

**THE UOSH
SAFETY LINE
OCTOBER
2010**

Utah Occupational Health and Safety Division (UOSH)
160 East 300
South Salt Lake City, UT 84111

Compliance
801-530-6901

Consultation Program
801-530-6855

Utah Labor Commission
801-530-6800

Work related fatalities, serious injuries, and imminent danger situations are to be reported to UOSH within 8 hours of the injury. Report seven days a week by calling 801-530-6901.

INSIDE THIS ISSUE:

APWA CONFERENCE 2

Health and Wellness 3

Safety Compliance Corner 3

Crane and Derrick OSHA sheet 4



ELECTRICAL SAFE WORK PRACTICES

What is arc flash?

Arc flash is the term used for the phenomenon that involves the release of energy caused by an electrical arc. Temperatures associated with arc flash incidents can reach as high as 35,000 degrees Fahrenheit.

In addition to the intense light and heat, arc flash also presents dangerous pressure, auditory, projectile, and inhalation hazards. Pressures associated with some arc flash incidents have been great enough to blow down nearby concrete walls.

How to avoid arc flash.

To reduce the risk of arc flash occurring in your facility, steps can be taken to help you protect your workers safety:

- * Do all maintenance repair work on de-energized equipment following approved procedures.
- * Determine the shock hazard and flash protection boundaries.
- * Perform the operation of unplugging or plugging in a circuit breaker with the electrical current shut off at the source with a lock out system in place.
- * Use arc-venting switchgear. Arc fault venting allows arc flash energy to exit in a specific direction away from where personnel are likely to be.
- * Set protection devices, such as differential relays, to react quickly.
- * Use current limiting fuses, arc fault interrupters, or circuit breakers, as these can

interrupt in as little as one-quarter of a cycle.

- * Use voltage rated tools. and insulating barriers.
- * Always test before you touch.

Even with all these safety steps available, there will still be occasions when employees will be required to interact with machinery in circumstances that don't fit these parameters. In those cases, other precautions may be used such as official arc flash hazard notices on any electrical equipment that requires inspection and maintenance. The notice can include arc flash boundary details, PPE category requirements and potential shock hazard when the cover is removed.

Sample Posting

"Danger: Arc Flash Hazard Exists; Appropriate PPE Required"

Employers should be knowledgeable about arc flash hazards and provide the proper PPE (personal protective equipment) required to protect workers and communicate the risks.

Employers are required to ensure employees are qualified and have received proper training and demonstrated skills in the operation of electrical equipment.

Employer are required to ensure the availability of medical personnel or provide a person who has first aid training.

OSHA requires an employer to determine the presence of a

hazard, require appropriate PPE, and ensure on-hand PPE fits personnel.

NFPA arc flash requirements are a bit different than OSHA's.

NFPA 70E 2004 130.3, on the other hand, specifically requires a flash hazard analysis be performed to protect against arc flash and to determine the arc flash boundary. Though it does not directly enforce the NFPA standard, OSHA does recognize it as an accepted industry practice.

To reference applicable OSHA standards for General Industry refer to:

- 1910.132 - 138 PPE
- 1910.151 Medical Services and First Aid

Electrical

- 1910.331 Scope
- 1910.332 Training
- 1910.333 Work Practices
- 1910.334 Use of equipment
- 1910.335 Safe Guards for personal protection

To reference applicable OSHA standards for Construction refer to:

- 1926.20 General safety and health provisions
- 1926.21 Safety training and education
- 1926.50 Medicals services and first aid
- 1926.95 - 96 PPE
- 1926.100 Head protection
- 1926.102 Face and eye protection
- 1926.416 General requirements
- 1926.417 Lockout and tagging of circuits.

JENMAR RECEIVES SHARP RECOGNITION



Jenmar Corporation of Utah Inc., was formally recognized October 12, 2010 for its continued emphasis on providing a safe and healthy work environment for its employees through the OSHA Safety and Health Achievement and Recognition Program (SHARP). Originally a recipient in 2005, achieving a two year extension in 2007, and most recently qualifying for a three year extension from 2009 through 2012. Utah Labor Commissioner, Sherrie Hayashi, presented Jenmar Corp of Utah Plant Manager, Bill Henson and Safety and ISO Manager, Alan Smith, a plaque that recognizes their years of continued success in SHARP. Utah Occupational Safety and Health (UOSH) Director, Louis Silva expressed our sentiments and admiration of a company that has achieved an exceptional safety and health record.

Among their many achievements, Jenmar UT recently completed an expansion of its facility to encompass a new product line and has been ISO 9001:2008 certified since 2005.

Jenmar Corp of Utah manufactures and produces roof support systems for the mining industry, servicing the Western US. Jenmar was incorporated in 1965 and from 1922 until 1972 was engaged in various businesses related to the coal mining industry. In 1972, Jenmar began to change the primary focus of its business to the manufacturing of roof support systems. The company's first step was the purchase of manufacturing machinery necessary to begin producing steel mine roof bolts in Cresson, Pennsylvania. Since then Jenmar has expanded its presence to West Virginia, Virginia, Kentucky, Utah, South Carolina, Australia, China, Canada and Chile. The company has expanded its products and services over the years to include mining and civil ground control engineering; steel slitting and processing; resin anchorage product manufacturing; specialty steel fabrication specializing in roll forming of coil, sheet, structural beams, arch and corrugated products for the mining and construction industries.

UTAH OSHA AT THE APWA CONFERENCE



Utah OSHA Consultation Division was invited to set up a booth at this year's American Public Works Association (APWA), Utah Chapter conference held October 5th and 6th at the South Town Expo Center, in Sandy, Utah. The booth was visited by most of those in attendance, estimated to be about 400, from both public and private employers. Information about the services available to these employers in both public and private sectors was given out. Many of those visiting the booth were not aware that there is a free service offered by Utah OSHA to their businesses to help them be in compliance with OSHA's regulations, without the fear of receiving a citation. The program was explained to all who visited our booth. Excitement for the program was expressed by many, with promises to contact the Utah OSHA office in the future to arrange visits.

As part of the conference, Utah OSHA Supervisor Dan King and Public Sector Consultant Evelyn Partner were asked to help present information during a breakout session on safety programs for APWA employers. This session was well attended and much was learned by all.

Health and Wellness

Fall is Here...and with it comes increased driver safety risks!

Are you prepared for a change in the weather? Is your vehicle prepared? Now is the time to prepare! In a recent article, the National Highway Traffic Safety Administration indicated that bad weather is associated with 800,000 injuries and more than 7,000 fatalities annually in the United States.

The National Safety Council suggest that by following the tips below, you can decrease your risk of accident.

1) Get a vehicle checkup?

Now's the time to give your vehicle a thorough checkup. Check the condition of the battery, the condition and the inflation of your tires, your ignition, and your brakes.

2) During the fall and winter seasons, use your defroster while driving so the inside of your windshield stays dry.

3) If it's raining so hard that you cannot see the car in front of you, pull over, stop, and wait for the storm to lighten up or pass by.

4) Be careful when driving on wet leaves because the wet leaves can cause your vehicle

to hydroplane.

5) Did you know that approximately 200 people die every year from motor vehicle collisions with deer? When you see a deer, be on the lookout for more. They usually travel in groups. Remember that deer are not only in the rural areas. They're in the suburban areas and urban areas as well. If you do hit a deer, call 911 and wait for assistance.

For more information on driver safety, visit the National Safety Council's website at www.nsc.org.

Safety Compliance Corner

Does the final rule on the new Cranes and Derricks standard require riggers to be certified?

No, riggers are not required to be certified. However, riggers must be a qualified person for the performance of specified hoisting activities such as during assembly/disassembly work and those that require employees to be in the fall zone to handle a load. The rigger would be considered qualified through possession of a recognized degree, certificate, or professional standing; or by extensive knowledge, training, and experience, successfully demonstrating the ability to solve/resolve problems related to rigging work and related activities.

Does the final rule on the new Cranes and Derricks standard require signal persons to be certified?

No, signal persons do not have to be certified. However, the employer of a signal person must ensure that the signal person is qualified. This qualification must be done by a qualified evaluator, which may be a third party or an employee of the signal person's employer. The evaluator must demonstrate that he or she can accurately assess whether an individual meets the qualification requirements specified by this final rule for signal persons.

OSHA[®] FactSheet

Subpart CC – Cranes and Derricks in Construction: Operator Qualification and Certification

This fact sheet explains the operator qualification and certification requirements of subpart CC – Cranes and Derricks in Construction, as specified in 29 CFR 1926.1427. State or local government licensing is effective November 8, 2010. Other certification and qualification is effective November 10, 2014.

Who needs to be certified or qualified?

Any person engaged in a construction activity who is operating a crane covered by the new cranes and derricks rule, except:

- sideboom cranes*
- derricks*
- equipment with a rated hoisting/lifting capacity of 2,000 pounds or less*

*Operators of the listed equipment must meet the criteria for minimum expertise described in the applicable section in subpart CC.

Are operators of digger derricks required to be qualified or certified?

Yes, unless the digger derrick is being used to auger holes for poles carrying electric or telecommunication lines, place or remove the poles, or handle associated materials to be installed on or removed from the poles.

What is required in the testing for certification?

Certification has two parts:

1. A written examination that includes the safe operating procedures for the particular type of equipment the applicant will be operating and technical understanding of the subject matter criteria required in 1926.1427(j).
2. A practical exam showing the applicant has the skills needed to safely operate the equipment, including, among other skills, the

ability to properly use load chart information and recognize items required in the shift inspection.

Does an operator need more than one certification?

With respect to certification from an accredited testing organization, an operator must be certified for the *type* and *capacity* of crane he or she is going to operate. Each accredited testing organization develops its own categories for crane type and capacity.

How is an operator certified or qualified?

There are 4 ways that an equipment operator can be qualified or certified and meet OSHA requirements.

1. A certificate from an accredited crane operator testing organization
2. Qualification from the employer through an audited employer program
3. Qualification by the US Military (only applies to employees of Department of Defense or Armed Forces and does not include private contractors)
4. *Licensing by a state or local government (if that licensing meets the minimum requirements set forth by OSHA)

*When a state or local government requires a crane operator license, the crane operator must be licensed accordingly to meet OSHA requirements. Page 2 of 2.

Operator Qualification and Certification, continued.

Accredited crane operator testing organization. The testing organization must be accredited by a nationally recognized accrediting agency and test according to the criteria listed at §§ 1926.1427(j)(1) and (j)(2). This certification is portable from employer to employer. The testing organization must have its accreditation reviewed every 3 years.

The certificate must note the type and capacity of equipment for which the operator is tested and certified. The certificate is valid for 5 years.

Audited employer program.

An employer may provide a crane operator testing program under the oversight of an independent auditor. An accredited crane operator testing organization must certify the auditor to evaluate the administration of written and practical tests. The auditor must conduct audits of the employer's program according to nationally recognized auditing standards. Crane operator qualification under an employer program is only valid while the operator is an employee of the employer and operating a crane for the employer. The qualification is valid up to 5 years.

U.S. Military. This qualification applies only to civilian employees of the Department of Defense or Armed Services and is not portable. This qualification does not include employees of private contractors.

Licensing by a government entity. This license is obtained from a government entity, such as a city or state that has a required certification program. When this license meets the minimum requirements of 1926.1427(e)(2) and (j), OSHA requires a crane operator to have this license when operating in the applicable city, county, or state. This license is not portable outside the boundaries of the government entity that issues the license, and is valid for a maximum of 5 years.