

TABLE I: New PELs vs. Current TLVs

CAUTION: This table is useful to you only if your plant has been practicing industrial hygiene in accordance with existing TLVs. It is not a comprehensive list of all the changes made when OSHA published their new PEL standard.

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Acrylic Acid	10 ppm TWA "skin"	Added "skin" notation
AGE	5 ppm TWA 10 ppm STEL	Deleted "skin" notation
Alumina	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Ammonia	35 ppm STEL	TLV is 35 ppm TWA, No current TLV-STEL.
Ammonium Sulfamate	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Ansidine	0.5 mg/m3 TWA	Deleted "skin" notation
Barium Sulfate	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Benomyl	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Beryllium	0.002 ppm TWA 0.005 ppm STEL (30) 0.025 ppm Ceiling	Added STEL and Ceiling limits.
Bismuth Telluride	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3).
Borates	10 mg/m3 TWA	Existing TLVs more stringent (1 or 5 mg/m3).
Boron Oxide	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.

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Calcium Carbonate	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Calcium Oxide	5 mg/m3 TWA	Existing TLV still more stringent (2 mg/m3)
Calcium Silicate	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Calcium Sulfate	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Captafol	0.1 mg/m3 TWA	Deleted "skin" notation
Carbon Dioxide	10,000 ppm TWA 30,000 ppm STEL	Existing TLV-TWA still more stringent (5,000 ppm)
Carbon Disulfide	4 ppm TWA 12 ppm STEL, skin	Lowered TLV. Added STEL.
Carbon Monoxide	35 ppm TWA 200 ppm Ceiling	Lowered TLV-TWA. Deleted STEL. Added Ceiling.
Carbon Tetra-chloride	2 ppm TWA	Lowered TLV from 5 ppm. Deleted "skin" notation.
Catechol	5 ppm TWA, skin	Added "skin" notation.
Cellulose	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Chlorine	0.5 ppm TWA 1 ppm STEL	Lowers existing TLV, but will agree w/ "intended" TLV changes.
Chloroform	2 ppm TWA	Lowered TLV from 10 ppm.
2-Chloro-6-tri chloromethyl pyridine	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Chromium metal	1 mg/m3 TWA	Existing TLV still more stringent (0.5 mg/m3)
Chromic Acid & chromates	0.1 ppm Ceiling	Existing TLV for Cr(VI) water Sol=0.05 mg/m ³ TWA. Equivalent to 0.01 ppm Chromic Acid
Clopidol	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Copper fume	0.1 mg/m3 TWA	Lowered TLV from 0.2 mg/m3
Crag Herbicide	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Cyanides	5 mg/m3 TWA	Deleted "skin" notation.
DDT	1 mg/m3 TWA	Added "skin" notation.
1,1-dichloro-ethane	100 ppm TWA	Lowered TLV from 200 ppm. Deleted STEL
Dicyclopentadienyl iron	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Diethylene-triamine	1 ppm TWA	Deleted "skin" notation.
Dipropylene-glycol methyl ether	100 ppm TWA 150 ppm STEL	Deleted "skin" notation.
Disulfoton	0.1 mg/m3 TWA	Added "skin" notation.
Emery	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Ethylene Dichloride	1 ppm TWA 2 ppm STEL	Lowered TWA from 10 ppm Added STEL
Ethylene glycol Dinitrate	0.1 mg/m3 STEL skin	Deleted TLV-TWA of 0.05. Added STEL
Ferbam	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Fluorine	0.1 ppm TWA	Lowered TLV-TWA from 1 ppm. Deleted STEL.
Formamide	20 ppm TWA	Existing TLV more stringent (10 ppm) Deleted "skin".
Glycerin	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Grain Dust	10 mg/m3 TWA 30 ppm STEL	Existing TLV more stringent (4 mg/m3)

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Graphite, syn	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Gypsum	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Hexachloro- butadiene	0.02 ppm TWA	Deleted "skin" notation.
Hexachloro- ethane	1 ppm TWA, skin	Same as "intended" TLV. Added "skin" notation.
Hydrogen Cyanide	4.7 ppm STEL, skin	TLV is 10 ppm Ceiling.
Hydrogen Fluoride	3 ppm TWA 6 ppm STEL	Added STEL and TWA. Existing TLV is 3 ppm Ceiling.
Iron Oxide	10 mg/m3 TWA	TLV is more stringent (5 mg/m3)
Isophorone	4 ppm TWA	TLV is a Ceiling limit of 5 ppm.
Isopropyl Ether	500 ppm TWA	TLV more stringent (250 ppm)
Kaolin	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Magnesite	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Magnesium Oxide Fume	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Malathion	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Mn Compds (dust)	5 mg/m3 Ceiling	TLV is TWA, not Ceiling.
Manganese Tetraoxide	1 mg/m3 TWA	No previous TLV
Mercury (aryl and Inorg.	0.1 mg/m3 Ceiling skin	TLV is TWA, not Ceiling.

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Methacrylic Acid	20 ppm TWA, skin	Added "skin" notation.
Methoxychlor	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Methyl amyl ketone	100 ppm TWA	TLV-TWA more stringent (50 ppm)
MBOCA	0.02 ppm TWA	Deleted "skin" notation.
Methylene bis-cyclohexylisocyanate	0.01 ppm Ceiling	TLV is 0.01 ppm TWA, not C
MEKP	5 mg/m3 Ceiling	TLV-TWA more stringent (1.5 mg/m3)
MDI	0.02 ppm Ceiling	Deleted TWA (0.005) Added Ceiling.
Molybdenum insol.	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Monomethyl-aniline	0.5 ppm TWA	No previous TLV
Naptha (coal tar)	100 ppm TWA	No previous TLV
Nickel Carbonyl	0.001 ppm TWA	Lowered TLV from 0.05 ppm.
Nitro chloro-benzene	1 mg/m3 TWA, skin	TLV-TWA more stringent (0.1 mg/m3)
Nitrogen Dioxide	1 ppm STEL	Lowered STEL from 5 ppm. Deleted TWA.
Nitroglycerin	0.1 mg/m3 STEL skin	Deleted TWA. Added STEL.
2-Nitropropane	10 ppm TWA	TLV was 10 ppm Ceiling, not TWA.
Paraquat	0.1 mg/m3 TWA	Added "skin" notation.
Particulates, NOR	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Pentachloro-naphthalene	0.5 mg/m3 TWA, skin	Added "skin" notation.
Pentaerythritol	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Perchloro-ethylene	25 ppm TWA	Lowered TLV from 50 ppm Deleted STEL
Perlite	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Phenyl ether-Biphenyl mix	1 ppm TWA	No previous TLV
Picloram	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Plaster of Paris	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Portland Cement	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Propane	1000 ppm TWA	No previous TLV. Considered simple asphyxiant.
Propylene glycol dinitrate	0.05 ppm TWA	Deleted "skin" notation
Rhodium metal & insol.	0.1 mg/m3 TWA	Lowered TLV from 1 mg/m3
Rhodium, sol.	0.001 mg/m3 TWA	Lowered TLV from 0.01.
Rouge	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Silica - amorph ppt, gel	6 mg/m3 TWA	Lowered TLV from 10 mg/m3
Silica - diatomaceous earth	6 mg/m3 TWA	Lowered TLV from 10 mg/m3
Silica - crystalline	Varies: 0.05 - 0.1 mg/m3	Deleted old silica "formulas"

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Silicon Carbide	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Silver metal, dust, fume	0.01 mg/m3 TWA	Lowered TLV from 0.1 (metal)
Sodium Azide	0.1 ppm Ceiling, skin	Added "skin" notation
Starch	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Sucrose	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent (10 mg/m3)
Temephos	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Tetrachloro- naphthalene	2 mg/m3 TWA, skin	Added "skin" notation.
Tetraethyl- lead	0.075 mg/m3 TWA, skin	Lowered TLV from 0.1 mg/m3
Tetramethyl- lead	0.075 mg/m3 TWA skin	Lowered TLV from 0.15.
Tetryl	0.1 mg/m3 TWA, skin	Lowered TLV from 1.5 mg/m3 Added "skin" notation.
Thiobis	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Titanium Dioxide	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
o-Toluidine	5 ppm TWA, skin	TLV-TWA more stringent. (2 ppm)
Uranium, sol	0.05 mg/m3 TWA	Lowered TLV from 0.2 mg/m3
Vegie Oil Mist	15 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std. TLV-TWA more stringent. (10 mg/m3)

<u>CHEMICAL</u>	<u>NEW PEL</u>	<u>HOW NEW PEL DIFFERS FROM EXISTING TLV</u>
Vinylidene Chloride	1 ppm TWA	Lowered TLV from 5 ppm. Deleted STEL.
Wood Dust	Varies: 2.5 - 5 mg/m3 TWA	Varies
Zinc Chromate	0.1 mg/m3 Ceiling	TLV-TWA more stringent. (0.01 mg/m3)
Zinc Oxide	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.
Zinc Stearate	10 mg/m3 total dust 5 mg/m3 resp. dust	Added "respirable" std.