Hazards are ever-present in the steel plant environment, and a heightened awareness and emphasis on safety is a necessary priority for our industry. This monthly column, coordinated by members of the AIST Safety & Health Technology Committee, focuses on procedures and practices to promote a safe working environment for everyone.

Workers may want to wear a respirator from time to time when it is not required. There are many reasons to want to wear a respirator; for example, employees who experience irritation from air contaminants such as allergens. Some work in cold environments and wearing the respirator helps comfort them. Understanding why some employees may want to wear a respirator is important. With that said, it can be hard to understand the differences between voluntary use and mandatory use. With a well-established industrial hygiene program, a company can anticipate, recognize, evaluate and control workplace exposures.

First, a comprehensive industrial hygiene study should be completed prior to requiring respiratory protection. Identifying raw materials, chemical decompositions, exposure risk of chemicals and frequency of use are just a few factors to determine what hazard exist. Next, take samples to identify if any hazard poses a health risk to the employee. If it is determined that the hazard is below occupational exposure limits (OELs), many questions are still raised:

- Does wearing a respirator, even when not required, pose additional health risks?
- Will letting an employee wear a respirator voluntarily protect them from all hazards at the location?
- Can the employee wear the respirator all the time?

If the employer doesn’t require a respirator for the task and it has been determined that the exposure is less than the OELs, it may be a voluntary-use situation. OSHA has outlined voluntary use of respirators in 29 CFR 1910.134, stating:

The employer must establish and implement those elements of a written respiratory protection program necessary to ensure that any employee using a respirator voluntarily is medically able to use that respirator and that the respirator is cleaned, stored and maintained so that its use does not present a health hazard to the user. Exception: Employers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks).

If this situation fits the job task, review 29 CFR 1910.134 Appendix D with each employee wishing to wear a respirator voluntarily. Appendix D covers the use and limitations of the respirator and will educate the employee on the respirators used and their applications. It also informs the employee that only certified respirators from the National Institute for Occupational Safety and Health (NIOSH) should be used.

In the past year, there have been some counterfeit respirators on the market. When purchasing respirators, be aware of exactly what is being purchased so that employees are protected, and ensure respirators are NIOSH certified (Fig. 1).

OSHA does not require fit testing or medical evaluations to be completed when using a filtering facepiece respirator (dust mask) for voluntary use. However, if an employee wants to wear a tight-fitting respirator and has approval from the employer, the employer must pay for any medical evaluations and materials to keep the respirator clean and maintained in proper condition.
To wear respiratory protection, the wearer must follow the manufacturer’s recommended instructions, and most manufactures require the wearer to be clean-shaven. Fig. 2 illustrates different facial hair styles that may or may not interfere with proper respirator use.

Implementing a comprehensive respiratory protection program is smart business and will keep employees safe. Educating employees on respiratory protection helps everyone understand the OSHA requirements. Helping employees recognize their responsibilities will help them realize why company rules are in place and what they must do to keep themselves safe.

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References