Alaska Chapter NECA

July 25, 2005

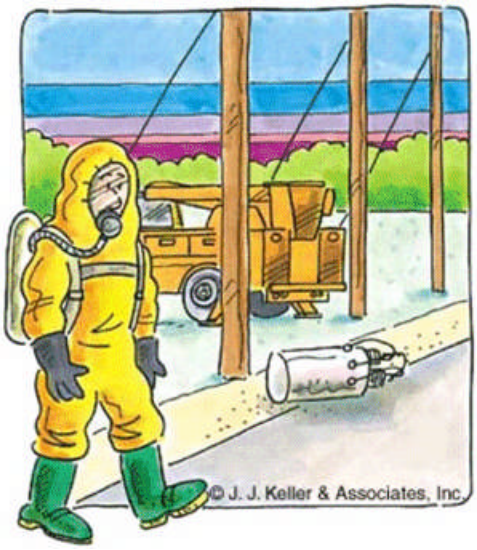
Alaska Chapter, NECA www.alaskaneca.org

Chapter Calendar

July 29	NECA Convention Earlybird Registration Deadline
August 2	Anchorage JATC
August 9	Safety Committee
August 10	Board Meeting/Membership Meeting Guest & Veteran Member Night
August 11	Health & Welfare Trust Meeting
August 18-21	NECA District 6 Mini Convention
September 16-21	NECA Convention in New Orleans

Tool Box Talks

August 2, 2005	Low Voltage, Indoors/Outdoors
August 9, 2005	MSDS
August 16, 2005	OSHA Violations to Avoid, Parts I & II
August 23, 2005	Portable Cords
August 30, 2005	Power Lines

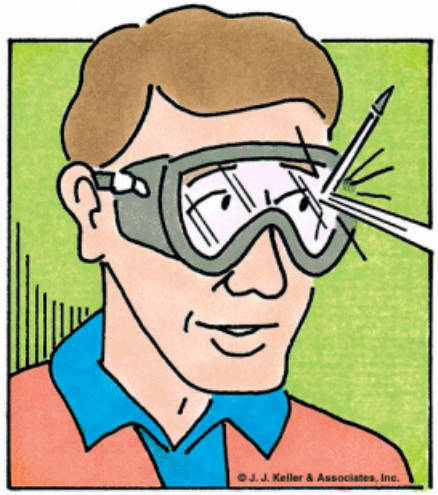


Chemical hazards in utilities?

You may not think of chemical and atmospheric hazards as being a huge issue in utility work. However, there are many situations in and around utilities where such hazards may be present:

- Enclosed or confined spaces may contain various chemical (e.g., hydrocarbons, hydrogen sulfide) and hazardous atmospheres. For example, furnace effluents can contain particulate substances, coal tar pitch volatiles, sulphur dioxide, and carbon monoxide. Particulate from flyash contains silica, and possibly arsenic, depending on the type of coal used. (A clue to the constant presence of sulphur dioxide is corroded metal structures or surfaces.)
- Toxic material, such as hydrazine, and flammable liquids, gases, vapors, or combustible materials may be used or produced during the chemical cleaning of boilers and pressure vessels. (Hydrazine has a PEL of 1 ppm and may be absorbed through the skin.)
- Ozone is produced in some high voltage electrical operations. For example, it may be present in high concentrations in electrostatic precipitators.
- Chlorine is likely to be present in chlorine system enclosures and may be present in the surrounding area. As a consequence of water treatment, there may be hazardous toxic or reactive chemicals in drainage trenches in the lowest levels of the power plant.
- High pressure steam leaks, which may be invisible, are hazardous energy sources to which exposure can be fatal. For example, steam from a pinhole leak could lance completely through the body of a person. The noise in the generation area may conceal this hazard. Experienced employees travel in these areas with a broom or a rag tied onto a stick held in front of them to detect such steam hazards.
- Chrysotile asbestos is present in older power generation facilities. Amosite asbestos may be in use in valve packing.
- Mercury may be present in the flooring of the instrument repair area of the power plant.
- Cadmium may be used to coat fish-screens in the intake caissons and to tip blades used to propel coal.
- Polychlorinated biphenyls (PCBs) may be present in maintenance operations involving capacitors and transformers. Dioxin may be present where these components were overheated.

Always be on the lookout for chemical hazards during your work and always follow your company's safety program (i.e., wear proper PPE, follow MSDSs) when working around/near such hazards.



Watch your eyes near disaster/emergency sites

Utility workers are often called to perform their work in the aftermath of a weather emergency or other disaster. When this is the case, safety must be a priority in all respects.

One area that is particularly vulnerable is your eyes. When working around a disaster/emergency site, your eyes may be exposed to several hazards. Common hazards are:

- Dust, concrete, and metal particles
- Falling or shifting debris, building materials, glass
- Smoke, noxious/poisonous gases
- Chemicals (acids, bases, fuels, solvents, lime, wet or dry cement powder)
- Welding light and electrical arc
- Thermal hazards and fires
- Bloodborne pathogens (hepatitis or HIV) from blood, body fluids, human remains

These hazards can result in a variety of injuries, such as:

- Corneal abrasions and conjunctivitis (red eyes)
- Concrete or metal particles or slivers embedded in the eye
- Chemical splash or burn
- Welder's flashburn
- Eyeball laceration
- Facial contusion and black eye
- Bloodborne pathogen exposure from blood or other body fluids or human remains

To help keep your eyes safe, consider the following 4 Points to Eye Safety provided by the

National Institute for Occupational Safety and Health (NIOSH):

1. Have a safe work environment
    - Minimize hazards from falling or unstable debris.
    - Make sure that tools work and safety features (machine guards) are in place.
    - Ensure you know how to use tools properly.
    - Keep bystanders out of the hazard area.

2. Evaluate your safety hazards
    - Know your primary hazards.
    - Recognize hazards from nearby workers, large machinery, and falling/shifting debris.

3. Wear the proper eye and face protection
    - Select ANSI Z87 eye protection for the hazard. Look for the Z87 mark on the frame or lens.
    - Make sure the eye protection is in good condition.
    - Make sure it fits properly and will stay in place.
    - Eye/face protection devices should not be relied upon to provide complete protection.

4. Prepare for eye injuries and first aid needs
    - Have an eyewash or sterile solutions on hand.

Jump-starting heavy equipment… not a good idea

There are times when you may feel the need to jump-start heavy equipment, often in a way that bypasses the starter. This is often done:

- Even if the operator's manual warns against bypassing normal starting procedures; and
- When there are labels on equipment starters warning that the equipment should only be

started from the operator's seat, and with the transmission in “park” or “neutral.”

Injuries and death
It's important to remember that if you do jump start equipment by bypassing normal starting procedures that serious injuries or death may occur from a runaway machine. That’s because if the equipment is in gear when jump-started it could lurch forward and run over the operator, coworkers, and innocent bystanders.

Jump start with caution?
Be wary of some equipment operator manuals that recommend against jump starting the equipment and then go on the provide safety warning and instructions on how to jump-start with caution. Manufacturers should not provide detailed information on actions that counter their safety recommendations.

So, if you do see this type of information in the operator’s manual, ignore it. Why? Because if a vehicle needs to be jump-started there is something wrong with it (like a dead battery or defective wiring). Correct the malfunction as soon as possible to avoid loss of time and unsafe conditions.

By-passing the starter relay
Many types of heavy equipment are designed not to start with the equipment in gear and without the parking break set. However, when the starter relay is bypassed so are the safety relays that prevent the equipment from being started when in gear and without the brake being set.

If you aren’t sure how to start or operate a piece of equipment talk to your supervisor or consult the equipment operator's manual.

Proper respirator use is good for your health

Working around dusts, mists, fumes, aerosols, gases, and vapors can be hazardous to your health. If your company can’t control the contaminants by using engineering controls then wearing a respirator help can protect you.

Your employer must establish and implement procedures for the proper use of respirators. These requirements include the following:

- Prohibiting conditions that may result in facepiece seal leakage,
- Preventing employees from removing respirators in hazardous environments,
- Taking actions to ensure continued effective respirator operation throughout the work shift, and
- Establishing procedures for the use of respirators in IDLH atmospheres or in interior structural firefighting situations.

Facepiece seal protection

You can't wear respirators with tight-fitting facepieces if you have:

- Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-facepiece seal or valve function.

For example, if you wear corrective glasses or goggles or other personal protective equipment, your employer has to make sure that you wear it in a manner that does not interfere with the seal of the facepiece to the face of the user.

You must also perform a user seal check each time you put on the respirator using the procedures in Appendix B-1 of 29 CFR 1910.134, or procedures recommended by the respirator manufacturer that are as effective as those in Appendix B-1.

Continuing respirator effectiveness

Employers must survey your work area conditions and degree of exposure or stress. When there is a change in either that may affect respirator effectiveness, your employer needs to reevaluate

the continued effectiveness of the respirator.

In addition, you must leave the respirator use area:

- To wash your face and respirator facepieces as necessary to prevent eye or skin irritation;
- If you detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece; or
- To replace the respirator or the filter, cartridge, or canister elements.

If you detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, have your employer replace or repair the respirator before you return to work.

Get involved with safety!

The best worker safety and health protection occurs when everyone at the worksite shares responsibility for protection. You have unique knowledge to help find problems and resolve them. In addition, no one else has as much at stake to avoid accidents as the people who are likely to be injured.

The more that you are involved in a variety of safety-related activities, the more you will appreciate the potential hazards that exist at the worksite, the more likely you will avoid unsafe behaviors, and the more likely the overall safety culture of the organization will strengthen. Without your involvement and cooperation, accidents are difficult to prevent.

How can you get involved?

Some things you can do to increase your involvement in safety include checking out the following possibilities:

- Volunteer to conduct site inspections.
- Analyze routine hazards in each step of a job or process, and prepare safe work practices.
- Volunteer to help develop and revise safety rules.
- Participate as trainers for current and new hires.
- Participate in accident/near miss incident investigations.
- Participate as safety observers and safety coaches.
- Report hazards and be involved in finding solutions to correct the problems.

Talk to your safety manager or supervisor about getting involved in safety at your company!

First aid kits

Just the basics …

Whether for work or home, is your first aid kit up to par? Most first aid kits will contain some basic items to treat a variety of injuries quickly and easily. Items that may be included are:

- Large and small gauze pads,
- Gauze roller bandages,
- Adhesive bandages (Band-Aids),
- Adhesive tape,
- Triangular bandages,
- Elastic wraps,
- Splint,
- Scissors,
- Tweezers,
- Latex gloves,
- Resuscitation bag, airway, or mask,
- Antiseptic towelettes,
- Antibiotic cream,
- Eye wash,
- Instant cold packs,
- Blanket, and
- Instructions for getting emergency assistance.