

Are you prepared for an OSHA inspection?

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The Occupational Safety and Health Administration (OSHA) will likely inspect your facility. It's just a question of when. OSHA's inspections are based on complaints, accidents or sometimes planned and are unannounced, which could leave you vulnerable to citations and penalties, some totaling thousands of dollars. The good news is many of the citations can be avoided.

Here are some inspection failures over the past four months that resulted in OSHA citations and penalties that could have been avoided. Use this information to improve your facility and avoid penalties.

**1. Failure to reduce compressed air pressure on nozzles to below 30 pounds per square inch (psig).
→ \$4000 penalty**

OSHA¹ requires that compressed air for cleaning must be reduced to below 30 psig. This can be achieved by either installing a pressure regulator or an OSHA approved nozzle on the compressed air line/hose.

2. Failure to conduct initial exposure monitoring for formaldehyde. → \$2625 penalty

OSHA² requires all employees exposed to formaldehyde to undergo an initial 8-hour monitoring period in order to assess their exposure compared to the OSHA standard. Most employers will hire an industrial hygienist to complete this monitoring, but you may be able to get your workers compensation carrier to complete this monitoring at no additional premium cost.

3. Failure to conduct an annual hazardous energy control audit. → \$630 penalty

OSHA³ requires a knowledgeable person to audit an employer's lock out/tag out (LOTO) procedure at least annually. LOTO requires companies to have machine specific procedures, equipment (locks, hasps, blocks, etc.) and training of both authorized and affected employees so that hazardous energy (electricity, hydraulic, pneumatic, springs, etc.) is positively blocked from activating any machine or device while a person repairs or services the machine or device in which any body part is exposed to hazardous energy. An EHS specialist, maintenance supervisor, or safety consultant who is familiar with both the OSHA standard and a company's LOTO procedures can conduct these audits of each authorized employee (those who have been issued locks, etc.).

4. Failure to provide respirators to exposed employees. → \$450 penalty

Employees exposed to chemical vapors or mists above OSHA established permissible exposure limits (PELs) for 8-hour exposures, or short term exposure limits (STELs) for 15 minutes exposures, must be provided respirator protection if engineering controls (like local ventilation) cannot reduce exposure to below the applicable PEL or STEL⁴. Respirators should be the last resort. Many PCB facilities operate

¹ OSHA regulation 1910.242(b)

² OSHA regulation 1910.1048(d)(2)

³ OSHA regulation 1910.147(c)(6)(i)

⁴ OSHA regulation 1910.134(a)(2)

without the need for respirators by having adequate local ventilation at process points where fumes or vapors can be generated.

5. Failure to guard a horizontal shaft. → \$450

Any exposed drive shaft must be safe guarded to prevent any body part (i.e. fingers) from contacting the moving/rotating shaft⁵. Employers can evaluate their machine guards using a “Gotcha stick” available free from www.motionshop.com.

None of the above citations require much cost or effort to implement compliant controls to the workplace hazards cited. PCB and EMS companies must be aware of the US OSHA’s enhanced enforcement program. During fiscal year 2011, PCB facilities were penalized \$48K by federal inspectors, more than double the \$22K penalties in fiscal year 2010. State inspectors added another \$60K. EMS facility penalties by US OSHA decreased from \$56K to \$43K on fewer citations, but on a per citation basis were up 20%. State inspectors added \$54K in EMS facility penalties. Awareness of these compliance requirements is the first step to improving compliance of both PCB and EMS industries, and the associated public perception of our industries.

Want to learn how to prepare for your next OSHA inspection? Attend this [free webinar](#) on Wednesday, June 20, 2012 in order to help avoid unnecessary penalties.

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⁵ OSHA regulation 1910.219(c)(2)(i)