

Health & Safety

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Making Health & Safety Work for You

Most employers, small and large, look at health and safety (H&S) as purely an overhead expense—a necessary evil of doing business. This mindset is actually counterproductive to an efficiently run business. Review some of the cost items of H&S:

- Safety systems, such as eyewash systems on the plating line.
- Personal protective equipment (PPE), such as gloves or safety glasses, to avoid exposure to acids, respirators to avoid airborne chemicals.
- Medical examinations and employee training required for using personal protective equipment, such as ear plugs and muffs.

- Maintenance and recalibration of air quality or noise-monitoring equipment.
- Workers compensation insurance, just in case an employee gets hurt.
- Incident investigation following accidents.

Careful review of these expenditures, and how these issues are addressed is paramount, not only to regulatory compliance, but also to the manufacturing process. To be costeffective, H&S must be allocated to the process just as copper or zinc are. Consider the following:

- Install safety systems. A metal finishing facility needs to have eyewash and shower systems in the event chemical is splashed in a worker's eyes or contacts the skin. These systems should be designed with the facility or renovation to ensure that they do not become expensive retrofit costs. Additionally, as the renovation is planned, straight paths to these systems must be considered to ensure that a reasonable number of units are installed, but not more than necessary, because of congested or convoluted aisle-ways.
- Evaluate personal protective equipment, medical examinations and employee training. We say that PPE should be the last line of defense for employees to avoid workplace hazards, including contact with harmful chemicals or exposure to noise. Engineering and administrative controls should be evaluated first. PPE includes gloves, safety glasses, respiratory protection, ear plugs, etc. Again, this H&S item should be considered when a facility is originally designed

or renovated. For example, can respiratory protection be eliminated by effectively designing exhaust ventilation systems? This can avoid the need for not only respirators, but also the required physical examinations, employee training and respirator maintenance. Employees who do not have to wear respirators are also more productive employees. Can the process be designed with automation so that employee contact with the chemicals is minimized? This will reduce the need for gloves; at least you will go through fewer pair even if you cannot avoid the use altogether. Installing vibration dampeners at vibrating equipment, barrier walls and control rooms at noisy process equipment are ways of reducing employee exposure to harmful noise and vibration. These changes may eliminate the need for a hearing conservation program, saving audiometric (hearing capacity) examinations, employee training, and ear plugs and muffs. In addition to hearing loss, noise increases worker fatigue and stress, which can lead to accidents.

- Minimizing the airborne concentration of contaminants and noise will reduce the need to have monitoring equipment, including airsampling pumps and noise dosimeters, on hand and calibrated.
 Renting this equipment when needed will save the expense and hassle of maintenance and recalibration.
- Initiate quality improvements.
 Incident investigation must follow each accident to determine the root causes. Once identified, the actual cause of the accident can

be addressed and future similar accidents eliminated, or at least reduced. Most facilities do not have "too" many accidents so they are often attributed to "uncontrollable" causes or "human error," therefore never getting to the actual cause of the incident. Few facilities investigate near-misses. A near-miss is simply a set of conditions that, if they were just slightly different, would have resulted in blood on the floor instead of a wipe across the forehead with the exclamation, "Whew, that was close!" Properly investigated, near-misses can teach us a lot about our operations and what we can do to make them safer, but also much more efficient. Employee involvement in the investigation will increase "buy-in" on the floor and usually enhance morale. My own firm, SECOR International, instituted a Loss Prevention System that has resulted in a reduction of OSHArecordable incidents by at least 50 percent, and a more streamlined,

- organized approach to our business
- Workers Compensation Insurance attempts to make employees "whole" after an injury at work. These costs are directly related to the work you do and your injury experience over the past three years. Following the above suggestions will reduce your incident rates, and reduce your insurance rates at the same time. There may also be H&S enhancement programs available through your insurance carrier. It may be true that H&S expenditures cannot be eliminated, but they can be looked at in a different light.
- If considered at the time of building construction or renovation, resources for safety systems can be allocated efficiently and costs minimized.
- By engineering to reduce airborne contaminants and noise, you can reduce your company's reliance on personal protective equipment and the associated medical examina-

- tions and employee training. This will make your staff more productive
- You may not be able to eliminate your workers compensation insurance premiums, but you can reduce them by implementing an effective Loss Prevention System. You may also be able to get your insurance carrier to provide some value to your firm, instead of just the other way around.
- Instituting a Loss Prevention System will better organize your operations, encourage employee "buy-in" to your H&S program, and reduce incidents for an overall more efficient, profitable firm.

This outlook on health and safety will go a long way toward making necessary expenditures more cost-effective, and also make health and safety work for you. PECSF