



MBAA Safety Tool Box Talk

Qualified Electrical Work Toolbox Talk

Overview

Working on electrical systems poses different risks than working around those systems. A brewery must consider the safety of employees engaged in such tasks and understand the requirements for employees to work on electrical components.

Qualified Electrician

One who has received training in and has demonstrated skills and knowledge in the construction and operation of electric equipment and installations and the hazards involved. (OSHA)

1. **Note 1 to the definition of "qualified person":** Whether an employee is considered to be a "qualified person" will depend upon various circumstances in the workplace. For example, it is possible and, in fact, likely for an individual to be considered "qualified" with regard to certain equipment in the workplace, but "unqualified" as to other equipment. (See 1910.332(b)(3) for training requirements that specifically apply to qualified persons.)
2. **Note 2 to the definition of "qualified person":** An employee who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person is considered to be a qualified person for the performance of those duties.

Limited Training

Limited Qualified Person—training in specific tasks, but not general electrical work:

- a. Basically a person can be qualified to one task and not another. OSHA does not look for a licensed elec-

trical person for the work being completed. Rather they look to skills, knowledge, and competency.

- b. Employer responsibility is to be able to show those items for the person(s) doing the work.
- c. This could include employer showing for a contracted electrical company/staff/person.

Hiring an Electrical Contractor

Working with an electrical contractor is a critical component of any brewery electrical safety program. For a small brewery that doesn't have any qualified employees, an NECA certified electrician should be on speed dial! In order to keep your brewery and employees safe, look for the following when selecting an electrician:

- Current license in your state (<http://www.nascla.org/?page=LicensingInfo>)
- Familiarity with NFPA 70E
- Detailed method statement for work to be done, including safety procedures and hazard assessment

Planning Work on Electrical Equipment

If your company will be engaging in electrical work, develop a plan and a program to manage these risks

The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards. At minimum, a brewery should have:

- Energized Electrical Work Permit
- Personal Protective Equipment
- Insulated Tools
- Written Electrical Safety Program

Arc Flash

Arc Flash is the result of a rapid release of energy due to an arcing fault

between a phase bus bar and another phase bus bar, neutral, or a ground. Arc flash can be caused by many things including: dust, dropping tools, accidental touching, condensation, material failure, and corrosion.

Protecting the Worker

De-energize the circuit and [Lock Out](#)

- Work Practices
- Insulation
- Guarding
- Barricading
- Ground Fault Circuit Interrupters (GFCI)
- Grounding (secondary protection)

Testing

Use an adequately rated portable test instrument to test each phase conductor or circuit part to verify it is de-energized. Test each phase conductor or circuit part both phase-to-phase and phase-to-ground. Before and after each test, determine that the test instrument is operating satisfactorily through verification on any known voltage source. (NFPA 70e 2018)

Live work is appropriate only if shutdown will cause:

- Interruption of life support equipment
- Deactivation of emergency alarm systems
- Shutdown of hazardous location ventilation equipment
- Removal of illumination for an area.

THIS SHOULD ALWAYS BE A LAST RESORT

References:

- National Fire Protection Association (NFPA) 70E
- National Electric Code
- OSHA 1910 Subpart S – Electrical

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