com)
- True North (www.truenorthgear.com)

Order Complete Set of ANSI/ISEA Standards at Deep Discount

ISEA is offering a complete set of its American National Standards at 30 percent off the price of purchasing the publications individually. For \$325 including shipping, safety officers can get all the following publications in a convenient three-ring binder:

- *American National Standard for Limited-Use and Disposable Coveralls - Size and Labeling Requirements*, ANSI/ISEA 101-1996 (R2008)
- *American National Standard for Classification and Performance Requirements for Chemical Protective Clothing*, ANSI/ISEA 103-2010
- *American National Standard for Gas Detector Tube Units - Short Term Type for Toxic Gases and Vapors in Working Environments*, ANSI/ISEA 102-1990 (R2009)
- *American National Standard for Air Sampling Devices - Diffusive Type for Gases and Vapors in Working Environments*, ANSI/ISEA 104-1998 (R2009)
- *American National Standard for Hand Protection Selection Criteria*, ANSI/ISEA 105-2011

- *American National Standard for High Visibility Safety Apparel and Headwear*, ANSI/ISEA 107-2010
- *American National Standard for Air-Purifying Respiratory Protective Smoke Escape Devices*, ANSI/ISEA 110-2009
- *American National Standard for Fixed and Portable Decontamination Shower Units*, ANSI/ISEA 113-2008
- *American National Standard for High Visibility Public Safety Vests*, ANSI/ISEA 207-2006
- *American National Standard for Occupational and Educational Personal Eye and Face Protection Devices*, ANSI/ISEA Z87.1-2010.
- *American National Standard for Industrial Head Protection*, ANSI/ISEA Z89.1-2009
- *American National Standard - Minimum Requirements for Workplace First Aid Kits and Supplies*, ANSI/ISEA Z308.1-2009
- *American National Standard for Emergency Eyewash and Shower Equipment*, ANSI/ISEA Z358.1-2009

Order directly online or download a faxable order form at www.safteyequipment.org.

SPOTLIGHT ON...



Miller's
state-of-
the-art
facility in
Franklin,
Pa.

Miller® Safety at Height — now a part of Honeywell

PHOTOS COURTESY MILLER SAFETY

Give us some background on Miller Safety at Height?

Miller is a brand of Honeywell Safety Products, and has been meeting the safety demands of those working at height for over 65 years. The company that Robert Miller founded in western Pennsylvania in 1945 continues to build strength with high-tech, state-of-the-art fall protection technology, world-class manufacturing, and training capabilities on all major continents throughout the world.

The company's manufacturing facility in Franklin, Pa., has been designated the fall protection Center of Operational Excellence in the Americas, complementing our global manufacturing network.

The Miller brand has long been considered the pioneer and innovator of quality personal fall-protection equipment, engineered fall-arrest solutions, professional fall prevention and protection training, and collective protection systems such as barriers and guard rails. With a line of more than 5,000 products, Miller equipment and services have protected individuals working at height in a wide range of industries, includ-

ing wind power, utilities, construction, petrochemical, general manufacturing and others.

How would you describe Miller's mission?

"In our business, due to the fact that working at height is a very high-risk environment, any mistake could be fatal or result in serious injuries due to incorrect product selection or improper training," said Doug Mercier, global product line leader for fall protection. "We have a tremendous focus on quality and seek to enhance worker safety, comfort, trust and increased productivity. While the global economic crisis continues to loom over every business, it is vitally important that we focus on educating markets on best practices and develop cost-effective products and services that enhance worker safety."

What is the key feature that differentiates Miller from others making and selling safety equipment?

A key facet that differentiates Miller from its competitors is the willingness to stay connected with its customer base. "We try to get very close to the end-user," Mercier says. "We work closely with safety directors and try to make sure we are accommodating their safety needs, including training. We are very innovative because we partner with our customers, seeking their feedback and using that information to develop innovative solutions engineered specifically to their needs. We're a multinational company, and our core values are spread throughout the world."

What are Miller's offerings that provide unique performance characteristics not found elsewhere?

The Miller brand is represented by several patents for innovative product design, such as the Miller DuraFlex® harness with stretch-



"Spotlight on..." highlights an ISEA member company that is working hard to ensure that workers are protected by world-class safety equipment. Answers to questions about Miller Safety at Height were provided by Ed Bickrest, global brand manager — Miller/Honeywell Safety Products, 401-757-2264 or ebickrest@sperian.com.

National Safety Council 2011 CONGRESS & EXPO

able webbing for greater comfort, increased worker productivity and improved safety; the Miller BackBiter® shock-absorbing tie-back lanyard, and Miller 5K® locking snap hook with 5,000-lb. gate capacity from any angle.

Other patent-pending products include the Miller Revolution™ harness, featuring the unique PivotLink™ rotary design for greater mobility and comfort, and the compact and lightweight Miller TurboLite™ personal fall limiter with an internal shock-absorbing braking system that arrests a fall to inches. The company's commitment to product quality, innovation and customer feedback separates it from the competition, Mercier says.

Where can prospects find out more about Miller products?

For more information on Miller Safety at Height equipment and other services, visit us online at www.millerfallprotection.com, call our experts at Miller Technical Service, toll free: 800.873.5242, or visit your nearest Miller distributor. ●



Worker wearing Miller fall protection scans the Pittsburgh skyline



ISEA Forum at NSC Expo Will Address PPE User Community's Needs

Don't miss "Solutions from ISEA Experts," the first-ever International Safety Equipment Association (ISEA) Forum for the personal protective equipment (PPE) user community, which will be held on Tuesday, Nov. 1, at 2 p.m. at the "Product Demo area" of the National Safety Council's 2011 Expo in Philadelphia.

Immediately following this year's presentation of OSHA's Top 10, a panel of experts from ISEA member companies will explain how organizations can avoid violations and what safety equipment manufacturers are doing to make workers safer and your job easier. Each ISEA representative will give a short presentation on PPE standards, application, design and performance, as well as what's on the horizon, and then will field your questions. They will be ready to address your toughest queries and your most difficult worker protection challenges.

Dr. Theresa Schulz, hearing conservation manager for Honeywell/Sperian, will cover hearing protection; Marty Lorkowski, global marketing manager, industrial, for Scott Safety, will address respiratory protection; Tom Wolner, vice president of engineering for Capital Safety, will handle fall protection, and Eric Beck, director of product planning and marketing for Mine Safety Appliances Co., will focus on current conformity assessment issues involving those product lines. ISEA President Dan Shipp will moderate.

Questions about the forum? Contact Joe Walker, ISEA marketing & communications advisor, jwalker@safetysystem.com or 703-491-3301. ●

Check Out the Latest Worker Protection Products from ISEA Members at NSC Expo

State-of-the-art safety equipment from International Safety Equipment (ISEA) member companies and their brands will be on display at the 2011 National Safety Council (NSC) Expo, October 31-November 2 in Philadelphia. Find an up-to-date list of exhibiting ISEA members, their key brands and booth numbers by visiting <http://safetysystem.com/c/expolist.cfm>.

CONSTRUCTION CORNER

ASSE Updates Two Standards for Construction Industry

The American Society of Safety Engineers (www.asse.org) has released two updated standards — one on steel erection and one on explosives handling — to help make construction workers safer.

The A10.13 American National Standards Institute (ANSI) standard, Safety Requirements for Steel Erection, has been updated from a version previously published in 2001, and a companion document is available for viewing changes.

“Erecting structural steel creates many safety issues,” said William H. Treham, A10.13 Subgroup chair and engineering director for Midwest Steel, Inc. “Fall protection is the biggest challenge, but there are many ways to get hurt.”

One of the most important revisions to

the standard for 2011 is the emphasis on preplanning or building safety into the construction of steel structures, with the end result being safer workers and safer job sites for all, according to Treham.

The updated A10.7 ANSI standard, Safety Requirements for Transportation, Storage, Handling and Use of Commercial Explosives and Blasting Agents, provides best practices to guide handling and use of explosives in a construction and/or demolition environment.

“Knowledge of the state-of-the-art best practices found in A10.7 is vital for any operator wanting to provide adequate explosives safety and security,” said Lon Santis, chair of the A10.7 subgroup.

For more information on both standards, visit www.asse.org/publications/standards. ●

OSHA Video Helps Prevent Falls in Residential Construction

The U.S. Occupational Safety and Health Administration (OSHA) has introduced an educational video on preventing fatal falls in residential construction. The narrated “Residential Fall Protection” presentation (<http://www.dol.gov/dol/media/webcast/20110812-osha/>) is the latest compliance assistance tool available to help the residential constructors comply with the requirements of the agency’s fall protection standard.

As of Sept. 13, 2011, a new OSHA regulation required employers to provide fall

protection to all employees working six or more feet above the ground in residential construction. The agency began enforcing Code 29 of Federal Regulation 1926.501(b)(13) on that date, at the end of a three-month phase-in period.

The new presentation describes safety methods for preventing injuries and deaths from falls, and explains techniques currently used by employers during various stages of construction. These techniques include the use of bracket scaffolds, anchors, safety net systems, safety harnesses and lines, and guardrails for activities such as installing roof trusses and sheathing, decking, re-roofing and installing walls. ●

NIOSH Publication Aims for Safer Trenches

The U.S. National Institute for Occupational Safety and Health (www.cdc.gov/niosh) has issued a new Workplace Solutions publication aimed at enhancing trench worker safety.

Workers who dig or excavate trenches are at risk of death if they enter an unprotected trench and the walls collapse, according to NIOSH. However, hazards associated with trench work and excavation are well defined and preventable. The OSHA standard for excavation and trenching – 29 CFR 1926 Subpart P – describes the precautions needed for safe excavation work.

The publication, “Preventing Worker Deaths from Trench Cave-ins,” recommends engineering controls, protective equipment and safe work practices to minimize hazards to workers. ●



MAKING WORKERS SAFER AROUND THE NATION

International Safety Equipment Association

(ISEA) member companies MCR Safety (www.mcrcsafety.com) of Memphis and Mine Safety Appliances Co. (www.msanet.com) of Pittsburgh have established a joint venture to create a new operating company dedicated to the do-it-yourself (DIY) and independent contractor markets for safety products.

● **The venture's new brand, "Safety Works[®]"** (www.safetyworks.com), combines MSA's leading line of respirators, hard hats and fall protection with MCR's premium brands that include Memphis Gloves, Crews Eyewear and River City Garments, the companies said. Retail versions of these products will be identified with the new Safety Works brand. MSA and MCR will jointly share ownership of Safety Works.

MSA also has announced the availability of eight updated worker-related product bulletins for the fire service, first responders and HazMat that contain new products and features, standards and approvals updates, and other technical information. Visit the MSA Asset Library at <http://assetlibrary.msanet.com>.

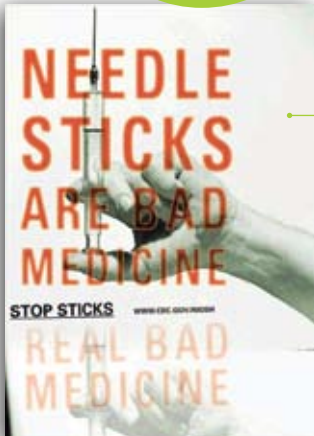
ISEA member Howard Leight by Honeywell has expanded its HearForever

(www.hearforever.org) social media initiative to include a dedicated YouTube channel, blog and Facebook page. The campaign builds awareness about the risks, dangers and consequences of noise-induced hearing loss by using social media outlets to provide educational, informative and motivational materials.

The U.S. Occupational Safety and Health Administration

(www.osha.gov) is conducting a National Emphasis Program with stepped up inspections to help protect workers from chemical and physical hazards in the primary metals industries. This industry became a concern during OSHA's review of data from the Bureau of Labor Statistics Census of Fatal Occupational Injuries. Previous OSHA inspections revealed that workers were exposed to substances including metal dusts and fumes, carbon monoxide, lead and silica. Inspections also showed that workers were exposed to noise and heat hazards.

Establishments in this industry are involved in extracting and refining metals from rocks containing iron, lead, nickel and tin, among



other elements. Such operations include those that manufacture nails, insulated wires and cables, steel piping, and copper and aluminum products.

Other new OSHA steps and products to enhance worker safety include:

● **Comprehensive Web page** on preventing work-related hearing loss, which has been listed as one of the most prevalent occupational health concerns in the United States for more than a quarter century. The new Web page provides information on the health effects of hazardous noise exposure and comprehensive information on controls to prevent hearing loss.

● **Hazard Alert** about the dangers to workers of engulfment and suffocation while working inside grain storage bins. Workers who enter bins can be engulfed and suffocated if they stand on moving or flowing grain, which can act like "quicksand" and pull a worker under; or if they stand on or below "bridged" grain, which can collapse and bury workers, or if they try to loosen grain, which can cave in. A fact sheet and wallet-sized card on preventing grain bin suffocations also are available from OSHA's Publications Web page.

● **OSHA-At-A-Glance** publication that provides a brief overview of OSHA's role in protecting the safety and health of workers. It includes information on employer responsibilities and worker rights, as well as OSHA standards, inspections, help for employers (e.g., on-site consultations, compliance assistance), and training courses.

The National Institute for Occupational Safety and Health

(www.cdc.gov/niosh) has launched a "Stop Sticks" campaign to raise awareness about the risk of exposure to bloodborne pathogens such as HIV, hepatitis B and hepatitis C from needlesticks and other sharps-related injuries in the workplace.

The U.S. Centers for Disease Control and Prevention estimates that about 385,000 sharps-related injuries occur annually among health care workers in hospitals. While the campaign materials at www.cdc.gov/niosh/stopsticks were developed mainly for operating room and emergency department audiences, the target audience also includes clinical and non-clinical healthcare workers and administrators in hospitals and doctors' offices.

MAKING WORKERS SAFER AROUND THE NATION *continued*

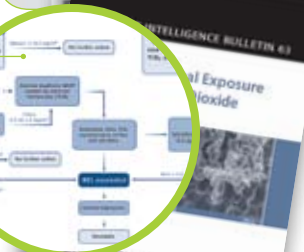
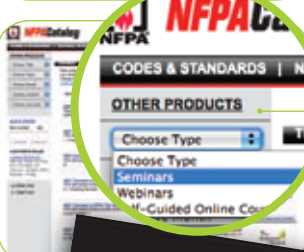
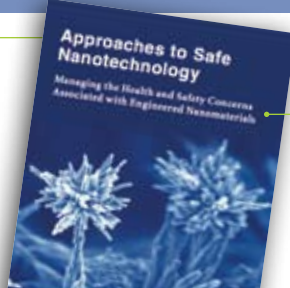
Also for the medical community, NIOSH has published a "List of Hazardous Drugs in Healthcare Settings..." that allows workers to minimize exposure to these powerful treatments for a wide range of medical conditions, including those used for chemotherapy, antivirus measures, and hormone and immunosuppressant therapies.

Other new NIOSH communications products to enhance worker safety include:

- Fact sheet explaining the advantages of chemical, biological, radiological and nuclear (CBRN) self-contained breathing apparatus (SCBA). "What's Special about CBRN Self-contained Breathing Apparatus (SCBA)?" summarizes SCBA standards and test procedures and how to determine if an SCBA meets NIOSH approval for CBRN protection.
- Fact sheet on "Safety and Health among Hotel Cleaners," which addresses ergonomic, trauma (trips, falls), respiratory, dermal, infectious and stress hazards related to hotel cleaning work.
- Current Intelligence Bulletin 63: Occupational Exposure to Titanium Dioxide, which examines data regarding the potential for exposure to result in adverse health effects, and offers recommendations for exposure limits and techniques for monitoring and controlling exposures.

New from the U.S. Mine Safety and Health Administration (www.msha.gov) has issued a hazard alert on arc flash accident prevention best practices. The alert recommends steps to be taken before performing electrical work to reduce the probability of arc flash exposure, which each year results in more than 2,000 people being admitted to burn centers.

New from the American College of Occupational and Environmental Medicine



(www.acoem.org) is a guidance document for occupational exposure to nanomaterials. The document offers recommendations on exposure monitoring, controls (including use of protective gloves, clothes and NIOSH-certified respirators), and medical surveillance.

● **The Center for the Polyurethanes Industry** (www.polyurethane.org) of the American Chemistry Council has issued a guidance document on how to visually illustrate application of high- and low-pressure spray polyurethane foam (SPF). The document gives information about different types of SPF and their uses, and explains what appropriate handling and personal protective equipment should be illustrated in a video or image depicting SPF application. Download the document free from www.spraypolyurethane.org.

● **New from the National Fire Protection Association** (www.nfpa.org) are Web user enhancements to simplify the search and registration process for seminars, webinars and online courses (www.nfpatraining.org). And, changes to the NFPA online publications catalog (www.nfpacatalog.org) make it easier to find and order codes and standards and their companion handbooks.

● **The National Hearing Conservation Association** (www.hearingconservation.org) has issued a set of guidelines to assist audiologists and other professional reviewers determine the recordability of occupational hearing loss, as required by OSHA. According to NHCA, evidence suggests that occupational hearing losses are routinely under-reported, with professional supervisors reporting difficulties in making a determination of recordability and work-relatedness, and with some reporting pressure to alter their assessments to benefit clients.

Monitor PPE Developments @ 'Safety Signals' Blog

You can stay abreast of the latest developments in the world of personal protective equipment (PPE) by checking out the International Safety Equipment Association's (ISEA's) blog at www.SafetySignals.org.

There you will find information and opinion about personal protective technologies and markets, standards, government affairs involving PPE, ISEA and its members.

"New articles are posted all the time, and readers can add their own comments and observations," said ISEA President Dan Shipp. "You can subscribe through RSS and be notified any time there is a new article."

If you are a member of the LinkedIn community and want to join the ISEA LinkedIn network, you will find it at <http://safetysignals.org>, Shipp added. ●



OSHA \$100,000 CLUB OF SAFETY CITATIONS

The U.S. Occupational Safety and Health Administration (OSHA) proposed penalties of \$100,000 or more during the June 1 – Aug. 31, 2011, period for the following alleged failures to protect workers from potential hazards, including many that could have been avoided or mitigated by personal protective equipment (PPE). Companies have 15 business days from receipt of citations and fines to request and participate in informal conferences with OSHA or to contest the citations before the independent Occupational Safety and Health Review Commission:

- Phenix Lumber Co., and its principal, John M. Dudley, \$1,939,000 for egregious and other safety violations, including exposing employees to amputations and fall hazards, at the company's lumber mill in Phenix City, Ala. Prior to these citations, Phenix had been cited 77 times for serious safety and health violations since 2007. "Phenix Lumber continues to put workers at risk by choosing not to implement safety measures that would prevent serious injuries to their employees," said Labor Secretary Hilda L. Solis.
- Quality Stamping Products Co., \$426,100 for 27 safety and health violations, including one willful violation for failing to report two amputation injuries at the company's metal stamping plant in Cleveland.
- Northeastern Wisconsin Wood Products, Pound, Wis., \$378,620 for 18 health and safety violations, including 13 willful violations; violations included failing to implement a hearing conservation program or to provide appropriate eye protection.
- P. Gioioso & Sons, Inc., Hyde Park, Mass., \$354,000 chiefly for exposing employees to cave-in hazards at work sites in Cambridge and Framingham, Mass.; the company has a long history of violating workplace safety standards, OSHA said.
- Meadow Gold Dairies, a subsidiary of Dean Foods, \$300,300 for two willful, one repeat, 35 serious and five other violations at its operation in Englewood, Colo.
- Cooper Tire and Rubber Co. and two maintenance contractors, \$254,900 for 25 safety violations at the company's Tupelo, Miss., plant, including exposing workers to hazards associated with combustible dust.
- Lessard Brothers Construction Inc. and its predecessor, Lessard Roofing & Siding Inc., Lewiston, Maine, \$243,360 for egregious willful, serious and repeat violations for lack of fall protection and other hazards at a work site in Lewiston.
- T & D Metal Products LLC, \$214,830 for seven violations after two workers suffered amputations at the company's Watseka, Ill., metal stamping facility; prior to the latest inspection, T & D had been cited by OSHA for 47 violations since 1988.
- AK Steel Corp., \$206,000 for record-keeping violations related to potential hearing hazards at its Butler (Pa.) Works.
- Lone Star Bakery Inc., \$199,600 for 18 serious and three repeat safety and health violations at a company plant in China Grove, Texas.
- Americarb Inc., \$194,400 for 11 violations at its graphite machining operation in Ashland, Ohio.
- DL Cattle Trading LLC Co., \$185,600 for 12 violations found during an inspection after a worker suffocated while engulfed in grain in a bin with a running auger at the company's feed lot and farming operation in Parks, Neb.
- Monro Muffler Brake Inc., \$184,000 for 10 violations, including lack of eye-flushing facilities, after an employee was burned in a fire at the company's Hyannis, Mass., location.
- Saehaesung Alabama Inc., \$179,300 for eight violations found after OSHA conducted a follow-up inspection to evaluate the abatement of violations found in 2009 at the company's automotive parts manufacturing plant in Andalusia, Ala.
- Don Wartko Construction Inc., Kent, Ohio, \$171,600 for failing to protect workers from cave-ins during trenching operations at three separate work sites in Cleveland.
- AFL Quality Inc., doing business as AFL Web Printing, \$170,000 for 26 violations relating to failure to provide machine guarding at the company's Voorhees, N.J., operation.
- Howard Industries Inc., Ellisville, Miss., \$169,500 for 17 safety violations following the January death of a worker who was electrocuted while calibrating a transformer test station.
- FixtureOne, \$169,400 for 44 violations, including lack of PPE, at its institutional furniture manufacturing facility in Philadelphia.
- Eclipse Builders Inc., Etters, Pa., \$168,000 for exposing employees to trenching hazards after the death of a worker in December 2010.
- All Feed Processing and Packing Inc., \$167,090, for violations involving repeated failure to provide respirators to workers and monitor their exposure to respirable dust at the company's Galva, Ill., pet food research and packaging facility. Subsequently, a judge ordered the Alpha, Ill.-based company to allow OSHA to inspect its facilities or pay fines of \$500 a day.
- Schumacher Co. of Texas Inc., \$166,500 for 33 violations for exposing workers to multiple hazards, including exposure without PPE to hazardous chemicals, at the company's metal finishing operation in Houston.
- Creative Multicare Inc., Stockbridge, Ga., \$162,000 for eight violations following the death of a worker who was exposed to excessive amounts of methylene chloride while using the chemical to remove paint from a bathtub at a Clarkston, Ga., work site.
- Hobbs Bonded Fiber Inc., \$161,100 for 29 serious violations found following a complaint alleging unsafe working conditions at the company's non-woven products manufacturing facility in Waco, Texas.
- Enterprise Products Transportation Co., \$160,000 for 32 violations following a fatality at the company's truck washing operation in Freeport, Texas.
- Thomasville Lumber Co., \$159,700 for 24 safety and record-keeping violations, the most serious involving not requiring equipment lockout/tagout, at its Thomasville, Ala., plant, which processes yellow pine products from logs.
- Advantage Powder Coating, Defiance, Ohio, \$159,600 after a pedestal grinder operator was killed when the grinder's abrasive wheel exploded and struck the operator in the head.
- Pearce Foundry Inc., a subsidiary of The Pearce Group., Inc., \$158,200 for 41 violations at the company's Prairieville, La., metal casting operation.
- Bontrager Excavating LTD, Uniontown, Pa., \$157,710 for failing to protect workers from cave-ins during trenching operation; OSHA inspected following a Stark County, Ohio, trench collapse that took a worker's life in December 2010.
- CMZ Construction LLC, Newark, N.J., \$157,080 for lack of fall and eye/face protection at a residential home construction site in Iselin, N.J., and at an apartment complex in Springfield, N.J.
- Peach State Roofing Inc., Lawrenceville, Ga., \$155,800 for five violations for exposing workers to fall hazards while renovating and installing roofs in Florida and Georgia.
- AL Solutions Inc., \$154,000 following an explosion and fire that caused the deaths of three workers at the company's New Cumberland, W.Va., facility; the company makes alloy compacts used in the aluminum manufacturing industry. ▶52

SAFETY EQUIPMENT Works for You



Vests Cool Down Parking Valets During Triple-digit Temperatures

Cooling vests helped parking attendants at Baylor Medical Center in Plano, Texas, avoid potentially serious medical problems while on the job in triple-digit temperatures during the broiling summer of 2011.

Working eight hours a day, five days a week, the workers were showing signs of dizziness and heat fatigue when one of the hospital's physicians noticed that several of the heavily perspiring attendants appeared to be succumbing to the heat. "I went and talked to one of them, and he said he was feeling dizzy and actually not feeling too well," said Dr. Robert Berry, the center's director of orthopedic sports medicine.

Dr. Berry convinced the hospital staff to purchase cooling vests to help protect the valets from heat exhaustion. Cool packs inside the vests help lower the body temperature for up to four hours. The vests turned out to be particularly helpful when the valets were retrieving parked cars, where temperatures inside can reach 140 degrees.

Isotherm™ cooling vests by ISEA member Bullard, www.bullard.com.



Syracuse Demolition Worker Returns to Work After Potentially Fatal Fall

A Syracuse, N.Y., demolition worker was back on the job the next day after his gear saved him from a potentially fatal fall during January 2011 work at a theater, then undergoing renovation. Sean McNulty was wearing a fall protection harness while he and two coworkers were demolishing a flat concrete roof on the Landmark Theater in downtown Syracuse when the roof gave way, according to a *Syracuse Post-Standard* report.

The project managers for the renovator, Heuber-Breuer Construction Co., praised McNulty's coworkers for quickly clipping him into additional safety equipment while they waited for rescuers. "Everything worked right to the letter in every respect," said project safety manager Ralph Orlandella, the newspaper reported. The historic theater underwent a \$16-million conversion, with reopening scheduled for October 2011.

OSHA \$100,000 CLUB from page 53

- B&B Lumber, \$152,100 for 35 violations following the death of worker at the company's Jamesville, N.Y., sawmill; the worker was changing blades on an edging saw and another worker inadvertently started the saw.
- Blue Heron Construction, Jordan, N.Y., \$147,000 for excavation safety violations at a water line installation project on the campus of the State University of New York at Brockport.
- Bushnell Illinois Tank Co., doing business as Schuld/Bushnell, \$142,400 for violations found during an inspection at the company's grain bin manufacturing plant in Valley, Neb.
- Dell Services Federal Government Inc., a telecommunications contractor for the Network Enterprise Center at the U.S. Army's Rock Island (Ill.) Arsenal, \$140,000.
- Safas Corp., \$135,000 for 20 violations, including excessive noise exposure, found at its Clifton (N.J.) facility, which makes granite-like materials for kitchen and bath counter tops, sinks and furniture.
- Lewis Construction Inc., \$130,000 for violations found during an investigation into the death of a worker and injuries to three others when a wet concrete wall collapsed at a building site in Chippewa Falls, Wis.
- Lakeland Feed and Supply, \$122,500 for exposing workers to grain bin machine guarding, fall and other hazards at the company's operation in Hamilton, Mont.
- KyKenKee Inc., \$121,400 for violations found after a worker was killed when a log fell from a de-barker conveyor, striking him in the head at the company's lumber mill in Vance, Ala.
- American Pulverizer Co., \$121,100 for 33 violations at the company's reduction equipment plant in St. Louis.
- Paliflex Co., \$121,000 for 29 violations, including fall hazards and inadequate PPE, at the company's filter manufacturing plant in Putnam, Conn.
- Marshall Durbin Cos., \$120,000 for 12 violations found following the death of a worker who was struck by a tractor-trailer while filling potholes at the company's poultry processing plant in Hattiesburg, Miss.
- Honeywell International Inc., \$119,000 for 17 violations found after its Metropolis, Ill., plant experienced a release of hydrogen fluoride vapor; the operation processes raw uranium into uranium hexafluoride for use in nuclear power generation applications. There were no reported injuries and the company's response team rectified the situation immediately, OSHA said.
- C. Scott Fulcher, doing business as 2-Brothers Enterprises Inc., Jackson, Ga., \$116,200 for violations found following a trench cave-in that led to the death of an employee at a Cumming, Ga., worksite.
- Brenner Tank Services, \$114,000 for 11 violations, including respirable dust exposure, at the company's operation in Mauston, Wis.
- AMF Bowling Centers Inc., \$112,600 following the death of a worker who was caught in a pinsetter while clearing a jam at the company's Addison, Texas, lanes.
- NTN-Bower Corp., Macomb, Ill., and on-site contractor Advanced Technology Services Inc., Peoria, Ill., \$112,000 for 19 violations at an NTN-Bower plant in Hamilton, Ala.; the company makes precision roller bearings.
- A-Treat Bottling Co., \$110,880 for 24 violations found at the company's soft-drink manufacturing and bottling operation in Allentown, Pa.
- R & B Grinding Co. Inc., \$105,930 for 24 violations found at its operation in Racine, Wis.
- MM Industries, \$102,600 for 38 violations, including failing to provide PPE, at its filtration systems fabricating plant in Salem, Ohio.

Send Us Your 'Safety Equipment Works for You' Stories

Protection Update welcomes contributions from readers for our regular "Safety Equipment Works for You" feature. Email examples of where PPE has saved workers' lives or prevented injuries to Editor Joe Walker, jwalker@safetysafetyequipment.org, or mail them to the Editor, *Protection Update*, International Safety Equipment Association, 1901 N. Moore Street, Suite 808, Arlington, VA 22209. Photos are welcome.