

Alaska Chapter NECA

February 24, 2006

Alaska Chapter, NECA www.alaskaneca.org

Chapter Calendar

March 3-7	Chapter Manager's Institute
March 7	Anchorage JATC
March 8	Board Meeting/Membership Meeting
March 12-14	Seattle Pension Meeting
March 14	Safety Committee
March 17	St Patrick's Day
March 19-22	District 10
March 23-26	District 6

Tool Box Talks

March 06, 2006	Cranes and Hoists/Rigging and Slings
March 13, 2006	DMM (Digital Multimeter) Safety/Test Equipment
March 20, 2006	Emergency Response
March 27, 2006	Excavation



Staying safe when using power tools

According to recent studies, almost half of all finger amputations in men aged 55 and older are caused by power tools. Finger amputations send an estimated 28,000 children and adults to hospital emergency departments each year. To prevent such incidents, follow safe procedures, whether working with power tools on the job or at home.

Prepare

- Read and familiarize yourself with the manufacturer's instructions, including precautions and how to respond to an emergency.
- Use recommended protective equipment, such as safety goggles, clothing, earplugs, dust masks, or gloves.
- Make sure that the tool is in good working order, including the cord, switch, and any protective guarding.

Proper use

- Make sure that safety guards are in place, in working order, and properly adjusted.
- Never modify a tool for a job it's not intended to do.
- Keep safety switches in working order; do not bypass or replace them with standard switches.
- Avoid accidental starts by keeping hands away from switches while carrying plugged-in or battery powered tools.
- Avoid using tools if you are taking strong medications, are drowsy, or consuming alcohol.



Work safely

- Keep work areas well lit and free of clutter.
- Never use power tools in damp or wet locations.
- Have observers remain a safe distance away from the work area.
- Keep good footing and maintain good balance.

- Avoid loose clothes, ties, or jewelry.

Storage

- Store tools in a dry place that is not above your head.
- Store tools out of the reach of children and disconnect the power supply.



Ladder use near overhead power lines

Recently, news outlets reported on the deaths of four adult Boy Scout leaders, and injuries to three other adults, when a tent pole apparently struck an overhead power line at the Boy Scouts' national gathering.

Just as tent poles are essential equipment for camping, ladders are essential equipment at construction jobsites. Like the tent pole incident, contact between portable metal ladders and overhead power lines causes serious (and often fatal) injuries to employees. Data from the National Institute for Occupational Safety and Health shows that contact of metal ladders with overhead power lines accounted for approximately four percent of all work-related electrocutions in the United States.

Do not use portable metal or conductive ladders for electrical work or in locations where they may contact electrical conductors. Nonconductive ladders such as those made of wood or fiberglass should be used instead.

To keep ladders from tipping and potentially causing employees to contact energized power lines:

- Use ladders only on stable and level surfaces, unless secured to prevent accidental displacement.

- Use ladders with slip-resistant feet to prevent accidental displacement.
- Place the top of a non-self-supporting ladder with the two rails supported equally.
- Secure, to prevent accidental discharge, ladders that are placed in any location where they can be displaced by workplace activities or traffic. Or, use barricades to keep the activities or traffic away from the ladder.
- Position non-self-supporting ladders at an angle so that the distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder (4-to-1 rule).
- Maintain ladders free of oil, grease, and other slipping hazards.
- Avoid loading ladders beyond their maximum intended load.
- Keep the area around the top and bottom of ladders clear of debris and material.
- Do not move, shift, or extend ladders while someone is standing on them.
- Use ladders only for the purpose for which they were designed.
- Never use the top of a stepladder as a step.
- Withdraw from service portable ladders with structural defects, such as broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components. Mark or tag these ladders with “Do Not Use” or similar language.

Talk with your supervisor if you have any questions about ladder use.



Never let your guard down in a work zone

Highway and street construction workers are at risk of fatal and serious nonfatal injury when working in the vicinity of passing motorists, construction vehicles, and equipment. Each year hundreds of workers are killed and thousands are injured in the highway and street construction industry.

These injuries and fatalities occur in what is known as the “work zone” and are usually caused by poor traffic control procedures, unsatisfactory construction vehicle and equipment maintenance (malfunctioning warning devices), poorly designed work zones, and failure to establish and follow policies and procedures for ensuring safety on the job.

What is a work zone?

The work zone is the area between the first warning sign and the last traffic control device. The work zone could also be said to include non-roadway areas (shoulders and drainages), and areas that serve as staging areas, or support areas for the work zone (temporary batch plants), although these areas are not in the definition of the work zone described in the Manual on Uniform Traffic Control Devices.

Work zone hazards

Potential hazards associated with work zones include:

- Traffic and construction equipment accidents,
- Working above level,
- Slippery conditions,
- Machinery pinch points,
- Crush zones,
- Drop-offs,
- Trenches,
- Airborne lead and silica particles,
- Truck tip-overs, and
- Energized electrical lines and conductors.

Internal versus external

There are two basic types of hazards:

- Internal hazards are activities within the workspace such as moving vehicles.
- External hazards are ones presented by passing cars and trucks and the debris they kick up.

There are many internal and external work zone hazards, but you can avoid them if you think safety first, use the necessary procedures, and be alert to situations that might result in accidents.



Welding and cutting safety

Everyone involved in welding operations must take necessary precautions to prevent fires, explosions, or personal injuries. Even for small or routine jobs you should always follow established safety procedures and resist the temptation to take shortcuts.

As with any job activity, you will have hazards involved. Some common welding dangers you should be aware of include fumes, gases, radiation, electric shock, fire and explosion, lead poisoning, metal splatter and sparks, noise, and slips, trips and falls. While these are a lot of hazards, OSHA allows a lot of ways to control or eliminate them in order to protect you.

Ventilation

Exhaust hoods, fans, and open spaces all help to reduce the concentration of hazardous fumes, gases, and dusts, and prevent the accumulation of flammable gases, vapors, and dusts that could cause fire. Know the symptoms of exposure to fumes and gases and get out of the area if they develop. Perform atmospheric testing.

Respirators

Wear a respirator when ventilation and plume avoidance don't give enough protection or when welding creates an oxygen-deficient area.

Personal protective equipment (PPE)

This includes:

- flame-resistant aprons, leggings, and high boots;
- ankle-length safety shoes worn under your pant legs;
- shoulder cape and skull cap;
- ear plugs or ear muffs;
- insulated gloves;
- safety helmets;
- goggles;
- helmets; and
- shields.

Use ANSI-approved filter lenses and plates. Protect those nearby by putting up shields.

Electrical precautions

Follow these tips:

- Do not arc weld while standing on damp surfaces or in damp clothing.
- Properly ground, install, and operate equipment.
- Do not use defective equipment.
- Use well-insulated electrode holders and cables.
- Insulate yourself from both the work and the metal electrode and holder.
- Don't wrap a welding cable around your body.
- Wear dry gloves and rubber-soled shoes.
- Do not use damaged or bare cables and connectors.

Fire protection

Use these precautions:

- Wear flame-resistant clothing.
- Have someone be your fire watcher when you weld.
- Move all combustible material at least 35 feet from the work area or cover them with fire resistant material.
- Don't weld in atmospheres containing dangerously reactive or flammable gases, vapors, liquids, or dust.
- Clean and purge containers which may have held combustible material before applying heat.
- Get a hot work permit and follow its safety precautions.

Confined space precautions

Assess limited work spaces and slipping hazards, and evaluate hazardous atmospheres and interior surfaces for flammability, combustibility, or toxic fumes that could result from welding processes.

Clothing

Wear wool, leather, or treated cotton clothing to reduce flammability for gas shielded arc welding. Long sleeves and pants without cuffs/front pockets are recommended to avoid catching sparks.

Remember, don't get too close to the fume or plume, or weld on lead-painted surfaces.