

Chemical	CAS No.	De Minimis				Cancer Risk			Chronic Noncancer Risk					
		Lb/Yr ⁵	Lb/Ave Period	Lb/Hr	C/ NC ⁴	BAC _C µg/m ³	Basis of BAC _C Source	Date	BAC _{NC} µg/m ³	Ave Period	Type	Basis of BAC _{NC} Source	Date	
Category 1 TACs														
1	Acrylonitrile	107-13-1	7.20		0.0081	C	0.015	IRIS	1/1/1991	2.00	Annual	RfC	IRIS	12/1/1991
2	Arsenic and arsenic compounds¹	7440-38-2	0.11		0.00012	C	0.00023	IRIS	4/10/1998	0.015	Annual	REL	Cal	12/1/2008
3	Benzene	71-43-2	216.00		0.24	C	0.45	IRIS	1/9/2000	30.00	Annual	RfC	IRIS	4/17/2003
4	Bromoform	75-25-2	436.80		0.49	C	0.91	IRIS	1/1/1991	70.00	Annual	RfD	IRIS	3/1/1991
5	1,3-Butadiene	106-99-0	14.40		0.016	C	0.030	IRIS	11/5/2002	2.00	Annual	RfC	IRIS	11/5/2002
6	Cadmium and cadmium compounds ¹	7440-43-9	0.27		0.00030	C	0.00056	IRIS	6/1/1992	0.020	Annual	REL	Cal	1/1/2001
7	Carbon tetrachloride	56-23-5	81.60		0.092	C	0.17	IRIS	3/31/2010	0.10	Annual	RfC	IRIS	3/31/2010
8	Chloroform	67-66-3	20.64		0.023	C	0.043	IRIS	10/19/2001	300.00	Annual	REL	Cal	4/1/2000
9	Chloroprene [2-Chloro-1,3-butadiene]	126-99-8	0.96		0.0011	C	0.0020	MI ^{NIA}	11/22/2000	0.020	Annual	RfC	IRIS	9/30/2010
10	Chromium ^{hexavalent} & Cr compounds ¹	7440-47-3	0.040		0.000045	C	8.3E-05	IRIS	9/3/1998	0.0080	Annual	RfC	IRIS	9/3/1998
	Chromium ^{trivalent} & Cr compounds ¹	16065-83-1	109.50	0.10	0.10	NC				5.00	8hr	ITSL	Mich	12/26/1995
11	1,4-Dichlorobenzene	106-46-7	43.68		0.049	C	0.091	CA ^{NIA}	4/1/1999	800.00	Annual	RfC	IRIS	11/1/1996
12	Ethyl acrylate	140-88-5	33.60		0.038	C	0.070	MI ^{IA}	2/8/1984	30.00	24hr	ITSL	Mich	
13	Formaldehyde	50-00-0	36.96		0.042	C	0.077	IRIS	5/1/1991	9.00	Annual	REL	Cal	12/1/2008
14	Methylene chloride [Dichloromethane]	75-09-2	1,008		1.13	C	2.10	IRIS	2/1/1995	400.00	Annual	REL	Cal	2/1/2000
15	Nickel and nickel compounds ¹	7440-02-0	1.82		0.0021	C	0.0038	CA ^{NIA}	8/1/1991	0.050	Annual	REL	Cal	2/1/2000
16	Perchloroethylene [Tetrachloroethylene]	127-18-4	81.60		0.092	C	0.17	CA ^{NIA}	10/1/1991	35.00	Annual	REL	Cal	10/1/1991
17	Trichloroethylene	79-01-6	240.00		0.27	C	0.50	CA ^{NIA}	10/1/1990	600.00	Annual	REL	Cal	4/1/2000
18	Vinyl chloride	75-01-4	110.40		0.12	C	0.23	IRIS	8/7/2000	100.00	Annual	RfC	IRIS	8/7/2000
Category 2 TACs														
1	Aluminum (fume or dust)	7429-90-5	1,095	1.00	1.00	NC				50.00	8hr	OEL	NIOSH	
2	Ammonia	7664-41-7	48,000	48,000	54.00	NC				100.00	Annual	RfC	IRIS	5/1/1991
3	Boron trifluoride	7637-07-2	30.66	0.084	0.035	NC				0.70	24hr	ITSL	Mich	5/7/1997
4	Butyl acrylate	141-32-2	2,190	2.00	2.00	NC				100.00	8hr	ITSL	Mich	11/3/1992
5	Chlorine	7782-50-5	96.00	96.00	0.11	NC				0.20	Annual	REL	Cal	2/1/2000
6	Cobalt and cobalt compounds ¹	7440-48-4	4.38	0.0040	0.0040	NC				0.20	8hr	ITSL	Mich	5/15/1995
7	Copper and copper compounds¹	7440-50-8	43.80	0.040	0.040	NC				2.00	8hr	ITSL	Mich	
8	Diisocyanates³	Various												
	1,6-Hexamethylene diisocyanate	822-06-0	4.80	4.80	0.0054	NC				0.010	Annual	RfC	IRIS	9/1/1994
	Isophorone diisocyanate	4098-71-9	9.86	0.0090	0.0090	NC				0.45	8hr	OEL	NIOSH	
	Methylene bis (4-cyclohexylisocyanate)	5124-30-1	24.09	0.022	0.022	NC				1.10	8hr	OEL	NIOSH	
	Methylene diphenyl diisocyanate [MDI]	101-68-8	288.00	288.00	0.32	NC				0.60	Annual	RfC	IRIS	2/7/1998

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* 9 Polymeric diphenylmethane diisocyanate	9016-87-9	26.28	0.072	0.030	NC				0.60	24hr	ITSL	Mich		
9 Glycol ethers ³	Various													
Diethylene glycol monobutyl ether	112-34-5	876.00	2.40	1.00	NC				20.00	24hr	ITSL	Mich	10/19/1992	
Diethylene glycol monobutyl ether acetate	124-17-4	1,095	3.00	1.25	NC				25.00	24hr	ITSL	Mich	9/22/1993	
* Diethylene glycol monoethyl ether	111-90-0	76,650	210.00	87.50	NC				1,750	24hr	ITSL	Mich	2/5/1996	
Diethylene glycol ethyl ether acrylate	7328-17-8	19.20	19.20	0.022	NC				0.040	Annual	Dflt			
Diethylene glycol monoethyl ether acetate	112-15-2	8,640	8,640	9.72	NC				18.00	Annual	ITSL	Mich	5/31/1994	
* Diethylene glycol methyl ether	111-77-3	8,322	22.80	9.50	NC				190.00	24hr	ITSL	Mich	2/28/1996	
Ethylene glycol dibutyl ether	112-48-1	4,800	4,800	5.40	NC				10.00	Annual	ITSL	Mich	1/10/1995	
Ethylene glycol ethyl ether	110-80-5	96,000	96,000	108.00	NC				200.00	Annual	RfC	IRIS	5/1/1991	
Ethylene glycol ethyl ether acetate	111-15-9	144,000	144,000	162.00	NC				300.00	Annual	REL	Cal	2/1/2000	
Ethylene glycol methyl ether	109-86-4	28,800	28,800	32.40	NC				60.00	Annual	REL	Cal	2/1/2000	
Ethylene glycol methyl ether acetate	110-49-6	43,200	43,200	48.60	NC				90.00	Annual	REL	Cal	2/1/2000	
Ethylene glycol monobutyl ether acetate	112-07-2	770,880	2,112	880.00	NC				17,600	24hr	ITSL	Mich	1/5/2000	
Ethylene glycol monopropyl ether	2807-30-9	14,400	14,400	16.20	NC				30.00	Annual	ITSL	Mich	4/6/1993	
10 Hydrochloric acid [Hydrogen chloride] ²	7647-01-0	9,600	9,600	10.80	NC				20.00	Annual	RfC	IRIS	7/1/1995	
11 Hydrofluoric acid [Hydrogen fluoride]	7664-39-3	6,720	6,720	7.56	NC				14.00	Annual	REL	Cal	8/1/2003	
12 Lead compounds ¹	Various	38.40		0.043	C	0.080	CA ^{NIA}	4/1/1997						
13 Manganese and Mn compounds ¹	7439-96-5	24.00	24.00	0.027	NC				0.050	Annual	RfC	IRIS	12/1/1993	
14 Naphthalene	91-20-3	13.92		0.016	C	0.029	CA ^{NIA}	8/1/2004	3.00	Annual	RfC	IRIS	9/17/1998	
15 Nitric acid	7697-37-2	1,095	1.00	1.00	NC				50.00	8hr	ITSL	Mich	2/1/1993	
16 Sulfuric acid	7664-93-9	480.00	480.00	0.54	NC				1.00	Annual	REL	Cal	12/1/2001	
17 Toluene	108-88-3	2,400,000	2,400,000	2,700	NC				5,000	Annual	RfC	IRIS	9/23/2005	
18 1,2,4-trimethylbenzene	95-63-6	9,636	26.40	11.00	NC				220.00	24hr	ITSL	Mich	8/12/1996	
19 Xylene (mixed isomers)	1330-20-7	48,000	48,000	54.00	NC				100.00	Annual	RfC	IRIS	2/21/2003	
Category 3 TACs														
1 Acetaldehyde	75-07-0	216.00		0.24	C	0.45	IRIS	1/1/1991	9.00	Annual	RfC	IRIS	10/1/1991	
2 Acrolein	107-02-8	9.60	9.60	0.011	NC				0.020	Annual	RfC	IRIS	6/3/2003	
3 Beryllium and beryllium compounds ¹	7440-41-7	0.20		0.00023	C	0.00042	IRIS	4/3/1998	0.020	Annual	RfC	IRIS	4/3/1998	
* 4 Coke oven emissions	8007-45-2	0.96		0.0011	C	0.0020	IRIS	3/1/1994	1.50	8hr	OEL	NIOSH	9/1/2005	
* 5 1,3-Dichloropropene	542-75-6	120.00		0.14	C	0.25	IRIS	5/25/2000	20.00	Annual	RfC	IRIS	5/25/2000	
* 6 Diesel particulate matter		1.58		0.0018	C	0.0033	CA ^{NIA}	8/1/1998	5.00	Annual	RfC	IRIS	2/28/2003	

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* 7 Ethylene dibromide [1,2-Dibromoethane]	106-93-4	0.96		0.0011	C	0.0020	IRIS	7/29/2004	9.00	Annual	RfC	IRIS	7/29/2004
* 8 Ethylene dichloride [1,2-Dichloroethane]	107-06-2	18.24		0.021	C	0.038	IRIS	1/1/1991	400.00	Annual	REL	Cal	1/1/2001
9 Ethylene oxide	75-21-8	5.28		0.0059	C	0.011	CA ^{NIA}	11/1/1987	30.00	Annual	REL	Cal	1/1/2001
* 10 Hexachlorobenzene	118-74-1	1.06		0.0012	C	0.0022	IRIS	11/1/1996	2.80	Annual	RfD	IRIS	4/1/1991
* 11 Hydrazine	302-01-2	0.096		0.00011	C	0.00020	IRIS	4/1/1991	0.20	Annual	REL	Cal	1/1/2001
12 Mercury and mercury compounds	7439-97-6	144.00	144.00	0.16	NC				0.30	Annual	RfC	IRIS	6/1/1995
* 13 Polychlorinated biphenyls [PCBs]	1336-36-3	4.80		0.0054	C	0.010	IRIS	6/1/1997	1.20	Annual	REL	Cal	1/1/1991
14 Polycyclic organic matter ⁶ [POM] as BaP	50-32-8	0.44		0.00049	C	0.00091	CA ^{NIA}	4/1/1999					
Benz[a]anthracene	56-55-3	4.37		0.0049	C	0.0091	CA ^{NIA}	4/1/1999					
Benzo[a]pyrene	50-32-8	0.44		0.00049	C	0.00091	CA ^{NIA}	4/1/1999					
Benzo[b]fluoranthene	205-99-2	4.37		0.0049	C	0.0091	CA ^{NIA}	4/1/1999					
* Benzo[j]fluoranthene	205-82-3	4.37		0.0049	C	0.0091	CA ^{NIA}	4/1/1999					
Benzo[k]fluoranthene	207-08-9	4.37		0.0049	C	0.0091	CA ^{NIA}	4/1/1999					
Chrysene	218-01-9	43.68		0.049	C	0.091	CA ^N	4/1/1999					
Dibenz[a,h]anthracene	53-70-3	0.40		0.00045	C	0.00083	CA ^{NIA}	4/1/1999					
* 7,12-Dimethylbenz[a]anthracene	57-97-6	0.0067		0.0000076	C	0.000014	CA ^N	4/1/1999					
Indeno[1,2,3-cd]pyrene	193-39-5	4.37		0.0049	C	0.0091	CA ^{NIA}	4/1/1999					
* 3-Methylchloranthrene	56-49-5	0.077		0.000086	C	0.00016	CA ^N	4/1/1999					
* Quinoline ⁸ (also Cat. 3 No. 16 TAC)	91-22-5	0.48		0.00054	C	0.0010	MI ⁸	9/27/2001	0.040	Annual	Dfit		
* 15 Propylene dichloride [1,2-Dichloropropane]	78-87-5	1,920	1,920	2.16	NC				4.00	Annual	RfC	IRIS	12/1/1991
* 16 Quinoline ⁸	91-22-5	0.48		0.00054	C	0.0010	MI ⁸	9/27/2001	0.040	Annual	Dfit		
* 17 1,1,2,2-Tetrachloroethane	79-34-5	8.16		0.0092	C	0.017	CA ^N	4/1/1999	70.00	8hr	OEL	NIOSH	5/20/2005
Category 4 TACs													
1 Acetamide	60-35-5	24.00		0.027	C	0.050	CA ^I	4/1/1999					
2 Acetonitrile	75-05-8	28,800	28,800	32.40	NC				60.00	Annual	RfC	IRIS	3/3/1999
3 Acetophenone	98-86-2	168,000	168,000	189.00	NC				350.00	Annual	RfD	IRIS	1/1/1989
4 2-Acetylaminofluorene	53-96-3	0.19		0.00022	C	0.0004	Dfit ^{NIA}						
5 Acrylamide	79-06-1	4.80		0.0054	C	0.010	IRIS	7/1/1993	6.00	Annual	RfC	IRIS	3/22/2010

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6 Acrylic acid	79-10-7	480.00	480.00	0.54	NC				1.00	Annual	RfC	IRIS	5/1/1995
7 Allyl chloride	107-05-1	81.60		0.092	C	0.17	CA	4/1/1999	1.00	Annual	RfC	IRIS	5/1/1995
8 4-Aminobiphenyl	92-67-1	0.19		0.000216	C	0.0004	Dfit ^{NIA}						
9 Aniline	62-53-3	302.40		0.34	C	0.63	CA	4/1/1999	1.00	Annual	RfC	IRIS	12/1/1993
10 o-Anisidine	90-04-0	0.19		0.00022	C	0.0004	Dfit ^A		5.00	8hr	OEL	NIOSH	2/3/2009
11 Antimony and antimony compounds ¹	7440-36-0	672.00	672.00	0.76	NC				1.40	Annual	RfD	IRIS	2/1/1991
12 Asbestos	1332-21-4	2.54		0.0029	C	0.0053	CA	3/1/1986					
13 Aziridine [Ethyleneimine]	151-56-4	0.19		0.00022	C	0.0004	Dfit ^{NIA}						
14 Baygon [Propoxur]	114-26-1	6,720	6,720	7.56	NC				14.00	Annual	RfD	IRIS	7/1/1992
* 15 Benzidine	92-87-5	0.0072		0.0000081	C	0.000015	IRIS	7/1/1993	10.50	Annual	RfD	IRIS	2/1/1995
16 p-Benzoquinone [Quinone]	106-51-4	87.60	0.080	0.080	NC				4.00	8hr	OEL	NIOSH	2/3/2009
17 Benzotrichloride	98-07-7	0.19		0.00022	C	0.0004	Dfit ^{NIA}						
* 18 Benzyl chloride	100-44-7	9.60		0.011	C	0.020	CA	4/1/1999	50.00	8hr	OEL	NIOSH	2/3/2009
19 Biphenyl	92-52-4	84,000	84,000	94.50	NC				175.00	Annual	RfD	IRIS	8/1/1989
20 Bis (2-ethylhexyl) phthalate [DEHP] [DOP]	117-81-7	201.60		0.23	C	0.42	CA	4/1/1999	70.00	Annual	RfD	IRIS	5/1/1991
21 Bis(2-chloroethyl) ether [Dichloroethylether]	111-44-4	0.67		0.00076	C	0.0014	CA	4/1/1999	300.00	8hr	OEL	NIOSH	2/3/2009
22 Bis (chloromethyl) ether	542-88-1	0.0077		8.6E-06	C	0.000016	IRIS	1/1/1991					
* 23 Bromomethane [Methyl bromide]	74-83-9	2,400	2,400	2.70	NC				5.00	Annual	RfC	IRIS	10/1/1992
24 Calcium cyanamide	156-62-7	109.50	0.10	0.10	NC				5.00	8hr	OEL	NIOSH	2/3/2009
25 Captan	133-06-2	218,400	218,400	245.70	NC				455.00	Annual	RfD	IRIS	3/1/1989
26 Carbaryl	63-25-2	168,000	168,000	189.00	NC				350.00	Annual	RfD	IRIS	3/1/1988
27 Carbon disulfide	75-15-0	336,000	336,000	378.00	NC				700.00	Annual	RfC	IRIS	8/1/1995
28 Carbonyl sulfide	463-58-1	4,320	4,320	4.86	NC				9.00	Annual	ITSL	Mich	7/6/1995
29 Catechol	120-80-9	4,380	4.00	4.00	NC				200.00	8hr	OEL	NIOSH	2/3/2009
30 Chloramben	133-90-4	25,200	25,200	28.35	NC				52.50	Annual	RfD	IRIS	3/1/1988
31 Chlordane	57-74-9	110	0.10	0.10	NC				5.00	8hr	OEL	NIOSH	2/3/2009
32 Chlorinated camphene [Toxaphene]	8001-35-2	1.44		0.0016	C	0.0030	MI						
33 Chloroacetic acid	79-11-8	0.19		0.00022	C	0.0004	Dfit ^{NIA}						
34 2-Chloroacetophenone	532-27-4	14.40	14.40	0.016	NC				0.030	Annual	RfC	IRIS	10/1/1991
35 Chlorobenzene	108-90-7	480,000	480,000	540.00	NC				1,000	Annual	REL	Cal	1/1/2001
36 Chlorobenzilate	510-15-6	33,600	33,600	37.80	NC				70.00	Annual	RfD	IRIS	12/1/1989
37 1-Chloro-2,3-epoxypropane [Epichlorohydrin]	106-89-8	20.64		0.023	C	0.043	CA	4/1/1999	1.00	24hr	ITSL	Mich	
38 Chloroethane [Ethyl chloride]	75-00-3	48,000	48,000	54	NC				100.00	Annual	RfC	IRIS	4/1/1991
* 39 Chloromethane [Methyl chloride]	74-87-3	768.00		0.86	C	1.60	MI	12/16/1985	90.00	Annual	RfC	IRIS	7/17/2001

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40	Chlorethyl methyl ether [CMME]	107-30-2	0.19		0.00022	C	0.0004	Dflt ^{NIA}						
41	Cresol/Cresylic acid (mixid isomers)	1319-77-3	288,000	288,000	324.00	NC				600.00	Annual	REL	Cal	1/1/2001
	o-Cresol	95-48-7	288,000	288,000	324.00	NC				600.00	Annual	REL	Cal	1/1/2001
	m-Cresol	108-39-4	288,000	288,000	324.00	NC				600.00	Annual	REL	Cal	1/1/2001
	p-Cresol	106-44-5	288,000	288,000	324.00	NC				600.00	Annual	REL	Cal	1/1/2001
42	Cumene [isopropyl benzene]	98-82-8	192,000	192,000	216.00	NC				400.00	Annual	RfC	IRIS	8/1/1997
43	DDE [1,1-Dichloro-2,2-bis (p-chlorophenyl) ethylene]	72-55-9	4.80		0.0054	C	0.010	MI						
44	Diazomethane	334-88-3	87.60	0.080	0.08	NC				4.00	8hr	OEL	NIOSH	2/3/2009
45	Dibenzofuran	132-64-9	48.00	48.00	0.054	NC				0.10	Annual	ITSL	Mich	
46	1,2-Dibromo-3-chloropropane	96-12-8	0.24		0.00027	C	0.00050	CA	4/1/1999	0.20	Annual	RfC	IRIS	10/1/1991
47	Dibutyl phthalate	84-74-2	1,095	1.00	1.00	NC				50.00	8hr	ITSL	Mich	9/20/1999
48	3,3'-Dichlorobenzidine	91-94-1	1.44		0.0016	C	0.0030	CA	4/1/1999					
49	1,1-Dichloroethane [Ethylidene dichloride]	75-34-3	302.40		0.34	C	0.63	CA	4/1/1999	500.00	24hr	ITSL	Mich	8/25/1997
50	1,1-Dichloroethylene [Vinylidene chloride]	75-35-4	96,000	96,000	108.00	NC				200.00	Annual	RfC	IRIS	8/13/2002
51	2,4-Dichlorophenoxyacetic acid ¹⁰ [2,4-D]	94-75-7	16,800	16,800	18.90	NC				35.00	Annual	RfD	IRIS	5/5/1988
52	Dichlorvos	62-73-7	240	240	0.27	NC				0.50	Annual	RfC	IRIS	6/1/1994
53	Diethanolamine	111-42-2	1,440	1,440	1.62	NC				3.00	Annual	REL	Cal	12/1/2001
54	1,4-Diethyleneoxide [1,4-Dioxane]	123-91-1	62.40		0.070	C	0.13	CA	4/1/1999	3,000	Annual	REL	Cal	4/1/2000
55	Diethyl sulfate	64-67-5	480.00	480.00	0.54	NC				1.00	Annual	ITSL	Mich	
56	3,3'-Dimethoxybenzidine	119-90-4	0.19		0.00022	C	0.0004	Dflt ^{NIA}						
57	4-Dimethylaminoazobenzene	60-11-7	0.38		0.00043	C	0.00080	CA	4/1/1999					
58	N,N-Dimethylaniline	121-69-7	40.80		0.046	C	0.085	MI		7.00	Annual	RfD	IRIS	3/1/1988
59	3,3'-Dimethylbenzidine	119-93-7	4.38	0.0040	0.0040	NC				0.20	8hr	OEL	NIOSH	2/3/2009
60	Dimethylcarbamoyl chloride	79-44-7	0.19		0.00022	C	0.0004	Dflt ^{NIA}						
61	N,N-Dimethylformamide [DMF]	68-12-2	14,400	14,400	16.20	NC				30.00	Annual	RfC	IRIS	10/1/1990
62	1,1-Dimethylhydrazine	57-14-7	32.85	0.030	0.030	NC				1.50	8hr	OEL	NIOSH	2/3/2009
63	Dimethyl phthalate	131-11-3	1,095	1.00	1.00	NC				50.00	8hr	OEL	NIOSH	2/3/2009
* 64	Dimethyl sulfate	77-78-1	0.19		0.00022	C	0.0004	Dflt ^{NIA}		0.50	8hr	ITSL	Mich	4/27/1993
65	4,6-Dinitro-o-cresol including salts	534-52-1	43.80	0.040	0.040	NC				2.00	8hr	OEL	NIOSH	2/3/2009
* 66	2,4-Dinitrophenol	51-28-5	3,360	3,360	3.78	NC				7.00	Annual	RfD	IRIS	7/1/1991
* 67	2,4-Dinitrotoluene	121-14-2	5.28		0.0059	C	0.011	Cal ^{IA}	4/1/1999	7.00	Annual	RfD	IRIS	2/1/1993
68	1,2-Diphenylhydrazine	122-66-7	2.16		0.0024	C	0.0045	IRIS	1/1/1991					
69	1,2-Epoxybutane	106-88-7	576.00		0.65	C	1.20	MI		2.00	Annual	RfC	IRIS	5/1/1992
70	Ethylbenzene	100-41-4	192.00		0.22	C	0.40	CA	11/1/2007	1,000	Annual	RfC	IRIS	3/1/1991
71	Ethyl carbamate [Urethane]	51-79-6	1.63		0.0018	C	0.0034	CA	4/1/1999					
* 72	Ethylene glycol	107-21-1	192,000	192,000	216.00	NC				400.00	Annual	REL	Cal	4/1/2000

Chemical	CAS No.	De Minimis				Cancer Risk			Chronic Noncancer Risk					
		Lb/Yr ⁵	Lb/Ave Period	Lb/Hr	C/NC ⁴	BAC _C µg/m ³	Basis of BAC _C Source	Date	BAC _{NC} µg/m ³	Ave Period	Type	Basis of BAC _{NC} Source	Date	
73	Ethylene thiourea	96-45-7	36.96		0.042	C	0.077	CA	4/1/1999	0.28	Annual	RfD	IRIS	11/1/1996
74	Heptachlor	76-44-8	0.38		0.00043	C	0.00080	IRIS	7/1/1993	1.75	Annual	RfD	IRIS	3/1/1991
75	Hexachlorobutadiene	87-68-3	21.60		0.024	C	0.045	IRIS	4/1/1991	2.40	8hr	OEL	NIOSH	2/3/2009
76	1,2,3,4,5,6-Hexachlorocyclohexane All stereo isomers, including Lindane	58-89-9	1.54		0.0017	C	0.0032	CA	4/1/1999	1.05	Annual	RfD	IRIS	3/1/1988
77	Hexachlorocyclopentadiene	77-47-4	96.00	96.00	0.11	NC				0.20	Annual	RfC	IRIS	7/5/2001
78	Hexachloroethane	67-72-1	120.00		0.14	C	0.25	IRIS	2/1/1994	3.50	Annual	RfD	IRIS	4/1/1991
79	Hexamethylene-1,6-diisocyanate	822-06-0	4.80	4.80	0.0054	NC				0.010	Annual	RfC	IRIS	9/1/1994
80	Hexamethylphosphoramide	680-31-9	0.19		0.00022	C	0.0004	Dfit ^{NIA}						
81	Hexane	110-54-3	336,000	336,000	378.00	NC				700.00	Annual	RfC	IRIS	12/23/2005
82	Hexone [Methyl isobutyl ketone, MIBK]	108-10-1	1,440,000	1,440,000	1,620	NC				3,000	Annual	RfC	IRIS	4/25/2003
* 83	Hydroquinone	123-31-9	438.00	0.40	0.40	NC				20.00	8hr	OEL	NIOSH	2/3/2009
84	Iodomethane [Methyl iodide]	74-88-4	2,190	2.00	2.00	NC				100.00	8hr	OEL	NIOSH	2/3/2009
85	Isophorone	78-59-1	1,776		2.00	C	3.70	MI	6/2/1998	2,000	Annual	REL	Cal	12/1/2001
86	Maleic anhydride	108-31-6	336.00	336.00	0.38	NC				0.70	Annual	REL	Cal	12/15/2001
87	Methanol	67-56-1	1,920,000	1,920,000	2,160	NC				4,000	Annual	REL	Cal	4/1/2000
88	Methoxychlor	72-43-5	8,400	8,400	9.45	NC				17.50	Annual	RfD	IRIS	8/1/1991
89	2-Methylaziridine [1,2-Propylenimine]	75-55-8	1,095	1.00	1.00	NC				50.00	8hr	OEL	NIOSH	2/3/2009
90	Methyl chloroform [1,1,1-trichloroethane]	71-55-6	2,400,000	2,400,000	2700	NC				5,000	Annual	RfC	IRIS	9/28/2007
* 91	Methylhydrazine	60-34-4	4.18		0.0047	C	0.0087	MI		0.030	24hr	ITSL	Mich	
92	Methyl isocyanate	624-83-9	10.95	0.010	0.010	NC				0.50	8hr	OEL	NIOSH	2/3/2009
93	Methyl methacrylate [MMA]	80-62-6	336,000	336,000	378.00	NC				700.00	Annual	RfC	IRIS	3/2/1998
* 94	Methyl tert-butyl ether [MTBE]	1634-04-4	1,824		2.05	C	3.80	CA	11/1/1999	3,000	Annual	RfC	IRIS	9/1/1993
95	4,4 N-Methylene bis (2-chloroaniline)	101-14-4	1.10		0.0012	C	0.0023	Cal	4/1/1999					
96	4,4 N-Methylenedianiline	101-77-9	1.06		0.0012	C	0.0022	Cal	4/1/1999	20	Annual	REL	Cal	4/1/1999
97	Nitrobenzene	98-95-3	4,320	4,320.00	4.86	NC				9.00	Annual	RfC	IRIS	2/6/2009
98	4-Nitrobiphenyl	92-93-3	19.20	19.20	0.02	NC				0.04	Annual	Dfit		
* 99	4-Nitrophenol	100-02-7	336.00	336.00	0.38	NC				0.70	Annual	ITSL	Mich	1/3/2011
100	2-Nitropropane	79-46-9	0.18		0.0002	C	0.00037	Mich		20.00	24hr	ITSL	Mich	
101	N-Nitroso-N-methylurea	684-93-5	0.00082		0.0000009	C	1.7E-06	Mich						
102	N-Nitrosodimethylamine	62-75-9	0.10		0.00011	C	0.0002	Cal	4/1/1999					
103	N-Nitrosomorpholine	59-89-2	0.24		0.00027	C	0.0005	Cal	4/1/1999					
104	Parathion	56-38-2	10.95	0.0100	0.0100	NC				0.50	8hr	OEL	NIOSH	10/18/2010
105	Pentachloronitrobenzene (Quintobenzene)	82-68-8								10.50	Annual	RfD	IRIS	1/1/1992
* 106	Pentachlorophenol	87-86-5	94.13		0.11	C	0.20	CA	4/1/1999	17.50	Annual	RfD	IRIS	9/30/2010
107	Phenol	108-95-2	96,000	96,000	108.00	NC				200.00	Annual	REL	Cal	4/1/2000
108	p-Phenylenediamine	106-50-3	21.90	0.020	0.020	NC				1.00	8hr	OEL	NIOSH	10/18/2010
109	Phosgene	75-44-5	144.00	144.00	0.16	NC				0.30	Annual	RfC	IRIS	1/31/2006

Chemical	CAS No.	De Minimis				Cancer Risk			Chronic Noncancer Risk					
		Lb/Yr ⁵	Lb/Ave Period	Lb/Hr	C/ NC ⁴	BAC _C µg/m ³	Basis of BAC _C Source	Date	BAC _{NC} µg/m ³	Ave Period	Type	Basis of BAC _{NC} Source	Date	
110	Phosphine	7803-51-2	144.00	144.00	0.16	NC				0.30	Annual	RfC	IRIS	7/1/1995
111	Phosphorous and phosphorous compounds ¹	7723-14-0	33.60	33.60	0.038	NC				0.070	Annual	RfD	IRIS	2/1/1993
*	Phosphoric acid	7664-38-2	4800	4,800	5.40	NC				10.00	Annual	RfC	IRIS	8/1/1995
112	Phthalic anhydride	85-44-9								7,000.00	Annual	RfD	IRIS	9/7/1988
113	1,3-Propane sultone	1120-71-4	0.6720		0.00076	C	0.0014	Cal	4/1/1999					
114	beta-Propiolactone	57-57-8	0.1920		0.00022	C	0.0004	Dflt ^{NI,IA}						
*115	Propionaldehyde	123-38-6	3840	3,840	4.32	NC				8.00	Annual	RfC	IRIS	9/30/2008
116	Propylene oxide	75-56-9								30.00	Annual	RfC	IRIS	11/1/1990
117	Styrene	100-42-5	816.00		0.92	C	1.70	MI ^{IA}	11/5/1992	1,000	Annual	RfC	IRIS	7/1/1993
118	Styrene oxide	96-09-3	0.1920		0.00022	C	0.0004	Dflt ^{NI,IA}						
*119	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.000013		1.4E-08	C	2.6E-08	CA	8/1/1986	0.000040	Annual	REL	Cal	2/1/2000
120	Titanium tetrachloride	7550-45-0	19.20	19.20	0.02	NC				0.04	Annual	Dflt		
121	Toluene-2,4-diamine	95-80-7	0.19		0.0002	C	0.0004	Dflt ^{IA}						
122	2,4-Toluene diisocyanate (TDI)	584-84-9	43.63		0.05	C	0.0909	Cal	4/1/1999					
123	o-Toluidine	95-53-4	33.60		0.04	C	7.0E-02	Mich						
124	1,2,4-Trichlorobenzene	120-82-1	16,800	16,800	18.90	NC				35.00	Annual	RfD	IRIS	11/1/1996
126	2,4,5-Trichlorophenol	95-95-4								350.00	Annual	RfD	IRIS	3/1/1988
*127	2,4,6-Trichlorophenol	88-06-2	24.00		0.027	C	0.050	CA	4/1/1999					
*128	Triethylamine	121-44-8	3,360	3,360	3.8	NC				7.00	Annual	RfC	IRIS	4/1/1991
129	Trifluralin	1582-09-8								26.25	Annual	RfD	IRIS	7/1/1989
*130	2,2,4-Trimethylpentane ¹¹	540-84-1	76,650	70.00	70.00	NC				3,500	8hr	ITSL	Mich	
*131	Vinyl acetate	108-05-4	96,000	96,000	108.00	NC	318.00	EU	8/19/2008	200.00	Annual	RfC	IRIS	1/5/2011
132	Vinyl bromide	593-60-2								3.00	Annual	RfC	IRIS	10/1/1994
*133	Cyanide and cyanide compounds ¹	57-12-5	4,320	4,320	4.86	NC				9.00	Annual	REL	Cal	4/1/2000
134	Fine mineral fibers	N/A	19	19	0.02	NC				0.04	Annual	Dflt		
135	Radon & various other radionuclides	10043-92-2	0.19		0.0002	C	0.0004	Dflt ^{IA}						
136	Selenium and selenium compounds ¹	7782-49-2	9,600	9,600	10.80	NC				20.00	Annual	REL	Cal	12/1/2001
Unlisted TACs (informational only)														
	2-Butanone [Methyl ethyl ketone] [MEK]	78-93-3	2,400,000	2,400,000	2,700	NC				5,000	Annual	RfC	IRIS	9/26/2003
	Dipropylene glycol methyl ether acetate	88917-22-0	40,734	111.60	46.50	NC				930.00	24hr	ITSL	Mich	

Chemical	CAS No.	De Minimis				Cancer Risk			Chronic Noncancer Risk				
		Lb/Yr ⁵	Lb/Ave Period	Lb/Hr	C/NC ⁴	BAC _C µg/m ³	Basis of BAC _C Source	Date	BAC _{NC} µg/m ³	Ave Period	Type	Basis of BAC _{NC} Source	Date
2-Ethylhexyl 2-cyano-3,3-diphenylacrylate	6197-30-4	19.20	19.20	0.022	NC				0.040	Annual	Dflt		
Sodium methylate	124-41-4	48.00	48.00	0.054	NC				0.10	Annual	ITSL	Mich	11/10/1998

Last Revised 1/10/11

* **New or revised entry since 6-5-07**

[See "Changes" document at http://www.louisvilleky.gov/APCD/STAR/STARLinks.htm](http://www.louisvilleky.gov/APCD/STAR/STARLinks.htm) for new or revised BAC entries January 1, 2007, to September 30, 2008

^N Listed as a carcinogen by the National Toxicology Program (NTP)

^{IA} Listed as a carcinogen by the International Agency for Research on Cancer (IARC)

Dflt = Default value for BAC_C (0.0004 µg/m³) or BAC_{NC} (0.04 µg/m³) is applicable

¹ The Benchmark Ambient Concentration (BAC) is given for the base element, for example, arsenic for an arsenic compound. If a specific compound is specified, then a BAC may be determined for that specific compound instead, pursuant to the methodology in Regulation 5.20.

² This TAC includes hydrogen chloride gas and hydrochloric acid aerosols including mists, vapors, fog, and other airborne forms of any particle size.

³ The BAC would be derived for a specific compound in this category of compounds.

⁴ The basis of the de minimis values is either the cancer risk (C) or the noncancer risk (NC)

⁵ If the basis of the de minimis value is the noncancer risk (NC) and the averaging period is not annual, then the annual pound-per-year (lb/yr) value is for informational purposes, and eligibility for being de minimis is determined by the pound-per-hour and pound-per-averaging period values.

⁶ Benzo[a]pyrene, also represented as 7-PAH: Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 degrees C. The seven polycyclic aromatic hydrocarbon (7-PAH) compounds are Benz[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Chrysene, Debenz[a,h]anthracene, and Indeno[1,2,3-cd]pyrene.

⁷ The inclusion of BACs and de minimis values for a TAC that is not a Category 1, 2, 3, or 4 TAC is for informational purposes, and does not establish a requirement to demonstrate environmental acceptability for this TAC.

⁸ Quinoline, CAS No. 91-22-5 is also classified as polycyclic organic matter (POM), which is classified as a carcinogen by both NTP and IARC

⁹ The Category 4 TACs have been renumbered to reflect the number assigned in the 7-19-06 version of Regulation 5.23.

¹⁰ 2,4-Dichlorophenoxyacetic acid includes salts and esters

¹¹ Combined BAC_{NC} of all applicable petroleum hydrocarbon materials with Footnote #11. This includes mineral spirits, naphthas, stoddard solvent, and kerosene.

IRIS	EPA's Integrated Risk Information System	3.3.1
CAL	California Office of Environmental Health Hazard Assessment	3.3.2
MI	Michigan Air Quality Division	3.3.3
NTP	National Toxicology Program	2.1.2
IARC	International Agency for Research on Cancer	2.1.3
ATSD	Agency for Toxic Substances & Disease Registry	2.1.4
NIOSH	National Institute of Occupational Safety and Health	4.5
ACGIH	American Conference of Governmental and Industrial Hygienists	4.5
EU	European Union's Risk Assessment	3.3.4.6

NB: The District believes that the information contained in this table is correct and complies with regulations pertaining to BACs and de minimis values. However, in the case of an inconsistency with the regulations, the regulations are controlling.

ITSL	Initial Threshold Screening Level	in units of µg/m ³
OEL	Occupational Exposure Level	in units of µg/m ³
REL	Reference Exposure Level	in units of µg/m ³
RFC	Reference Concentration	in units of µg/m ³
RfD	Reference Exposure Level, in units of µg/kg-day	in units of µg/kg-day
TLV	Threshold Limit Value	in units of µg/m ³
NOAEL	No Observed Adverse Effect Level	in units of µg/m ³
LOAEL	Lowest Observable Adverse Effect Level	in units of µg/m ³