Sec. 22a-174-29. Hazardous air pollutants

- (a) "Hazard Limiting Values" and "Ambient Air Quality Standards"
- (1) "Hazard Limiting Values" (HLV)'s for "Hazardous Air Pollutants" for 8-hour and 30-minute averaging times are listed in Tables 29-1, 29-2, and 29-3. "Ambient Air Quality Standards" (AAQS) are listed in section 22a-174-24.
- (2) For a "hazardous air pollutant" or other "air pollutant" for which either a "HLV" or an "AAQS" has not yet been established by the "Commissioner," the "Commissioner" may request the Commissioner of Health Services to propose changes to Tables 29-1, 29-2 or 29-3 or to section 22a-174-24, to provide supporting documentation for his selection, and to submit it for review by the "Hazardous Air Pollutant Advisory Panel" within ninety (90) days of receipt of the request of the "Commissioner."
- (3) The "Commissioner" shall request the "Panel" to review the proposal and supporting documentation and to make a recommendation to the "Commissioner" to approve, modify or decline to accept the proposal within ninety (90) days of receipt. Within sixty (60) days of receipt of the recommendation of the "Panel," the "Commissioner" shall announce a hearing for a new "HLV" to be included in Tables 29-1, 29-2, or 29-3 or "AAQS" for section 22a-174-24.

(b) Maximum Allowable Stack Concentrations.

- (1) On or after October 1, 1986, no person shall cause or permit the emission of any hazardous air pollutant listed in Table 29-1 from any stationary source at a concentration at the discharge point in excess of the maximum allowable stack concentration, unless the stationary source is operating in accordance with the terms of an order or permit of the commissioner specifically allowing the continued operation of the stationary source in violation of this subdivision while coming into compliance or the source is in compliance with the provisions of subsection (d)(3) of this section.
- (2) No person, who is required to maintain compliance with a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies shall cause or permit the emission of any hazardous air pollutant listed in Table 29-1, 29-2 or 29-3 of this section from any stationary source or modification at a concentration at the discharge point in excess of the maximum allowable stack concentration unless such source is in compliance with the provisions of subsection (d)(3) of this section. The owner or operator of a stationary source who was issued a permit under former section 22a-174-3 of the Regulations of Connecticut State Agencies prior to July 1, 1986 shall be required to comply with Tables 29-2 and 29-3 of this section upon modification of such permit.
- (3) If the owner or operator of a stationary source that emits or may emit a hazardous air pollutant is in compliance with the MASC at the discharge point of that source, but the commissioner determines, through ambient monitoring, that the HLV is exceeded, then the commissioner may require that the concentration of the hazardous air pollutant at the discharge point be further reduced.
- (4) The owner or operator of any stationary source or modification not subject to the provisions of subdivision (2) or subdivision (6) of this subsection that emits or may emit a hazardous air pollutant shall comply with the requirements of subdivision (2) of this subsection if the commissioner determines, through ambient monitoring, that the HLV is exceeded as a result of the emissions from that stationary source.

- (5) For the purposes of subdivisions (3) and (4) of this subsection, any person who performs ambient air monitoring shall use methods and procedures approved by the commissioner.
- (6) The owner or operator of any incinerator shall not cause or permit the emission of any hazardous air pollutant listed in Table 29-1, 29-2 or 29-3 of this section from such incinerator at a concentration at the discharge point in excess of the maximum allowable stack concentration.
 - (c) Determination of "Maximum Allowable Stack Concentrations"
- (1) The "maximum allowable stack concentration" of a "hazardous air pollutant" (in micrograms per cubic meter or parts per million) at the "discharge point" of a "stationary source" shall be determined as follows:
- (A) If the "discharge point" is twenty (20) meters or less measured vertically from the ground elevation at the "discharge point," the "MASC" shall be:

$$\frac{0.885HLV(X+1.08V_0^{0.64})1.56}{V_0}$$
 [1]

Where "HLV" is the applicable "hazard limiting value" (in either micrograms per cubic meter or parts per million for 8-hour and 30-minute averaging times), " V_0 " is the average actual flow rate (in actual cubic meters per second) from the "discharge point," and "X" is ten (10) meters, or the distance from the "discharge point" to the closest property line, whichever is greater.

(B) If the "discharge point" is more than twenty (20) meters measured vertically from the ground elevation at the "discharge point," the "maximum allowable stack concentration" ("MASC") shall be:

$$\frac{0.885 HLV (X_{\max} + 1.08 V_0^{0.64})^{1.56} \exp[10.33 (H - 20)^2 (X_{\max} + 1.08 V_0^{0.64})^{-1.56}]}{V_0}$$
 [2]

Where "HLV" is the applicable "hazard limiting value" (in micrograms per cubic meter or parts per million) for 8-hour and 30-minute averaging times, " V_0 " is the average actual flow rate (in actual cubic meters per second) from the "discharge point," "H" is the height (in meters) of the "discharge point," measured vertically from the ground elevation at the "discharge point" and "Xmax" is the greater of the following distances:

- (i) ten (10) meters
- (ii) the closest distance, in meters, from the "discharge point" to the property line, or
- (iii) the distance, in meters, determined by:

$$4.47_{(H-20)}^{128}$$
 [3]

Where "H" is the height (in meters) of the "discharge point" measured vertically from

the ground elevation at the discharge point.

(2) For the purposes of this subsection, in determining the distance from the "discharge point" to the property line the "Commissioner" may allow consideration for any "watercourse" adjacent to the property in question. The "Commissioner" may allow the use of the opposite shore in determining the closest distance to the property line.

(d) Ambient Air Quality Standards.

- (1) The provisions of this subsection apply to any stationary source that emits an air pollutant for which there is an ambient air quality standard ("AAQS") found in section 22a-174-24 of the Regulations of Connecticut State Agencies except for any criteria air pollutant other than lead.
- (2) If the source complies with the MASC and there is an applicable AAQS, then the owner or operator shall not cause or exacerbate a violation of the applicable AAQS unless the impact of the source is less than significant as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i) of the Regulations of Connecticut State Agencies.
- (3) If the source does not comply with the MASC and there is an applicable AAQS, then the owner or operator shall:
- (A) Install and use Best Available Control Technology for the applicable hazardous air pollutant; and
- (B) Not cause an impact in excess of the applicable AAQS if such impact is significant as listed in Table 3a(i)-1 set forth in section 22a-174-3a(i) of the Regulations of Connecticut State Agencies.
- (4) Upon the request of the commissioner, the owner or operator of any stationary source shall make and submit to the commissioner, for his approval, a BACT determination for each hazardous air pollutant for which an AAQS has been set, as required by the commissioner, including costs estimates of all control options as may be specified by the commissioner.
- (5) For the purposes of this subsection, the commissioner shall allow the use of only air quality models, data bases or other requirements approved by the commissioner prior to the determination of compliance with the AAQS.

(e) Sampling for Hazardous Air Pollutants.

- (1) Testing to determine concentrations of hazardous air pollutants in the ambient air contiguous to a source may be required if the commissioner determines that the operation of a source might reasonably be expected to cause an exceedance of an applicable HLV or AAQS.
- (2) In addition to any testing required by section 22a-174-5(e)(2) of the Regulations of Connecticut State Agencies, testing to determine concentrations of hazardous air pollutants at discharge points of sources may be required by the commissioner if:
 - (A) An exceedance of a HLV with an 8-hour averaging time is observed;
- (B) Two (2) or more exceedances of a HLV with a 30-minute averaging time are observed within two (2) non-overlapping 8-hour periods within any seven (7)-day period;
 - (C) The source is required to meet the requirements of subdivision (b)(2) of this section;
 - (D) The emissions from a source are suspected of causing a violation of an AAQS;
- (E) There is an enforcement action for violation of section 22a-174-20 or 22a-174-23 of the Regulations of Connecticut State Agencies; or

- (F) The source is suspected of emitting a hazardous air pollutant listed in Table 29-1.
- (3) Testing to determine concentrations of hazardous air pollutants at either discharge points of stationary sources or in the ambient air shall be conducted by the commissioner, the commissioner's authorized representative or by persons qualified by training or experience in the field of sampling emissions from air pollution sources or in the ambient air. All sampling, emissions testing and laboratory analyses shall be done using procedures and techniques approved by the commissioner prior to the commencement of such testing.
- (4) In addition to the provisions of subdivision (1) of this subsection, the commissioner shall perform testing for dioxin emissions in the ambient air in accordance with the requirements of this subdivision. The commissioner shall perform the following tests in the area of any resources recovery facility. The tests shall be representative of conditions existing prior to the commencement of operation and representative of conditions existing after the issuance of the permit to operate.
- (A) For tests representative of conditions existing prior to the commencement of operation for each subject resources recovery facility the commissioner shall analyze at a minimum a total of eight (8) samples. At a minimum, such tests shall consist of the collection of samples at four locations deemed representative by the commissioner during four distinct time periods and the analysis of two samples for each time period for a total of eight samples. The commissioner shall make every effort to perform such testing once per calendar quarter prior to the commencement of operation.
- (B) For tests representative of conditions existing after the issuance of a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies for each subject resources recovery facility the commissioner shall analyze at a minimum a total of eight (8) samples. At a minimum, such tests shall consist of the collection of samples at four locations deemed representative by the commissioner during four distinct time periods and the analysis of two representative samples per calendar quarter for the first year following issuance of a permit under section 22a-174-3a of the Regulations of Connecticut State Agencies. Based upon an analysis of the ambient data, results of stack tests, data from the continuous emission monitors and other pertinent information, the commissioner shall determine a representative ambient sampling program for subsequent years. The commissioner shall provide notice of this determination to the chief elected official of each town participating in the subject resources recovery facility.

(f) Reporting Requirements

- (1) The owner or "operator" of any "stationary source" shall, upon written notice by the "Commissioner," supply him with information, for those time periods specified, concerning the usage of any substances listed in Table 29-1, 29-2, or 29-3 or the emissions of such substances into the ambient air.
- (2) Information required in subdivision (f) (1) shall be provided on forms issued for this purpose by the "Commissioner."
- (3) If the "Commissioner" deems that emissions of a "hazardous air pollutant" from a "stationary source" are likely to result in a severe and imminent health hazard, information required in subdivision (f) (1) shall be submitted by the owner or "operator" of the "stationary source" as soon as possible but not later than forty-eight (48) hours after receiving written notice from the "Commissioner."

Nothing in this subdivision shall prevent the "Commissioner" from taking action in accordance with the provisions of Sec. 22a-181 C.G.S.

- (4) Except as provided in subdivision (f) (3), such information required in subdivision (f) (2) shall be provided by the owner or "operator" of the "stationary source" within ninety (90) days of written notice by the "Commissioner."
- (g) Permits to operate a "stationary source" ordered to comply with any of the provisions of this section.
- (1) The "Commissioner" may require the owner or "operator" of a "stationary source" to obtain a permit to operate if he is found by the "Commissioner" not to comply with any of the provisions of subsection (b).
 - (h) Objectionable odors and compliance with other regulations
- (1) Compliance with this section by a "stationary source" does not in any manner relieve the owner or "operator" of the responsibility to comply with the provisions of section 22a-174-23 or any other section of these regulations.
 - (i) Adjustments to the MASC for Time Periods Less Than 8 Hours.

Notwithstanding the provisions of subsection (c), the Commissioner may allow an adjustment to the MASC for sources which emit continuously for a period of more than thirty (30) minutes but less than eight (8) hours by multiplying the MASC determined under subsection (c) by the following factor:

Adjustment Factor =
$$5 - 4\left(\frac{T - 0.5}{7.5}\right)$$

Where T = Number of hours the source is in continuous operation.

TABLE 29-1

		(ug/m		NG VALUE" ("HLV") VOLUMETRIC UNITS*
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOUR	30-MINUTE	8-HOUR 30-MINUTE
2-Acetylamino fluorene	53-96-3			
Acrylonitrile	107-13-1	22	110	0,01 0.05
Aflatoxins	83219-44-7			
	83219-45-8			
4-Aminodiphenyi	92-67-1			
Arsenic & compounds (as As)	7440-38-2	0.05	0.25	
Arsenic pentoxide	1 303-28-2			
Arsine	7784-42-1	1	5	0.25ppbv 1.25 ppbv
Asbestos++	1332-21-4			
Auromine	2465-27-2			
Azathioprine	446-86-6			
Benz(a)pyrene***	50-32-8			
Benzene	71 -4 3-2	150	750	0.05 0.25
Benzidine	92-87-5			
Beryllium	7440-41-7	0.01	0.05	
Beryllium oxide	1304-56-9			
Beryllium sulfate	13510-49-1			
Chlorambucil	3 05-03-3			
Chiordane	57 - 7 4- 9	2.5	12.5	
Chlorinated comphene	8 001-3 5-2	2.5	12.5	
Chiornaphthazine	494-03-1	_		
Chlorobenzilate	510-15-4			- -
Chloroform	676 6- -3	250	1,250	0.05 0.25
bis-Chloromethyl ether	542 -8 8-1	0.015	0.075	5.pptv 25.pptv
Chloromethyl methyl ether	1 07-3 0-2			

Volumetric units are in parts per million by volume, unless shown as parts per billion by volume (ppbv) or parts per trillion by volume (pptv).
 The "HLV" for asbestos (all forms, including amosite, chrysotile, crocidolite, tremolite, and fibrous tale) is 500 fibers, of a length of 5 micrometers or more, per cubic meter (8-hour average and 2,500 fibers, of a length of 5 micrometers or more, per cubic meter (30-min. average).
 See Polycyclic Aromatic Hydrocarbons

	TABLE 29-1,	Continued				
	"HAZARD LIMITING VALUE" ("HLV					
		(ug/m3		VOLUMETRIC UNITS		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOUR	30-MINUTE	8-HOUR 30-MINUTE		
Chromic acid and chromates (as Cr) Chromite ore processing (chromate),		0.25 0.25	1.25			
as Cr	7440-47-3		1.25			
Chromium, metai	8007-45-2	2.5 1	12.5 5			
Coke oven emissions	-					
Cyclophosphamide	5 0- 18 -0					
Dibromoch (oropropane	96-12-8	0.05	0.25			
3,3'-Dichlorobenzidine	91-94-1					
1,2-Dichloroethane	107-06-2	20	100	5.ppbv 25.ppbv		
Diethylstilboestriol	39011-86-4					
Diethyl sulfate	64-67-5					
4—Dimethylaminoczobenzene	60-11-7					
Dimethyl sulfate	77-78-1	2.5	12.5	0.5 ppbv 2.5 ppbv		
Dioxane, technical grade	123-91-1	450	2,250	0.125 0.625		
Estrogens						
Ethylene dichloride	1 07-06- 2	20	100	5.ppbv 25.ppbv		
Heptochlor	7 6-44-8	2.5	12.5			
Hexach I oroethane	67-72-1	50	250	5.ppbv 25.ppbv		
Kepone	143-50-0					
Me i pha i an	1 48-8 2-3					
4.4°-Methylene bis (2-chloraniline)	101-14-4	0.015	0.075			
MOCA	101-14-4	0.015	0.075			
Morpholine	110-91-8	350	1,750	0.1 0.5		
Mustord gas	5 05-60- 2					
My leran	55-98-1					
beto-Napthylamine	91-59-8					
Nickel carbonyt, as Ni	1 34 63-39 -3	1.75	8.75	0.25ppbv 1.25 pp		
Nickel (metal)	7 440-0 2-0	5	25			
Nickel, soluble compounds (as Ni)+	_	0.075	0.375			

* Carcinogens

TABLE 29-1, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	(ug/m3)	AZARD LIMITII 30-MINUTE	VOLUMETRIC	
Nicket sutfide	12035-72-2 92-93-3 55-86-7	5	25		
n-Nitrosodimethylomine	62-75-9 43 4-0 7-1 127-18-4 62-44-2	1,700	8,500	0.25	1.25
Polynuclear aromatic hydrocarbons (PAH) beta-Propiolactone	50-32-8 57-57-8 79-34-5 1314-20-1	0.1* 7.5 34.4	0.5* 37.5 172	2.5ppbv 5.ppbv	12.5 ppbv 25.ppbv
o-Toluidine Toxaphene Treosulfan 1,1,2-Trichloroethane Trichloroethylene 2,4,6-Trichlorophenol	95-53-4 8001-35-2 299-75-2 79-00-5 79-01-6 88-06-2	45 2.5 225 1,350	225 12.5 1,125 6,750	0.01 0.05 0.25	0.5 0.25 1.25
Vinyt chloride	75-01-4	50	250	0.025	0.125

^{*} Benzene-soluble fraction

^{**} Perchloroethylene has been placed in Group 1 provisionally, pending further research by the Department of Health Services and the "Hazardous Air Pollutant Review Panel".Polycyclic Aromati Hydrocarbons

TABLE 29-2

	"HAZARD LIMITING VALUE" ("HLV") (ug/m3) VOLUMETRIC UNITS=					
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER	" 8-HOUR	30-MINUTE	8-HOUR 30-MINUTE		
Actinomycin D	1402-38-6					
Adriamycin	23214-92-8		7.5			
Aldrin	3 09-00- 2 106-92-3	1.5 22 0	1,100	0.05 0.25		
Allyi glycidyl ether	100-92-3	220	1,100	0,00 0.20		
2-Aninognthraquinone	117-79-3					
1-Anino-2-nethylanthraquinone	82-28-0					
3-Anino 1.2.4-triazole (amitrole)	61-82-5					
o-Anisìdine	29191-52-4	5	25	1.ppbv 5.ppbv		
Antimony trioxide, handling & use		_				
(as Sb)	1309-64-4	5 5	25 25			
Antimony trioxide production (as Sb)	13 09-64-4 1 48- 57 -8	Þ	25			
Aramite	(40-3/-0					
(as As)	1327-53-3	6.25	1.25			
(de Ma)	1327-33-3	0.25	1.25			
Benz(g)anthracene	56-55-3					
Benza(b)fluoranthene	205-99- 2			-		
Benzotrichloride	98-07-7					
Browingted biphenyls				_		
Butadiene (1,3-butadiene)	1 06-99-0	22,000	110,000	10 50		
n-Butyl glycidyl ether (BGE)	2426-08-6	1.350	6.750	0.25 1.25		
Codmium	7440-43-9	0.4	2.0			
Codmium dust & salts (as Cd)	7440-43-9	6.4	2.0			
Cadmium oxide fume (as Cd)	1306-19-0	1.0	5.0			
Cadmium sulfate	10124-36-4					
Carbon tetrachloride	50-23-5	300	1,500	0.05 0.25		
Chloromphenicol	56-75-7		100	6. poby 30. ppby		
1-Chlora,2,3-epoxypropane	105-89-8	2 0	100	6.ррву 36.ррву		
bis-Chlorosthyl mitrosourea (BCNU)	188-66-1					
1-(2-Chioroethyi)-3-cyclohexyl-						
1-nitrosourea (CCNU)	13909-09-6					
Chrysene	218-01-9					
Cisplatin	15663-27-1					
p-Cresidine	1 26- 71-8					

Volumetric units are in parts per million by volume, unless shown as parts per billion by volum (ppbv) or parts per trillion by volume (pptv).

TABLE 29-2, Continued

		(ug/	"HAZARD LIMITI		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOUR	30-MINUTE	VOLUMETRIC 8-HOUR 3	O-MINUTE
Cupferron	135-20-6				
Cycasin	14901087 4342034				
DOT (Dichlorodiphenyl-trichloro-	4342-63-4				
ethane)	50-29-3	5	25		
2.4-Digminognisole sulfate	39156-41-7				
Dibenz(a,h) anthracene	53-70-3				
7H-Dibenzo(c.g) carbazole	194-59-2				
Dibenzo(a,h) pyrene	189-64-0 189-55-9	_			
Dibenzo(a,i) pyrene	109-33-9				_
1.2-Dibromoethane	106-93-4	1,550	7,750	0.2	1
Dienestrol	84-17-3				
Diepoxybutane	1464-53-5				
Di-2,3-epoxypropyl ether	2238-07-5	10	50	_	
Di(2-ethylhexyl) phthoiote	117-81-7	50	250		
3-3'-Dimethoxybenzidine	113-90-4				
4-Dimethylominobenzene	1300-73-8	100	500	0.21	0.1
3,3'-Dimethylbenzidine	119-93-7				
Dimethyl carbanoyl chloride	79-44-7	10	50		
1,1-Dimethylhydrozine	57-14-7	10	36	5.ppbv	25 . ppbv
3.3'-Dimethyloxybenziding	119-90-4		-		
Dinitrotaluene	121-14-2	15	75		_
Direct Black 38	1937-37-7				
Direct Blue 6	2610-05-1		-		
Direct Brown 95	10300-74-0				_
Epichlorhydrin	106-89-8	20	100	6.ppbv	30.ppbv
Ethinylestridiol	57 -63-6			_	
Ethylene dibromide	106-93-4	1,550	7,750	0.2	1
Ethylene oxide	75-21-8 96-45-7	20	100	0.01	0.05
Ethylene thioureo	90 -13- /				
Formal dehyde	50-00-0	12	60	0.01	0.05
Hexochi orobenzene	118-74-1				
Hexachlorobutodiene	87 -68- 3	2.4	12		
Hexamethyl phosphoramide	680-31-9 302-01-2	1	5	1.ppbv	5. ppbv
Hydrazine	302-01-Z	•	J	i.ppov	J. ppuv

TABLE 29-2, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	(ug/m3	HAZARD LIMITI) 30-MINUTE	VOLUMETRI	
Hydrazine suifate	10034-93-2 122-66-7 193-39-5 9004-58-4 4016-14-2		12,000	= = 0.5	
Lead acetate	301-94-2 18454-12-1 7446-27-7 58-89-9 72-33-3	0.5 -5	2.5	=	=======================================
4.4-Methylene dianiline	101-77-9 101-61-1 60-34-4 74-88-4	8 199	40 500	1.ppbv	5.ppbv
Metronidazele Michier's ketone Mirex Monomethy! hydrozine Nitrilotriacetic acid	443-48-1 90-94-8 2385-85-5 60-34-4 139-13-9	=	=	=	
5-Nitro-o-anisidine	99-59-2 1836-75-5 79-46-9 924-16-3	360	1,800	<u> </u>	
n-Nitrosodiethanolasine. n-Nitrosodiethylasine. n-Nitrosodiphenylasine. n-Nitrosodi-n-propylasine. n-Nitrosodi-n-propylasine.	1116-54-7 55-18-5 86-36-6 621-64-7 759-73-9	=		=	=
n-Nitroso-n-methylurec. n-Nitrosomethylvinylamine. n-Nitrosomorpholine. n-Nitrosonornicotine. n-Nitrosopiperidine.	684-93-5 4549-40-0 59-89-2 16543-55-8 100-75-4			=	

TABLE 29-2, Continued

		"}- (ug/m3)	WAZARD LIMITI	TING VALUE" ("HLV") VOLUMETRIC UNITS		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOUR	30-MINUTE	B-HOUR	30-MINUTE	
NAZARDOUS AIR POLLUTANT	CAS MARBER	G-TROOM	30-41(0) 6	D-1 KOK	50 WINDIE	
htts	930-55-2					
n-Nitrosopyrrolidinen-Nitrososorcosine	20661-60-3	_	_			
Norethisterone	68-22-4					
Oestrodio!~17-betg	2529-64-8				_	
Destrone	53-16-7					
Oestrone	33-10-1					
Phenozopyridine	94-78-0					
Phenazopyridine hydrochlorids						
Phenantoin (and sodium salt)	50-12-4					
Phenoxyscetic acid herbicides	_			_		
Phenyl glycidyl ether (PGE)	12 2-60- 1	60	300	0.01	0.05	
Pheny I hydraz i ne	199-63-8	286	1.000	9.85	0.25	
Pheny I-2-noph thy I om i ne	135-68-6					
Phenytain	57-41-0					
Polybraminated biphenyls						
r or you can should be below y round to the real real real real real real real rea						
Palychlorinated biphenyls:						
42% Cl	53469-21-9	0.01	9.05			
54% C1	11097-69-1	0.01	0.05		-	
Procarbazine hydrochloride	366-70-1					
Progesterone	57838					
Propone suitone	1120-71-4					
Propylene imine	75-55-8	50	250	8.02	0.1	
Propylthiourocil	51-52-5					
Reserpine	50-55-5					
Saccharine	81-07-2					
Safroie	94-59-7					
Salanium sulfide	7446-34-6					
Streptozotocin	18883-66-4					
Sulfaliate	95-06-7					
Tetrochloringted dibenzo-p-dioxins	1746-01-6					
Thi ogcet ami de	62-55-5	_				
Thiotepo	52-24-4					
Thiourea	62-56-6					
o-Tolidine	119-93-7					

[•] The "HLV" for dioxin is 0.7 picograms per cubic mater (8-hour average). There is no "HLV" in volumetric units. Concentration is expressed in terms of 2.3.7.8 dibenzo-p-dioxin equivalents, as defined in section 220-174-1. There is on "ambient air quality standard" for this substance contained in section 220-174-24.

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutent" listed. The "HLV" and/or "AAQS" will be determined at a later date.

TABLE 29-2, Continued

		("HLV")				
		(ug/m3) VOLUM			ETRIC UNITS	
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOUR	30-MINUTE	8-HOUR	30-MINUTE	
p-Totuidine	106-49-0	90	450	0.02	0.1	
o-Toluidine hydrochloride	636-21-5					
Trioziquone	68-76-8					
Tris(1-aziridiny1)phosphine sulfide	1 40-56- 7					
Tris (2,3-dibromopropy!)phosphate	126-72 - 7					
Uracil mustard	66-75-1					
Urethane	51-79-6					
Vinyl bromide	593-60-2	44	220	11.ppb	v 55.ppbv	
Vinyl cyclohexene dioxide	106-87-6	600	3,000	0.10.	5	
Xylidine	1330-73-8	100	500	0.02	0.1	
Zinc chromate (as Cr)	13530-65-9	0.5	2.5			

TABLE 29-3

	"HAZARD LIMITING VALUE" ("HLV")						
			(ug/m3) VOLUMETRIC U				
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE	R"	a-Hour 37.		8-MINUTE		38-MINUTE
Acetaldehyde	75-07-0	3,	600	18	,000	2	10
Acetic acid	69-19-7		500	2	.500	0.2	1
Acetic anhydride	188-24-7		400	2	.000	0.1	0.5
Acetone	67-64-1	11.	800	59	.000	5	25
Acetone cyonohydrin	75-86-5				_		-
Acetonitrile	75 - 05-8		680	3	.400	0.39	1.95
Acetylene	7 485 2						
Acetylene dichloride	54 0-59-0		800		,000	4	20
Acetylene tetrobromide	7 9- 27- 6		280	1	,4 00	8.62	8.1
Acetylsalicylic acid	50-78-2		100		500		_
Acrotein	107-02-8		5		25	2.ppbv	10.ppby
Acrylamide	7 9-06- 1		6		30		``
Acrylic acid	79-10-7		600	3	,000	0.2	1
Adiponitrile	111-69-3		360	1	,800	9.98	0.4
Allyl alcohol	107-18-6		100		500	0.04	0.2
Allyl chloride	107-05-1		60		300	0.02	0.1
Allyl propyl disulfide	2179-59-1		248	1	,280	0.84	0.2
Aluminum metal and oxide	7429-96-5		200	1	,000		
Aluminum pyro powder			100		500		
Aluminum welding fumes			100		500		
Aluminum soluble salts	_		40		200	_	
classified)			40		200		
2-Aminoethanol	141-43-5		120		600	0.04	0.2
2-Aminopyridine	5 04- 2 9-0		40		200	0.01	6.05
Ammonia	7654-41-7		360	1	, 800	0.5	2.5
Ammonium chloride fune	12125-02-9)	200	1	.000		
Ammonium sulfamate	7773 -06-0		200	1	,000		
n-Anyl acetate	62 8-6 3-7	10,	500	52	,500	2	10
sec-Amyl acetate	62 638 0	13,	,000	65	,000	2.5	10
Aniline	62-53-3		200	1	. 000	0.04	9.2
p-Aniaidine	29191-52-4	+	10		50	2.ppbv	16. ppbv
Antimony & compounds (as Sb)			19		50		
ANTU (-Nophthyl thiourea)	86-88-4		6		30		
Asphalt (petroleum) funes	8052-42-4		100		500		

Volumetric units are in parts per million by volume, unless shown as parts per billion by volume (ppbv) or parts per trillion by volume (pptv).

TABLE 29-3, Continued

			"HAZARD LIMITI	NG VALUE" ("HLV")
4		(ug/		VOLUMETRIC	
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER	"8—HOURÌŠ	30-MINUTE		0-MINUTE
Atrazine	1912-24-9	100	500		
Azinphos-methy)	86-5 0-0	4	20		
Barium (soluble compounds), as Ba	7 440-39-3	10	50		
Baygon (propoxur)	114-26-1	10	50		_
Benomy i	1,7804-35-2	200	1,000		
Benzal chloride	98-87-3			-	
Benzenethiol	108-98-5	40	200	0.01	0.05
Benzo(r,s,t) pentaphene	189-55-9				
p-Benzoqu'i none	106-51-4	8	40	2.ppbv	10.ppbv
Benzoyl chloride	98-88-4				
Benzoyl peroxide	94-36-0	100	500		
Benzyl chloride	100-44-7	100	500	0.02	
Biphenyl	92-52-4	30	150	2.6 ppt	v 13. pobv
Bismuth telluride	1304-82-1	200	1.996		
Bismuth tellurids, Se-doped		100	500		

Borates, tetra, sodium saits					
- anhydrous	1303-96-4	20	100		
- decahydrate	1303-96-4	199	500		
- pentahydrate	1303-96-4	20	198		
Boron oxide	1303-86-2	200	1,000		
			•		
Boron tribromide	10294-33-4	200	11,000	0.02	0.1
Boron triftuorida	7637 -0 7-2				
Bromoci I	31 4-40-9	200	1,000	0.02	8.1
Bromine	7726-95-6	14	70	2.ppbv	10.ppbv
Browine pentofluoride	7789 -30- 2	14	70	2.ppbv	10.ppbv
Bromochioromethane/chiorobromomethane.	7 4-97- 5	21.999	105,000	4	20
Bronoform	75-25-2	100	500	0.01	0.05
Butane	106-97-8	38,999	190,000	16	88
1-Butanethiol	109-79-5	30	150	8.91	0.05
2-Butanethiol	513-53-1	30	150	0.01	0.05
2-Butanone	78 -9 3-3	11,800	59,000	4	20
2-Butoxyethenol	111-76-2	2,400	12,000	0.5	2.5
n-Butyl acetete	123-86-4	14,200	71,000	3	15
sec-Buty1 acetate	105-46-4	19,000	95,000	4	20
tert-Butyl acetate	5 40-8 8-5	19,000	95,000	4	20

TABLE 29-3, Continued

		,	"HAZARD LIMITI		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		g/m3) 30-MINUTE	8-HOUR	CUNITS SO-MINUTE
Butyl acrylate	141-32-2	1,100	5.500	0.2	1
n-Butyl alcohol	71 -3 6-3	6,000	30.000	2	10
sec-Butyl sicohol	78-92-2	6,100	30,500	2	10
tert-Butyl alcohol	75-65-1	6,000	30,000	2	10
Buty I comine	109-73-9	_	·	_	_
tert-Butyl chromate (as CrO3)	1189-85-1	_			
n-Butyl loctate	138-22-7	500	2,500	0.1	0.5
Butyl mercaptan	1 09-79-5	30	150	0.01	0.05
o-sec-Buty I pheno I	89-72-5	600	3,000	0.1	0.5
p-tert-Butyltoluene	98-51-1	1,200	6,000	0.2	1
n-Butyronitrile	109-74-0	440	2,200	0.16	0.8
Codmium oxide production	1306-1 9-0	1	5		
Calcium arsenate (as As)	7778 -44- 1	_	-		
Calcium cyanamide	156- 62-7	10	50		
Calcium hydroxide	1305-62-0	100	500	_	_
Calcium oxide	13 05-78- 8	40	200		_
Comphor, synthetic	76 - 22-2	240	1,200	0.04	0.2
Caproloctam dust	1 05- 60-2	20	100	_	
Caprolactam vapor	1 05- 60-2	400	2,000	0.1	0.5
Captafol (difolatan)	2425 -06- 1	2	10		_
Captan	113-06-2	100	500		_
Carbaryl (Sevin)	63-25-2	100	500	_	
Carbofuran (Furadan)	1563-66-2	2	10	_	
Carbon black	1333-86-4	7 0	350		
Carbon disulfide	75 - 15-0	60	300	0.02	0.1
Carbon tetrabromide	558-13-4	28	140	2.ppbv	10.ppbv
Carbonyl chloride (Phosgens)	75 -44- 5	8	40	2.ppbv	1 0 .ppbv
Carbonyl fluoride	353-50-4	198	500	0.04	0.2
Catechol	12 0-80-9	400	2,000	0.1	0.5
Cesium hydroxide	21351 -79 -1	40	200	_	_
2-Chloraniline	106-47-8	0.06	0.3	0.01 p	pbv 0.05 ppbv
Chlorinated diphenyl oxide	5572 0-9 9-5	10	50		-
Chlorine	7782 -50 -5	60	300	0.02	0.1
Chlorine dioxide	10049-04-4	6	30	2. ppbv	10.ppbv
Chlorine trifluoride	779 0-9 1-2			_	

TABLE 29-3, Continued

	"HAZARD LIMITING VALUE" (
		(1	ug/m3)	VOLUMETRI	
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER	" 8-HOUR	30-MINUTE	8-HOUR	30-MINUTE
Chlomadiana nastata	700 00 7				
Chiormadione acetate	302-22-7 107-2 0-0				
aipha - Chioroacstophenone (Phenacyi	101-20-0				-
chloride)	532-27-4	6	30	1.ppbv	5.ppbv
Chloroacetyl chloride	7 9-04-0	4	20	1.ppbv	5. ppbv
Chlorobenzene	108-90-7	7,000	35,000	1.5	7.5
o-Chiorobenzylidene maionitrile	2 698-41- 1	8	40	1.ppbv	5.ppbv
Chiprobromomethane/bromochipromethane.	7 4-97- 5	21,000	105,000	4	20
2-Chloro-1,3-butadiene	126 -99-8	900	4,500	0.2	1
Chlorodifluoromethane	75-45-6	70,000	350,000	20	100
Chlorodiphenyl (42% Chlorine)	53469-21-9	20	199		
Chlorodiphenyl (54% Chlorine)	11097-69-1	10	50		
2-Chioroethanol	107-07-3	320	1,600	0.1	6.5
Chioropentafiuoroethane	76-15-3 1	26,400	632,000	20	100
1-Chloro-1-nitro-propone	600 25-9	200	1,800	0.04	0.2
Chloropierin	76-06-2	14	70	2.ppbv	10. ppbv
beta — Chloroprene	12	26 -99-8	900	4,500	0.2 1
o-Chlorostyrene	1331-28-8	5,700	28,500	1	5
o-Chlorotolyene	9 5-4 9 -8	5.000	25,000	1	5
Chloropyrifos (Dursban)	2921-85 -2	4	20		_
Chromium (II) compounds, as Cr		10	50		
Chromium (III) compounds, as Cr		18	50		
Chromium (IV) compounds, non-					
carcinogenic, as Cr		9.5	2.5		
Chromyi chloride	14977-61-8	3	15 0.5	ppbv 2.5pp	bv
Clofibrate	637-07-1				
Clomi prene	911-45-5				
Clopidal.,	2971 -90- 6	200	1,000		
Coal dust		48	200		_
Cobalt metal, dust & fume (as Co)	7 440-48-4	2	10		
Cobalt carbonyl, as Co	90000-00-0	2	10		
Cobalt hydrocarbonyl, (as Co)	1 684203 8	2	10	_	_
Copper - dusts & mists (as Cu)	7 440-50-8	20	198		
Copper fuse	7 440-50-8	2	10		
Cotton dust, row		4	20		_

TABLE 29-3, Continued

				AZARD LIMITING VALUE" ("HLV")		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		g/m3) 3 0 M INUTE	B-HOUR	UNITS SO-MINUTE	
Crag herbicide	556-22-9	300	1,500		_	
Cresol	131 9-77- 3	200	1,000	0.048	0.24	
Crotonal dehyde	12 3- 7 3-9	120	600	0.04	0.2	
Crufomate	299-86-5	100	500			
Cumena	9 8 -828	4,900	24,500	1	5	
Cyanamide	420-04-2	40	200			
Cygnides, as CN	51 508	100	500			
	143-33-9	100	500			
Cyanogen	460- 19-5	400	2,000	0.2	1	
Cyanogen chioride	506-77-4				_	
Cyclomates	100-88-9					
Cyclohexane	110-82-7	21,000	105,900	6	30	
Cyclohexanethiol	156 9-69- 3					
Cyclohexanol	108-93-0	4.000	20,000	1	5	
Cyclohexanone	108-94-1	2,000	10,000	0.5	2.5	
Cyclohexene	110-83-8	20,300	101,500	6	30	
Cyclohexylamine,	1 08-91- 8	800	4.000	0.2	1	
Cyclonite	121-82-4	30	150			
Cyclopentadiene	5 42-92- 7	4,000	20,000	1.5	7.5	
Cyclopentane	2 87-92- 3	17,000	85,000	6	30	
Cyhexatin	13121-70-5					
2,4-D (2,4-Dichlorophenoxyocetic acid)	94-75-7	200	1,000			
Da lapon	75- 99-0	120	600	0.02	0.1	
Dapsone	89-98-9		_		_	
Decaborane	17702-41-9	6	30	1.ppbv	5.ppbv	
Decanethiol	143-10-2	_				
Demoton	8065-48- 3	2	18		bv 1.ppbv	
Discetone alcohol	123-42-2	4,800	24,000	1	5	
1,2-Diaminoethone	107-15-3	500	2,500	0.2	1	
Diazinon	333-41-5	2	10			
Diazonethane	334-88-3	ā	40	4.ppbv	20.ppbv	
Diborane	19287-45-7	ž	10	2.ppbv	16 ppbv	
Dibrom	300-76-5	60	300			
2-n-Dibuty (aminos thanof	102-81-8	280	1,400	0.04	0.2	

TABLE 29-3, Continued

			"HAZARD LIMIT	ING VALUE"	("HLV")
			(ug/m3)	VOLUMETRI	C UNITS
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE			8-HOUR	30-MINUTE
Dibutyl phosphate	107-66-4	190	500	0.02	0.1
Dibutyl phthalate	84-74-2	100	500		
Dichloracetylene	7572-29-4				
o-Dichlorobenzene	95-50-1		-		
p-Dichlorobenzene	196 46-7	9,000	45,000	1.5	7.5
Dichtorodif Luoromethane	75-71-8	99,000	495.000	20	100
1,3-Dichloro-5,5-dimethyl hydantoin	118-52-5	4	20		
1.1-Dichloroethane	75343	8,900	40,00 0	2	19
1,2-Dichloroethylene	540-59-0	15,800	79,000	4	20
Dichloroethyl ether	111 -44-4	600	3.000	0.1	0.5
Dichloromethane	75 -09- 2	7.000	35.000	2	10
Dichloromonofluoromethons	75-43-4	899	4,000	ē.2	1
1,1-Dichloro-1-nitroethene	594-72-9	200	1,000	0.04	ė.2
Dichtoropropene	542-75-6	100	500	0.02	0.1
2,2-Dichloropropionic acid	75-99-0	120	500	0.02	0.1
z je premoropropromo doro	70 35-0	120	500	0.02	4.1
Dichloretetrafiuoroethane	76-14-2	140,000	700,000	20	100
Dichlorvos (DOVP)	62-73-7	20	100	2.ppbv	10.ppbv
Dicrotophos (Bidrin)	141 -56- 2	5	25		-
4,4'-di isocyanate		1.1	5.5		
Dicyclopentadiene	77-73-6	600	3,000	8.1	0.5
Dicyclopentadienyl iron	1 02-54- 5	200	1,000		
Dieldrin	60- 57-1	5	25		
Diethanolamine	111-42-2	300	1,500	9.96	0.3
Diethylamine	1 09-8 9-7	600	3,000	0.2	1
Diethylaminoethanol	100-37-8	1,000	5,000	0.2	1
Diethyl ether	60-29-7	24,000	120,000	8	40
Diethyl ketone	9 5-22-0	14,199	78,500	4	20
Disthyl phthalate	84-66-2	198	500		
Disthylene triamine	111 -40-0	80	400	0.02	0.1
Diffuoradibramamethane	75 - 61-6	17,200	86,900	2	10
Diglycidal ether	2238-07 -5	10	50	2.ppbv	
Dissobuty! ketone	1 08-83- 8	2,800	14,000	9.46	2.3
Disocyanates, not tisted	_				bv 0.5 ppbv
Diisopropylamine	1 08- 18 -9	400	2,000	0.1	9.5

TABLE 29-3, Continued

	"HAZARD LIMITING VALUE" ("HLV")						
			(ug/m3)	VOLUMETRI			
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE				30-MINUTE		
Dimethisterone	79-64-1			_			
Dimethoxymethane,	1 09-8 7-5	62,000	310,000	20	100		
Dimethyl acetanide	127-19-5	700	3,500	Ð.2	1		
Dimethylamine	124-40-3	360	1.800	8.2	1		
Dimethylaniline	121 –69 –7	500	2,500	0.1	0.5		
Dimethylformanide	68-12-2	500	3,000	0.2	1		
Dimethylphthalate	131-11-3	100	500				
Dinitolmide	14 8-0 1-6	100	500				
Dinitrobenzene - o isoner	52 8- 29 -0	20	100	3.ppbv	15.ppbv		
Dinitrobenzeze - m isomer	9 9-65-0	20	100	3.ppbv			
Dinitrobenzene - p isomer	1 00- 25-4	26	100	3.ppbv			
Dinitro o-cresol	534-52-1	4	20				
3.5-Dinitro-o-toluomide (Dinitolmide).	148-01-6	100	500				
Dioxathion (Delnay)	78-34-2	4	20				
Diphenyl	92-52-4	20	100	2.6 00	by 13.ppby		
Diphenylamine	122-39-4	200	1,000				
Diphenylmethane difsocyanate	101-68-8	1	5		_		
Diphenyiphthaiate	_			_			
Dipropylane glycol methy! ether	34590-94-8	12,000	60.000	2	10		
Dipropyl ketone	123-19-3	4,700	23,500	1	5		
Diquot	85-00- 7	10	50	_	_		
Di-sec octyl phthalate	117-81-7	100	500		_		
Disulfiran	9 7 77 8	40	200				
Disulfoton	298-04-4	2	10		_		
Disyston	29 8 04 4	2	10	_			
2,6-Ditert butyl-p-cresol	12 8-37-0	200	1,600	_			
Diuron	330-54-1	200	1,500	_	_		
Diviny) benzene	108-57-6	1,000	5,000				
Dodeconethiol	_	· - -					
Dyfonate	944-22-9	2	10				
Endosul fan	115-29-7	2	10				
Endrin	72-20-8	2	10		_		
EPN	2164-64-5	10	50				
Ethane	74-84-0						
Ethanol	64-17-5	38,000	198,000	29	100		
Ethanolazine	141-43-5	120	600	0.84	0.2		

TABLE 29-3, Continued

		("HAZARD LIMITI ug/m3)	ZARD LIMITING VALUE" ("HLV") VOLUMETRIC UNITS		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		30-MINUTE		30-MINUTE	
thion	557 12-2	8	40			
-Ethoxyethanol	563-12-2 11 0-8 0-5	380	1.900	0.1	0.5	
-Ethoxyethyl ccetate	111-15-9	540	2.700	0.1	0.5 0.5	
	141-78-6	28.000	140.000	8	40	
ithyl acetate	140-88-5			•		
ithyl ocrylate	140-00-3	400	2,000	0.1	0.5	
Ethylomine,	75-04-7	360	1,800	0.2	1	
Ethyl sec-anyl ketone	541-85-5	2.600	13.000	0.6	3	
Ethyl benzene	100-41-4	8.700	43.500	2	10	
Ethyl bramide	74-96-4	17,800	89,000	7	20	
Ethylbutyl ketone	106-35-4	4.600	23.000	i	5	
211/1-21/1		.,	20,000	•	•	
Ethyl chloride	75 -00 -3	52.000	250,000	20	100	
Ethylene	74-85-1					
Ethylene chlorohydrin	107-07-3	320	1,600	0.1	0.5	
Ethylenedicmine	107-15-3	500	2.500	0.2	1	
,						
Ethylene glycol dinitrate	628-96-6	5	30	1.ppbv	5.ppbv	
Ethylene glycol monomethyl ether						
acetate	11 0-49-6	480	2,400	0.1	9.5	
Ethylene glycol, vapor	107-21-1					
Ethylenimine	151-56-4	20	100	0.01	0.05	
Ethyl ether	60-29- 7	24,000	120,000	8	40	
Ethyl formate	109-94-4	6,000	30.000	2	18	
Ethylidene norbornene	16219-75-3					
Ethyl mercaptan	7 5-08- 1	20	100	0.01	0.05	
n-Ethylmorpholine	100-74-3	460	2.300	0.1	0.5	
Ethyl siticate	78-19-4	1.700	8,500	0.2	1	
Ethynodiai acetate	297-76-7	1,700	8,500			
Fenceiphos	22224-92-6	2	10		_	
Fensulfothion (Dasanit)	115-90-2	2	10	_		
THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRE	113-30-2	-	10			
Fenthion	55-38-9	4	20			
Ferban	14484-64-1	200	1.000			
Ferrovanadium dust	12604-58-9	20	100			
Fluorides (as F)		50	250			
Fluorine	7782-41-1	4	20	2.ppb	v 18. pobv	
		-				

TABLE 29-3, Continued

	"HAZARD LIMITING VALUE"					
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE		g/m3) 30-MINUTE	8-HOUR	UNITS 50-MINUTE	
Fluorotrichloromethane	75-69-4	112,996	560,800	20	100	
5-Fluorouracil	51-21-B					
Formani de	944-22-9	2	10			
Forming and a	75-12-7	600	3,000	0.4	2	
Formic acid	64-18-6	180	900	9.1	0.5	
Furfural	98-01-1	160	800	6.84	0.2	
Furfuryl alcohol	98 99 0	800	4.000	0.2	1	
Gasoline	8006-61-9	18.000	90.000	6	30	
Germanium tetrahydride	7782-65-2	12	60	4.ppbv	20. ppbv	
Gloss (dust)		100.	500.•		20.ppbv	
		,,,,,	900.4		_	
Glass (fibrous)**	_		_	_		
unactivated	111-30-8	14	70	-		
Glycerin mist	56-81- 5					
Glycidal	556-52-5	1,500	7,500	0.5	2.5	
Glyconitrile	107-16-4					
Guthion (Azinphos-Methyl)	B6-50-0	4	20			
Hafnium	7440-58-6	18	50	-		
Hematite	1317-69-8				_	
Heptone (n-Heptone)	142-82-5	7,000	35,000	1.75	8.75	
Heptanethiol	1639-09-4					
Hexach lorocyclohexane	319-85-7	_				
Hexachiorocyclopentadiena	77-47-4		10	0.2	-	
Hexochloronaphthalene	1335-87-1	4	20	0.2	1	
Hexadecanethiol	1000-07-1		20	_		
					_	
Hexaf luoroacetone	684-16-2	14	70	2.ppby	18.ppbv	
Hexamethylene diisocyanate	822-06-0	0.7	3.5		_	
Hexane (n-hexane)	110-54-3	3,600	18,000	1	5	
Hexans, other isomers	110-54-3	36.000	180,000	10	50	
Hexonethic I	111-31-9		_			
2-Hexanone	591-78-6	400	2.000	0.1	0.5	
Hexone	108-16-1	4.100	20,500	1	5.5	
sec-Hexyl acetate	108-84-9	5.000	30,000	ł	5 5	
Hexylene glycol	107-41-5	0,000	50,000		•	
Hydralazine	B6-54-4	=				
				_	_	

[•] Respirable

ee The "HLV" for fibrous glass is 60,000 fibers of a length of 5 microns or greater per cubic meter (8-hour average) or 300,000 fibers of length of 5 microns or greater per cubic meter (30-minute average).

TABLE 29-3, Continued

		NG VALUE" (
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		ig/m3) 30-MINUTE		SO-MINUTE
Hydrazi nobenzene	100630	400	2,000	0.1	0.5
Hydrochtoride o-anisidine	 :			-	—
Hydrogenated terphenyls	92-94-4	100	500	0.01	0.05
Hydrogen bromide	10035-10-6	200	1,000	8.88	8.3
Hydrogen chloride	764701 0				
Hydrogen cyanide	74-90-8	220	1,100	0.2	1
Hydrogen fluoride	7684-39-3	56	250	0.06	0.3
Hydrogen peroxide	7722-84-1	28	140	0.02	0.1
Hydrogen selenide	7783 -0 7-5	4	29	1.ppbv	5.ppbv
Hydrogen aulfide	7783-96-4	280	1,400	9.2	1
Hydroquinone	123-31-9	40	200		
17x-Hydroxyprogesterone caproate			200		
2-Hydroxypropyl acrylate	999-61-1	60	300	8.01	0.05
Indene	95-13-6	900	4.500	0.2	1
Indium & Compounds (gs In)	7440-74-6	2	10		
The same of the sa	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	10		
Iodine	7553-56-2				
Iodoform	75 47 8	200	1,000	0.012	0.06
Iron oxide fume	13 0 9-37-1	100	500		
Iron pentacarbonyl	13463-40-6	16	80	2. ppbv	10.ppbv
Iron saits, soluble (as Fe)		20	100	'`	—
Isomyl acetate	123-92-2	10.500	52.500	2	10
Isoamyt alcohol	123-51-3	7.200	36,000	- 2	10
Isobutyl ocetate	110-19-0	14,900	70,000	3	15
Isobutyl alcohol	78-83-1	3.000	15.000	ĭ	5
Isobutyronitrile	78-82-0	440	2.200	0.16	8.6
	- -		-,	J. 1.0	0.0
Isonicotinic gold hydrazide	55-22-1				
Isooctyl alcohol	26952-21-6	5,400	27,000	1	5
Isophorone	7 8-59- 1	460	2,300	0.1	0.5
Isophorone diisocyanate	4098 -71 -9	0.9	4.5	8.1ppby	/ Ø.5pbv
Isopropoxyethonol	1 09-59- 1	2,100	10,500	9.5	2.5
Impropyl acetate	108-21-4	19,000	95.000	5	25
Isopropy! alcohof	67-63-0	19.600	98,000	B	40
Isopropylamine	75-31-0	248	1,200	0.1	0.5
n-Isopropyl aniline	643-28-7	200	1,000	6.64	8.2
Isopropy! ether	108-20-3	21,900	105,000	5	25
		,550	100,000	-	29

TABLE 29-3, Continued

	"HAZARD LIMITING VALUE" ("HLV					
		(uq	g/mJ)	VOLUMETRI	UNITS	
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE	R" 8-HOUR	30-MINUTE	8-HOUR	30-MINUTE	
Isopropyl oils						
Kerosene	B008-20-6	2.806	10,000			
Ketene	463-51-4	18	90	0.01	0.05	
Leed, inorg., fumes & dusts (as Pb)	7439-92-1	3	15	0.01	0.05	
		3				
Leed arsenate (as Pb)	10102 -48-4		15			
Liquified petroleum gas		36,000	180,000	20	100	
Lithium hydride	7580-67-8	0.5	2.5			
Lynoestrenol	52-76-6					
Magenta	632-99-5					
Mognesite	546-93-0					
Magnesium oxide fune	1309-48-8	200	1,000			
	1045 40 0		1,000		_	
Malathion	121-75-5	200	1,000			
Maleic anhydride	108-31-6	20	100	5.ppbv	25. ppbv	
Majonitrile	109-77-3	150	800	0.06	0.3	
Manganese dust & compounds (as Mn)	7489-96-5					
Manganese cyclopentadienyl	7403-30-3					
tricarbony! (as Mn)	12079-65-1	2	19			
tricarony, (as man)	12079-03-1	-	10			
Manganese fuse (as Mn),,	7439-96-5	20	100			
Manganese tetroxide	1317-35-7	26	100			
Medroxyprogesterone acetate	71-58-9					
Megestral acetate	595-33-5			-		
6-Mercaptopurine	50-44-2					
	55 11 2					
Mercury (ciky i compounds) (as Hg)		9.2	1			
Mercury, (all forms except alkyl)						
(as Hg)						
Vapor		1	5			
aryl and inorganic compounds		2	10		_	
Mesityl oxide	141-79-7	800	4.000	0.2	1	
Methocrylic ccid	79-41-4	1.400	7.000	8.4	ż	
Methanethiol	74-93-1	20	100	0.01	6.05	
Methanoi	67-56-1	5.200	26.999	4	20	
Methony1	16752-77-5		258			
	. 3132-17-3		2.00		_	
Methatrexate	59-05-2					
Methoxychior	72-43-5	200	1,000			
2-Methoxyethanol	1 09-86-4	320	1,600	0.1	0.5	
2-Methoxyethyl ocetate	110-49-6	480	2,400	8.1	0.5	
4-Methoxyphenel	150-76-5	100	500			

TABLE 29-3, Continued

	"HAZARD LIM {ug/m3}			AITING VALUE" ("HLV") VOLUMETRIC UNITS		
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER	₹" 8-+1			30-MINUTE	
Methyl acetate	7 9-20-9	12,200	61,999	4	28	
Wethyl acetylene	74 -99- 7	33,000	165,000	28	198	
Mathyl acetylene-propadiene mixture		36,000	188,000	28	196	
Methyl acrylate	96-33-3	700	3,5 00	8.2	1 ,	
Wethylocrylonitrile	126-98-7	60	380	0.02	9.1	
Mothy lat	109-87-5	62,000	310,000	20	100	
Methylanine	74-89-5	240	1,200	0.2	1	
Methyl n-anyl ketone	110-43-0	4.700	23,500	1	5	
n-Mathyl on line	100-61-8	40	200	0.01	9.95	
Wethyl bromide	74-83-9	1.200	6,000	0.3	1.5	
Wethyl butyl ketone	591-78-6	80	490	28. ppbv		
Methyl sellosolve	109-85-4	320	1,698	0.1	0.5	
Methyl delicative acetate	110-49-6	488	1,200	₩.1	9.5	
Methyl chloride	74-87-3	2,100	18,500	1	5	
Methyl chloroform	71-55-6	38,000	190,000	7	35	
Methyl 2-cyanoscrylate	13705-3	160	898	9.94	8.2	
Methylcyclohexane	10887-2	32,000	160,000	8	49	
Wethylcyclohexanol	25639-42-3	4,700	23,500	ī	5	
Methylcyclohexanone	583 -60- 8	4,600	23,000	\$	5	
tricarbonyi (sa Mm)	12108-13-3	4	29	2. ppbv	18. ppbv	
Methyl demeton	8 0 2 2-00- 2	10	50			
i accyonate)	5124-30-1	-				
Methylene chioride	75 -89- 2	7,000	35,000	2	10	
Methylene diphenyl isocyanate (MDI)	161-68-8	1	5			
Methyl ethyl ketone (MEK)	78-93-3	11,800	59,000	4	29	
Methyl ethyl katone peroxide	1338-23-4					
Methyl formate	107-31-3	5,000	25,000	2	10	
Methyl Isomeyl ketone	116-12-3	4,600	23,690	9,96	4.8	
Methyl isobutyl carbinol	188-11-2	2.000	10,000	8.5	2.5	
Methyl isobutyl ketone	108-19-1	4,006	20,000	Ť	5	
Wethyl isocyonate	824 -83- 9	1	5	9,4 pp	bv 2.ppbv	
Wethy! isopropy! ketone	563 -86-4	14,180	79,588	4	20	
Hethyl mercaptan	74-93-1	20	160	9.91	0.05	
Methyl methacrylate	80-62-6	B , 200	41,000	2	10	
Methyl parathion	298-00-0	4	20			
Methyl n-propyl ketone	167-67-9	18,600	53,800	2.8	14	
Methyl silicate	681-64-5	129	600	0.02	0.1	
Methyl styrene	98-83-9	4,500	24,906	1	5	
Matribuzin	21 087-64-9	196	588			

TABLE 29-3, Continued

		'ING VALUE" ("HLV") VOLUMETRIC UNITS			
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER	"8-HOUR	g/m3) 30-MINUTE		SO-MINUTE
Mev i nphos	7786-34-7	2	18	2.ppbv	10.ppbv
Mineral woo! fiber		200	4 500		
Molybdenum (as Ma) soluble compounds.		100	1,000		
motypoenum (da mo) soluple compounds		100	Sala	_	_
Molybdenum (insoluble compounds)		200	1,888		
Wonocrotophos	6923-22-4	.5	20		
Monomethyl aniline	100-61-8	40	200	0.01	0.05
Nated	3 00- 7 5- 5	60	300		
Naphtha**	_	8,000	40.000	2	10
Naphthaiene	91-20-3	1,800	5,000	0.2	1
Naphthalene dilsocyanate	39394-45-1	0.8	4		_
1-Napthy (amine	134-32-7				
Nickel (II) oxide	1313-99-1	0.3	1.5		_
Nickel (III) oxide	1314-06-3	0.3	1.5		
Minhal abban salubla assessmen					
Nickel, other soluble compounds (gs Ni)***		6.3	1.5		
Nicotine	54-11-5	10	1.5 56		_
Nitrapyrin	1929-82-4	298	1,006		_
Nitric acid	7697-37-2	100	500	0.04	0.2
***************************************			500	V	V
Nitric oxide	10102-43-9	600	3.660	8.5	2.5
p-Nitrogniline	190-01-6	60	300	0.61	0.05
Nitrobenzene	98-95-3	188	500	0.02	0.1
p-Nitrochlorobenzene.,	100-00-5	26	100		
Nitroethane	79-24-3	6,200	31,000	2	10
Nitrogen trifluoride	7783-54-2	580	2.900	0.2	1
Nitroglycerin	55-63-0	18	50	1.ppbv	5.ppbv
Nitromethane	75~52-5	5.000	25,000	2	10
1-Nitropropone	108-03-2	1,888	9.660	0.5	2.5
Nitrotoluene	9 9-08- 1	220	1,100	0.04	0.2
Nitrous oxide	19024-97-2	1.340	6,790	0.73	3.65
Nongne		21.000	185,888	4	3.65 20
Nonanethial	1455-21-6	21,000	100,000		70
Norethynodrei	68-23-4				_
Norgestrel	6533-00-2	_			
Octochi o ronaphtha i ene	2234-13-1	2	10	-	
Antenna an amabutana ang 118		•	10	-	-

[•] The "HLV" for mics is 0.4 million particles per cubic foot (mppcf), eight—hour average and 2 mppcf, 30-minute average.

^{**} See also VMBP Naphtha

^{***} Non-carcinogens

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		"HAZARD LIMITI g/m3) 30-MINUTE	VOLUMETRIC	
Octodecanethiol.,					
Octane	111-65-9	7, 000	35, 000	1.4	7
Octanethiol	111 8 66				
Oil mist, mineral	8012-95-1	198	500		
Osmaiuma tetroxide (ce Ce)	2081 6- 12-0	9.94	0.2	4.pplv	20.pptv
Oxalic acid	144-62-7	20	199		
Oxygen difluoride	7783-41-7	2	10	1.ppbv	5.ppbv
Poraffin wax fune	8002-74-2	40	200		
Paraguat, respirable sizes	1910-42-5	2	10		
Parathion	56-38-2	2	10		
Pentaborane	19624-22-7	0.2	1	0.1 pob	v 8.5 ppbv
Pentachioronophthalene	1321-64-8	10	50		
Pentachiorophenol	87-86-5	10	50		
Pentgerythritol	115-77-5	300	1.500		
Pentane	1 09-66-0	7,000	35,000	2.3	11.7
Pentanethiol	110-66-7				
2-Pentanone	107-87-9	10.600	53,800	2.8	14
Perchloromethy! mercapton	594-42-3	16	80	2.ppbv	10. ppbv
Perchloryl fluoride	7615-94-6	270	1,350	0.96	0.3
Perlite		0.6	3		
		mppcf*	mppcf =		
Phone I zine	51-71-8				
Phenobarbital	5 8-86-5				
Phenol	108-95-2	380	1,900	0.1	0.5
Phenothiazine	92-84-2	188	500		
Pheny I but azone	50-33-9				
p-Phenylene digaine	1 06-50- 3	2	10		
Phenyl ether (vapor)	101-84-8	140	700	9.02	0 .1
Phenyl ether-Diphenyl mixture (vapor).		140	700	0.02	0.1
Phenyl mercapton	1 08-98- 5	48	268	0.01	9.95
Pheny I-1-naphthy I am i ne	90-3 0- 2				
Pheny i phosphine	638-21-1			,	
Phorate (Thimet)	298-02-2	1	5		
Phosdrin (Mevinphos)	7786-34-7	2	10	2.ppbv	10.ppbv
Phosgene (carbonyl chloride)	75-44-5	8	40	2.ppbv	10.ppbv
Phosphi ne	7803-51-2	8	40	6.ppbv	30.ppbv

^{*} mppcf: millions of particles per cubic foot

TABLE 29-3, Continued

		"HAZARD LIMITING VALUE" ("H			
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER		/m3) 3 0-M INUTE	VOLUMETRIC 8-HOUR 3	O-MINUTE
Phosphoric ecid	7664-38-2	20	100		
Phosphorus (yellow)	7723-14-0	2	10		
Phosphorus oxychloride	10025-87-3	12	68		10.ppbv
Phosphorus pentachloride	1 0026- 13 -8	20	100	2. ppbv	10.ppbv
Phosphorus pentasülfide	1 3 14-80-3	20	100		
Phosphorus trichloride	771 9- 12-2	30	150	4.ppbv	20.ppbv
Phthalic anhydride	B5 -44-9	120	600	0.02	0.1
m-Phthaiodinitrile	626-17-5	100	500	_	
Pictorom	191 8-02- 1	200	1,000		
Picric ocid	88-89- 1	2	10		
Pindone	83-26-1	2	19		
Piperazine dihydrochloride	142-64-3	100	500		
Pival (2-Pivaly1-1,3-indandione)	83-26-1	2	10		
Piatinum (metal)	7440-06-4	20	100		
Platinum (soluble salts) (as Pt)		0.04	0.2		
Polytetrafluoroethylene decomposition					
products					
Potossium hydroxide	131 0- 58-3				
Prednisone	53 -0 3-2				
Propone	74-9 8-6	-			-
Propanethiol	75-33-2	36,000	180,000		
Propargy i alcohol	10 7 –19 – 7	40	200	0.92	0.1
Propionic acid	79 -09-4	600	3,000	0.2	1
Propionitrile	107-12 -0	280	1,400	0.12	0.6
Propoxyr	114-26-1	16	50		
n-Propy! ocetate	1 09-50-4	16,800	84,000	4	20
Propyl alcohol	71-23-B	10,000	50,00 0	4	20
Propylene	11 5-0 7-1			_	
Propylene dichloride	78 – 87–5	7,000	35,0 0 0	1.5	7.5
Propylene glycol dinitrate	6423-43-4	6	30	1.ppbv	5.ppbv
Propylene glycal monomethyl ether	197-98-2	7,200	36,000	2	10
Propylene oxide	75-56-9	1,000	5,000	0.4	2
n-Propyl nitrate	627-13-4	2,100	10,500	0.5	2,5
Pyrethrum	8003-34-7	100	500		
Pyridine	110-86-1	300	1,500	0.1	0.5

TABLE 29-3, Continued

		 (ug/ n. 3	ING VALUE" ("HLV") VOLUMETRIC UNITS	
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"		30-MINUTE	8-HOUR 30-MINUTE
Quinone	106-51-4 121-82-4	.8	40	2.ppbv 18.ppbv
RDXResorcing!	108-45-3	36	150 4.500	0.2 1
Rhodium, Metal fume & dusts (as Rh)	7440-16-6	2	10	
- insoluble compounds	_	20	100	
- saluble salts (as Rh)		9.92	0.1	
Rosin core solder pyrolysis products	29 9-84-3	200	1,000	
(as formaldehyde)	_	2	10	
Rotenone (commercial)	83-79-+	100	500	2.ppbv 18.ppbv
Rouge	130937-1		_	
Selenium compounds (as Se)		4	20	
Selenium hexafluoride	7783-79-1	4	20	1.ppbv 5.ppbv
Sesone	13 6- -787	200	1,000	
Silane	78 03- 62-5	1 40	700	0.1 0.5
Silice, amorphous	60 6 76- 86 -0	_		
Silicon carbide	409-21-2	_		
Silver, metal	74 48 -22-4	0.2	1	
Silver, soluble compounds	_	0.2	1	_ —
Soapstone*		_	_	
Sodium azide	26628-22-8	_		
Sodium bisulfite	7631-90-5	100	500	
Sodium fluoroacetate (1860)	62-7 4-8	1	5	
Sodium hydroxide	1310-73-2	40	200	
Sodium metabisulfite	7681-57-4	100		
Sprionolactone	52-01-7			
Stibine	7803-52- 3	10	50	2.ppbv 10.ppbv
Stoddard solvent	8052-41-3	7,000.**	35,000.00	1.22** 6.1**
Strychnine	57-24-9		15	- -
Styrene, monomer	100-42-5	4,300	21,500	1 5
Styrene exide	96-09-3			
100% pure crystolline enzymes de	1395-21-7			
Succinonitrile	118-61-2	400	2.000	0.12 0.6
Sulfafurazole	127-69-5		-,000	

 $[\]bullet$ The "HLV" for scapstone is 0.4 million particles per cubic foot (mppcf), eight-hour average and 2 mppcf, 3θ -minute average.

es Petroleum molvents generally, except keromene

TABLE 29-3, Continued

"HAZARDOUS AIR POLLUTANT"	"CAS NUMBE	(° R" 8-HOUR	"HAZARD LIMIT] ug/m3) 30-MINUTE	ING VALUE" VOLUMETRI 8-HOUR	
Self-real transport	707 40 0				
Sulfamethoxazole	723-46-6			_	
Sulfatep	3689-24-5		20	20	100
	2551-62-4 7664-93-9		500,000 100	20	100
Sulfuric acid	10025-67-9	20 12 0	600	0.02	0.1
Surrur monochioride	10025-07-9	120	900	0.02	0.1
Sulfur pentafluoride	5714-22-7	5	25		bv 2.5 ppbv
Sulfur tetrafluoride	778 3- 6 0-0	8	40	2.ppbv	
Sulfuryl fluoride	269 9- 79-8	400	2,000	Ø.1	0.5
Sulprofos	35400-43- 2	20	100	_	
2,4,5-T	93-76-5	200	1,000	_	
Tantalum	7 448 -25-7	100	500		
TEDP (Sulfatep)	3689-24-5	4	20		
Teflon decomposition products					
Tellerium & compounds, gs Te	13494-80-9	2	10		_
Tellerium hexofiuoride, as Te	7783-80-4	4	20	Ð.4	2
Temephos	3383-96-8	200	1,000		
TEPP	107-49-3	1	5	0.08	pbv 0.4 ppbv
Terphenyls	92-94-4				
2,3,7,8-Tetrachlorodibenzofuran	51207-31-0				
1,1,1,2-Tetrachioro-2,2-difluoroethane	7 6- 11 - 9	83,400	417,000	10	50
1.1.2.2-Tetrachioro-1.2-difluoroethane	76-12-8	83,400	417,000	10	50
Tetrachioronaphthalene	1335-88-2	40	200		
Tetraethyl lead (as Pb)	7 8-00- 2	1.5	7.5		
Tetrahydrofuran	109 -99-9	11,800	59,000	4	20
Tetramethyl lead (as Pb)	75 –7 4- -1	1.5	7.5	_	
Tetramethyl succinonitrile	3333-52-6	60	120	6.61	0.05
Tetranitromethana	509-14-8	160	800	0.02	0.1
Tetrasodium pyrophosphate	7722-88-5	199	500		
Tetryl (2,4,6-trinitrophenyl-					
methylnitromine)	47 9-45-8	30	150		
Thailium, soluble compounds (as TI)		2	10		
4,4'-Thiobis (5-tert butyl-m-cresol)	96-69-5	200	1.000		
Thioglycolic acid	68-11-1	100	500	0.02	0.1
Thiren	137-26-8	100	500		
Tin, metal	7440-31-5	40	200		

TABLE 29-3, Continued

	"HAZARD LIMITING VALUE" ("HLV")				
		(ug/m3)			IC UNITS
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HO	UR 30-MINUTE	8-HOUR	30-MINUTE
Tin, inorganic compounds, except SnH4.		40	200		
Tin, organic compounds (as Sn)		2	10		
Tin, oxide (as Sn)		40	200		
Titanius dioxide (as Ti)	13463-67-7	300	1.500		
Toluene		7,500	37,500	2	10
Toluene-2,4-diisocyanate (TDI)	584-84-9	€.	72 4	9.1 p	pby 8.5 ppby
Tributyl phosphate	126-73-8	58	250	4.ppb	
Trichlorogeatic acid	7 6-83-9	100	500	0.02	0.1
1,2,4-Trichlorobenzene	120-82-1	800	4.000	9.1	0.5
1,1,1-Trichtoroethane		3,000	190,000	7	35
Trichloroffuoromethane	75-69-4	_			
Trichloronophthelene	1321-65-9	100	500		
2.4.5-Trichlorophenol	95-95-4				
1.2.3-Trichloropropane	96-18-4	5.000	30,000	1	5
1,1,2-Trichloro-1,2,2-triflucroethane.	76-13-1 152	2,000	760,000	20	100
Tricyclohexyltin hydroxide (Cyhexatin)	13121-78-5	100	500		****
Triethylanine	121-44-8	800	4,000	0.2	t
Trifluoromonobomomethone	7 5-6 3-8 123	2,000	610,0 00	20	100
Trimellitic onhydride	552-3 0- 7	0.	.8 4	Ø.1 p	pbv 0.5 ppbv
Trimethy lamine	75 -50-3	480	2,400	0.2	1
Trimethyl benzene		2,500	12,500	0.5	2.5
Trimethy! phosphite	121 ~45~9	200	1,608	0.04	0.2
2.4-6-Trinitrotoluene (TNT)	11 8-98- 7	10	5 0		
Triorthocresyl phosphote	73 -30- 8	2	10		
Triphenyl cmine	5 03 –34–9	100	500		
Triphenyl phosphate	115-86-6	60	300		
Tungsten & compounds, as W — soluble	_	20	169		_
- insoluble		188	500		
Turpentine	8006-64- 2 1	1,200	5 6,000	2	10
Undecone thio I		_			_
Uranium (natural) compounds (as U)		_	_		
eoluble		1	5		
insoluble		4	20		
Valeraldehyde		3,500	17,500	7	5
Vanadium, as Pentoxide, - Dust	1314-62-1	1	5		
- (Fume)	1314-62-1	•	5		

TABLE 29-3, Continued

### Table 18			"HAZARD LIMITING VALUE" ("HLV") (ug/m3) VOLUMETRIC UNITS			
"HAZARDOUS AIR POLLUTANT"	"CAS NUMBER"	8-HOU	IR 30-MINUTE	8-HOUR	30-MINUTE	
Vinblastine	865-21-4					
Vincristine	57-22 - 7					
Vinyl acetate	108-05-4	600	3,000	0.2	1	
Vinylidene chloride	75-35-4	400	2,000	0.1	0.5	
Vinyl toluene	25013-15-4	9,600	48,000	2	10	
VM & P Naphtha	8030-30-6 2	7,000	135,000	6	30	
Warfarin		2	10			
Welding fumes (not otherwise		100	500		-	
o-Xylene	1330-20-7	8,680	43,400	2	10	
m—Xylene	1330-20-7	8,680	43,400	2	10	
p-Xylene	1 330-20- 7	8,680	43,400	2	10	
m-Xylene, '-diamine	1 477-55-0					
Yttrium	744 0- 65-5	20	100			
Zinc chloride fume	7646-85-7	20	100			
Zinc oxide fume	1314-13-2	100	500			
Zinc stearate	557 -0 5-1	_				
Zirconium compounds (os Zr)		100	500			

Note: Dashed lines indicate that no "hazard limiting value" has been established for the "hazardous air pollutant" listed. The "HLV" and/or "AAQS" will be determined at a later date.

(Effective October 21, 1988; Amended April 4, 2006; Amended April 6, 2016)