

Alaska Chapter NECA

August 25, 2005

Alaska Chapter, NECA www.alaskaneca.org

Chapter Calendar

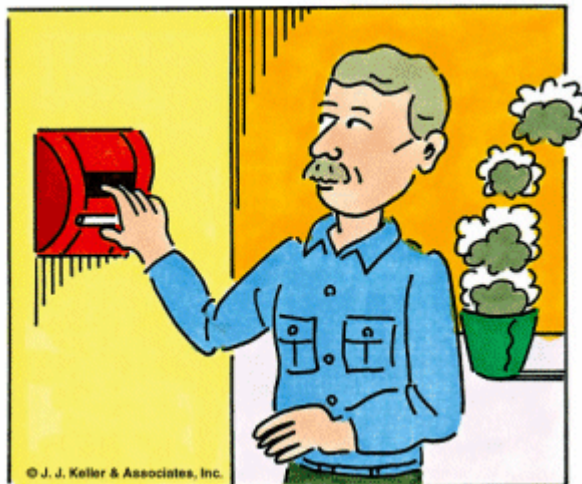
September 5	Labor Day
September 6	Anchorage JATC
September 13	Safety Committee
September 14	Board Meeting/Membership Meeting Cancelled
September 16-21	NECA Convention in New Orleans

Tool Box Talks

September 06, 2005	Personal Protective Equipment
September 13, 2005	PPE: Rubber
September 20, 2005	Responding to Your Customer's Unsafe Acts
September 27, 2005	Safety 101: General Guidelines



“Somebody should really cover that up.”



Know the systems

Engineering controls are commonly relied upon for notification and response to fires and chemical emergencies. Emergency responders should be familiar with available systems and thoroughly understand those in place at their facility.

The following sections describe engineering controls that are commonly encountered in emergency response situations.

Alarms

The complexity of alarm systems depends on the operations and degree of hazards at a facility. A small, single-process plant may only require a simple siren to call for evacuations.

In a more complex facility, the alarm system may convey various information for workers to respond or evacuate in a specific manner. Depending on the facility, the alarm may communicate:

- The location of the release,
- The type of the release (i.e., vapor, gas, liquid),
- The ambient conditions that may affect response or evacuation options, and
- Which response or evacuation procedure is to be followed.

At these sites, the alarm system must provide distinctive and recognizable signals as necessary for proper action as designated in the emergency plan.

Emergency shutoff valves

Various shutoff valves may be incorporated into chemical processes and storage tanks at a facility. These devices are intended to stop spills of liquids and prevent gas explosions in emergencies.

Shutoff valves may be designed to automatically activate under certain conditions, such as a change in pressure or temperature. However, some of these devices must be manually activated or are remotely controlled.

Fire suppression

Fixed fire extinguishing/suppression systems are commonly used to quickly extinguish a developing fire and alert occupants before extensive damage occurs. They do this by filling the protected area with a gas or chemical extinguishing agent.

When an automatic or manual device is activated, these systems may:

- Activate a pre-discharge alarm,
- Initiate agent release,
- Shut down ventilation systems,
- Shut down machinery or equipment,
- Activate visual and audible fire alarms, and
- Notify emergency response personnel.

If your facility has these systems, make sure you understand:

- The type of systems installed,
- The hazards involved,
- Proper activation in case of emergency, and
- The correct response to audible and visual pre-discharge alarms.

Prior to participating in any emergency response, be sure you understand the proper operation of engineering controls in place at your facility.

Recognize warning signs and tags

Warning signs and tags are in place for good reason – they prevent injuries by alerting workers to hazards. You may not realize there are certain requirements for signs and tags to make it easier for you to identify the degree of danger.

Color the hazard

Colors are used to indicate hazard levels. An OSHA rule at 29 CFR 1910.144 outlines a safety color code for marking physical hazards. OSHA uses these color requirements in the rules for accident prevention signs and tags.

Danger

Danger signs use the color red. Danger signs are used to warn of specific dangers and radiation hazards. Danger signs mean immediate danger. Special precautions are needed.

Danger tags are used where an immediate hazard presents a threat of death or serious injury.

Other items use the color red to indicate danger. Safety cans or other portable containers for flammable liquids are painted red. Red lights are used to mark barricades or temporary obstructions. On machinery, emergency stop buttons or controls are colored red.

Because fire represents a danger, fire protection equipment is also typically red in color. If you see red pipes, they contain fire quenching materials.



Caution

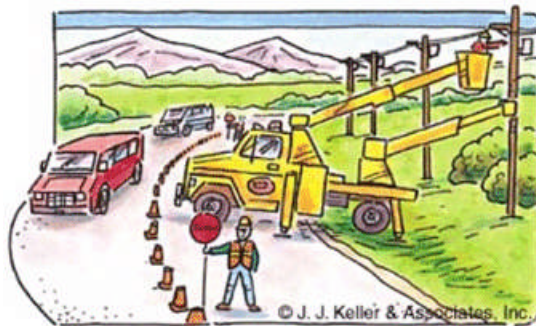
Caution signs use the color yellow. They are used to warn against potential hazards or to caution against unsafe practices. Caution signs indicate a possible hazard against which proper precaution should be taken.

Caution tags are used where a non-immediate or potential hazard or unsafe practice presents a lesser threat of injury. Warning tags (orange in color) may be used to represent a hazard level between caution and danger.

The color yellow is used to mark physical hazards where employees could strike against something, stumble, fall, trip, or be caught between items. Because aisles in the workplace must be marked, it's common to use yellow stripes to outline the boundary of the aisles.

Safety instructions

Safety instruction signs have a green panel with white letters. Safety instruction signs are used where there is a need for general instructions about safety measures.



Highway work zone tragedies can be prevented, ASSE reminds

The American Society of Safety Engineers (ASSE) encourages employers, workers, and motorists to be aware of roadway work zone safety rules in an effort to prevent tragedy this summer. Working in and traveling through a roadway work zone can be deadly ASSE officials note, citing a crash on Interstate 81 north of Binghamton, New York, when a tour bus struck a motorcyclist, a tractor-trailer, a cement mixer, and then hit three roadway workers from a paving company, killing all three.

To prevent roadway work zone workers from being injured on the job, ASSE member George Wolff, CSP, writes in the ASSE Construction Safety Management and Engineering Book that employers and employees must be aware of the many types of worker hazards and exposures to risk; the need for a temporary traffic control work zone; the need to set up an advance work zone warning area and transition area; the hazards of installing, modifying, and removing work zones; how to best equip a flag person; driver awareness; and, liability and litigation.

In addition to the risk from impaired drivers, Wolff states that roadway workers face a multitude of hazards which include being struck or caught between equipment; injury from overuse and poor body conditions; and environmental exposures to heat, cold, and sun.

Recent incidents

Incidents involving roadway work zone fatalities from the National Institute for Occupational Safety and Health (NIOSH) Fatality Assessment and Control Evaluation (FACE) reflect the different risks involved. Recently:

- A roller operator and a work crew foreman died after they were struck by a motorist in a highway work zone – Oklahoma
- A construction worker died after a water truck and a scraper collided – South Carolina
- An asphalt milling superintendent was crushed under an asphalt milling machine – Virginia
- A construction worker died after being struck by a front end loader – Pennsylvania
- A construction worker died after being run over by an asphalt roller at a highway construction site – Virginia
- A construction worker died after a compactor tipped over at a highway construction site – South Carolina
- A flagger was struck from behind and killed by a truck intruding into a highway construction work zone – Wisconsin
- A state Department of Transportation worker died after being struck by a motor vehicle – North Carolina
- A state Department of Transportation highway maintenance worker died after being struck by a car while installing reflectors on a guardrail – North Carolina
- A 17-year-old part-time road construction worker died after being run over by a water truck – Indiana
- A construction worker died after being run over and crushed by a grader at a road construction site – North Carolina
- A roadway construction worker died after being backed over by a dump truck – Virginia
- A highway worker died after being hit by a speeding vehicle while picking up cones on an interstate – California
- In different incidences in different places, construction workers were killed after being backed over by a truck – California
- A city street worker was struck and killed by a speeding car – Iowa
- A highway construction worker died when struck by a semi-tractor trailer – Kentucky
- A police officer was killed when struck by a motorist while directing traffic at a roadway work zone – Massachusetts
- A worker died after being crushed between a rock spreader and a large roller – Minnesota

In a roadway work zone, motorists should pay attention to the orange diamond-shaped warning

signs or electronic message boards posted in advance of a road construction project; minimize distractions such as changing a radio station; watch for stopped or slowing traffic, don't tailgate; keep an eye out for workers, their equipment and vehicles, as well as the vehicles around you; and, watch for detours and lane diversions.



Portable light strings at construction jobsites — necessary electrical hazard?

By their nature, temporary light strings at construction jobsites are basically an automatic hazard. The light strings themselves are not the hazard, but the nature of the jobsite makes them a hazard. However, hazards can be controlled and jobsites can be made safe.

What are the OSHA requirements?

The requirements for temporary lighting at construction jobsites are in 29 CFR 1926.405(a)(2)—Temporary wiring. A lot is said about temporary wiring but little is said about temporary light strings. Here are the requirements:

- Receptacles for uses other than temporary lighting shall not be installed on branch circuits which supply temporary lighting.
- Receptacles shall not be connected to the same ungrounded conductor of multi-wire circuits which supply temporary lighting.
- Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this means of suspension.
- Flexible cords used with temporary and portable lights shall be designed for hard or extra-hard usage.

Best practices for temporary light strings

Follow these precautions when using portable light strings:

- Inspect the wiring and fixtures before stringing the lights or before they are energized or plugged in. Make sure the outer insulation is not damaged, the plug ends are intact, and the fixtures are not cracked.
- The light-string must be grounded. Make certain the plug has a ground prong. Never cut one off. The quality of the ground must be tested frequently. A good ground could save your life if an electrical fault develops, especially when working in wet conditions or on metal structures. If a Ground Fault Circuit Interrupter (GFCI) is available, use it. GFCIs should always be used under wet conditions.
- Never string lights so they are near any combustible items. You know from experience that bulbs get hot. Even if they are not in direct contact with the combustible, heat can build up slowly until the ignition temperature is reached.

- Make certain that all bulbs have guards installed. Not only will this help prevent the bulb from coming in direct contact with a combustible, it can also protect you (or someone else) from coming in contact with the bulb and getting burned.
- All fixtures must have an unbroken bulb installed. The bulb will help prevent you from coming in contact with the exposed electrical conductors that are present when a bulb is missing or broken. When you change a broken bulb, disconnect the power from the light-string and wear gloves to guard against cuts.
- Never use an ordinary light string in an area that could contain flammable vapors. When used within an enclosed or confined space, the space must be certified as “Safe for Hot Work” if a conventional string is used. If the atmosphere is not “Safe for Hot Work”, then “explosion-proof” lights must be used. Keep in mind, when you place any type of lighting in an area where flammable vapors are present, you are introducing a source of ignition. This could endanger your life.

You will want to be especially careful during your inspection to make sure that the cord, all plugs, the fixture and the globe are all in place. Don't forget the gasket at the bottom of the globe. Make sure everything is clean and tight.



Does the kind of music you like say anything?

Can the type of music you listen to reveal what kind of person you are? A recent study at the University of Texas at Austin says it can. The study had 3500 participants who also took IQ and attitude tests. Here are some of the findings.

- **If you like country, pop, or religious music.** You tend to be a good neighbor, a person who likes to help others, outgoing, agreeable and reliable. You tend not to be an adventurer. You probably like sticking to a routine.
- **If you like classical, blues or jazz.** You tend to be tolerant, open to other people's opinions, open to new experiences, and curious. You probably don't stick to conventions and you're probably not athletic.
- **If you like heavy metal, rock or alternative music.** You probably speak your mind freely and you're a risk taker.
- **If you like hip-hop, dance or soul.** You are probably talkative and energetic. You probably aren't very argumentative. You'll fight back if you have to, but you probably won't be the one who started it.