Q&A: Protective Clothing for Brewery Workers

Q: Do brewing boots - such as the standard waterproof, steel toe boots by Servus - count as non-specialty or do they fall into PPE required to be paid for?

A: No. According to the OSHA Training Institute handout (https://www.osha.gov/dte/outreach/intro_osha/7_employee_ppe.pdf) the employer must pay for rubber boots with steel toes.

Q: Comment: Levels in excess of 85 dBA also requires annual hearing testing and training.

A: Yes that is true. Where workers are exposed to an 8 hour time weighted average noise level equal to or exceed 85 dBA a full Hearing Conservation program must be implemented. To determine whether this exposure threshold has been exceeded, personal noise dosimetry must be performed by a safety professional. A Hearing Conservation Program shall include: a baseline measurement of noise levels a workers is exposed to, a baseline audiogram, annual measurement of the noise levels, annual hearing exams, hearing protection, hearing protection training, and evaluation of the adequacy of the hearing protectors in use.

Q: Can you address respirators (the kind you use when handling DE) and beards?

A: There is no “one size fits all” when it comes to choosing a respirator and therefore each employee must be fitted for their own respirator. The respiratory protection needed for DE, or any exposure, must be based on the actual measured exposure of the workers actual workplace. Common terms associated with DE cartridges include N-95, P-100, HEPA, or Type-H; your PPE distributor can usually tell you if your mask/cartridge combination is compatible with your air contaminant. As for brewers with beards in an environment requiring respiratory protection the only option is a PAPR (powered air purifying respirator) with a loose fitting hood.

Q: Comment: We've had a lot of glass cuts... and severe ones! We require workers to wear cut resistant gloves anytime they handle glass.

A: We are happy to hear the level of protection you providing your packaging staff. But, when we look at the Hierarchy of Control chart we can see that some other controls can be implemented before or in concert with PPE. A basic engineering control for broken glass is the use of dust pans and brooms. Take whatever steps you can so one has to touch the broken glass.

Q: For employees using half face respirators - should each employee have their own respirator? Is it acceptable for employees to use them interchangeably as long as they are properly sanitized?

A: Best practice would be to issue an individual respirator to each person. However, the OSHA standard (1910.134(h)(1)) states “Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals”

Q: Comment: PPE regulation CFR 1910.132(d)(2) requires a formal written PPE evaluation and then certification (signature).
A: The OSHA standard (1910.132(d)(2)) states: “The employer shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.”

Q: What about composite-toed shoes instead of steel-toed shoes? I've heard that composites are lighter/more comfortable and safer than steel toes.

A: Protective foot wear must comply with ASTM F-2413-2005, "Standard Specification for Performance Requirements for Protective Footwear”. Look for the standard on the label of your boots/shoe. Impact protection is performance based not material based. Steel, aluminum, and composites are all used. Generally composites and aluminum are lighter.

Q: How often should you change out your dust mask? Every few months?

A: There is no set rule (time limit) as to when you should change out your dust mask (filtering face piece). You should refer to the manufacturer instruction. A rule of thumb for replacing your disposable respirators is to change them out when they are soiled, damaged, damp, you've been sick, if you detect odor or other signs of breakthrough, or if breathing becomes difficult.

Q: Is there a material selection of pants/shorts printed somewhere that can be referenced? What is the best practice material for pants?

A: We are not aware of a brewery specific list of material that we could share with you. The material should be based on the task and hazard of the job you’re performing (your PPE assessment will help with this). Wet jobs, like hand washing kegs, would require a water proof material, where as a dry dusty job, like malt dumping, could use just about any material. The use of coveralls and aprons are a good ways to provide shared protection for specific tasks.

Q: PAA - I've read that activated carbon is the choice for filter, but brewers typically don't keep them in bags. I worry that the carbon will lose activation/effectiveness. Does everybody else use activated carbon? Has anybody done formal air monitoring?

A: PAA or Peracetic acid is a common biocide used throughout our industry. A multi-gas cartridge that can protect against both acid gases and organic vapors (most contain activated carbon) would be the best choice for PAA exposure. All respirators will lose their effectiveness with time as their filtering cartridges becomes overloaded with the chemicals they remove from the air you are breathing. As for storage; all respiratory must be stored in bag or container that will protect them from chemical exposure, damaging conditions (heat and light), protect the face seal becoming deformed and per the manufacturer’s instructions. All breweries and process applications are different, so when it comes to looking at formal air monitoring data, the concentrations found at one facility may not be reliable as far determining what exposure may be at your own facility.
Q: Do breweries provide money to help employees with prescription safety glasses or just use over the glasses style?

A: Breweries are doing both. Some breweries supply safety glasses that fit over regular prescription glasses; other breweries pay for safety-rated prescription glasses. The OSHA standard allows for either method; provided that if you allow your employees to pay for their own prescription safety glasses you must allow them to be wear their glasses off the job site.