

NIOSH Recommendations for Occupational Safety and Health Standards. (ต่อจากฉบับที่ 8 ; Vol. 17 No 8.)

Potential Hazard*	OSHA Standard	NIOSH Recommendations		
		NIOSH Recommended Exposure Limit(s)†	Health Effect(s) Considered	Comments
Coal liquefaction, volumes I and II (Occupational Hazard Assessment June 1981)	OSHA PEL's or NIOSH REL's for specific hazards are applicable		Various effects depending on substances present; carcinogenic potential	Extensive work-practice and control procedures recommended
Coal-tar products (September 1977)	0.2 mg/m ³ , 8-hr TWA (benzene-soluble fraction)	0.1 mg/m ³ TWA (cyclohexane-extractable fraction)	Lung and skin cancer	Includes coal tar, creosote, and coal-tar pitch; pulmonary function testing and chest X-rays required
Cobalt (Occupational Hazard Assessment November 1981)	0.1 mg/m ³ , 8-hr TWA	NIOSH has concluded that there is insufficient evidence to warrant recommending a new exposure limit	Dermatitis; potential for pulmonary fibrosis	Includes recommendations for engineering controls, work practices, protective equipment, worker education, monitoring, and medical surveillance
Coke oven emissions (February 1973; revised November 1975 as part of NIOSH testimony at OSHA hearing)	150 µg/m ³ , 8-hr TWA	0.5-0.7 mg/m ³ (total particulates) as screening level	Lung cancer	Sputum cytology and chest X-ray required; work practices to minimize exposure to emissions

(ต่อหน้า 109)

NIOSH Recommendations for Occupational Safety and Health Standards (ต่อจากหน้า 104)

Potential Hazard*	OSHA Standard	NIOSH Recommendations		
		NIOSH Recommended Exposure Limit(s) [†]	Health Effect(s) Considered	Comments
Confined spaces, working in (December 1979)	Covered under numerous OSHA regulations for General Industry (29 CFR 1910)	Various recommendations including a permit system to prevent worker injury and death	Injury and death	None
Cotton dust (September 1974; reaffirmed September 1983 as part of NIOSH testimony at OSHA hearing)	Yarn manufacturing: 200 $\mu\text{g}/\text{m}^3$, 8-hr TWA; slashing and weaving operations: 750 $\mu\text{g}/\text{m}^3$, 8-hr TWA; all other operations: 500 $\mu\text{g}/\text{m}^3$, 8-hr TWA	200 $\mu\text{g}/\text{m}^3$ lint-free cotton dust	Pulmonary disease (byssinosis)	Pulmonary function testing required
Cresol (February 1978)	5 ppm (22 mg/m^3), 8-hr TWA (Skin)	2.3 ppm (10 mg/m^3) TWA	Skin, liver, kidney, and pancreas effects	Applies to mixtures of cresols and cresylic acid; skin and eye contact to be prevented; possible delayed effects
Cyanide, hydrogen and cyanide salts (March 1977)	Hydrogen cyanide: 10 ppm (11 mg/m^3), 8-hr TWA (Skin); cyanide: 5 mg/m^3 , 8-hr TWA (Skin)	4.7 ppm (5 mg/m^3) ceiling (10 min)	Thyroid; blood; respiratory system effects	Concurrent measurement required for HCN when measuring for cyanide salt; trained first-aid personnel and first-aid kits to be available during use; skin and eye contact to be prevented
DDT (Special Hazard Review September 1978)	1 mg/m^3 , 8-hr TWA (Skin)	Lowest reliably detectable level; 0.5 mg/m^3 TWA by NIOSH-validated method	Cancer	Skin contact to be prevented

*Date recommendation was transmitted to OSHA is in parentheses.

[†]NIOSH TWA recommendations are based on exposures up to 10 hours unless otherwise noted.

NIOSH Recommendations				
Potential Hazard*	OSHA Standard	NIOSH Recommended Exposure Limit (s) [†]	Health Effect(s) Considered	Comments
2,4-Diaminobenzonitrile and its salts (CIB January 1978)	None	Reduce exposure to lowest feasible level	Cancer	Skin contact to be prevented; engineering and work-practice controls are recommended
Dibromochloropropane (September 1977)	1 ppb, 8-hr TWA; eye and skin contact to be avoided	10 ppb (0.1 mg/m ³) TWA	Sterility; renal and liver effects	Workers to be warned of reproductive system abnormalities, including sterility
Di-2-Ethylhexyl phthalate (DEHP)(Special Hazard Review March 1983)	5 mg/m ³ , 8-hr TWA	Reduce exposure to lowest feasible level	Cancer	DEHP, widely used in the quantitative fit testing of respirators, should be replaced with less toxic material such as refined corn oil
Diisocyanates (September 1978)	Toluene diisocyanate (TDI): 0.02 ppm (0.14 mg/m ³) ceiling; diphenylmethane diisocyanate (MDI): 0.02 ppm (0.2 mg/m ³) ceiling	Each equivalent to 5 ppb TWA and 20 ppb ceiling. All values given in µg/m ³ and all ceiling values for 10 min: TDI: 35 TWA, 140 ceiling; MDI: 50 TWA, 200 ceiling; hexamethylene diisocyanate (HDI): 35 TWA, 140 ceiling; naphthalene diisocyanate (NDI): 40 TWA, 170 ceiling; isophorone diisocyanate (IPDI): 45 TWA, 180 ceiling; dicyclohexylmethane 4,4'-diisocyanate (hydrogenated MDI): 55 TWA, 210 ceiling; other diisocyanates also to be controlled to 20 ppb ceiling and 5 ppb TWA	Respiratory effects and sensitization; irritation	Chest X-ray and pulmonary function testing required

(อ่านต่อฉบับที่ 11 ; Vol. 17 No. 11)