



Comments on OSHA's Request for Assistance in Identifying Chemicals of Concern

Public Citizen appreciates the opportunity to comment on OSHA's request for assistance in identifying top chemicals of concern for potential rulemaking. We are heartened by OSHA's recognition of its past shortcomings in setting adequate permissible exposure limits (PELs) and its determination to correct this problem.

In determining which chemicals' PELs OSHA should reassess, we compared OSHA's current PELs with the recommended exposure limits (RELs) set forth by the National Institute for Occupational Safety and Health (NIOSH). We reviewed NIOSH's criteria documents, which recommend standards and actions for OSHA to implement to protect workers from dangerous chemicals. We then compared NIOSH's RELs with the PELs found in OSHA's standards at 1910.1000, tables Z-1, Z-2, and Z-3.

Public Citizen recommends that OSHA reexamine the existing PELs for chemicals that affect a large number of workers, PELs whose limits far exceed the RELs put forth by NIOSH, PELs that NIOSH has specifically mentioned as inadequate, and PELs for chemicals that are potential carcinogens. These chemicals are listed below. These recommendations are based on review of NIOSH criteria documents, though there are limitations on the applicability of this data. Because some criteria documents are several decades old, the number of workers exposed to these chemicals is likely outdated. Nonetheless, we believe the numbers are likely to have increased over the years as industries and America's workforce have grown, and we therefore believe the potential for exposure and harm to employees is still great.

Chemicals with Over One Million Affected Workers as of the Date of NIOSH REL Publication (Note also that three of these chemicals also have large disparities between PEL and REL)

Chemical	REL	PEL	Affected Workers	Year of NIOSH Report
Ethylene Dichloride	1 ppm, 4 mg/m ³ , 10-hr TWA	50 ppm, 8-hr TWA	2,000,000	1978
2-Butoxyethanol	5 ppm, 24 mg/m ³ , 10-hr TWA	50 ppm, 240 mg/m ³ , 8-hr TWA	1,680,768	1990
Antimony	0.5 mg/m ³ , 10-hr TWA	0.5 mg/m ³ , 8-hr TWA	1,400,000	1978
Metalworking fluids	0.4 mg/m ³ , 10-hr TWA	None	1,200,000	1998
Respirable crystalline silica	0.05 mg/m ³ , 10-hr TWA	(10 mg/m ³)/(%SiO ₂ +2)	1,060,000	1974



Chemicals with a Large Disparity Between REL and PEL

Ethylene glycol monomethyl ether acetate	0.1 ppm, 0.5 mg/m ³ , 10-hr TWA	25 ppm, 120 mg/m ³ , 8-hr TWA	9,892	1991
Ethylene glycol monomethyl ether	0.1 ppm, 0.3 mg/m ³ , 10-hr TWA	25 ppm, 80 mg/m ³ , 8-hr TWA	130,608	1991
Ethylene glycol monoethyl ether acetate	0.5 ppm, 2.7 mg/m ³ , 10-hr TWA	100 ppm, 540 mg/m ³ , 8-hr TWA	244,639	1991
Ethylene glycol monoethyl ether	0.5 ppm, 1.8 mg/m ³ , 10-hr TWA	200 ppm, 740 mg/m ³ , 8-hr TWA	247,691	1991

Chemicals Whose PEL Has Been Criticized by NIOSH as Inadequate

Chlorobenzene	No REL	75 ppm, 350 mg/m ³ , 8-hr TWA	Unknown	1993
Ethyl ether	No REL	400 ppm, 1200 mg/m ³ , 8-hr TWA	Unknown	1993

Chemicals That Are Potential Carcinogens

Acrylamide	No REL	0.3 mg/m ³ , 8-hr TWA	Unknown	1991
------------	--------	----------------------------------	---------	------

We urge OSHA to reexamine its PELs for these chemicals. Recognizing that the rulemaking process and limited resources will prevent OSHA from establishing an adequate PEL for every dangerous chemical, we also support suggestions offered by other commentators for OSHA to explore additional ways for OSHA to require employers to limit the chemical exposure of employees, such as through expanded use of the general duty clause or increased industrial hygiene standards.