

ADOSH ADVOCATE

Improving Workplace Safety and Health



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Darin Perkins, Director

Spring 2005

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The General Duty Clause

During their visits, ADOSH inspectors and consultants look for conditions that can present hazards to employees. They conduct their inspections or surveys using OSHA or industry standards (i.e., ANSI, ASME) as a reference. In most instances, the hazards identified can be directly correlated to one or more specific OSHA standards. However, there are some hazards that are not addressed by the standards. In those cases, the compliance officer may recommend a citation based upon the General Duty Clause.

The General Duty Clause (GDC) comes from the Arizona Revised Statutes. A.R.S. 23-403(A) places a general duty or requirement upon every employer to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." When a hazard is identified that is not covered by a specific OSHA standard, it may be possible for ADOSH to address the hazard by using the General Duty Clause.

There are some restrictions upon using the GDC to address a hazard. First, the hazard must not already be addressed through a regular OSHA standard. Second, the hazard being addressed must be a recognized hazard. This recognition can be shown by referencing a standard that has been established or recognized by the employer's industry, such as an ANSI or ASME standard. Hazard recognition can also be established through employer recognition and by simple "common sense."

The hazard addressed through the use of the GDC must be one that is causing or is likely to cause serious physical harm or death. Thus, the GDC cannot be used to address conditions that would typically be considered non-serious. Additionally, the employer cited with a GDC violation must be an employer of the employees exposed to the hazard.

Finally, in order to issue a citation under the GDC, there must be a feasible and useful method of correcting or avoiding the hazard.

A review of ADOSH citation data calendar year 2004 indicates that the GDC was cited 55 times. The hazards addressed were varied, although the GDC was most often used to address the lack of seat belt use on forklifts, backhoes and similar equipment. The insert at the end of this article lists the hazards that were addressed with the GDC and the number of times each condition was cited.

It is important for employers to understand the purpose of the General Duty Clause and how it is used by ADOSH to address serious workplace hazards that are not covered by OSHA standards. Many industry standards address workplace hazards not covered by OSHA standards. Employers must be aware of these industry standards as well as the instructions set forth by the manufacturers of the equipment they purchase. Failure to follow those standards or instructions can lead to OSHA citations. If you

have questions regarding the General Duty Clause or other compliance issues, please call 602-542-5795 or 520-628-5478.

Darin Perkins, Director

GDC Citations-CY-2004

Employees not using seatbelts while operating forklifts, backhoes or similar equipment. (35)

Storage racks not complying with ANSI standards (not anchored to floor, no load ratings, damaged legs not repaired, etc.) (7)

Extra rider on forklifts, backhoes, tractors or similar equipment. (4)

Spreader bars, lifting devices damaged. (2)

Employees not trained on operation of concrete mixer. (1)

Tractor traveling down a field without a driver. (1)

Failure to utilize communication equipment during diving operations. (1)

Use of PVC pipe to transport compressed air. (1)

Improper use of wire rope clamps. (1)

Exceeding the maximum capacity of a scissors lift. (1)

Failure to utilize safe practices when lifting wood-framed walls. (1)

Failure to follow manufacturer's instructions when utilizing a meat cutter. (1)

Point of Operation Guarding

For the past year I have had the opportunity as a consultant to visit many construction employers who use portable cement mixers and air compressors that are powered by internal combustion engines. The guarding of the engine's rotating flywheels on these units has been consistently identified as a



point of operation hazard. OSHA Construction Standard CFR 1926.300(b)(4)(ii) is clear on this issue and states "The point of operation of machines whose operation exposes an employee to injury shall be guarded."

Manufacturers of motor driven cement mixers and air compressors have installed a rope start guard that covers the flywheel as a means of complying with this standard. However, due to the repeat starting of the units, damage sometimes occurs to the guard and it has to be removed. Unfortunately, employees do not usually contact their employer about the condition of the unit when the guards are no longer in place. As a solution, the employee oftentimes will leave the guard off and start the unit by wrapping a pull rope around the flywheel. This solution is the wrong one and must be eliminated. The employee can be injured by the exposed rotating portion of the flywheel. A machine in this condition should be removed from service and until the appropriate guard is installed.

to continue the practice of using a pull rope to start the unit provided that they cover the rotating portion of the flywheel with the cowl cover of the cement mixer. This again is an incorrect practice because the employee is exposed to the hazard when starting the unit and when lifting the cowl cover to turn the unit off. Employees should never be allowed to circumvent any guard that has been installed.

On a related note, I have also found that many employees are allowed to bring and use their personal cement mixer onto the job site and many of the mixers have been found with point of operation hazards. The construction standards are quite clear on this issue. CFR 1926.300(a) states that "All hand and power tools and similar equipment, whether furnished by the employer or the employee, shall be maintained in a safe condition." When employers allow employees to bring personal equipment to the job it is the employer's responsibility to ensure the equipment is safe.

If you have any questions regarding any machine guarding or other occupational safety and health issue, contact the ADOSH consultation sections at either 602-542-5795 in Phoenix, or 520-628-5478 in Tucson.

Carlos Rodriguez, Safety Consultant

I am frequently asked by employees and supervisors if it is OK for them

Region IX 2005 VPP Conference

The 2005 Region IX VPP Application Workshop® and Networking Conference will be held April 27th-29th at the Shelter Pointe Hotel and Marina in San Diego, California.

The Application Workshop is beneficial to anyone completing the application. Patrick Ryan, (Assistant Director of ADOSH), will be conducting a session on completing the various sections of the VPP Application on April 27th. Confirmed speakers (at the time of this newsletter) for the conference include:

Pauline Caraher, Region IX, Federal OSHA

Alan Traenkner, Region IX Fed OSHA

John Ohanesian, Georgia-Pacific Corporation, Madera Container, **Management Commitment**

David Burud, Georgia-Pacific Corporation, Packaging Division, **Safety Observation Program**

Scott Margolin, Westex Inc.

Understanding NFPA 70E and the Arc Flash Hazard

Jackson Shaver, Special Devices Inc., Mesa, AZ

'Beginning with Nothing to VPP

We are expecting a great turnout at the conference, which will be held at the beautiful Shelter Pointe Hotel and Marina.

For more information contact Ron Chun at 559-673-5111, ext. 204

Water, Water Everywhere?

With the advent of the hot summer weather ADOSH receives numerous complaints from employees in both construction and general industry

about the lack of potable water in the workplace. This despite the fact that the standards requiring potable water are some of the easiest standards to follow. Employers should be worried about ensuring that employees have enough water available to hydrate themselves. It would not take long for an employee to become dehydrated in Arizona's extreme temperatures.

There are two standards that we need to review regarding this issue, one for general industry and the other for construction. For general industry, 29 CFR 1910.141(b) states the following:

"Potable water **shall be provided** in all places of employment, for drinking, washing of the person, cooking, washing of foods, washing of cooking utensils, washing of food preparation or processing premises, and personal service rooms." (Emphasis added).

In the construction standards, 29 CFR 1926.51(a)(1) states:

"An adequate supply of potable water **shall be provided** in all places of employment." (Emphasis added).

Construction sites are places of employment. Some contractors decide that they will not provide water for a variety of reasons ranging from cost issues to problems keeping the cups cleaned up on the jobsite. The plain and simple fact is that the employer has the responsibility to provide employees with an adequate supply of water.

It makes sense if you're in business to do what you can for your employees so they can perform at peak levels. Working in 100 degree-plus temperatures without an adequate supply of water is counterproductive

and frankly, asking for problems.

Dehydration (the loss of body fluids due to perspiration) is the cause of most heat disorders. Energetic activity on hot days can cause the body to lose one to one-and-a-half quarts of fluid per hour. In a few hours, you could lose as much as 6 percent of your body weight. A loss of only 2 to 3 percent of your body weight decreases blood circulation, leading to extreme discomfort and thirst, along with higher body temperature and rapid pulse. This is followed by heat cramps, dizziness, headaches, excessive sweating, and a feeling of weakness. All of these symptoms are signs of heat exhaustion. You may suffer from heat stroke when you lose 3 to 6 percent of your body weight and your body stops perspiring and your temperature increases rapidly. Convulsions, unconsciousness, and death are possible.

Here are just a few recommendations to try and prevent problems with heat related health conditions:

Train workers to be aware of the dangers of working in the heat and ensure that they know who is trained in first aid.

Require crews to take breaks and drink water, especially crews working at piece rate.

Supply adequate water and allow reasonable opportunities to drink.

Obviously there are other methods that can also help, such as proper clothing and working at different times of the day during extreme heat conditions. But as far as ADOSH is concerned, there's no substitute for water!

Mark Norton, Assistant Director

IBM Achieves VPP Status



ADOSH is pleased to announce that International Business Machines

Corporation has achieved STAR status within the Voluntary Protection Program. In an awards ceremony held on February 2, 2005, IBM safety team representatives were presented with the VPP certificate and flag, attesting to their membership in the program.

VPP recognition is given to those companies who have established and implemented "best practices" with respect to occupational safety and health. VPP employers have gone far

above and beyond what is required for OSHA compliance purposes and have implemented a true safety culture within their organizations to the point where employee safety has become everyone's responsibility. Such a culture translates into improved employee morale, fewer injuries and illnesses, and reduced workers' compensation and related costs.

Our congratulations to IBM on becoming Arizona's 15th VPP workplace!

Fatal Mistakes

Every year in Arizona we welcome the coming of the new season's crops, and the folks who follow the harvest, picking the produce. It's tough work for the crews who work the fields and a job few of us envy. As we enter this next growing season, let's be reminded of the tragic deaths that occur every year to our itinerant crop workers.

Last season, a crew of laborers was picking sweet corn in the early hours of the day in order to beat the heat from the sun. Twelve laborers were following the picking trailer, taking the ears of corn from the stalks and placing them on the trailer platform as they slowly walked the rows. The trailer spanned six rows at once. Attached to the end of the picking trailer was a boxing trailer. As each box was packed it was placed on the boxing trailer. When the boxing trailer was filled, it was dropped off for pick up and replaced with an empty trailer.

When there was just one more turn to go, and the picking work would be done for the night and the season, the tractor broke down. It would no longer pull the combined trailer rigs and had to be replaced. It was 2:30 AM, and the hard working crew was eager to finish and rest. Three laborers reported to the foreman that they were going to catch a quick nap while the tractor was replaced. They were told to go to the bus to sleep and not to sleep in the field. Two went to the bus; one did not.

The foreman found the two men in the bus when it came time to restart the picking, just under an hour later. He failed to find the third man and assumed he had left the field. After finishing the pass where the tractor failed, the crew turned onto the final six rows of corn. Halfway down that pass, the third man was found by the tractor wheels. The driver was turned facing the picking trailer, as he was trained to do in order to be able to see hand signals from the foreman if it was necessary to stop the tractor, speed up, or slow down. He glanced forward occasionally to determine if there was any obstacle coming up. His rate of speed was about 250 per hour. He felt a bump when the tire hit the sleeping laborer, but was unable to stop the rig until the second tire on the left side had passed over the victim. The tractor was a 22,000 pound gross vehicle weight machine.

Efforts to rush the victim to the hospital several miles away were fruitless. He was pronounced dead at the hospital from massive internal injuries.

In another incident, the driver of a melon picking rig somehow left the seat of the tractor and fell under the tractor's rear wheel, reappearing when the picking trailer passed over his body, revealing it to the following crew. The foreman scrambled aboard the tractor and was able to stop the rig. No one knows why the driver left the driver's seat. The driver was pronounced dead at the site by responding emergency medical technicians, from massive internal trauma.

Both of these accidents involved itinerant agriculture crews and heavy tractors. We hope by publishing articles like this, the safety atmosphere at similar work sites will be enhanced and someone may live to work another day.

Ernie Miller, Safety Consultant

ADOSH Education and Training Calendar

Registration for each class begins no earlier than 30 days prior to the date of the class. Location, address and time of class will be determined at the time of registration. All ADOSH classes are free of charge and are subject to change or cancellation without notice.

Date	Class	Location	Trainer	Phone number
April 5	Forklift Train-the-Trainer	Prescott	Joe Gates	602-542-1641
April 5	Excavation Awareness	Tucson	Mark Norton	520-628-5478
April 6	Bloodborne Pathogens	Buckeye	Fernando Mendieta	602-542-1640
April 7	Construction Safety Mgmt.	Avondale	Joe Gates	602-542-1641
April 7	Forklift Train-the-Trainer	Tucson	Carlos Rodriguez	520-628-5478
April 12	Safety Management	Tucson	Mark Norton	520-628-5478
April 13	Heat Stress Prevention	Phoenix	Fernando Mendieta	602-542-1640
April 14	Scaffold Safety	Tucson	Tom Webb	520-628-5478
April 14	Construction Safety Mgmt.	Gilbert	Joe Gates	602-542-1641
April 19	Back Injury Prevention	Peoria	Fernando Mendieta	602-542-1640
April 20	Machine Guarding	Yuma	Joe Gates	602-542-1641
April 21	Fall Protection	Tucson	Carlos Rodriguez	520-628-5478
April 21	Lockout/Tagout	Yuma	Joe Gates	602-542-1641
April 26	Forklift Train-the-Trainer	Phoenix	Joe Gates	602-542-1641
April 27	Hazard Communication	Tucson	Fernando Mendieta	602-542-1640
April 27	Bloodborne Pathogens	Tucson	Fernando Mendieta	602-542-1640
April 28	Hazard Communication	Tucson	Tom Webb	520-628-5478
April 28	Excavation Safety (AM)	Holbrook	Joe Gates	602-542-1641
April 28	Electrical Safety (PM)	Holbrook	Joe Gates	602-542-1641
May 3	Respiratory Protection	Prescott	Fernando Mendieta	602-542-1640
May 5	Construction Hazard Recognition	Tucson	Mark Norton	520-628-5478
May 11	Confined Space Entry	Phoenix	Fernando Mendieta	602-542-1640
May 11	Welding Safety (AM)	Show Low	Joe Gates	602-542-1641
May 11	Scaffold & Ladder Safety (PM)	Show Low	Joe Gates	602-542-1641
May 12	Lockout Tagout	Tucson	Tom Webb	520-628-5478
May 12	OSHA in the Medical Office	Avondale	Fernando Mendieta	602-542-1640
May 18	Heat Stress Prevention	Yuma	Fernando Mendieta	602-542-1640
May 18	Hand & Power tools- Construction	Tucson	Mark Norton	520-628-5478
May 19	Excavation Awareness	Tucson	Tom Webb	520-628-5478
May 19	Violence Prevention	Yuma	Fernando Mendieta	602-542-1640
May 24	Heat Stress Prevention	Peoria	Fernando Mendieta	602-542-1640
May 24	Hand & Power Tool Safety	Phoenix	Joe Gates	602-542-1641
May 25	Hazard Communication	Buckeye	Fernando Mendieta	602-542-1640
May 26	Confined Space Entry	Tucson	Fernando Mendieta	602-542-1640
May 26	Respiratory Protection	Tucson	Fernando Mendieta	602-542-1640
May 26	Lockout/Tagout	Flagstaff	Joe Gates	602-542-1641
June 2	Forklift Train the Trainer	Tucson	Bill Garton	520-628-5478
June 7	Scaffold & Ladder Safety	Peoria	Joe Gates	602-542-1641
June 7	Scaffold Safety	Tucson	Tom Webb	520-628-5478
June 8	Back Injury Prevention	Phoenix	Fernando Mendieta	602-542-1640
June 9	OSHA Inspection Process -	Tucson	Mark Norton	520-628-5478
June 9	OSHA in the Medical Office	Mesa	Fernando Mendieta	602-542-1640
June 9	Scaffold & Ladder Safety	Prescott	Joe Gates	602-542-1641
June 15	Concrete & Masonry Safety	Yuma	Joe Gates	602-542-1641
June 16	Personal Protective Equipment	Tucson	Carlos Rodriguez	520-628-5478
June 16	Welding Safety	Yuma	Joe Gates	602-542-1641
June 21	Fall Protection	Phoenix	Joe Gates	602-542-1641
June 21	Noise/Hearing Conservation	Peoria	Fernando Mendieta	602-542-1640
June 21	Fall Protection	Tucson	Tom Webb	520-628-5478
June 22	Hazard Communication	Tucson	Bill Garton	520-628-5478
June 22	Hazard Communication	Show Low	Fernando Mendieta	602-542-1640
June 22	Personal Protective Equipment	Show Low	Fernando Mendieta	602-542-1640
June 23	Machine Guarding	Tucson	Mark Norton	520-628-5478
June 28	Hazard Recognition - Gen. Ind.	Tucson	Mark Norton	520-628-5478
June 29	OSHA in the Medical Office	Tucson	Fernando Mendieta	602-542-1640
June 29	Back Injury Prevention	Tucson	Fernando Mendieta	602-542-1640

All Tucson classes will be held at 2675 East Broadway Tucson Az. Please call if you have any questions.

Trainers may also be contacted by e-mail at gates.joe@dol.gov, mendieta.fernando@dol.gov

*Occupational Fatalities Investigated by ADOSH
October 1, 2004 through December 31, 2004*

- An employee was killed when he was caught and pulled into a rotating auger.
- An employee was crushed by a falling stack of wooden boxes.
- An employee was crushed between the bucket of a backhoe and an asphalt rolling machine.
- The owner of a company was crushed between the mast of a forklift and a bale of scrap cardboard.
- An employee was crushed by a truck axle that fell when he was underneath the vehicle.

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