

# *TerranearPMC Safety Share*

## **Week of August 12, 2013 – Administrative Controls; The forgotten practice**

While engineering controls and personal protective equipment (PPE) seem to generate a certain level of notoriety, that when confronted with a workplace hazard, there is a tendency to automatically think of such methods as the only options available to protect workers. True, such controls as ventilation, enclosures or respiratory protection are viable and effective: however, there are other options. For the most part, when engineering and PPE is used, personnel wind up relying on something other than themselves to ensure their safety and health remains in check. For ventilation, engineers and mechanics are tasked with providing the right system and proper installation to control an airborne hazard. For respirators, employees wear the PPE that has been assigned to them. Without a doubt, all workers are responsible to check their PPE and observe whether mechanical systems are operating properly; but the basic regulatory requirements associated with engineering controls and PPE rests with someone other than the affected persons.

Within the world of safety and health, a hierarchy has been established for which the various control classifications have been prioritized that dictate the order of implementation. They are:

- Eliminate the hazard
- Substitute to a less hazardous (i.e. non-toxic) material
- Engineer/designing controls
- Administrative controls
- PPE

It is administrative controls – the control class near the bottom of this list – that is most often overlooked, yet holds an important key to protect workers. When properly implemented, such practices can have a tremendous impact. However, it is up to the worker to be cognizant of his/her specific job task and how they apply their specific work practice; otherwise they are merely going through motions and working under a false sense of security.

Administrative controls include lengthened rest breaks, staggered work shifts to reduce working during the hottest hours of the day, exercise breaks to vary body motions, and rotating workers through different jobs to reduce stress or repetitive motions on one part of the body. This practice also includes proper postings to inform employees and visitors of specific areas that represent hazards which would require special training and qualifications.

An example of an effective administrative control is through the work practice of proper positioning to minimize inhalation exposures. For instance, by stationing hot work (welding, torch cutting, etc) at a location that is downwind from an employee breathing zone can offer a very simple, yet effective method to reduce employees from a harmful intake of a hazardous material. All it takes is for workers to identify the potential hazard and then to implement this work practice. Industrial hygiene assessment methods have proven, consistently, that the difference of using – or not using this control can be the difference of an exposure that drastically exceeds an occupational health standard and one where the worker remains in a healthful work atmosphere – all without the aid of respiratory

protection. This means there is no compromised visibility (as respirators are known to cause), while removing the exhaustive requirements of respirator training, fit testing and medical surveillance.

Another simple and sensible method to reduce employee exposures to hazardous airborne concentrations is to schedule the most dust- or fume-producing operations for a time when the fewest number of employees will be present.

Worker rotation, which involves rotating employees into and out of contaminated areas in the course of a shift, thereby reducing the full-shift exposure of any given employee may or may not be feasible based on the amount of employee resources available. For instance, when a worker is rotated out of the job that involves lead exposure, he or she may be assigned to an area when an exposure to lead does not exist; thereby reducing their daily time-weighted average to within the established health standard (it should be noted that there are certain hazardous materials, such as cadmium and chrome VI, where worker rotation is not permitted to be used as a control if it has been determined that the airborne concentration is high enough so that persons in the area would be subject to an overexposure based on a full shift assessment).

A rigorous housekeeping program is necessary to keep surface contamination from being suspended, and thereby causing an inhalation hazard. This requires that all workplace surfaces must be maintained as free as practicable of accumulations of metals and other contaminants. Such surfaces as overhead ledges, equipment, and floors that are subject to traffic, vibration, or random air currents must be part of regularly scheduled clean-ups. In addition, housekeeping is an effective way to remove tripping hazards in any work environment. It just requires personnel to take the initiative to clean up an area when they notice materials and equipment cluttering walk ways and work stations.

Personal hygiene is also an important element in any program to protect workers from exposure to hazardous materials. When employee exposure is above the occupational health standard, many times it is required that the employer provide (and ensure that workers use) shower facilities as well as hand-washing stations and clean change areas, and separate (non-contaminated) eating areas. Employees must also wash their hands and faces prior to eating, drinking, using tobacco products, or applying cosmetics, when assigned to work in an area where an overexposure to a hazardous material may be present. In addition, employees must not enter lunchroom facilities or eating areas while wearing protective work clothing or equipment (unless it can be assured that clothing and equipment have been cleaned).

Training, such as OSHA's Hazard Communication as well as regulations that focus on specific S&H issues such as beryllium and fall protection are considered administrative controls as this provides workers information to understand proper work practices and procedures for their jobs.

Administrative controls are an effective, efficient and cost-saving approach to control workplace hazards, while empowering each employee to take charge of their personal safety and well-being.

**The greatness of a nation can be judged by the way its animals are treated.**

Mahatma Gandhi