

Employee Involvement: PPE Hazard Assessment

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PPE hazard assessment is a cornerstone of the comprehensive written health and safety program, however many do not understand its fundamental importance or an effective method of development. OSHA standard 1910.132 addresses assessment, purchase, fit, inspection, training, and payment as well as other details relative to PPE. This article will focus specifically on 1910.132(d)(2), the certified PPE hazard assessment and its application, and includes methods and opinions based on the author's personal experience and many years as a safety and health professional and small business owner. The information in this article is intended as a practical supplement to the standard. Please read the entire standard and pertinent letters of interpretation for more complete information.

Last year, a memorandum was issued by OSHA which described instances when fire retardant clothing is required in the US Onshore Oil and Gas exploration and production (upstream) industry. Industry leaders met with OSHA at the Washington, D.C. office to discuss the memorandum and to develop a path forward. During that discussion, one high ranking OSHA official issued a challenge to the industry for improving our PPE hazard assessment process. Since that meeting, we have developed and taught PPE Hazard Assessment courses, and have also polled several companies, confirming that this important portion of the standard is, in many cases misunderstood and/or misapplied.

All of us have suffered an avoidable injury or illness at work or at home. Some, such as hand or eye injuries result in acute pain. We quickly realize what went wrong and vow not to let it happen again. Other injuries take much longer to manifest. I suffer from permanent hearing loss and tinnitus from my early days as a young man on the family farm driving a tractor with no muffler, among other things. Less fortunate are those who suffered amputations from unguarded equipment, or serious long term effects from exposures to hazardous farm chemicals. Like many folks my age involved in agriculture and for that matter other industries, we didn't know any better. There was little or no training. We were busy trying to get our jobs done and making a living. We did our best to use common sense, skimming through the long list of safety warnings from equipment or chemical manufacturers, but focusing on the assembly of the equipment or proper dilution of chemicals to avoid damaging our crops.

Those days on the farm are long past, and many fine companies, agencies, associations, organizations, and educators have worked to create an informed workforce and responsible employers in all industries. Statistics are clear that too many preventable incidents occur due to workers wearing the wrong PPE for the job or not wearing PPE at all. By engaging our employees in the development of the PPE Hazard Assessment, we gain a much better understanding of the actual tasks performed and hazards faced by our workers and can effectively begin to change those statistics. The employees become better informed and educated, and have the satisfaction of being included in the process. The bottom line is that we still have much work to do regarding this important subject.

PPE comes in at third place in OSHA's Hierarchy of protection; eliminate, control and protect. Employers should eliminate hazards whenever possible.

Means of protection include using engineering controls to physically change a machine or work environment. Administrative controls are used to change how or when employees do their jobs, and include work practices that involve training workers how to perform tasks in ways that reduce their exposure to workplace hazards. PPE is used when these preferred control measures are either unavailable or not completely effective in eliminating the hazard.

1910.132(a) ***Application.*** Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

1910.132(d)(2) 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.***

The PPE Hazard Assessment needs to be thorough enough to be effective, but should not be overcomplicated. Written health and safety programs must always make sense for the size and type of business and be user friendly for the employees. Complicated programs often look good on the shelf, but typically stay on the shelf and therefore are not very effective. A spreadsheet format is easy to understand and works well for the PPE Hazard Assessment. A detailed list of tasks on one axis and potential hazards on the other axis, with a

corresponding list of specific PPE in the body of the spreadsheet is simple but very efficient.

As mentioned above, the most successful leaders use a team approach to develop written programs, involving potentially affected employees in the process to develop a comprehensive list of tasks and hazards. Employee interviews and group discussions, work site visits, MSDS sheets, incident investigation and industry data, and previous JSA's serve as valuable resources for the assessment. Companies that perform a variety of jobs, or employ specialized crafts such as welders, electricians, or asbestos abatement specialists, for example, should consider working with each of those teams independently to develop separate PPE hazard assessments.

An excellent method for the assessment is to assemble a multi-discipline team of employees and selected contractor representatives. The team should review one job at a time, listing each task and its associated hazards in detail.

Research to determine specific PPE such as correct gloves for chemicals used, types of respirators and cartridges, or hearing protection is essential.

Appropriate references such as respirator and glove guides and/or the assistance of Certified Industrial Hygienists should be considered to identify appropriately specific PPE for each task. Finally, seek the signature of a manager or safety professional, adding the date of certification to complete the document.

The PPE hazard assessment should be reviewed periodically to ensure continual improvement, so that as jobs or tasks change or crafts are added, the assessment is updated. Although not required, a best practice is to treat the certified PPE hazard assessment similarly to the OSHA 300 log, updating it at least annually. After the PPE Hazard Assessment is complete, it should be

posted in a conspicuous place and utilized as a training tool. It should also be used as a reference for job planning, Management of Change and Job Safety Analysis. Some safety professionals contend that a JSA itself can be used as a certified PPE hazard assessment. While that may be possible if all of the correct elements are included, by doing so, an important opportunity to use the assessment for broader education, planning and employee involvement is lost.

From the safety manager's perspective, the process necessary to develop a thorough PPE hazard assessment is well worth the time and energy invested. We are getting better at trending incidents and near incidents, as well as behavioral science and statistics. While the science of statistics and trending is absolutely critical, there is just no substitution for boots on the ground. We provided a few examples above concerning the development of a quality hazard assessment, but perhaps the most important ingredient is time in the field. Safety and health professionals and other leaders can become burdened with such a heavy administrative workload that time in the actual workplace is greatly diminished. Any good sports coach would tell us that focusing on the basics is the key to sustainable improvement. PPE Hazard assessment is one of those basics. The challenge that the OSHA official made to our industry last year has been taken up and is now bearing the fruit of increased knowledge. We now pass the challenge on to you and yours.

For additional information including sample templates for Certified PPE Hazard Assessment forms, contact rickey.ingram1@bp.com

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