

Table – 1A

Screening Emission Levels

THESE ARE NOT EMISSION LIMITS. Exceedances of these levels indicate that a screening risk assessment should be performed.

Original Date of Listing	Toxic Air Contaminant	CAS NO	Screening Emission Level (lbs/yr) 25 meters	Screening Emission Level (lbs/yr) 50 meters	Screening Emission Level (lbs/yr) 100 meters
December 7, 1990 <i>September 8, 1998</i>	Acetaldehyde	75-07-0	12.25	32.11	95.70
January 8, 1999	Acetamide	60-35-5	1.65	4.33	12.92
August 13, 1999	Acrolein	107-02-8	0.0001 lbs/hr	0.0002 lbs/hr	0.0005 lbs/hr
December 7, 1990	Acrylamide (or propenamide)	79-06-1	0.03	0.07	0.20
August 13, 1999	Acrylic acid	79-10-7	3.00 lbs/hr	6.00 lbs/hr	16.06 lbs/hr
December 7, 1990	Acrylonitrile (or vinyl cyanide)	107-13-1	0.11	0.30	0.89
January 8, 1999	Allyl chloride	107-05-1	5.51	14.45	43.07
January 8, 1999	Aminoanthraquinone, 2-	117-79-3	0.28	0.73	2.16
<i>August 18, 2000</i> August 13, 1999	Ammonia	7664-41-7	6,610 1.60 lbs/hr	17,300 3.20 lbs/hr	51,700 8.57 lbs/hr
January 8, 1999	Aniline	62-53-3	20.66	54.18	161.50
December 7, 1990 August 13, 1999	Arsenic and arsenic compounds*, inorganic	7440-38-2	0.004 0.0001 lbs/hr	0.01 0.0002 lbs/hr	0.03 0.0005 lbs/hr
August 13, 1999	Arsine	7784-42-1	0.08 lbs/hr	0.16 lbs/hr	0.43 lbs/hr
June 1, 1990	Asbestos	1332-21-4	0.0005	0.001	0.004
June 1, 1990 <i>August 18, 2000</i> August 13, 1999	Benzene (including benzene from gasoline)	71-43-2	1.14 0.739 lbs/hr	2.99 1.48 lbs/hr	8.91 3.96 lbs/hr
December 7, 1990	Benzidine (and its salts)	92-87-5	0.0002	0.0006	0.0018
September 8, 1998 August 13, 1999	Benzyl Chloride	100-44-7	0.67 0.12 lbs/hr	1.77 0.24 lbs/hr	5.27 0.64 lbs/hr
December 7, 1990	Beryllium and beryllium compounds*	7440-41-7	0.002	0.005	0.016
December 7, 1990	Bis(2-chloroethyl)ether (DCEE)	111-44-4	0.05	0.12	0.36
December 7, 1990	Bis(chloromethyl)ether	542-88-1	0.003	0.007	0.020
September 8, 1998	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	14	36	108
December 7, 1990	Butadiene, 1,3-	106-99-0	0.19	0.51	1.52
June 1, 1990	Cadmium and cadmium compounds*	7440-43-9	0.008	0.02	0.06
August 13, 1999	Carbon disulfide	75-15-0	3.52 lbs/hr	7.04 lbs/hr	18.86 lbs/hr
June 1, 1990 August 13, 1999	Carbon tetrachloride	56-23-5	0.79 1.08 lbs/hr	2.06 2.16 lbs/hr	6.15 5.78 lbs/hr

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Original Date of Listing	Toxic Air Contaminant	CAS NO	Screening Emission Level (lbs/yr) 25 meters	Screening Emission Level (lbs/yr) 50 meters	Screening Emission Level (lbs/yr) 100 meters
June 1, 1990 <i>August 18, 2000</i>	Chlorinated dioxins & dibenzofurans		1.28E-06	3.35E-06	1.00E-05
June 1, 1990 <i>August 18, 2000</i>	Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	67562-39-4	4.35E-04	1.14E-03	3.40E-03
June 1, 1990 <i>August 18, 2000</i>	Heptachlorodibenzofuran, 1,2,3,4,7,8,9-	55673-89-7	4.35E-04	1.14E-03	3.40E-03
June 1, 1990 <i>August 18, 2000</i>	Heptachlorodibenzofuran, Total	38998-75-3	4.35E-04	1.14E-03	3.40E-03
June 1, 1990 <i>August 18, 2000</i>	Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-	35822-46-9	4.35E-04	1.14E-03	3.40E-03
June 1, 1990 <i>August 18, 2000</i>	Heptachlorodibenzo-p-dioxin, total	37871-00-4	4.35E-04	1.14E-03	3.40E-03
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzofuran, 1,2,3,4,7,8-	70648-26-9	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzofuran, 1,2,3,6,7,8-	57117-44-9	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzofuran, 1,2,3,7,8,9-	72918-21-9	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzofuran, 2,3,4,6,7,8-	60851-34-5	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzofuran, total	55684-94-1	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	39227-28-6	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8	57653-85-7	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-	19408-74-3	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Hexachlorodibenzo-p-dioxin, total	34465-46-8	4.35E-05	1.14E-04	3.40E-04
June 1, 1990 <i>August 18, 2000</i>	Octachlorodibenzofuran, 1,2,3,4,5,6,7,8-	39001-02-0	9.00E-04	2.30E-03	6.80E-03
June 1, 1990 <i>August 18, 2000</i>	Octachlorodibenzo-p-dioxin, 1,2,3,4,5,6,7,8-	3268-87-9	9.00E-04	2.30E-03	6.80E-03
June 1, 1990 <i>August 18, 2000</i>	Pentachlorodibenzofuran, 1,2,3,7,8-	57117-41-6	2.56E-06	6.71E-06	2.00E-05
June 1, 1990 <i>August 18, 2000</i>	Pentachlorodibenzofuran, 2,3,4,7,8-	57117-31-4	2.56E-07	6.71E-07	2.00E-06

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June 1, 1990 <i>August 18, 2000</i>	Pentachlorodibenzofuran, Total	30402-15-4	2.56E-07	6.71E-07	2.00E-06
June 1, 1990 <i>August 18, 2000</i>	Pentachlorodibenzo-p dioxin 1,2,3,7,8-	40321-76-4	2.56E-07	6.71E-07	2.00E-06
June 1, 1990 <i>August 18, 2000</i>	Pentachlorodibenzo-p dioxin, total	36088-22-9	2.56E-07	6.71E-07	2.00E-06
June 1, 1990 <i>August 18, 2000</i>	Tetrachlorodibenzofuran, 2,3,7,8-	51207-31-9	1.28E-06	3.35E-06	1.00E-05
June 1, 1990 <i>August 18, 2000</i>	Tetrachlorodibenzofuran, Total	55722-27-5	1.28E-06	3.35E-06	1.00E-05
June 1, 1990 <i>August 18, 2000</i>	Tetrachlorodibenzo-p dioxin 2,3,7,8-	1746-01-6	1.28E-07	3.35E-07	1.00E-06
June 1, 1990 <i>August 18, 2000</i>	Tetrachlorodibenzo-p dioxin, total	41903-57-5	1.28E-07	3.35E-07	1.00E-06
<i>August 18, 2000</i> August 13, 1999	Chlorine	7782-50-5	6.61 0.11lbs/hr	17.3 0.21lbs/hr	51.7 0.56 lbs/hr
January 8, 1999	Chloro-o-phenylenediamine, 4-	95-83-0	7.19	18.85	56.17
January 8, 1999	Chloro-o-toluidine, p-	95-69-2	0.43	1.13	3.36
December 7, 1990 <i>August 18, 2000</i> August 13, 1999	Chloroform	67-66-3	6.24 0.09 lbs/hr	16.36 0.17 lbs/hr	48.75 0.46 lbs/hr
September 8, 1998	Chlorophenols Pentachlorophenol	96000 87-86-5	1.62	4.25	12.7
December 7, 1990	Trichlorophenol, 2,4,6	88-06-2	0.46	1.20	3.59
August 13, 1999	Chloropicrin	76-06-2	0.015lbs/hr	0.029 lbs/hr	0.078 lbs/hr
June 1, 1990	Chromium, hexavalent	18540-29-9	0.0002	0.0006	0.0018
August 13, 1999	Copper and copper compounds*		0.05 lbs/hr	0.10 lbs/hr	0.27 lbs/hr
January 8, 1999	Cresidine, p-	120-71-8	0.77	2.02	6.01
January 8, 1999	Cupferron	135-20-6	0.52	1.38	4.10
January 8, 1999	Diaminoanisole, 2,4- (sulfate)	615-05-4	5.01	13.14	39.15
January 8, 1999	Diaminotoluene, 2,4-	95-80-7	0.03	0.08	0.23
September 8, 1998	Dibromo-3-chloropropane, 1,2- (DBCP)	96-12-8	0.02	0.04	0.13
September 8, 1998	Dichlorobenzene, 1,4- (or p-dichlorobenzene)	106-46-7	0.75	1.97	5.87

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December 7, 1990	Dichlorobenzidine, 3,3-	91-94-1	0.097	0.26	0.76
January 8, 1999	Dichloroethane, 1,1-	75-34-3	21	54	162
January 8, 1999	Dimethylaminoazobenzene, p-	60-11-7	0.03	0.07	0.20
December 7, 1990	Dinitrotoluene, 2,4-	121-14-2	0.37	0.97	2.90
December 7, 1990 <i>August 20, 2000</i> August 13, 1999	Dioxane, 1,4-	123-91-1	4.29 1.5 lbs/hr	11.26 3.0 lbs/hr	33.56 8.0 lbs/hr
December 7, 1990	Diphenylhydrazine (or hydrazobenzene)	12-2-66-7	0.15	0.39	1.17
December 7, 1990 August 13, 1999	Epichlorohydrin	106-89-8	1.44 0.65 lbs/hr	3.77 1.30 lbs/hr	11.23 3.48 lbs/hr
<i>August 18, 2000</i>	Ethyl benzene	100-41-4	66,100	173,000	517,000
<i>August 18, 2000</i>	Ethyl chloride	75-00-3	992,000	2,600,000	7,750,000
June 1, 1990	Ethylene dibromide	106-93-4	0.47	1.22	3.64
June 1, 1990	Ethylene dichloride (or 1,2-dichloroethane)	107-06-2	1.50	3.94	11.74
<i>August 18, 2000</i>	Ethylene glycol	107-21-1	13,200	37,400	103,000
<i>August 18, 2000</i> February 10, 1999 August 13, 1999	Ethylene glycol ethyl ether	110-80-5	2,310 0.21 lbs/hr 7.00 lbs/hr	6,070 0.42 lbs/hr 14.00 lbs/hr	18,100 1.13 lbs/hr 37.48 lbs/hr
<i>August 18, 2000</i> August 13, 1999	Ethylene glycol monoethyl ether acetate	111-15-9	9,920 0.08 lbs/hr	26,000 0.16 lbs/hr	77,500 0.43 lbs/hr
<i>August 18, 2000</i> August 13, 1999	Ethylene glycol monomethyl ether	109-86-4	1,980 0.05 lbs/hr	5,200 0.11 lbs/hr	15,500 0.28 lbs/hr
<i>August 18, 2000</i>	Ethylene glycol monomethyl ether acetate	110-49-6	2,980	7,800	23,300
June 1, 1990	Ethylene oxide	75-21-8	0.38	0.99	2.94
January 8, 1999	Ethylene thiourea	96-45-7	2.54	6.67	19.88
December 7, 1990 <i>August 18, 2000</i> August 13, 1999	Formaldehyde	50-00-0	5.51 0.05 lbs/hr	14.45 0.09 lbs/hr	43.07 0.25 lbs/hr
December 7, 1990	Hexachlorobenzene	118-74-1	0.007	0.02	0.05
December 7, 1990	Hexachlorocyclohexane: technical grade	608-73-1	0.008	0.02	0.06
September 8, 1998	gamma- (lindane)	58-89-9	0.03	0.07	0.21

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August 18, 2000	Hexane (n-)	110-54-3	231,000	607,000	1,810,000
September 8, 1998	Hydrazine	302-01-2	0.007	0.02	0.05
August 18, 2000 August 13, 1999	Hydrogen chloride (hydrochloric acid)	7647-01-0	298 1.05 lbs/hr	780 2.10 lbs/hr	2,330 5.62 lbs/hr
August 18, 2000 August 13, 1999	Hydrogen cyanide (hydrocyanic acid)	74-90-8	298 0.17 lbs/hr	780 0.34 lbs/hr	2,330 0.91lbs/hr
August 13, 1999	Hydrogen fluoride (hydrofluoric acid)	7664-39-3	0.12 lbs/hr	0.24 lbs/hr	0.64 lbs/hr
August 13, 1999	Hydrogen selenide	7783-07-5	0.003 lbs/hr	0.005 lbs/hr	0.013 lbs/hr
August 18, 2000 February 10, 1999	Hydrogen sulfide	7783-06-4	331 0.021 lbs/hr	867 0.042 lbs/hr	2,850 0.112 lbs/hr
August 18, 2000 August 13, 1999	Isopropyl alcohol	67-63-0	231,000 1.6 lbs/hr	607,000 3.20 lbs/hr	1,810,000 8.57 lbs/hr
September 8, 1998	Lead and lead compounds* (inorganic, including elemental lead) including, but not limited to:	7439-92-1	2.76	7.22	21.53
September 8, 1998	Lead compounds (inorganic)		*	*	*
September 8, 1998	Lead compounds (other than inorganic)		*	*	*
September 8, 1998	Lead acetate	301-04-2	*	*	*
September 8, 1998	Lead chromate	7758-97-6	*	*	*
September 8, 1998	Lead phosphate	7446-27-7	*	*	*
September 8, 1998	Lead subacetate	1335-32-6	*	*	*
August 18, 2000	Manganese and manganese compounds*		6.61	17.3	51.7
August 18, 2000 August 13, 1999	Mercury and mercury compounds* (inorganic)		1.86 0.0009 lbs/hr	4.88 0.0018 lbs/hr	14.5 0.0048 lbs/hr
	Mercuric chloride	7439-97-6	*	*	*
	Methyl mercury	7487-94-7	*	*	*
August 18, 2000 August 13, 1999	Methanol	67-56-1	132,000 14.00 lbs/hr	347,000 27.98 lbs/hr	1,030,000 74.97 lbs/hr
August 18, 2000 August 13, 1999	Methyl bromide	74-83-9	165 1.95 lbs/hr	433 3.90 lbs/hr	1,290 10.44 lbs/hr
August 18, 2000 August 13, 1999	Methyl chloroform (1,1,1 TCA)	71-55-6	33,100 34.00 lbs/hr	86,700 67.96 lbs/hr	258,000 182.06 lbs/hr

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August 13, 1999	Methyl ethyl ketone	78-93-3	6.50 lbs/hr	12.99 lbs/hr	34.81 lbs/hr
January 8, 1999	Methylene bis(2-chloroaniline), 4,4- (MOCA)	101-14-4	0.08	0.20	0.60
June 1, 1990 <i>August 18, 2000</i> August 13, 1999	Methylene chloride	75-09-2	33.06 7.00 lbs/hr	86.69 13.99 lbs/hr	258.40 37.48 lbs/hr
September 8, 1998	Methylene dianiline, 4,4'- (and its dichloride)	101-77-9	0.072	0.189	0.562
<i>August 18, 2000</i>	Methyl t-butyl ether	1634-04-4	265,000	694,000	2,070,000
January 8, 1999	Michler's ketone	90-94-8	0.13	0.35	1.03
<i>August 18, 2000</i>	Naphthalene	91-20-3	298	780	2,330
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel and nickel compounds* including but not limited to:	7440-02-0	0.13 0.003 lbs/hr	0.33 0.006 lbs/hr	0.99 0.016 lbs/hr
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel acetate	373-02-4	*	*	*
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel carbonate	3333-67-3	*	*	*
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel carbonyl	13463-39-3	*	*	*
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel hydroxide	12054-48-7	*	*	*
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickelocene	1271-28-9	*	*	*
March 12, 1999 <i>August 18, 2000</i> August 13, 1999	Nickel oxide	1313-99-1	*	*	*
December 7, 1990 <i>August 18, 2000</i> August 13, 1999	Nickel refinery dust from the pyrometallurgical process		0.13 0.003 lbs/hr	0.33 0.006 lbs/hr	0.99 0.016 lbs/hr
December 7, 1990 <i>August 18, 2000</i> August 13, 1999	Nickel subsulfide	120-35-72-2	*	*	*
			*	*	*

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August 13, 1999	Nitric acid	7697-37-2	0.04 lbs/hr	0.09 lbs/hr	0.23 lbs/hr
December 7, 1990	N-Nitroso- Compounds				
December 7, 1990	n-Nitroso-n-ethylurea	759-73-9	0.001	0.003	0.008
December 7, 1990	n-Nitroso-n-methylurea	684-93-5	0.0003	0.0007	0.0020
December 7, 1990	n-Nitrosodi-n-butylamine	924-16-3	0.0001	0.0002	0.0006
December 7, 1990	n-Nitrosodiethylamine	55-18-5	0.001	0.002	0.007
December 7, 1990	n-Nitrosodimethylamine	62-75-9	0.002	0.005	0.014
December 7, 1990	n-Nitrosodiphenylamine	86-30-6	3.18	8.34	24.85
September 8, 1998	n-Nitrosodiphenylamine,	156-10-5	1.54	4.05	12.06
September 8, 1998	p-n-Nitrosodi-n-propylamine,n-	621-64-7	0.004	0.011	0.03
September 8, 1998	Nitrosomethylethylamine,	10595-95-6	0.001	0.003	0.010
January 8, 1999	n-Nitrosomorpholine, n-	59-89-2	0.017	0.046	0.136
January 8, 1999	Nitrosopiperidine, n-	100-75-4	0.012	0.032	0.096
December 7, 1990	N-Nitrosopyrrolidine	930-55-2	0.01	0.04	0.11
January 8, 1999	Paraffins, chlorinated (average chain length, c12; approx. 60% Cl by weight)	108171-26-2	1.32	3.47	10.34
September 8, 1998	Perchloroethylene (or	127-18-4	5.60	14.69	43.80
<i>September 8, 1998</i>	tetrachloroethylene)				
August 13, 1999			10.00 lbs/hr	19.99 lbs/hr	53.55 lbs/hr
<i>August 18 2000</i>	Phenol	108-95-2	6,610	17,300	51,700
August 13, 1999			2.90 lbs/hr	5.80 lbs/hr	15.53 lbs/hr
August 13, 1999	Phosgene	75-44-5	0.002 lbs/hr	0.004 lbs/hr	0.011 lbs/hr
<i>August 18, 2000</i>	Phosphoric acid	7664-38-2	231	607	1,810
December 7, 1990	Polynuclear Aromatic Hydrocarbons (PAHs):				
December 7, 1990	Benz[a]anthracene	56-55-3	0.024	0.062	0.185
December 7, 1990	Benzo[a]pyrene	50-32-8	0.002	0.006	0.019
December 7, 1990	Benzo[b]fluoranthene	205-99-2	0.024	0.062	0.185
January 8, 1999	Benzo[j]fluoranthene	205-82-3	0.024	0.062	0.185
December 7, 1990	Benzo[k]fluoranthene	207-08-9	0.024	0.062	0.185
December 7, 1990	Chrysene	218-01-9	0.24	0.62	1.85
January 8, 1999	Dibenz[a,h]acridine	226-36-8	0.24	0.06	0.19

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January 8, 1999	Dibenz[a,j]acridine	224-42-0	0.24	0.06	0.19
December 7, 1990	Dibenzo[a,h]anthracene	53-70-3	0.007	0.018	0.052
January 8, 1999	Dibenzo[a,e]pyrene	192-65-4	0.002	0.006	0.019
January 8, 1999	Dibenzo[a,h]pyrene	189-64-0	0.0002	0.0006	0.0018
January 8, 1999	Dibenzo[a,i]pyrene	189-55-9	0.0002	0.0006	0.0018
January 8, 1999	Dibenzo[a,l]pyrene	191-30-0	0.0002	0.0006	0.0018
January 8, 1999	Dibenzo[c,g]carbazole, 7h-	194-59-2	0.002	0.006	0.019
January 8, 1999	Dimethylbenz[a]anthracene, 7,12-	57-97-6	0.0001	0.0003	0.0009
January 8, 1999	Dinitropyrene, 1,6-	42397-64-8	0.0002	0.0006	0.0018
January 8, 1999	Dinitropyrene, 1,8-	42397-65-9	0.002	0.006	0.019
December 7, 1990	Indenopyrene	193-39-5	0.035	0.092	0.273
January 8, 1999	Methylcholanthrene, 3-	56-49-5	0.0012	0.0033	0.0097
January 8, 1999	Methylchrysene, 5-	3697-24-3	0.002	0.006	0.019
January 8, 1999	Nitroacenaphthene, 5-	602-87-9	0.21	0.56	1.65
January 8, 1999	Nitrochrysene, 6-	7496-02-8	0.0002	0.0006	0.0018
January 8, 1999	Nitrofluorene, 2-	607-57-8	0.24	0.62	1.85
January 8, 1999	Nitropyrene, 1-	5522-43-0	0.024	0.062	0.185
January 8, 1999	Nitropyrene, 4-	57835-92-4	0.024	0.062	0.185
September 8, 1998	Polycyclic aromatic hydrocarbons (PAHs), total with individual compounds		0.002	0.006	0.019
September 8, 1998	Polycyclic aromatic hydrocarbons (PAHs), total w/o individual compounds		0.002	0.006	0.019
December 7, 1990	Polychlorinated biphenyls (PCBs)	1336-36-3	0.002	0.006	0.019
January 8, 1999	Potassium bromate	7758-01-2	0.24	0.62	1.85
January 8, 1999	Propane sultone, 1,3-	1120-71-4	0.05	0.13	0.38
August 18, 2000	Propylene	115-07-1	99,200	260,000	775,000
August 18, 2000	Propylene glycol monomethyl ether	107-98-2	231,000	607,000	1,810,000
September 8, 1998 February 23, 2000 August 13, 1999	Propylene oxide (or 1,2-epoxy propane)	75-56-9	8.94 1.55 lbs/hr	23.43 3.10 lbs/hr	69.84 8.30 lbs/hr
August 13, 1999	Sodium hydroxide	1310-73-2	0.004 lbs/hr	0.008 lbs/hr	0.021 lbs/hr

Table – 1A

Screening Emission Levels

THESE ARE NOT EMISSION LIMITS. Exceedances of these levels indicate that a screening risk assessment should be performed.

Original Date of Listing	Toxic Air Contaminant	CAS NO	Screening Emission Level (lbs/yr) 25 meters	Screening Emission Level (lbs/yr) 50 meters	Screening Emission Level (lbs/yr) 100 meters
<i>August 18, 2000</i> August 13, 1999	Styrene	100-42-5	29,800 10.50 lbs/hr	78,000 20.99 lbs/hr	233,000 56.22 lbs/hr
August 13, 1999	Sulfuric acid and oleum	7664-93-9	0.06 lbs/hr	0.12 lbs/hr	0.32 lbs/hr
January 8, 1999	Tetrachloroethane 1,1,2,2-	79-34-5	0.57	1.50	4.46
January 8, 1999	Thioacetamide	62-55-5	0.02	0.05	0.15
<i>August 18, 2000</i> August 13, 1999	Toluene	108-88-3	9,920 18.50 lbs/hr	26,000 36.98 lbs/hr	77,500 99.06 lbs/hr
September 8, 1998	Toluene diisocyanate: toluene-2,4-diisocyanate toluene-2,6-diisocyanate	584-84-9 91-08-7	3.01 3.01	7.88 7.88	23.5 23.5
January 8, 1999	Trichloroethane, 1,1,2-	79-00-5	2.07	5.42	16.15
December 7, 1990 <i>August 18, 2000</i>	Trichloroethylene	79-01-6	16.53	43.35	129.20
August 13, 1999	Triethylamine	121-44-8	1.40 lbs/hr	2.80 lbs/hr	7.50 lbs/hr
September 8, 1998	Urethane (or ethyl carbamate)	51-79-6	0.11	0.30	0.89
August 13, 1999	Vanadium pentoxide	1314-62-1	0.015 lbs/hr	0.030 lbs/hr	0.080 lbs/hr
December 7, 1990 August 13, 1999	Vinyl chloride	75-01-4	0.42 90.00 lbs/hr	1.11 179.89 lbs/hr	3.31 481.93 lbs/hr
<i>August 18, 2000</i> August 13, 1999	Xylenes (isomers and mixtures) xylene, m- xylene, o- xylene, p-	1330-20-7 108-38-3 95-47-6 106-42-3	23,100 11.00 lbs/hr 23,100 11.00 lbs/hr 23,100 11.00 lbs/hr 23,100 11.00 lbs/hr	60,700 21.99 lbs/hr 60,700 21.99 lbs/hr 60,700 21.99 lbs/hr 60,700 21.99 lbs/hr	181,000 58.90 lbs/hr 181,000 58.90 lbs/hr 181,000 58.90 lbs/hr 181,000 58.90 lbs/hr

Notes:

The original dates of listing for chronic values are denoted in italics.

The original dates of listing for acute values are denoted in bold and their screening values are in units of lbs/hour.

*For metal compounds, use the corresponding risk values from Table 8 and apply the metal fractions in the substances.

Example 1: For Nickel Acetate, use the corresponding risk value for nickel from Table 8 and apply nickel fraction in the substance.

$$\text{Nickel} = (59 \text{ lb of Ni} / 249 \text{ lb of Ni}(\text{OOCCH}_3)_2 \cdot 4\text{HOH}) \times 100 = 23.7\%$$

Tables Effective for Applications Deemed Complete on or after August 18, 2000

Example 2: For Lead Chromate, use the corresponding risk values for Lead and Chromium from Table 8 and apply metal equivalents for each metal obtained from the following for:

$$\text{Lead} = (207 \text{ lb Pb} / 323 \text{ lb PbCrO}_4) \times 100 = 64.1\%$$

$$\text{Chromium (hexavalent)} = (52 \text{ lb Cr} / 323 \text{ lb PbCrO}_4) \times 100 = 16.1\%$$

**Table – 1B
 DRY CLEANING LOOK-UP TABLE (residential receptor)**

Dry Cleaning Screening Levels
 (gallons per month, includes disposal losses
 adjusted for meteorological station)

Assumptions:

- *The table represents a 15m x 15m x 6m (height) building as a volume source.*
- *There are no building vents or fans.*
- *The building contains a 55 lb. factory original, dry cleaning machine with primary and secondary controls.*
- *Usage includes perc lost through sludge and filter disposal.*
- *Operating hours are less than 24 hours per day.*

For any change in above conditions, e.g., bigger building, larger machine, presence of a building vent or fan, greater perc loss through sludge and filter disposal, the applicant is entitled to proceed to Tier 4 (refined risk assessment).

Meteorological Station	MET factor	(gallons per month)				
		25m	50m	75m	100m	200m
Pomona, Santa Ana Canyon, West Los Angeles	1.00	3.9	11.1	22.1	36.9	78.5
Anaheim, La Habra Malibu, Redlands, Riverside	0.90	4.3	12.3	24.6	41.0	87.2
Azusa, Costa Mesa, Fontana, Indio, La Canada, Norco, Pasadena, Reseda	0.80	4.9	13.9	27.6	46.2	98.1
Canoga Park, Compton, El Toro, King Harbor, Lennox, Los Alamitos, Lynwood, Pico Rivera, Walnut, Whittier, Upland	0.70	5.6	15.9	31.6	52.8	112
Banning, Burbank, Downtown Los Angeles, Long Beach, Newhall, Palm Springs, Vernon	0.60	6.5	18.5	36.8	61.5	130

DRY CLEANING LOOK-UP TABLE (occupational receptor)

Dry Cleaning Screening Levels
(gallons per month, includes disposal losses
adjusted for meteorological station)

Assumptions:

- *The table represents a 15m x 15m x 6m (height) building as a volume source.*
- *There are no building vents or fans.*
- *The building contains a 55 lb. factory original, dry cleaning machine with primary and secondary controls.*
- *Usage includes perc lost through sludge and filter disposal.*
- *Operating hours are less than 24 hours per day.*

For any change in above conditions, e.g., bigger building, larger machine, presence of a building vent or fan, greater perc loss through sludge and filter disposal, the applicant is entitled to proceed to Tier 4 (refined risk assessment).

Meteorological Station	MET factor	(gallons per month)				
		25m	50m	75m	100m	200m
Pomona, Santa Ana Canyon, West Los Angeles	1.00	5.9	16.8	33.5	55.9	118
Anaheim, La Habra Malibu, Redlands, Riverside	0.90	6.6	18.7	37.2	62.2	132
Azusa, Costa Mesa, Fontana, Indio, La Canada, Norco, Pasadena, Reseda	0.80	7.4	21.0	41.9	69.9	148
Canoga Park, Compton, El Toro, King Harbor, Lennox, Los Alamitos, Lynwood, Pico Rivera, Walnut, Whittier, Upland	0.70	8.5	24.0	47.8	79.9	169
Banning, Burbank, Downtown Los Angeles, Long Beach, Newhall, Palm Springs, Vernon	0.60	9.9	28.0	55.8	93.2	198

Table – 1C

Source Screening Levels

Note: Decision on further updates for this table is pending.

Table – 1D

Source Screening Levels

Note: Decision on further updates for this table is pending.

Table – 2A

**Point Source
Operating 12 hours/Day or Less**

Carcinogenic and Chronic X/Q Values ($[\mu\text{g}/\text{m}^3]/[\text{tons}/\text{yr.}]$)

Stack Height (ft)	Downwind Distance (meters)							
	25	50	75	100	200	300	500	1000
≥ 14 to 24	51.18	16.88	7.89	4.51	1.14	0.50	0.18	0.05
> 24 to 49	19.14	12.74	6.94	4.19	1.12	0.50	0.18	0.05
> 49	5.13	5.13	4.31	3.08	0.97	0.45	0.16	0.04

Table – 2B

Meteorological Correction Factors (MET)

<u>STATION</u>	<u>MET</u>	<u>STATION</u>	<u>MET</u>
Anaheim	0.84	Lynwood	0.58
Azusa	0.77	Malibu	0.84
Banning	0.52	Newhall	0.50
Burbank	0.57	Norco	0.73
Canoga Park	0.65	Palm Springs	0.55
Compton	0.63	Pasadena	0.74
Costa Mesa	0.69	Pico Rivera	0.70
Downtown L.A.	0.51	Pomona	0.86
El Toro	0.65	Redlands	0.86
Fontana	0.77	Reseda	0.68
Indio	0.69	Riverside	0.82
King Harbor	0.60	Santa Ana Canyon	0.89
La Canada	0.73	Upland	0.60
La Habra	0.78	Vernon	0.54
Lancaster	0.47	Walnut	0.60
Lennox	0.67	West L.A.	1.00
Long Beach	0.59	Whittier	0.63
Los Alamitos	0.60		

Table – 3A

**Point Source
Operating More Than 12 hours/day**

Carcinogenic and Chronic X/Q Values ($[\mu\text{g}/\text{m}^3]/[\text{tons}/\text{yr.}]$)

Stack Height (ft)	Downwind Distance (meters)							
	25	50	75	100	200	300	500	1000
≥ 14 to 24	49.68	23.07	12.50	7.74	2.24	1.06	0.42	0.12
> 24 to 49	10.70	10.70	7.46	5.32	1.92	0.97	0.40	0.12
> 49	2.38	2.38	2.38	2.12	1.27	0.75	0.33	0.10

Table – 3B

Meteorological Correction Factors (MET)

<u>STATION</u>	<u>MET</u>	<u>STATION</u>	<u>MET</u>
Anaheim	0.69	Lynwood	0.68
Azusa	0.64	Malibu	0.84
Banning	0.63	Newhall	0.92
Burbank	0.64	Norco	0.60
Canoga Park	0.71	Palm Springs	0.88
Compton	0.60	Pasadena	0.88
Costa Mesa	0.69	Pico Rivera	0.68
Downtown L.A.	0.60	Pomona	1.28
El Toro	0.65	Redlands	1.74
Fontana	1.19	Reseda	0.64
Indio	0.60	Riverside	0.81
King Harbor	0.53	Santa Ana Canyon	0.80
La Canada	1.33	Upland	0.71
La Habra	0.78	Vernon	0.92
Lancaster	0.76	Walnut	0.71
Lennox	0.68	West L.A.	1.00
Long Beach	1.00	Whittier	0.55
Los Alamitos	0.69		

Table – 4A

**Volume Source
Operating 12 hours/day or Less**

Carcinogenic and Chronic X/Q Values ($[\mu\text{g}/\text{m}^3]/[\text{tons}/\text{yr.}]$)

Source Dimensions		Downwind Distance (meters)							
Area (ft ²)	Height (ft)	25	50	75	100	200	300	500	1000
< 3,000	≤ 20	41.45	13.68	6.70	3.95	1.06	0.48	0.17	0.04
3,000 to 10,000	≤ 20	36.93	12.83	6.41	3.82	1.04	0.47	0.17	0.04
3,000 to 10,000	> 20	26.52	10.54	5.58	3.44	0.98	0.46	0.17	0.04
>10,000 to 30,000	> 20	21.59	9.51	5.20	3.26	0.96	0.46	0.17	0.04
> 30,000	> 20	-	8.19	4.65	2.98	0.91	0.43	0.16	0.04

Table – 4B

Meteorological Correction Factors (MET)

<u>STATION</u>	<u>MET</u>	<u>STATION</u>	<u>MET</u>
Anaheim	0.86	Lynwood	0.63
Azusa	0.80	Malibu	0.88
Banning	0.54	Newhall	0.53
Burbank	0.60	Norco	0.75
Canoga Park	0.68	Palm Springs	0.60
Compton	0.63	Pasadena	0.75
Costa Mesa	0.71	Pico Rivera	0.70
Downtown L.A.	0.51	Pomona	0.91
El Toro	0.68	Redlands	0.90
Fontana	0.80	Reseda	0.71
Indio	0.72	Riverside	0.82
King Harbor	0.63	Santa Ana Canyon	0.92
La Canada	0.76	Upland	0.62
La Habra	0.81	Vernon	0.55
Lancaster	0.49	Walnut	0.63
Lennox	0.66	West L.A.	1.00
Long Beach	0.58	Whittier	0.66
Los Alamitos	0.64		

Table – 5A

**Volume Source
Operating More Than 12 hours/day**

Carcinogenic and Chronic X/Q Values ($[\mu\text{g}/\text{m}^3]/[\text{tons}/\text{yr.}]$)

Source Dimensions		Downwind Distance (meters)							
Area (ft ²)	Height(ft)	25	50	75	100	200	300	500	1000
< 3,000	≤ 20	60.49	22.40	11.68	7.18	2.12	1.02	0.41	0.12
3,000 to 10,000	≤ 20	55.80	21.35	11.30	7.01	2.09	1.01	0.40	0.12
3,000 to 10,000	> 20	35.18	15.50	8.87	5.78	1.89	0.94	0.39	0.12
>10,000 to 30,000	> 20	29.58	14.43	8.41	5.55	1.85	0.93	0.39	0.12
> 30,000	> 20	--	13.05	7.81	5.22	1.79	0.91	0.38	0.12

Table – 5B

Meteorological Correction Factors (MET)

<u>STATION</u>	<u>MET</u>	<u>STATION</u>	<u>MET</u>
Anaheim	0.56	Lynwood	0.69
Azusa	0.64	Malibu	0.86
Banning	0.65	Newhall	0.93
Burbank	0.66	Norco	0.58
Canoga Park	0.73	Palm Springs	0.89
Compton	0.55	Pasadena	0.91
Costa Mesa	0.63	Pico Rivera	0.66
Downtown L.A.	0.63	Pomona	1.27
El Toro	0.66	Redlands	1.76
Fontana	1.22	Reseda	0.59
Indio	0.56	Riverside	0.78
King Harbor	0.46	Santa Ana Canyon	0.81
La Canada	1.34	Upland	0.76
La Habra	0.79	Vernon	0.91
Lancaster	0.78	Walnut	0.74
Lennox	0.66	West L.A.	1.00
Long Beach	0.99	Whittier	0.53
Los Alamitos	0.73		

Table – 6

Dispersion Factors For Acute Hazard Index (X/Qhr)

Point Sources
All Daily Operating Conditions
X/Qhr Values ($[\mu\text{g}/\text{m}^3]/[\text{lbs}/\text{hr}]$)

Stack Height (ft)	Downwind Distance (meters)							
	25	50	75	100	200	300	500	1000
≥ 14 to 24	2000.0	1000.6	577.9	373.5	119.2	59.8	25.4	8.4
> 24 to 49	548.1	548.1	406.0	295.2	109.6	57.1	24.8	8.3
> 49	110.1	110.1	103.8	92.4	67.3	42.9	20.6	7.2

Table – 7

Dispersion Factors For Acute Hazard Index (X/Qhr)

Volume Sources
All Daily Operating Conditions
X/Qhr Values ($[\mu\text{g}/\text{m}^3]/[\text{lbs}/\text{hr}]$)

Source Dimensions		Downwind Distance (meters)							
Area (ft ²)	Height(ft)	25	50	75	100	200	300	500	1000
< 3,000	≤ 20	1532.1	773.2	463.1	309.0	106.3	55.2	24.1	8.2
3,000 to 10,000	≤ 20	1103.1	613.9	387.7	267.5	98.0	52.2	23.3	8.0
3,000 to 10,000	> 20	646.2	416.9	288.5	211.2	86.4	48.0	22.2	7.9
> 10,000 to 30,000	> 20	439	309.4	226.4	172.2	76.3	44.0	21.1	7.7
> 30,000	> 20	-	213.8	164.9	130.5	63.5	38.3	19.3	7.3

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Acetaldehyde	2.70E-06	1.00	9.00E+00	1.00		
Acetamide	2.00E-05	1.00				
Acrolein					1.90E-01	1
Acrylamide (or propenamide)	1.30E-03	1.00				
Acrylic acid					6.00E+03	1
Acrylonitrile (or vinyl cyanide)	2.90E-04	1.00				
Allyl chloride	6.00E-06	1.00				
Aminoanthraquinone, 2-	9.40E-06	12.70				
Ammonia			2.00E+02	1.00	3.20E+03	1
Aniline	1.60E-06	1.00				
Arsenic	3.30E-03	2.70			1.90E-01	4
Arsenic compounds (inorganic)	3.30E-03	2.70			1.90E-01	4
Arsine					1.60E+02	1
Asbestos	6.30E-02	1.00				
Benzene (including benzene from gasoline)	2.90E-05	1.00	6.00E+01	1.00	1.30E+03	6
Benzidine (and it salts)	1.40E-01	1.00				
Benzyl chloride	4.90E-05	1.00			2.40E+02	1
Beryllium (and beryllium compounds)	2.40E-03	6.90				
Bis(2-chloroethyl)ether (DCEE)	7.10E-04	1.00				
Bis(chloromethyl)ether	1.30E-02	1.00				
Bis(2-ethylhexyl)phthalate (DEHP)	2.40E-06	1.00				
Butadiene, 1,3-	1.70E-04	1.00				
Cadmium and cadmium compounds	4.20E-03	1.00				
Carbon disulfide					6.20E+03	6
Carbon tetrachloride	4.20E-05	1.00			1.90E+03	7
Chlorinated dioxins & dibenzofurans	3.80E+00	6.80	4.00E-05	82.00		
Heptachlorodibenzofuran, 1,2,3,4,6,7,8-	3.80E-01	1.00	4.00E-03	82.00		
Heptachlorodibenzofuran, 1,2,3,4,7,8,9-	3.80E-01	1.00	4.00E-03	82.00		
Heptachlorodibenzofuran, total	3.80E-01	1.00	4.00E-03	82.00		
Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-	3.80E-01	1.00	4.0E-03	82.00		
Heptachlorodibenzo-p-dioxin, total	3.80E-01	1.00	4.00E-03	82.00		

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Hexachlorodibenzofuran, 1,2,3,4,7,8-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzofuran, 1,2,3,6,7,8-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzofuran, 1,2,3,7,8,9-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzofuran, 2,3,4,6,7,8-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzofuran, total	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-	3.80E+00	1.00	4.00E-04	82.00		
Hexachlorodibenzo-p-dioxin, total	3.80E+00	1.00	4.00E-04	82.00		
Octachlorodibenzofuran, 1,2,3,4,5,6,7,8-	3.80E-02	1.00	4.00E-02	82.00		
Octachlorodibenzo-p-dioxin, 1,2,3,4,5,6,7,8-	3.80E-02	1.00	4.00E-02	82.00		
Pentachlorodibenzofuran, 1,2,3,7,8-	1.90E+00	6.80	8.00E-04	82.40		
Pentachlorodibenzofuran, 2,3,4,7,8-	1.90E+01	6.80	8.00E-05	82.40		
Pentachlorodibenzofuran, total	1.90E+01	6.80	8.00E-05	82.40		
Pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	1.90E+01	6.80	8.00E-05	82.40		
Pentachlorodibenzo-p-dioxin, total	1.90E+01	6.80	8.00E-05	82.40		
Tetrachlorodibenzofuran, 2,3,7,8-	3.80E+00	6.80	4.00E-04	82.00		
Tetrachlorodibenzofuran, total	3.80E+00	6.80	4.00E-04	82.00		
Tetrachlorodibenzo-p-dioxin, 2,3,7,8-	3.80E+01	6.80	4.00E-05	82.00		
Tetrachlorodibenzo-p-dioxin, total	3.80E+01	6.80	4.00E-05	82.00		
Chlorine			2.00E-01	1.00	2.10E+02	1
Chloro-o-phenylenediamine, 4-	4.60E-06	1.00				
Chloro-o-toluidine, p-	7.70E-05	1.00				
Chloroform	5.30E-06	1.00	3.00E+02	1.00	1.50E+02	7
Chlorophenols						
Pentachlorophenol	5.10E-06	4.00				
Trichlorophenol, 2,4,6-	2.00E-05	3.60				
Chloropicrin					2.90E+01	1
Chromium, hexavalent	1.50E-01	1.01				
Copper and copper compounds					1.00E+02	1
Cresidine, p-	4.30E-05	1.00				

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Cupferron	6.30E-05	1.00				
Diaminoanisole, 2,4- (sulfate)	6.60E-06	1.00				
Diaminotoluene, 2,4-	1.10E-03	1.00				
Dibromo-3-chloropropane, 1,2- (DBCP)	2.00E-03	1.00				
Dichlorobenzene, p- (or 1,4-dichlorobenzene)	1.10E-05	4.00				
Dichlorobenzidine, 3,3-	3.40E-04	1.00				
Dichloroethane, 1,1-	1.60E-06	1.00				
Dimethylaminoazobenzene, p-	1.30E-03	1.00				
Dinitrotoluene, 2,4-	8.90E-05	1.00				
Dioxane, 1,4-	7.70E-06	1.00	3.00E+3	1.00	3.00E+03	1
Diphenylhydrazine (or hydrazobenzene)	3.40E-04	1.00				
Epichlorohydrin	2.30E-05	1.00			1.30E+03	1
Ethyl benzene			2.0E+03	1.00		
Ethyl chloride			3.00E+04	1.00		
Ethylene dibromide	7.10E-05	1.00				
Ethylene dichloride (or 1,2-dichloroethane)	2.20E-05	1.00				
Ethylene glycol			4.00E+02	1.00		
Ethylene glycol ethyl ether (EGEE)			7.00E+01	1.00	3.70E+02	6
Ethylene glycol monobutyl ether					1.40E+04	1
Ethylene glycol monoethyl ether acetate			3.0E+02	1.00	1.40E+02	6
Ethylene glycol monomethyl ether			6.0E+01	1.00	9.30E+01	6
Ethylene glycol monomethyl ether acetate			9.0E+01	1.00		
Ethylene oxide	8.80E-05	1.00				
Ethylene thiourea	1.30E-05	1.00				
Formaldehyde	6.00E-06	1.00	3.0E+00	1.00	9.40E+01	1
Hexachlorobenzene	5.10E-04	9.40				
Hexachlorocyclohexanes:						
technical grade	1.10E-03	4.00				
gamma- (lindane)	3.10E-04	4.00				
Hexane (n-)			7.00E+03	1.00		
Hydrazine	4.90E-03	1.00				

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Hydrogen chloride (hydrochloric acid)			9.00E+00	1.00	2.10E+03	1
Hydrogen cyanide (hydrocyanic acid)			9.00E+00	1.00	3.40E+02	1
Hydrogen fluoride (hydrofluoric acid)					2.40E+02	1
Hydrogen selenide					5.00E+00	1
Hydrogen sulfide			1.00E+01	1.00	4.20E+01	1
Isopropyl alcohol			7.00E+03	1.00	3.20E+03	1
Lead and lead compounds (inorganic, including elemental lead), including but not limited to:	1.20E-05	1.00				
Lead compounds, inorganic	1.20E-05	1.00				
Lead compounds (other than inorganic)	1.20E-05	1.00				
Lead acetate	1.20E-05	1.00				
Lead chromate	*	*				
Lead phosphate	1.20E-05	1.00				
Lead subacetate	1.20E-05	1.00				
Manganese and manganese compounds			2.00E-01	1.00		
Mercury and mercury compounds (inorganic) Mercuric chloride Methyl mercury			9.00E-02	1.60	1.80E+00	1
Methanol			4.00E+03	1.00	2.80E+04	1
Methyl bromide			5.00E+00	1.00	3.90E+03	1
Methyl chloroform (1,1,1 TCA)			1.00E+03	1.00	6.80E+04	1
Methyl ethyl ketone					1.30E+04	1
Methylene bis(2-chloroaniline), 4,4- (MOCA)	4.30E-04	1.00				
Methylene chloride	1.00E-06	1.00	4.00E+02	1.00	1.40E+04	1
Methylene Dianiline, 4,4'- (and its dichloride)	4.60E-04	1.00				
Methyl t-butyl ether			8.00E+03	1.00		
Michler's ketone	2.50E-04	1.00				
Naphthalene			9.00E+00	1.00		

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Nickel & nickel compounds including but not limited to:	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel acetate	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel carbonate	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel carbonyl	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel hydroxide	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickelocene	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel oxide	2.60E-04	1.00	1.00E-01	1.00	6.00E+00	1
Nickel refinery dust from the pyrometallurgical process	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nickel subsulfide	2.60E-04	1.00	5.0E-02	1.00	6.00E+00	1
Nitric acid					8.60E+01	1
N-Nitroso- Compounds:						
n-Nitroso-n-ethylurea	7.70E-03	4.00				
n-Nitroso-n-methylurea	3.30E-02	4.00				
n-Nitrosodi-n-butylamine	3.10E-03	4.00				
n-Nitrosodiethylamine	1.00E-02	4.00				
n-Nitrosodimethylamine	4.60E-03	4.00				
n-Nitrosodiphenylamine	2.60E-06	4.00				
n-Nitrosodiphenylamine, p-	6.30E-06	3.40				
n-Nitrosodi-n-propylamine	2.00E-03	4.00				
Nitrosomethylethylamine, n-	6.30E-03	4.00				
Nitrosomorpholine, n-	1.90E-03	1.00				
Nitrosopiperidine, n-	2.70E-03	1.00				
n-Nitrosopyrrolidine	6.00E-04	4.00				
Paraffins, chlorinated (average chain length, c12; approx. 60% Cl by weight)	2.50E-05	1.00				
Perchloroethylene (or tetrachloroethylene)	5.90E-06	1.00	3.50E+01	1.00	2.00E+04	1
Phenol			2.00E+02	1.00	5.80E+03	1
Phosgene					4.00E+00	1

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Phosphoric acid			7.00E+00	1.00		
Polycyclic Aromatic Hydrocarbons (PAHs):	1.70E-03	12.70				
Benz[a]anthracene	1.10E-04	12.70				
Benzo[a]pyrene	1.10E-03	12.70				
Benzo[b]fluoranthene	1.10E-04	12.70				
Benzo[j]fluoranthene	1.10E-04	12.70				
Benzo[k]fluoranthene	1.10E-04	12.70				
Chrysene	1.10E-05	12.70				
Dibenz[a,h]acridine	1.10E-04	12.70				
Dibenz[a,j]acridine	1.10E-04	12.70				
Dibenz[a,h]anthracene	3.90E-04	12.70				
Dibenzo[a,e]pyrene	1.10E-03	12.70				
Dibenzo[a,h]pyrene	1.10E-02	12.70				
Dibenzo[a,i]pyrene	1.10E-02	12.70				
Dibenzo[a,l]pyrene	1.10E-02	12.70				
Dibenzo[c,g]carbazole, 7h-	1.10E-03	12.70				
Dimethylbenz[a]anthracene, 7,12-	2.40E-02	12.60				
Dinitropyrene, 1,6-	1.10E-02	12.70				
Dinitropyrene, 1,8-	1.10E-03	12.70				
Indenopyrene	1.10E-04	12.70				
Methylcholanthrene, 3-	2.10E-03	12.70				
Methylchrysene, 5-	1.10E-03	12.70				
Nitroacenaphthene, 5-	1.10E-05	14.20				
Nitrochrysene, 6-	1.10E-02	12.70				
Nitrofluorene, 2-	1.10E-05	12.70				
Nitropyrene, 1-	1.10E-04	12.70				
Nitropyrene, 4-	1.10E-04	12.70				
PAHs, total, w/o individual compounds	1.10E-03	12.70				
PAHs, total, with individual compounds	1.10E-03	12.70				
Polychlorinated biphenyls (PCBs)	5.70E-04	24.00				
Potassium bromate	1.40E-04	1.00				

Table – 8A

Unit Risk Factor (U), Reference Exposure Level (REL) and Multi Pathway Adjustment Factors (MP)

Toxic Air Contaminant	Unit Risk Factor	MP (MICR)	REL (Chronic)	MP (Chronic)	(Acute)	
					REL	Avg Hrs
Propane sulfone, 1,3-	6.90E-04	1.00				
Propylene			3.00E+03	1.00		
Propylene glycol monomethyl ether			7.00E+03	1.00		
Propylene oxide (or 1,2-epoxy propane)	3.70E-06	1.00	3.00E+01	1.00	3.10E+03	1
Sodium hydroxide					8.00E+00	1
Styrene			9.00E+02	1.00	2.10E+04	1
Sulfuric acid and oleum					1.20E+02	1
Tetrachloroethane 1,1,2,2-	5.80E-05	1.00				
Thioacetamide	1.70E-03	1.00				
Toluene			3.00E+02	1.00	3.70E+04	1
Toluene-2,4-diisocyanate	1.10E-05	1.00				
Toluene-2,6-diisocyanate	1.10E-05	1.00				
Trichloroethane, 1,1,2-	1.60E-05	1.00				
Trichloroethylene	2.00E-06	1.00	6.00E+02	1.00		
Triethylamine					2.80E+03	1
Urethane (or ethyl carbamate)	2.90E-04	1.00				
Vanadium pentoxide					3.00E+01	1
Vinyl chloride	7.80E-05	1.00			1.80E+05	1
Xylenes (isomers and mixtures)			7.00E+02	1.00	2.20E+04	1
xylene, m-			7.00E+02	1.00	2.20E+04	1
xylene, o-			7.00E+02	1.00	2.20E+04	1
xylene, p-			7.00E+02	1.00	2.20E+04	1

*For Lead Chromate, use the corresponding risk values for Lead and Chromium and apply metal Equivalents for each metal obtained from the following for:

Lead = (207 lb Pb/323 lb PbCrO₄) X 100 = 64.1%

Chromium (hexavalent) = (52 lb Cr/323 lb PbCrO₄) X 100 = 16.1%

Table – 8B

**Adjustment Factors (AF) for Compounds With REL Averaged Over 4, 6, and 7 Hours
Point Source**

<u>STATION</u>	<u>4 HRS</u>	<u>6 or 7 HRS</u>	<u>STATION</u>	<u>4 HRS</u>	<u>6 or 7 HRS</u>
Anaheim	0.93	0.77	Lynwood	0.87	0.79
Azusa	0.78	0.59	Malibu	0.86	0.69
Banning	0.85	0.71	Newhall	0.87	0.77
Burbank	0.94	0.84	Norco	0.81	0.75
Canoga Park	0.97	0.75	Palm Springs	0.75	0.69
Compton	0.92	0.67	Pasadena	0.93	0.87
Costa Mesa	0.87	0.88	Pico Rivera	0.84	0.85
Downtown L.A.	0.80	0.84	Pomona	0.94	0.78
El Toro	0.98	0.77	Redlands	0.97	0.88
Fontana	0.92	0.78	Reseda	0.95	0.72
Indio	0.70	0.54	Riverside	0.81	0.83
King Harbor	0.70	0.62	Santa Ana Canyon	0.84	0.71
La Canada	0.94	0.91	Upland	0.84	0.72
La Habra	0.85	0.82	Vernon	0.81	0.61
Lancaster	0.83	0.68	Walnut	0.78	0.74
Lennox	0.91	0.66	West L.A.	0.92	0.83
Long Beach	0.89	0.73	Whittier	0.97	0.66
Los Alamitos	0.84	0.72			

Table – 8C

**Adjustment Factors (AF) for Compounds With REL Averaged Over 4, 6, and 7 Hours
Volume Source**

<u>STATION</u>	<u>4 HRS</u>	<u>6 or 7 HRS</u>	<u>STATION</u>	<u>4 HRS</u>	<u>6 or 7 HRS</u>
Anaheim	0.95	0.81	Lynwood	0.91	0.85
Azusa	0.86	0.77	Malibu	0.90	0.76
Banning	0.88	0.75	Newhall	0.91	0.82
Burbank	0.96	0.88	Norco	0.86	0.79
Canoga Park	0.98	0.83	Palm Springs	0.79	0.74
Compton	0.94	0.71	Pasadena	0.98	0.91
Costa Mesa	0.98	0.98	Pico Rivera	0.96	0.90
Downtown L.A.	0.86	0.88	Pomona	0.96	0.87
El Toro	0.98	0.89	Redlands	0.98	0.92
Fontana	0.94	0.84	Reseda	0.96	0.77
Indio	0.74	0.59	Riverside	0.89	0.88
King Harbor	0.78	0.70	Santa Ana Canyon	0.88	0.84
La Canada	0.98	0.94	Upland	0.87	0.80
La Habra	0.93	0.89	Vernon	0.85	0.67
Lancaster	0.96	0.73	Walnut	0.93	0.72
Lennox	0.94	0.77	West L.A.	0.95	0.88
Long Beach	0.92	0.87	Whittier	0.98	0.78
Los Alamitos	0.87	0.80			

Table – 9

Lifetime Exposure Adjustment (LEA) Factors

Type of Receptor	LEA Factor
Sensitive	1.0
Residential	1.0
Off-site Worker	0.14, if permit unit operates 24 hr/day, 365 days/yr 0.66, if permit unit does not operate 24 hr/day, 365 days/yr

When performing a screening risk assessment for offsite worker receptors, only 0.14 and 0.66 may be used for the LEA. Do not prorate for other operating schedules.

Table – 10A

Target Organs Affected by Toxic Air Contaminants (Chronic Toxicity)

Toxic Air Contaminant	CV/BL	CNS/PNS	ENDO	EYE	IMMUN	KIDN	GI/LV	REPR	RESP	SKIN
Acetaldehyde									X	
Ammonia									X	
Benzene	X	X						X		
Chlorine									X	
Chloroform						X	X	X		
Chlorinated dioxins & dibenzofurans	X		X				X	X	X	
Dioxane	X					X	X			
Ethyl benzene			X			X	X	X		
Ethyl chloride							X	X		
Ethylene glycol						X		X	X	
Ethylene glycol ethyl ether	X							X		
Ethylene glycol monoethyl ether acetate								X		
Ethylene glycol monomethyl ether								X		
Ethylene glycol monomethyl ether acetate								X		
Formaldehyde				X					X	
Hexane (n-)		X								
Hydrogen chloride (hydrochloric acid)									X	
Hydrogen cyanide	X	X	X							
Hydrogen sulfide									X	
Isopropanol						X		X		
Manganese and manganese compounds		X								
Mercury & mercury compounds (inorganic)		X								

Table – 10A (continued)

Target Organs Affected by Toxic Air Contaminants (Chronic Toxicity)

Toxic Air Contaminant	CV/BL	CNS/PNS	ENDO	EYE	IMMUN	KIDN	GI/LV	REPR	RESP	SKIN
Methanol								X		
Methyl bromide		X						X	X	
Methyl chloroform (1,1,1 TCA)		X								
Methyl t-butyl ether				X		X	X			
Methylene chloride	X	X								
Naphthalene									X	
Nickel & nickel compounds (except nickel oxide)	X								X	
Nickel oxide	X								X	
Perchloroethylene						X	X		X	
Phenol	X	X				X	X			
Phosphoric acid									X	
Propylene									X	
Propylene glycol monomethyl ether							X			
Propylene oxide									X	
Styrene		X								
Toluene		X						X	X	
Trichloroethylene		X		X						
Xylenes isomers and mixtures)		X							X	
xylene, o-		X							X	
xylene, m-		X							X	
xylene, p-		X							X	

CV/BL: Cardiovascular or blood system
 CNS/PNS: Central or peripheral nervous system
 ENDO: Endocrine system
 EYE: Eye
 IMMUN: Immune system
 KIDN: Kidney
 GI/LV: Gastrointestinal system and liver
 RESP: Respiratory system
 REPR: Reproductive system/Development
 SKIN: Skin

Table – 10B

Target Organs Affected by Toxic Air Contaminants (Acute Toxicity)

Toxic Air Contaminant	CV/BL	CNS/PNS	EYE	IMMUN	KIDN	GI/LV	REPR	RESP	SKIN
Acrolein			x					x	
Acrylic acid			x					x	
Ammonia			x					x	
Arsenic and arsenic compounds (inorganic)							x		
Arsine	x								
Benzene	x			x			x		
Benzyl chloride			x					x	
Carbon disulfide		x					x		
Carbon tetrachloride		x				x	x		
Chlorine			x					x	
Chloroform		x					x		
Chloropicrin			x					x	
Copper and copper compounds								x	
1,4,-dioxane			x					x	
Epichlorohydrin			x					x	
Ethylene glycol ethyl ether							x		
Ethylene glycol monoethyl ether acetate		x					x		
Ethylene glycol monomethyl ether							x		
Ethylene glycol monomethyl ether acetate		x					x		
Ethylene glycol monobutyl ether			x					x	
Formaldehyde			x	x				x	
Hydrogen chloride (hydrochloric acid)			x					x	
Hydrogen cyanide (hydrocyanic acid)		x							
Hydrogen fluoride (hydrofluoric acid)			x					x	
Hydrogen selenide			x					x	
Hydrogen sulfide								x	
Isopropyl alcohol			x					x	
Mercury and compounds (inorganic)							x		
Methanol		x							
Methyl bromide		x					x	x	
Methyl chloroform (1,1,1-TCA)		x							
Methyl ethyl ketone			x					x	
Methylene chloride		x							

Table – 10B (continued)

Target Organs Affected by Toxic Air Contaminants (Acute Toxicity)

Toxic Air Contaminant	CV/BL	CNS/PNS	EYE	IMMUN	KIDN	GI/LV	REPR	RESP	SKIN
Nickel and nickel compounds				x				x	
Nitric acid								x	
Perchloroethylene		x	x					x	
Phenol			x					x	
Phosgene								x	
Propylene oxide			x				x	x	
Selenium and compounds			x					x	
Sodium hydroxide			x					x	x
Styrene			x					x	
Sulfuric acid and oleum								x	
Toluene		x	x				x	x	
Triethylamine		x	x						
Vanadium pentoxide			x					x	
Vinyl chloride		x	x					x	
Xylenes isomers and mixtures)			x					x	
xylene, o-			x					x	
xylene, m-			x					x	
xylene, p-			x					x	

CV/BL: Cardiovascular or blood system
 CNS/PNS: Central or peripheral nervous system
 EYE: Eye (this category added for August amendments due to OEHHA classifications)
 IMMUN: Immune system
 KIDN: Kidney
 GI/LV: Gastrointestinal system and liver
 RESP: Respiratory system
 REPR: Reproductive system/Development
 SKIN: Skin

Table – 11

Meteorological Monitoring Stations in the South Coast Air Basin

STATION	UTM (KM) E-W	UTM (KM) N-S	LONGITUDE	LATITUDE
Anaheim	415.0	3742.5	117:55:07	33:49:16
Azusa	414.9	3777.4	117:55:23	34:08:09
Banning	510.5	3754.4	116:53:11	33:55:58
Burbank	379.5	3783.0	118:18:27	34:10:58
Canoga Park	352.9	3786.0	118:35:48	34:12:23
Compton	385.5	3750.3	118:14:17	33:53:19
Costa Mesa	413.8	3724.2	117:55:47	33:39:21
Downtown LA	386.9	3770.1	118:13:31	34:04:02
El Toro	436.0	3720.9	117:41:25	33:37:39
Fontana	455.4	3773.9	117:29:01	34:06:24
Indio	572.3	3731.0	116:13:11	33:43:06
King Harbor	371.2	3744.4	118:23:30	33:30:00
La Canada	388.2	3786.1	118:12:49	34:12:42
La Habra	412.0	3754.0	117:57:07	33:55:28
Lancaster	396.0	3839.5	118:08:08	34:41:38
Lennox (Hawthorne)	373.0	3755.0	118:22:26	33:55:46
Long Beach	390.0	3743.0	118:11:19	33:49:24
Los Alamitos	404.5	3739.8	118:01:54	33:47:45
Lynwood	388.0	3754.0	118:12:42	33:55:20
Malibu	344.0	3766.9	118:41:23	34:01:59
Newhall	355.5	3805.5	118:31:02	34:22:59
Norco	446.8	3749.0	117:34:31	33:52:54
Palm Springs	542.5	3742.5	116:32:27	33:49:25
Pasadena	396.0	3778.5	118:07:41	34:08:38
Pico Rivera	402.3	3764.1	118:03:29	34:00:53
Pomona	430.8	3769.6	117:44:60	34:03:60
Redlands	486.2	3769.4	117:09:00	34:04:00
Reseda	359.0	3785.0	118:31:49	34:11:54
Riverside	464.8	3758.6	117:22:50	33:58:10
Santa Ana Canyon	431.0	3748.4	117:44:46	33:52:32
Upland	440.0	3773.1	117:39:02	34:05:55
Vernon	387.4	3762.5	118:13:10	33:59:55
Walnut	420.0	3761.7	117:51:58	33:59:41
West LA	372.3	3768.6	118:23:01	34:03:08
Whittier	405.5	3754.0	118:01:28	33:55:26

Figure 1

Meteorological Monitoring Stations in the South Coast Air Basin

