

# Ammonia hazards

*Refrigeration company offers insights into PSM program*

Cover story | page 4

Inside:

Safety Notes | page 12

2011 GOSH Conference Recap | page 18

Going the Distance | page 21



*17th Annual*

**2011**

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## RESOURCE

**Oregon Health and Safety Resource** is published every other month by the Oregon Occupational Safety and Health Division of the Department of Consumer and Business Services.



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*On the cover:* Refrigeration system at National Frozen Foods in Albany.

# Administrator's message: Maybe the impossible really is possible

By Michael Wood

**W**hen I gave the welcome at the Oregon Governor's Occupational Safety and Health (GOSH) conference last month, I was able to share some encouraging news. The number of workplace fatalities accepted by the Oregon workers' compensation system in 2010 reached an all-time low of 17.

Of course, for the families and friends of those 17 workers, the grief and sense of loss is no less real for being one of 17 workers, rather than one of 35 or one of 85. And one of the reasons for the decrease in workplace fatalities is certainly the impact of the economy, particularly on those higher-risk sectors such as manufacturing, construction, or logging. The number also represents the "low" end of what might be described as normal statistical variation. But it still represents a snapshot of what is certainly possible.

In fact, I was struck by the workers' compensation system's confirmation of what our own fatality reporting systems had already told us – there were no construction fatalities on the list in 2010. Again, construction employment has been hit by the economic downturn, but that reduction itself cannot explain the lack of any fatalities – we have certainly been at these employment levels in years past. And even to the extent that the lack of construction fatalities may be explained by random variation, we have still pushed the overall risk low enough that it is possible for one of Oregon's highest risk industries to experience a year with no fatalities.

We often declare that the goal of our system is "zero," whether we're talking about fatalities or injuries. I sometimes get frustrated with what seems to be a too easy approach – declaring that without really being prepared to engage in the hard work that will get us there. On Worker Memorial Day in years past, for example, I have heard people give speeches on April 28 that included the line "maybe next year we won't have anyone to honor." The problem, of course,

is that by April 28 we already have names from the current year stored up just waiting for next year's ceremony.

Zero is an easy goal to declare. But it's a tough goal to turn into reality.

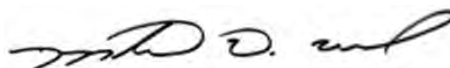
On the other hand, maybe that's the point. If we're prepared to articulate only the goals that we know we can achieve, then we're not going to stretch ourselves and we're not going to challenge the world around us. We aren't going to redefine reality by changing our expectations – by simply setting out to redefine what is acceptable. Such a vision requires us to push our boundaries and to set out consciously to redefine our world.

The successes of the past came in part because those in the field were prepared to say that we were not setting our sights high enough. Those successes came because the advocates saw a vision of the future that was, in a word, unrealistic. And those successes have brought us to the point that we can actually have a year when there are no construction fatalities in the workers' compensation system.

Can we reach a year when the entire Oregon workers' compensation system sees no fatalities at all? That's the question that faces us.

But perhaps there is a better way to frame the question: When we face those who lost a loved one in the Oregon workplace in 2010, can we expect them to accept any goal for the future other than zero? We cannot ask them to settle for less. And we cannot allow ourselves to settle for less.

Our work is not done.



Michael Wood, Administrator



# Ammonia hazards

## Refrigeration company offers insights into PSM program

By Melanie Mesaros

With 76,000 pounds of ammonia, the potential for a catastrophic accident at National Frozen Foods in Albany is not lost on employees.

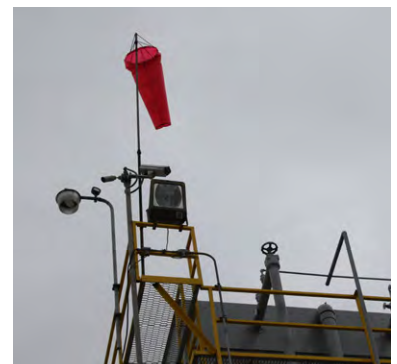
"I definitely respect the chemical," said Tom Rowe, one of several certified industrial refrigeration operators at the plant.

Rowe, Elroy Flores, and Mike Stablein maintain the engine room at the food processor, which packages hundreds of pounds of green beans and other vegetables daily during the peak summer season. In addition to having a Process Safety Management (PSM) program, all employees, even those who are seasonal, are trained on ammonia risks and take part in emergency evacuation drills twice a year.

"Anyone can say, 'Hey, I think I smell ammonia,' and know who to go to," said Jim Barron, the facilities and maintenance manager at National Frozen Foods.

Barron has 18 years of experience at the plant and is a past president of the Refrigerating Engineers and Technicians Association. He said the company has been working to develop a first-class PSM program throughout the past decade. Ammonia, a caustic and colorless chemical with a pungent odor, can severely burn skin, cause blindness, and be explosive.

Above: Armando Nunez (left) and Jim Barron oversee the PSM program at National Frozen Foods in Albany.



A wind sock at the plant shows which direction the wind is blowing if an evacuation ever occurs.

**“Anyone can say, ‘Hey, I think I smell ammonia,’ and know who to go to,”**

– Jim Barron, Maintenance Manager  
National Frozen Foods

“Our staff can’t open or close a valve without a face mask on,” Barron said.

In 1999, National Frozen Foods had a near miss when a welded plate blew off a pipe after ammonia built up. No one was injured in the incident and workers were able to shut off the valve before a serious leak.



Barron takes a look at an older valve in the system.



Nunez (left) and Barron review settings on a compressor control system recently installed.

“It made us realize we weren’t doing enough to preserve the system’s mechanical integrity,” Barron said. “We also got lucky.”

He said the company follows lockout/tagout and conducts pre-planning for major projects (management of change) that affect the system. Standard Operating Procedures are reviewed annually by a committee focused on their PSM review.

continued on page 6



Barron oversees the restoration of an ammonia pump while wearing proper protective equipment.



Pipes are well marked in the refrigerated warehouse.

## Amonia danger, *continued from page 5*

Armando Nunez, an assistant plant manager, has also worked on developing the company's PSM program. He said safety valves are never repaired but are replaced to reduce the risk of a failure. Management has shown its dedication by taking part in the PSM review process and ensures employee training at all levels.

"I've not seen a company invest so much into a program," Nunez said.

Barron believes the education commitment and attention to detail have helped turn the operation into a model program.

"Education is a pivotal part of being successful," he said. "It not only makes us safe, it enhances our efficiency." ■

**"Education is a pivotal part of being successful. It not only makes us safe, it enhances our efficiency."**

– Jim Barron



**1 and 5)** Workers inspect frozen vegetables before they are packaged. **2)** Housekeeping in the engine room is an important part of safety. **3)** Continuous inspections are important to maintaining an effective Mechanical Integrity (PM) program. **4)** Proper piping and identification also make for a safe operation.

# The other ammonia

By Ellis Brasch

**T**hanks to household cleaners and recalcitrant pets, most folks are familiar with ammonia's most distinctive characteristic — its pungent aroma.

But ammonia takes on an entirely different guise when it's a gas and kept under pressure, which is typically how it's commercially stored and used.

In this state, it's properly known as anhydrous ammonia – anhydrous means “without water.” About 80 percent of the anhydrous ammonia used commercially is stored in high-pressure tanks at agricultural chemical retailers, where it's sold to farmers, off-loaded to smaller “nurse tanks,” and used as fertilizer. (It's a rich source of nitrogen.)

The other 20 percent is used as an industrial refrigerant by all sorts of businesses that need to keep things cold, such as food processors, wineries, breweries, and cold storage warehouses. Three things make anhydrous ammonia a useful refrigerant: it's relatively inexpensive, energy efficient, and very cold.

As long as anhydrous ammonia is kept tightly under wraps – in a sealed tank or in a properly functioning refrigeration system – it's quite harmless. But given just the slightest chance to escape, it becomes most unfriendly. Anhydrous ammonia released into the atmosphere becomes a gaseous mix of liquid and vapor at -28° F. It rapidly absorbs moisture in the air and forms a dense, white cloud of ammonium hydroxide. Because the moisture-laden cloud is heavier than air, it tends to spread along the ground or into low-lying areas.

If you're exposed and unprotected, your bare skin will freeze because the just-released vapor is -28° F. And because ammonia is extremely hygroscopic – meaning it loves moisture – it readily migrates to the most accessible moist areas of your body: your eyes, nose, and throat. It will destroy eye tissue as well as the delicate tissue in the respiratory tract.

**How common are accidental releases?** More than 300 registered facilities in Oregon produce, process, or use anhydrous ammonia in quantities from one to 2.5 million pounds. A study released by the Oregon Public Health Division in 2007 documented 240 incidents over a 14-year period, 67 of which required an evacuation order.

Although releases can happen when ammonia is transported or delivered to a facility, poorly maintained storage and processing equipment account for many accidents. Oregon OSHA inspections have found corroded pipes, ice-covered pipes, and defective relief valves in such equipment. That's common when the equipment isn't inspected, tested, or maintained. Other reasons that lead to releases include poor inspection documentation and inadequate process hazard analyses. (*Refrigeration systems handling more than 10,000 pounds of anhydrous ammonia are covered by Oregon OSHA's Process Safety Management standard, 1910.119.*)



State of Alaska, ADEC – Y Ha

An entry team prepares to seal a simulated ammonia release.

## Oregon OSHA rules for facilities that produce, process, or use anhydrous ammonia:

- **1910.111** Storage and handling of anhydrous ammonia
- **1910.119** Process safety management of highly hazardous chemicals
- **1910.120** Hazardous Waste Operations and Emergency Response
- **1910.1200** Hazard Communication
- **437-002-0382** Oregon Rules for Air Contaminants



It's a marathon, not a sprint

# 2011 GOSH AWARDS



Seventeen leaders in safety and health were honored with awards at the **2011 Oregon Governor's Occupational Safety and Health (GOSH) Conference** in Portland. A panel of industry professionals judges the awards, which honor extraordinary contributions to the field of workplace safety and health.



**Above:** KATU's Dave Anderson, of "AM Northwest," was the master of ceremonies. **Center:** The award luncheon was held in the Portland Ballroom of the Oregon Convention Center in Portland. **Right:** Bruce Hollcroft, president, ASSE Columbia-Willamette Chapter, (left) and Michael Wood, administrator for Oregon OSHA, presented the awards.





The winners this year are as follows:

## ASSOCIATION



**Signatory Painting  
Contractors Organization, Clackamas**

## EMPLOYER



**Duckwall-Pooley Fruit Company, Odell**



**Wildish Companies, Eugene**



**Snyder Roofing of Oregon, LLC, Tigard**



**Randy Rema receiving the Award for  
Reese Electric, North Bend**

**SAFETY AND HEALTH PROFESSIONAL**



**Anthony Barsotti of Temp Control Mechanical**



**John Kirwan of Hinkle Locomotive**



**Melissa Diede of SAIF Corp.**



**Alan Rhodes of Providence Health Systems**

**SAFETY AND HEALTH ADVOCATE**



**Gary McQuown of Arctic Sheet Metal**



**Rebecca Rogie of Goodwill Industries**



**Tooling Department  
of Orenco Systems, Inc.**

## SAFETY COMMITTEE



City of Gresham



Comcast – Beaverton FFO



Dallas Retirement Village



Kraft Foods Portland Bakery  
Safety Committee



Union Pacific Railroad,  
Hinkle Locomotive

## Case Report

Incident type | Car accident/Fatality

Industry | Forest activities

Employees | Laborers



A work crew began a job to harvest noble fir boughs in the Willamette National Forest. Ten or 11 employees loaded into a van at the motel where they were staying. The van was a 1988 Chevrolet half-ton conversion-type van. It had the original two captain seats in the front. Both of these seats were equipped with the factory seat belts. The rear bench seat appeared to be an original factory bench seat and was designed to be converted into a bed. None of the three employees riding in this rear bench seat were wearing seat belts. In between the rear bench seat and the front captain seats were two more bench seats. It was obvious that someone other than the factory or a professional installed these two seats. Neither was equipped with seat belts. The employer told the investigator that he had instructed one of his former employees to locate two bench seats from a salvage yard and install them in the van. There were four-inch by four-inch wooden beams that had been bolted to the floor and then the seats were bolted to the beams.

The Chevrolet van left the motel early in the morning with a second van of workers following. It was foggy as they traveled toward the area where they would be working. The driver was going slowly once they reached snow. As they were going uphill and around a corner that veered to the right, the back end of the van began to slip off toward the right edge of the road. The driver accelerated and turned the wheel to the right in hopes of straightening out the van. As the tires gained traction, the van shot over the edge to the right and the van went over the embankment front first. As the van rolled over, the windows broke out. The passengers were thrown around and many of them were tossed out of the window openings. The van struck a boulder that was larger than the vehicle. The van bounced into the air, came down on all four tires, and then rolled approximately nine feet before coming to a stop.

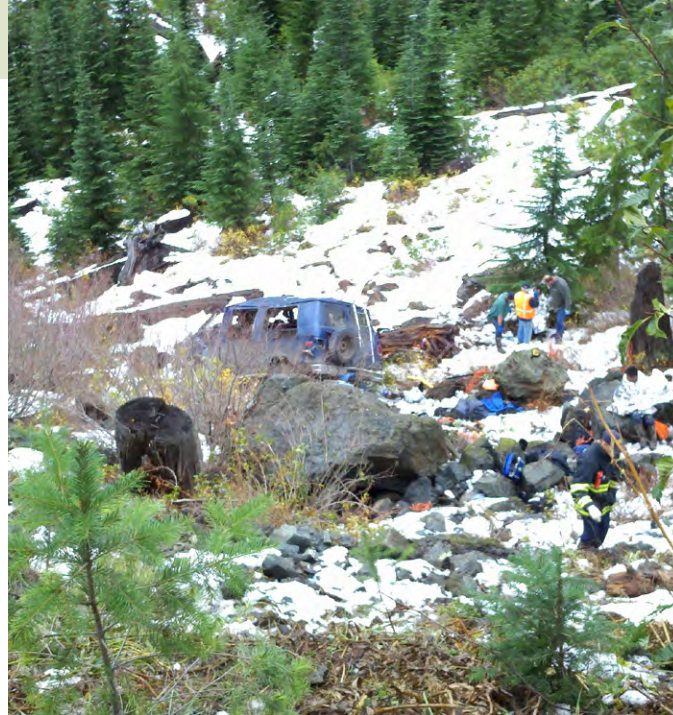


Photo courtesy of Linn County Sheriff's Department

Some of those interviewed said all but the two in the front seats, who were wearing seat belts, were thrown out of the van. Some stated the driver was the only one left in the van as it came to a stop. Others remembered four left in the van. One of the passengers stated that he and the victim were thrown out at the same time, either through the torn-off sliding door or out the rear passenger window opening. The passenger said he ended up on top of the victim. He was unable to pull his arm free from a bush and yelled at the victim to help him. He said the victim was not moving. Someone helped free his arm and he looked at the victim and saw blood on his head. He was not sure if the person was dead or alive at that time.

The foreman of the crew, who was driving the second van, stated he saw the van go over the edge. He stopped and ran to the edge and could see the van and passengers scattered about in the snow. He and the passengers in his van made their way down to the injured employees. Some of them were able to get up, but many were not. He said when he made his way to victim, he checked to find a pulse but there wasn't one. One of the employees called 911 but the victim did not survive.

#### Items cited:

**437-007-0560(1):** All vehicles designed or used primarily to transport personnel or materials over private or public roads did not have seat belts.

**437-007-0220(6)(a):** Written land directions to the worksite were not available near the worksite communication device at worksites of more than one-day duration.

**437-007-0220(3):** All personnel employed in forest activities were not trained in first aid and CPR.

**437-007-0220(11):** Worksite first-aid kits did not contain the minimum supplies required by the rules.

## Workplace deaths continue to decline in Oregon

Seventeen people covered by Oregon's workers' compensation system died on the job during 2010, according to Department of Consumer and Business Services (DCBS) figures. The total represents an all-time low in Oregon and is likely tied, to some degree, to the economic downturn and increased unemployment.

Statistics for the past decade illustrate a continuing and positive trend. In 2009, there were 31 fatalities, which is also among the lowest numbers reported since the state started tracking workplace deaths in 1943. In 2008, 45 people died on the job (eight workers were killed in a firefighting helicopter crash) and in 2007, the fatality total was 35. That compares to an average of 55 workplace deaths per year in the 1990s and 81 in the 1980s.

On-the-job injuries have also been declining in recent decades. The statewide rate of reported workplace injuries and illnesses has decreased more than 50 percent since the late 1980s.

Trucking, logging, and manufacturing industries saw the largest concentration of deaths in 2010. There were no construction deaths in 2010 – a significant improvement from 2007 when 12 fatalities occurred.

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**“Each lost worker is a reminder that we not only can, but must do better to eliminate hazards in the workplace.”**

**– Michael Wood, administrator of Oregon OSHA**

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“While encouraging, the reduction in fatalities doesn't lessen the pain and loss felt by the family and friends of these individuals,” said Michael Wood, administrator of Oregon OSHA. “Each lost worker is a reminder that we not only can, but must do better to eliminate hazards in the workplace.”

Oregon OSHA offers educational workshops, consultation services, training videos, and website information to help Oregon employers create or improve their safety and health programs.

DCBS compiles fatality statistics from records of death claim benefits paid by Oregon workers' compensation insurers during the calendar year. The data reported may exclude workplace fatalities involving self-employed individuals, city of Portland police and fire employees, federal employees, and incidents occurring in Oregon to individuals with out-of-state employers. These workers are either not subject to Oregon workers' compensation coverage requirements or are covered by other compensation systems.

Deaths that occur during a prior calendar year may appear in the compensable fatality count for a later year because of the time required to process a claim.

Complete data on all deaths caused by injuries in Oregon workplaces, regardless of whether they are covered by workers' compensation insurance, are computed separately and reported in the annual Census of Fatal Occupational Injuries (CFOI) administered by the U.S. Bureau of Labor Statistics. The 2010 CFOI report is not expected for release until the fall of 2011.

The link to the full DCBS fatality report can be found [here](#). ■

# Oregon OSHA initiates program to help reduce amputations

Beginning in February, Oregon OSHA initiated an “emphasis program” to reduce injuries and workplace risks that result in amputations.

The program focuses on inspections of job sites with machinery, equipment, and processes that cause amputations and job sites where amputations have occurred in the past. Industries with significant hazards and high amputation rates include meat packing plants, food processing, pulp and paper mills, sawmills, cabinet manufacturing, sheet metal work, foundries, and commercial printing among others.

“The loss of a finger or limb can be life changing for any worker,” said Oregon OSHA Administrator Michael Wood. “This emphasis program will help us identify risks earlier so that employers can prevent amputations.”

From 2005 to 2009, Oregon had more than 800 accepted workers’ compensation claims for amputations. Machinery was the source of more than half of those claims, and powered hand tools added another 8 percent to the total. Nearly all of the amputations – 97 percent – were fingers.

Inspectors will assess machinery cleaning, jams, and regular operations, along with maintenance procedures. The scope of an inspection may be expanded to address unrelated hazards if they pose a serious danger. ■

**May 11, 2011**



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# Brazilian Blowout drops lawsuit against Oregon OSHA

The maker of the popular salon hair straightening treatment Brazilian Blowout dropped its lawsuit filed against Oregon OSHA and Oregon Health and Science University's Center for Research on Occupational and Environmental Toxicology (CROET). The suit was filed after Oregon OSHA and CROET published an Oct. 29, 2010, report that found significant levels of formaldehyde in the product, despite being labeled "formaldehyde free."

In the report, 105 samples of "Keratin-based" hair smoothers were tested from 54 Oregon salons. More than one-third of the samples were Brazilian Blowout Acai Professional Smoothing Solution and formaldehyde content ranged from 6.8 percent to 11.8 percent.

Air samples were taken in seven salons during Brazilian Blowout treatments with Brazilian Blowout Acai Professional Smoothing Solution (labeled "Formaldehyde Free"). Although no airborne exposures above regulatory limits were identified, Oregon OSHA and CROET noted that the exposures were significant and changes in circumstances (such as multiple treatments by a stylist in a single day) might result in exposures above the limits. In addition, Oregon OSHA's monitoring did identify several exposures above the levels recommended by the American Conference of Government Industrial Hygienists and the National Institute for Occupational Safety and Health.

Oregon OSHA issued a hazard alert to stylists warning of the high formaldehyde levels. The alert is available at [www.orsosha.org/pdf/hazards/2993-26.pdf](http://www.orsosha.org/pdf/hazards/2993-26.pdf). The complete report with sampling results is at [www.orsosha.org/pdf/Final\\_Hair\\_Smoothing\\_Report.pdf](http://www.orsosha.org/pdf/Final_Hair_Smoothing_Report.pdf). ■







*Congratulations to these new SHARP companies:*

- Cintas Corporation, Eugene
- Portland General Electric – Port Westward, Clatskanie



*Congratulations to the new VPP company:*

- Pacific Klamath Energy, Klamath Falls

Round-Up Your



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*5<sup>th</sup> Annual*  
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Safety & Health Conference**

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**Health and Safety Culture**



A joint effort of the Oregon SHARP Alliance, Oregon OSHA,  
and employers/employees from Northeast Oregon.

# 2011 Oregon GOSH Conference held in Portland

The Oregon Governor's Occupational Safety and Health (GOSH) Conference was held March 7-10 at the Oregon Convention Center in Portland. It's the largest conference of its kind in the Pacific Northwest and featured more than 140 workshops and sessions.



Greg Bell, keynote speaker

This year, more than 1,500 attended the conference, which was themed, "Safety: It's a marathon, not a sprint."

The keynote address, "Water The Bamboo: Unleash Your Potential," was presented by author Greg Bell. His focus was on the importance of self-responsibility and having the patience to stay the course on safety.

"You keep watering the bamboo and nothing happens," Bell said. "What you are working on is largely invisible. The important things about success are never visible."



1) Attendees in the busy exhibit hall. 2) Kevin Pfau (left) of SAIF Corporation with students from Tillamook High School who participated in the GOSH Youth Program. 3) Attendees play an interactive game at the SAIF Corporation booth.



# Columbia Forklift Challenge

The inaugural Columbia Forklift Challenge debuted at the Oregon GOSH conference. The event showcased the operating skill and safety awareness of drivers who participate.

This year, operators negotiated tight turns, maneuvered through a slalom run, stacked pallets and containers in precise locations, and finished with the task of rolling a bowling ball off a pallet toward pins approximately 20 feet away.

Cash prizes ranged from \$200 to \$500 and were given to both teams and individuals. All drivers competing were required to have employer-certified training and attended an orientation prior to the event. Boeing, National Frozen Foods, Cascade Steel, Fred Meyer Distribution, and Boise Packaging and Newsprint participated in the 2011 competition.



## CONGRATULATIONS TO THE WINNERS!

### INDIVIDUAL

1st place: **Ruben Medina**  
of Boise Packaging  
and Newsprint

2nd place: **Jim Genera**  
of Boise Packaging  
and Newsprint

3rd place: **Mike Morrison**  
of Cascade Steel

### TEAM

1st place: **Boise Cascade**  
and Newsprint



# Ask Technical

**Q:**

*I have a few employees who handle aluminum tubing all day and use a chop saw to cut it. I want to protect their hands from cuts and splinters from the aluminum, but I also want to comply with OSHA rules. Would cutting off the fingers of the glove at the second knuckle and wrapping their fingers with something like a gauze strip be acceptable?*



Chop saw

**A:**

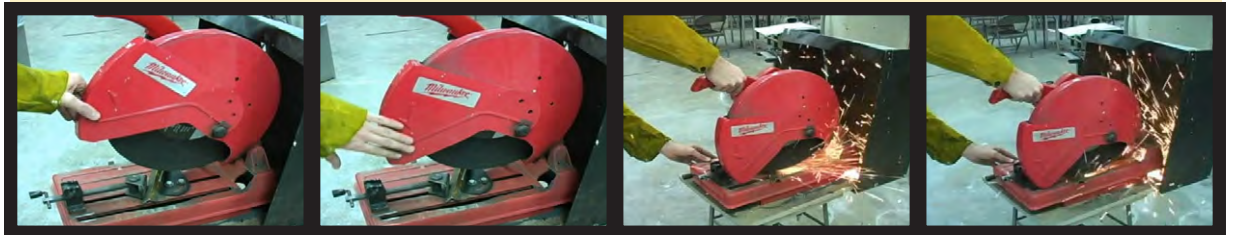
**Our rules prohibit the use of gloves when hands are exposed to moving parts or machines in which they may be caught.**

These regulations are written to prohibit employees from wearing gloves when there is a hand hazard. When cutting aluminum with a chop saw, you need to evaluate the hazard posed by wearing gloves. If you have power in-feed rolls, where a hand could get caught on the material and pulled into the machine, then gloves would be prohibited, whether or not the fingers of the gloves have been removed. If this is a manual-feed operation, there isn't a reason to keep employees from wearing intact gloves with all the fingers in place.



Cut-off saw/chop saw

In the situation you described, if employees are close enough to the chop saw blade to get cut, you have a machine guarding issue and the use of gloves will not solve that problem. ■



# Going the distance

## Meet a leading Oregon health and safety professional

### What is your background and safety philosophy?

I have worked in construction and related fields for 39 years. I graduated from Oregon State University in 1972 and one of my buddies in the National Guard got me interested in being a carpenter. About 10 years later, I became a superintendent on commercial construction projects and was hired by Adroit Construction as a construction superintendent in 1992 and later became a full-time safety director.

I believe there is always a safe way to complete a task or a mission if you plan ahead. It is when we fail to plan that we end up with a situation that is very expensive to fix. I have also found that safety is very dependent on personal relationships. The saying, "I don't care what you know, until I know that you care," is very true. I have been able to get superintendents or employees to use a best practice or a new device on the strength of our relationship alone. Every one of our employees knows me and can reach me at any time of day. I make it a point to talk with each of them on every site I visit. I firmly believe

continued on page 22



**Company:** Adroit Construction

**Safety Director:** Jeff Smith

**Workforce:** 68 employees

**Common Hazards:** Falls, ergonomic issues, electrical hazards, driving

Jeff Smith leads safety efforts for Adroit Construction in Medford.

**OregonOSHA**

## Going the Distance, *continued from page 20*



Smith (left) and Stan Robbins, a construction superintendent, review the safety plan at the Jackson County Jail Sally Port Project.

that employees will make or break your safety program. Given an informed choice, I believe employees will always choose to work safely. Lacking a good program of employee safety training and education, you have less than a 50-50 chance of having the method of choice be the safest way.

I am very lucky to have the owners of Adroit be fully committed to safety. Our management team shares this top-down attitude of safety as a core value. At Adroit, employees are more likely to be disciplined or fired for safety reasons than any other issue and I have seen it played out time and time again.

### **What are the unique safety challenges you are facing on current projects?**

Each new project brings in several new subcontractors that have not worked with us before. How we engage them is very important. Many of the new contractors coming to an Adroit project experience a period of annoyance, followed by a period of education, and hopefully resolving into a state of enhanced safety performance.

As a Safety and Health Achievement and Recognition Program (SHARP) employer, we have dismantled the barriers between “us and them.” We are one entity as far as safety goes. A safety failure on the part of a subcontractor is a failure of the entire system. We are not fond of warning over and over again. If a tradesman is violating either OSHA rules or Adroit’s rules, we will give one warning to the employee and his lead man. The second violation will result in

removal from the project. If there is a pattern of violations, we will assume the lead man or foreman for that subcontractor is not an effective safety leader and we will ask that he or she be replaced.

### **Has the tight economy had an impact on your safety program?**

Surprisingly, I have not been asked to cut back at all. The only reduction to my budget has been my own desire to be as lean as possible without impacting overall safety. Adroit was well positioned going into the recession. 2010 was our most challenging year to date and 2011 is looking very promising for us.

I was encouraged to take advantage of special pricing that was offered on safety equipment during the height of the recession to upgrade our inventories. We purchased 17 new fall-protection harnesses, several new self-retracting lifelines, high-visibility clothing, and other PPE at huge discounts.



Smith and Fernando Guterrez discuss projection at the ends of the rebar slab dowels.



Lead man Miles Loogman (right) shows Smith the workstation layout at the Oregon Ear, Nose, and Throat Clinic project in Medford.

### **The spring season is likely your busiest time. Does that present new hazards or issues for workers?**

It seems like a great number of building projects start in the spring, which means we will be adding new employees. Our crews are all aware that the new employee is at most risk for injury or illness, and for this reason we have a very rigorous hiring regimen. We have all new prospective employees go through drug testing, a medical exam, and pre-employment physical testing. Plus their first eight-hour day at Adroit is spent with me in safety training. The training they receive prepares them for the first day on one of our projects. It still amazes me that seasoned construction workers often tell me this is their first exposure to formal safety training. Our goal is to have the best-trained, best-outfitted, and most safety aware employees — period.

continued on page 24

## Going the Distance, *continued from page 23*

### What advice do you have for other safety and health managers hoping to make a difference?

My advice is to make safety personal. When you see poor behaviors, approach it from the employee's point of view. I like to ask, "What is your incentive to take this kind of risk? What do you (the employee) have to gain from taking this shortcut? Why would you jeopardize your employment and your personal life to do something we don't want you to do?" I realize that I have an advantage over many others in the business who have way too many employees to get to know each one individually. But for those who have medium to small companies, this approach really does work.

It's hard to keep up a caring and passionate safety attitude without support and rejuvenation. Becoming a member of American Society of Safety Engineers puts you in contact with others in your line of work, gives you resources, targeted training, and a sounding board for new ideas.

I also rely heavily on the services of the many safety and loss-control consultants available to me. Outside consultants are ideally situated to see long-term trends and to note things that we may have become blind to in our daily grind.

I also can't say enough about the SHARP program offered by Oregon OSHA as a fantastic way to kick up your safety performance. The program was developed by first studying what the top performing companies in the nation were doing that made them truly outstanding safety performers.



Pat Staed, a project superintendent, demonstrates the operation of an air scrubber at Medford's Rogue Valley Medical Center.

The two and a half years that Adroit has been in SHARP have, without question, been our best ever. I'm also a member of the Oregon SHARP Alliance, a group of current SHARP companies and SHARP graduates from across Oregon who are dedicated to helping employers in adopting the principles of SHARP. ■

Smith, with Staed, said Adroit's goal is to have the best trained, best equipped workforce.