

Health and Safety

OSHA Standards May Be Hazardous to Your Health

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- You've noticed over the last year that you've developed a constant dripping nose and an annoyingly persistent headache most days by midway through your shift, even though you've felt fine on your days off. But your supervisor laughs at your questions about what the Industrial Hygienist's report showed when she tested for epichlorohydrin.
- You know that your office has supposedly been cleared by OSHA as a safe place to work, but you and your co-workers still feel terrible after being there even an hour each day. Maybe your boss is right, you're all just whiners who don't really want to work and can't take the pace.

What's Going On?

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cases, management insists that there's nothing about the work that is harming them. **But still, workers are complaining, getting sick, going to the hospital...dying.**

According to work done by Siwinski and another industrial hygienist, Eileen Senn Tarlau of the New Jersey Department of Health, many of the OSHA limits set have been based on "unscientific, irregular procedures" with corporations—even those producing the chemical—determining what a "safe" level is.

In addition, the most recent permissible exposure limits (PELs) set by OSHA ignore the majority of the information found by its "research arm," NIOSH. For example, NIOSH claims that there is no safe level of epichlorohydrin, which it categorizes as an occupational carcinogen, and that exposure should be reduced to the lowest feasible concentration.

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Using the tools available to them—OSHA limits and standards for noise and chemical levels, reports from industrial hygienists, etc.—these workers have tried to investigate something about their work they think is unhealthy or unsafe. Workers throughout our two-county area are more and more urgently trying to find out what health and safety risks they face at their worksites. In almost all

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Finally, industrial hygienists and others have repeatedly pushed air sampling as the best and first way to understand a workplace health problem. But this is not always so, and industrial hygienists and workers need to evaluate controls and use other approaches as well.

OSHA Limits vs. EPA Guidelines

Chemical Name	OSHA PEL (mg/m ³)	EPA Guideline (mg/m ³)
Chromium II		
Found in paints, welding, plating		
water soluble	0.5	0.00000044
water insoluble	1.0	0.00000044
Epichlorohydrin		
Found in epoxies	8.0	0.0044
Methyl Ethyl Ketone		
Found in adhesives, cleaners, paints	590.0	0.45
Styrene		
Found in plastics, solvents	215.0	1.8
Tetrachloroethylene (known as Perchloroethylene)		
Found in degreasing cleaners	170.0	0.18
Tetraethyl Lead		
Found in gasoline	0.075	0.0000018
Toluene		
Found in adhesives, paints	375.0	0.376
Trichloroethylene		
Used in degreasing, cleaning operations	270.0	0.0041

Greg Siwinski, an Industrial Hygienist with the Central New York Occupational Health Clinical Center, discussed these problems with workers attending a Health and Safety training that the Labor Coalition held in June in Cortland. Greg and the participants began to unravel what the limits to health and safety standards are, and why those standards are dangerous for all workers.

The Limits of the Limits

To begin with, there has not been enough long-term testing of most chemicals and hazards to know what effects they're having on workers' health, such as cancer or other major damage to body organs, or whether they are affecting areas where little research is done, e.g. lung function or immune system function. And very few chemicals have been tested to see the damage they do to a fetus or reproductive systems or their ability to cause allergic reactions.

Secondly, the recommended or legal limits that have been set are often thousands of times too high to protect workers' health. For instance, the table shows some EPA (Environmental Protection Agency) guidelines for a number of chemicals compared to the OSHA limits. Why, according to OSHA, is a worker safe when being

exposed to up to 8 mg/cubic meter of epichlorohydrin for 2, 5, or 8 hours per day, when according to EPA there is danger for anyone exposed to more than 0.0044 mg/cubic meter?

When to Use Air Quality Testing

Testing the air is a useful tool if workers are experiencing irritation, smelling odors, seeing dust, or complaining of health problems. Rely on the **symptoms of the workers**. It can also be used to decide where controls are needed. But be certain that:

- all chemical exposures are identified and will be sampled;
- the union (or affected workers, where there is no union) will be present during the monitoring to ensure that the sampling occurs during worst exposure conditions;
- management agrees in writing that full exposure data will be given to the union, all workers sampled or with similar exposure (with a copy of the information put in every affected worker's permanent personnel file), and to public health officials acceptable to the union;
- only exposure limits that are most protective of health will be used to evaluate the sampling and analysis of the effects of combined exposures will be made.