Table 1
CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ⊛

Chemical	Chemical▼ Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date ◆ Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date ◆ Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date ◆ Value Reviewed [Added]	Inhalation ⁝ Unit Risk $(\mu g/m^3)^{-1}$	Inhalation ⁝ Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date ◆ Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date ◆ Value Reviewed [Added]	M♣ W A F
ACETALDEHYDE	75-07-0			9.0E+00	5/93			2.7E-06	1.0E-02	4/99 [5/93]			1
ACETAMIDE	60-35-5							2.0E-05	7.0E-02	4/99			1
ACROLEIN	107-02-8	1.9E-01	4/99	6.0E-02	1/01								1
ACRYLAMIDE	79-06-1			7.0E-01	1/91			1.3E-03	4.5E+00	4/99 [7/90]			1
ACRYLIC ACID	79-10-7	6.0E+03	4/99	1.0E+00 RfC	1996								1
ACRYLONITRILE	107-13-1			5.0E+00	12/01			2.9E-04	1.0E+00	4/99 [1/91]			1
ALLYL CHLORIDE	107-05-1			1.0E+00 RfC	1996			6.0E-06	2.1E-02	4/99			1
2-AMINOANTHRAQUINONE	117-79-3							9.4E-06	3.3E-02	4/99			1
AMMONIA	7664-41-7	3.2E+03	4/99	2.0E+02	2/00								1
ANILINE	62-53-3			1.0E+00 RfC	1996			1.6E-06	5.7E-03	4/99			1
Antimony Compounds	*7440-36-0*			*2.0E-01 RfC*	*1996*								*1*
ANTIMONY TRIOXIDE	1309-64-4			2.0E-01 RfC	1996								1
ARSENIC AND COMPOUNDS (INORGANIC) TAC	7440-38-2 1016 [1015]	1.9E-01 AveP	4/99	3.0E-02	1/01	3.0E-04	10/00	3.3E-03 TAC	1.2E+01	7/90	1.5E+00	10/00	1
ARSINE	7784-42-1	1.6E+02	4/99	5.0E-02 RfC	1996								1
ASBESTOS TAC ⌑	1332-21-4							1.9E-04 TAC ⌑	2.2E+02	3/86			333.33
BENZENE TAC	71-43-2	1.3E+03 AveP	4/99	6.0E+01	2/00			2.9E-05 TAC	1.0E-01	1/85			1
BENZIDINE (AND ITS SALTS) *values also apply to:*	92-87-5			1.0E+01	1/91			1.4E-01	5.0E+02	4/99 [1/91]			1
Benzidine based dyes	*1020*			*1.0E+01*	*1/91*			*1.4E-01*	*5.0E+02*	*4/99 [1/91]*			*1*
Direct Black 38	*1937-37-7*			*1.0E+01*	*1/91*			*1.4E-01*	*5.0E+02*	*4/99 [1/91]*			*1*
Direct Blue 6	*2602-46-2*			*1.0E+01*	*1/91*			*1.4E-01*	*5.0E+02*	*4/99 [1/91]*			*1*
Direct Brown 95 (technical grade)	*16071-86-6*			*1.0E+01*	*1/91*			*1.4E-01*	*5.0E+02*	*4/99 [1/91]*			*1*
BENZYL CHLORIDE	100-44-7	2.4E+02	4/99	1.2E+01	1/92			4.9E-05	1.7E-01	4/99			1
BERYLLIUM AND COMPOUNDS	7440-41-7 [1021]			7.0E-03	12/01	2.0E-03	12/01	2.4E-03	8.4E+00	4/99 [7/90]			1
BIS(2-CHLOROETHYL)ETHER (Dichloroethyl ether)	111-44-4							7.1E-04	2.5E+00	4/99			1
BIS(CHLOROMETHYL)ETHER	542-88-1							1.3E-02	4.6E+01	4/99 [1/91]			1

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Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
BROMINE AND COMPOUNDS	7726-95-6 [1040]			1.7E+00	1/92								1
BROMINE PENTAFLUORIDE	7789-30-2			1.7E+00	1/92								1
HYDROGEN BROMIDE	10035-10-6			2.4E+01	1/92								1
POTASSIUM BROMATE	7758-01-2			*1.7E+00*	*1/92*			1.4E-04	4.9E-01	4/99 [10/93]			1
1,3-BUTADIENE TAC	106-99-0			2.0E+01	1/01			1.7E-04 TAC	6.0E-01	7/92			1
CADMIUM AND COMPOUNDS TAC	7440-43-9 [1045]			2.0E-02	1/01	5.0E-04	10/00	4.2E-03 TAC	1.5E+01	1/87			1
CARBON DISULFIDE	75-15-0	6.2E+03 AveP	4/99	8.0E+02	5/02								1
CARBON MONOXIDE	630-08-0	2.3E+04	4/99										1
CARBON TETRACHLORIDE TAC (Tetrachloromethane)	56-23-5	1.9E+03 AveP	4/99	4.0E+01	1/01			4.2E-05 TAC	1.5E-01	9/87			1
CHLORINATED PARAFFINS	108171-26-2							2.5E-05	8.9E-02	4/99			1
CHLORINE	7782-50-5	2.1E+02	4/99	2.0E-01	2/00								1
CHLORINE DIOXIDE	10049-04-4			6.0E-01	1/01								1
4-CHLORO-O-PHENYLENEDIAMINE	95-83-0							4.6E-06	1.6E-02	4/99			1
2-CHLOROACETOPHENONE	532-27-4			3.0E-02 RfC	1996								1
CHLOROBENZENE	108-90-7			1.0E+03	1/01								1
CHLORODIFLUOROMETHANE ... (see Fluorocarbons)													
CHLOROFORM TAC	67-66-3	1.5E+02 AveP	4/99	3.0E+02	4/00			5.3E-06 TAC	1.9E-02	12/90			1
Chlorophenols	*1060*												*1*
2-CHLOROPHENOL	95-57-8			1.8E+01	1/91								1
PENTACHLOROPHENOL	87-86-5			2.0E-01	1/92			5.1E-06	1.8E-02	4/99			1
TETRACHLOROPHENOLS	25167-83-3			8.8E+01	1/92								1
2,3,4,6-Tetrachlorophenol	*58-90-2*			*8.8E+01*	*1/92*								*1*
2,4,6-TRICHLOROPHENOL	88-06-2							2.0E-05	7.0E-02	4/99 [1/91]			1
CHLOROPICRIN	76-06-2	2.9E+01	4/99	4.0E-01	12/01								1
CHLOROPRENE	126-99-8			1.0E+00	1/92								1
p-CHLORO-o-TOLUIDINE	95-69-2							7.7E-05	2.7E-01	4/99			1
CHROMIUM 6+ TAC *values also apply to:*	18540-29-9			2.0E-01	1/01	2.0E-02	10/00	1.5E-01 TAC	5.1E+02	1/86	Æ		1
Barium chromate	*10294-40-3*			*2.0E-01*	*1/01*	*2.0E-02*	*10/00*	*1.5E-01 TAC*	*5.1E+02*	*1/86*	Æ		*0.2053*
Calcium chromate	*13765-19-0*			*2.0E-01*	*1/01*	*2.0E-02*	*10/00*	*1.5E-01 TAC*	*5.1E+02*	*1/86*	Æ		*0.3332*

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		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
Lead chromate	*7758-97-6*			*2.0E-01*	*1/01*	*2.0E-02*	*10/00*	*1.5E-01* TAC	*5.1E+02*	*1/86*	Æ		*0.1609*
Sodium dichromate	*10588-01-9*			*2.0E-01*	*1/01*	*2.0E-02*	*10/00*	*1.5E-01* TAC	*5.1E+02*	*1/86*	Æ		*0.397*
Strontium chromate	*7789-06-2*			*2.0E-01*	*1/01*	*2.0E-02*	*10/00*	*1.5E-01* TAC	*5.1E+02*	*1/86*	Æ		*0.2554*
CHROMIUM TRIOXIDE (as chromic acid mist)	1333-82-0			2.0E-03	1/01	2.0E-02	10/00	1.5E-01 TAC	5.1E+02	1/86	Æ		0.52
COPPER AND COMPOUNDS	7440-50-8 [1067]	1.0E+02	4/99	2.4E+00	1/92								1
p-CRESIDINE	120-71-8							4.3E-05	1.5E-01	4/99			1
CRESOLS (mixtures of)	1319-77-3			6.0E+02	1/01								1
m-CRESOL	108-39-4			6.0E+02	1/01								1
o-CRESOL	95-48-7			6.0E+02	1/01								1
p-CRESOL	106-44-5			6.0E+02	1/01								1
CUPFERRON	135-20-6							6.3E-05	2.2E-01	4/99			1
Cyanide Compounds (inorganic)	*57-12-5 1073*	*3.4E+02*	*4/99*	*9.0E+00*	*4/00*								*1*
HYDROGEN CYANIDE (Hydrocyanic acid)	74-90-8	3.4E+02	4/99	9.0E+00	4/00								1
2,4-DIAMINOANISOLE	615-05-4							6.6E-06	2.3E-02	4/99			1
2,4-DIAMINOTOLUENE	95-80-7							1.1E-03	4.0E+00	4/99			1
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	96-12-8			2.0E-01	1/92			2.0E-03	7.0E+00	4/99 [1/92]			1
p-DICHLOROBENZENE	106-46-7			8.0E+02	1/01			1.1E-05	4.0E-02	4/99 [1/91]			1
3,3-DICHLOROBENZIDINE	91-94-1							3.4E-04	1.2E+00	4/99 [1/91]			1
1,1,-DICHLOROETHANE (Ethylidene dichloride)	75-34-3							1.6E-06	5.7E-03	4/99			1
1,1-DICHLOROETHYLENE … (see Vinylidene Chloride)													
DI(2-ETHYLHEXYL)PHTHALATE (DEHP)	117-81-7			7.0E+01	1/91			2.4E-06	8.4E-03	4/99 [1/92]	8.4E-03	10/00	1
DIESEL EXHAUST … (see Particulate Emissions from Diesel-Fueled Engines)													
DIETHANOLAMINE	111-42-2			3.0E+00	12/01								
p-DIMETHYLAMINOAZOBENZENE	60-11-7							1.3E-03	4.6E+00	4/99			1
N,N-DIMETHYL FORMAMIDE	68-12-2			8.0E+01	1/01								1
2,4-DINITROTOLUENE	121-14-2							8.9E-05	3.1E-01	4/99			1
1,4-DIOXANE (1,4-Diethylene dioxide)	123-91-1	3.0E+03	4/99	3.0E+03	4/00			7.7E-06	2.7E-02	4/99 [1/91]			1

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EPICHLOROHYDRIN (1-Chloro-2,3-epoxypropane)	106-89-8	1.3E+03	4/99	3.0E+00	1/01			2.3E-05	8.0E-02	4/99 [1/92]			1
1,2-EPOXYBUTANE	106-88-7			2.0E+01	1/01								1
ETHYL ACRYLATE	140-88-5			4.8E+01	1/92								1
ETHYL BENZENE	100-41-4			2.0E+03	2/00								1
ETHYL CHLORIDE (Chloroethane)	75-00-3			3.0E+04	4/00								1
ETHYLENE DIBROMIDE TAC (1,2-Dibromoethane)	106-93-4			8.0E-01	12/01			7.1E-05 TAC	2.5E-01	7/85			1
ETHYLENE DICHLORIDE TAC (1,2-Dichloroethane)	107-06-2			4.0E+02	1/01			2.1E-05 TAC	7.2E-02	9/85			1
ETHYLENE GLYCOL	107-21-1			4.0E+02	4/00								1
ETHYLENE GLYCOL BUTYL ETHER … (see Glycol ethers)													
ETHYLENE OXIDE TAC (1,2-Epoxyethane)	75-21-8			3.0E+01	1/01			8.8E-05 TAC	3.1E-01	11/87			1
ETHYLENE THIOUREA	96-45-7							1.3E-05	4.5E-02	4/99			1
Fluorides	1101	*2.4E+02*	*4/99*	1.3E+01	8/03	4.0E-02	8/03						*1*
HYDROGEN FLUORIDE (Hydrofluoric acid)	7664-39-3	2.4E+02	4/99	1.4E+01	8/03	4.0E-02	8/03						1
FLUOROCARBONS (chlorinated) *values also apply to:*	1104 [1105]			7.0E+02	1/91								1
Chlorinated fluorocarbon (CFC-113)	*76-13-1*			*7.0E+02*	*1/91*								*1*
CHLORODIFLUOROMETHANE (Freon 22)	75-45-6			5.0E+04 RfC	1996								1
Dichlorofluoromethane (Freon 12)	*75-43-4*			*7.0E+02*	*1/91*								*1*
Trichlorofluoromethane (Freon 11)	*75-69-4*			*7.0E+02*	*1/91*								*1*
Fluorocarbons (brominated)	*1103*			*7.0E+02*	*1/91*								*1*
FORMALDEHYDE TAC	50-00-0	9.4E+01	4/99	3.0E+00	2/00			6.0E-06 TAC	2.1E-02	3/92			1
GASOLINE VAPORS	1110			2.1E+03	1/91								1
GLUTARALDEHYDE	111-30-8			8.0E-02	1/01								1
GLYCOL ETHERS	1115												1
ETHYLENE GLYCOL BUTYL ETHER – EGBE	111-76-2	1.4E+04	4/99	2.0E+01	1/92								1
ETHYLENE GLYCOL ETHYL ETHER – EGEE	110-80-5	3.7E+02 AveP	4/99[1/92]	7.0E+01	2/00								1
ETHYLENE GLYCOL ETHYL ETHER ACETATE – EGEEA	111-15-9	1.4E+02 AveP	4/99	3.0E+02	2/00								1

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ETHYLENE GLYCOL METHYL ETHER – EGME	109-86-4	9.3E+01 AveP	4/99	6.0E+01	2/00								1
ETHYLENE GLYCOL METHYL ETHER ACETATE – EGMEA	110-49-6			9.0E+01	2/00								1
HEXACHLOROBENZENE	118-74-1			2.8E+00	7/90			5.1E-04	1.8E+00	4/99 [1/91]			1
HEXACHLOROCYCLOHEXANES (mixed or technical grade)	608-73-1 1120			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
alpha-HEXACHLOROCYCLOHEXANE	319-84-6			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
beta- HEXACHLOROCYCLOHEXANE	319-85-7			1.0E+00	1/91	3.0E-04	1/91	1.1E-03	4.0E+00	4/99 [1/91]	4.0E+00	10/00 [1/92]	1
gamma-HEXACHLOROCYCLOHEXANE (Lindane)	58-89-9			1.0E+00	1/91	3.0E-04	1/91	3.1E-04	1.1E+00	4/99	1.1E+00	10/00	1
HEXACHLOROCYCLOPENTADIENE	77-47-4			2.4E-01	1/91								1
n-HEXANE	110-54-3			7.0E+03	4/00								1
HYDRAZINE	302-01-2			2.0E-01	1/01			4.9E-03	1.7E+01	4/99 [7/90]			1
HYDROCHLORIC ACID (Hydrogen chloride)	7647-01-0	2.1E+03	4/99	9.0E+00	2/00								1
HYDROGEN BROMIDE … (see Bromine & Compounds)													
HYDROGEN CYANIDE … (see Cyanide & Compounds)													
HYDROGEN FLUORIDE … (see Fluorides & Compounds)													
HYDROGEN SELENIDE … (see Selenium & Compounds)													
HYDROGEN SULFIDE	7783-06-4	4.2E+01	4/99[7/90]	1.0E+01	4/00								1
ISOPHORONE	78-59-1			2.0E+03	12/01								
ISOPROPYL ALCOHOL (Isopropanol)	67-63-0	3.2E+03	4/99	7.0E+03	2/00								1
LEAD AND COMPOUNDS[TAC] ✷ (inorganic) *values also apply to:*	7439-92-1 1128 [1130]							1.2E-05 TAC	4.2E-02	4/97	8.5E-03	10/00	1
Lead acetate	*301-04-2*							*1.2E-05 TAC*	*4.2E-02*	*4/97*	*8.5E-03*	*10/00*	*0.637*
Lead phosphate	*7446-27-7*							*1.2E-05 TAC*	*4.2E-02*	*4/97*	*8.5E-03*	*10/00*	*0.7659*
Lead subacetate	*1335-32-6*							*1.2E-05 TAC*	*4.2E-02*	*4/97*	*8.5E-03*	*10/00*	*0.7696*
LINDANE ... (see gamma-Hexachlorocyclohexane)													
MALEIC ANHYDRIDE	108-31-6			7.0E-01	12/01								1

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MANGANESE AND COMPOUNDS	7439-96-5 [1132]			2.0E-01	4/00								1
MERCURY AND COMPOUNDS (INORGANIC)	7439-97-6 [1133]	1.8E+00	4/99	9.0E-02	2/00	3.0E-04	10/00 [1/92]						1
Mercuric chloride	*7487-94-7*	*1.8E+00*	*4/99*	*9.0E-02*	*2/00*	*3.0E-04*	*10/00 [1/92]*						*1*
MERCURY AND COMPOUNDS (ORGANIC) *values also apply to:*	N/A												1
METHYL MERCURY	593-74-8			1.0E+00	1/91								1
METHANOL	67-56-1	2.8E+04	4/99	4.0E+03	4/00								1
METHYL BROMIDE (Bromomethane)	74-83-9	3.9E+03	4/99	5.0E+00	2/00								1
METHYL tertiary-BUTYL ETHER	1634-04-4			8.0E+03	2/00			2.6E-07	1.8E-03	11/99			1
METHYL CHLOROFORM (1,1,1-Trichloroethane)	71-55-6	6.8E+04	4/99	1.0E+03	2/00								1
METHYL ETHYL KETONE (2-Butanone)	78-93-3	1.3E+04	4/99	1.0E+03 RfC	1996								1
METHYL ISOCYANATE	624-83-9			1.0E+00	12/01								1
METHYL MERCURY ... (see Mercury & Compounds)													
METHYL METHACRYLATE	80-62-6			9.8E+02	1/92								1
4,4'-METHYLENE BIS (2-CHLOROANILINE) (MOCA)	101-14-4							4.3E-04	1.5E+00	4/99			1
METHYLENE CHLORIDE TAC (Dichloromethane)	75-09-2	1.4E+04	4/99	4.0E+02	2/00			1.0E-06 TAC	3.5E-03	7/89			1
4,4'-METHYLENE DIANILINE (AND ITS DICHLORIDE)	101-77-9			2.0E+01	12/01			4.6E-04	1.6E+00	4/99	1.6E+00	10/00	1
METHYLENE DIPHENYL ISOCYANATE	101-68-8			7.0E-01	1/01								1
MICHLER'S KETONE (4,4'-Bis(dimethylamino)benzophenone)	90-94-8							2.5E-04	8.6E-01	4/99			1
MINERAL FIBERS (<1% FREE SILICA)	N/A			2.4E+01	1/92								1
Ceramic fibers (man-made)	*1056*			*2.4E+01*	*1/92*								*1*
Glasswool (man-made fibers)	*1111*			*2.4E+01*	*1/92*								*1*
Mineral fibers (fine: man-made)	*1136*			*2.4E+01*	*1/92*								*1*
Rockwool (man-made fibers)	*1168*			*2.4E+01*	*1/92*								*1*
Slagwool (man-made fibers)	*1181*			*2.4E+01*	*1/92*								*1*
N-NITROSODI-n-BUTYLAMINE	924-16-3							3.1E-03	1.1E+01	4/99 [1/92]			1
N-NITROSODI-n-PROPYLAMINE	621-64-7							2.0E-03	7.0E+00	4/99 [1/91]			1
N-NITROSODIETHYLAMINE	55-18-5							1.0E-02	3.6E+01	4/99 [1/91]			1

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Table 1
CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
N-NITROSODIMETHYLAMINE	62-75-9							4.6E-03	1.6E+01	4/99 [1/91]			1
N-NITROSODIPHENYLAMINE	86-30-6							2.6E-06	9.0E-03	4/99			1
N-NITROSO-N-METHYLETHYLAMINE	10595-95-6							6.3E-03	2.2E+01	4/99 [7/90]			1
N-NITROSOMORPHOLINE	59-89-2							1.9E-03	6.7E+00	4/99 [7/92]			1
N-NITROSOPIPERIDINE	100-75-4							2.7E-03	9.4E+00	4/99 [7/92]			1
N-NITROSOPYRROLIDINE	930-55-2							6.0E-04	2.1E+00	4/99 [7/90]			1
NAPHTHALENE ... (see Polycyclic aromatic hydrocarbons)													
NICKEL AND COMPOUNDS[TAC] *values also apply to:*	7440-02-0 [1145]	6.0E+00	4/99	5.0E-02	2/00	5.0E-02	10/00	2.6E-04 TAC	9.1E-01	8/91			1
Nickel acetate	*373-02-4*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.3321*
Nickel carbonate	*3333-67-3*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.4945*
Nickel carbonyl	*13463-39-3*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.3438*
Nickel hydroxide	*12054-48-7*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.6332*
Nickelocene	*1271-28-9*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.4937*
NICKEL OXIDE	1313-99-1	6.0E+00	4/99	1.0E-01	2/00	5.0E-02	10/00	2.6E-04 TAC	9.1E-01	8/91			0.7859
Nickel refinery dust from the pyrometallurgical process	*1146*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*1*
Nickel subsulfide	*12035-72-2*	*6.0E+00*	*4/99*	*5.0E-02*	*2/00*	*5.0E-02*	*10/00*	*2.6E-04 TAC*	*9.1E-01*	*8/91*			*0.2443*
NITRIC ACID	7697-37-2	8.6E+01	4/99										1
NITROBENZENE	98-95-3			1.7E+00	1/91								1
NITROGEN DIOXIDE	10102-44-0	4.7E+02	4/99[1/92]	4.7E+02	1/92								1
2-NITROPROPANE	79-46-9			2.0E+01	1/92								1
p-NITROSODIPHENYLAMINE	156-10-5							6.3E-06	2.2E-02	4/99			1
OZONE	10028-15-6	1.8E+02	4/99[1/92]	1.8E+02	1/92								1
PARTICULATE EMISSIONS FROM DIESEL-FUELED ENGINES[TAC] ■	9901			5.0E+00 TAC	8/98			3.0E-04 TAC	1.1E+00	8/98			1
PENTACHLOROPHENOL ... (see Chlorophenols)													
PERCHLOROETHYLENE[TAC] (Tetrachloroethylene)	127-18-4	2.0E+04	4/99	3.5E+01 TAC	10/91			5.9E-06 TAC	2.1E-02	10/91			1
PHENOL	108-95-2	5.8E+03	4/99	2.0E+02	4/00								1

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		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
PHOSGENE	75-44-5	4.0E+00	4/99										1
PHOSPHINE	7803-51-2			8.0E-01	9/02								1
PHOSPHORIC ACID	7664-38-2			7.0E+00	2/00								1
PHOSPHORUS (WHITE)	7723-14-0			7.0E-02	1/91								1
PHTHALIC ANHYDRIDE	85-44-9			2.0E+01	1/01								1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [lowest risk]★	1336-36-3			1.2E+00	1/91	2.0E-05 RfD	1996	2.0E-05	7.0E-02	4/99	7.0E-02	10/00	1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [low risk]★	1336-36-3			1.2E+00	1/91	2.0E-05 RfD	1996	1.1E-04	4.0E-01★		4.0E-01★		1
PCB (POLYCHLORINATED BIPHENYLS) (unspeciated mixture) [high risk]★	1336-36-3			1.2E+00	1/91	2.0E-05 RfD	1996	5.7E-04	2.0E+00	4/99	2.0E+00	10/00	1
PCB (POLYCHLORINATED BIPHENYLS (speciated) v													
3,3',4,4'-TETRACHLOROBIPHENYL (PCB 77)	32598-13-3			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
3,4,4',5-TETRACHLOROBIPHENYL (PCB 81)	70362-50-4			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3,3',4,4'-PENTACHLOROBIPHENYL (PCB 105)	32598-14-4			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3,4,4',5-PENTACHLOROBIPHENYL (PCB 114)	74472-37-0			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3',4,4',5-PENTACHLOROBIPHENYL (PCB 118)	31508-00-6			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
2,3',4,4',5'-PENTACHLOROBIPHENYL (PCB 123)	65510-44-3			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
3,3',4,4',5-PENTACHLOROBIPHENYL (PCB 126)	57465-28-8			4.0E-04	8/03	1.0E-07	8/03	3.8E+00	1.3E+04	8/03	1.3E+04	8/03	1
2,3,3',4,4',5-HEXACHLOROBIPHENYL (PCB 156)	38380-08-4			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (PCB 157)	69782-90-7			8.0E-02	8/03	2.0E-05	8/03	1.9E-02	6.5E+01	8/03	6.5E+01	8/03	1
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 167)	52663-72-6			4.0E+00	8/03	1.0E-03	8/03	3.8E-04	1.3E+00	8/03	1.3E+00	8/03	1
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (PCB 169)	32774-16-6			4.0E-03	8/03	1.0E-06	8/03	3.8E-01	1.3E+03	8/03	1.3E+03	8/03	1
2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (PCB 189)	39635-31-9			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1

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Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
POLYCHLORINATED DIBENZO-*P*-DIOXINS (PCDD) (Treated as 2,3,7,8-TCDD for HRA) TAC ●	1085 1086			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
2,3,7,8-TETRACHLORODIBENZO-*P*-DIOXIN TAC	1746-01-6			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
1,2,3,7,8-PENTACHLORODIBENZO-*P*-DIOXIN	40321-76-4			4.0E-05	8/03	1.0E-08	8/03	3.8E+01	1.3E+05	8/03	1.3E+05	8/03	1
1,2,3,4,7,8-HEXACHLORODIBENZO-*P*-DIOXIN	39227-28-6			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,6,7,8-HEXACHLORODIBENZO-*P*-DIOXIN	57653-85-7			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8,9-HEXACHLORODIBENZO-*P*-DIOXIN	19408-74-3			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-*P*-DIOXIN	35822-46-9			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-*P*-DIOXIN	3268-87-9			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1
POLYCHLORINATED DIBENZOFURANS (PCDF) TAC ● (Treated as 2,3,7,8-TCDD for HRA)	1080			4.0E-05	2/00	1.0E-08	10/00	3.8E+01 TAC	1.3E+05	8/86	1.3E+05 TAC	8/86	1
2,3,7,8-TETRACHLORODIBENZOFURAN	5120-73-19			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8-PENTACHLORODIBENZOFURAN	57117-41-6			8.0E-04	2/00	2.0E-07	10/00	1.9E+00	6.5E+03	4/99	6.5E+03	10/00	1
2,3,4,7,8-PENTACHLORODIBENZOFURAN	57117-31-4			8.0E-05	2/00	2.0E-08	10/00	1.9E+01	6.5E+04	4/99	6.5E+04	10/00	1
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	70648-26-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	57117-44-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	72918-21-9			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	60851-34-5			4.0E-04	2/00	1.0E-07	10/00	3.8E+00	1.3E+04	4/99	1.3E+04	10/00	1
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	67562-39-4			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	55673-89-7			4.0E-03	2/00	1.0E-06	10/00	3.8E-01	1.3E+03	4/99	1.3E+03	10/00	1
1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN	39001-02-0			4.0E-01	8/03	1.0E-04	8/03	3.8E-03	1.3E+01	8/03	1.3E+01	8/03	1

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Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
POLYCYCLIC AROMATIC HYDROCARBON (PAH) [Treated as B(a)P for HRA]	1150 1151							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
BENZ(A)ANTHRACENE	56-55-3							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(A)PYRENE	50-32-8							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
BENZO(B)FLUORANTHENE	205-99-2							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(J)FLUORANTHENE	205-82-3							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
BENZO(K)FLUORANTHENE	207-08-9							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
CHRYSENE	218-01-9							1.1E-05	3.9E-02	4/99 [4/94]	1.2E-01	10/00 [4/94]	1
DIBENZ(A,H)ACRIDINE	226-36-8							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
DIBENZ(A,H)ANTHRACENE	53-70-3							1.2E-03	4.1E+00	4/99 [4/94]	4.1E+00	10/00 [4/94]	1
DIBENZ(A,J)ACRIDINE	224-42-0							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
DIBENZO(A,E)PYRENE	192-65-4							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
DIBENZO(A,H)PYRENE	189-64-0							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
DIBENZO(A,I)PYRENE	189-55-9							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
DIBENZO(A,L)PYRENE	191-30-0							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
7H-DIBENZO(C,G)CARBAZOLE	194-59-2							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
7,12-DIMETHYLBENZ(A)ANTHRACENE	57-97-6							7.1E-02	2.5E+02	4/99 [4/94]	2.5E+02	10/00 [4/94]	1
1,6-DINITROPYRENE	42397-64-8							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
1,8-DINITROPYRENE	42397-65-9							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
INDENO(1,2,3-C,D)PYRENE	193-39-5							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
3-METHYLCHOLANTHRENE	56-49-5							6.3E-03	2.2E+01	4/99 [4/94]	2.2E+01	10/00 [4/94]	1
5-METHYLCHRYSENE	3697-24-3							1.1E-03	3.9E+00	4/99 [4/94]	1.2E+01	10/00 [4/94]	1
NAPHTHALENE	91-20-3			9.0E+00	4/00			3.4E-05	1.2E-01	8/04			1

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5-NITROACENAPHTHENE	602-87-9							3.7E-05	1.3E-01	4/99 [4/94]	1.3E-01	10/00 [4/94]	1
6-NITROCHRYSENE	7496-02-8							1.1E-02	3.9E+01	4/99 [4/94]	1.2E+02	10/00 [4/94]	1
2-NITROFLUORENE	607-57-8							1.1E-05	3.9E-02	4/99 [4/94]	1.2E-01	10/00 [4/94]	1
1-NITROPYRENE	5522-43-0							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
4-NITROPYRENE	57835-92-4							1.1E-04	3.9E-01	4/99 [4/94]	1.2E+00	10/00 [4/94]	1
POTASSIUM BROMATE.... ... (see Bromine & Compounds)													
1,3-PROPANE SULTONE	1120-71-4							6.9E-04	2.4E+00	4/99			1
PROPYLENE (PROPENE)	115-07-1			3.0E+03	4/00								1
PROPYLENE GLYCOL MONOMETHYL ETHER	107-98-2			7.0E+03	2/00								1
PROPYLENE OXIDE	75-56-9	3.1E+03	4/99	3.0E+01	2/00			3.7E-06	1.3E-02	4/99 [7/90]			1
SELENIUM AND COMPOUNDS	7782-49-2 [1170]			2.0E+01	12/01								1
HYDROGEN SELENIDE	7783-07-5	5.0E+00	4/99										1
Selenium sulfide	*7446-34-6*			*2.0E+01*	*12/01*								*1*
SILICA [CRYSTALLINE, RESPIRABLE]	7631-86-9			3.0E+00	2/05								1
SODIUM HYDROXIDE	1310-73-2	8.0E+00	4/99	4.8E+00	7/90								1
STYRENE	100-42-5	2.1E+04	4/99	9.0E+02	4/00								1
SULFATES	9960	1.2E+02	4/99	2.5E+01	1/92								1
SULFUR DIOXIDE	7446-09-5	6.6E+02	4/99[1/92]	6.6E+02	1/92								1
SULFURIC ACID AND OLEUM	7664-93-9	1.2E+02	4/99	*1.0E+00*	*12/01*								1
SULFURIC ACID	*7664-93-9*	*1.2E+02*	*4/99*	1.0E+00	12/01								*1*
SULFUR TRIOXIDE	*7446-71-9*	*1.2E+02*	*4/99*										*1*
OLEUM	*8014-95-7*	*1.2E+02*	*4/99*	*1.0E+00*	*12/01*								*1*
1,1,2,2-TETRACHLOROETHANE	79-34-5							5.8E-05	2.0E-01	4/99			1
TETRACHLOROPHENOLS ... (see Chlorophenols)													
2,4,5-TRICHLOROPHENOL ... (see Chlorophenols)													
2,4,6-TRICHLOROPHENOL ... (see Chlorophenols)													
THIOACETAMIDE	62-55-5							1.7E-03	6.1E+00	4/99			1
TOLUENE	108-88-3	3.7E+04	4/99	3.0E+02	4/00								1

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Table 1
CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES

Chemical	Chemical Abstract Number	Noncancer Effects						Cancer Risk					
		Acute Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Inhalation ($\mu g/m^3$)	Date Value Reviewed [Added]	Chronic Oral (mg/kg/d)	Date Value Reviewed [Added]	Inhalation Unit Risk $(\mu g/m^3)^{-1}$	Inhalation Cancer Potency Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	Oral Slope Factor $(mg/kg\text{-}d)^{-1}$	Date Value Reviewed [Added]	MWAF
Toluene diisocyantates	*26471-62-5 1204*			*7.0E-02*	*1/01*			*1.1E-05*	*3.9E-02*	*4/99*			*1*
TOLUENE-2,4-DIISOCYANATE	584-84-9			7.0E-02	1/01			1.1E-05	3.9E-02	4/99			1
TOLUENE-2,6-DIISOCYANATE	91-08-7			7.0E-02	1/01			1.1E-05	3.9E-02	4/99			1
1,1,2-TRICHLOROETHANE (Vinyl trichloride)	79-00-5							1.6E-05	5.7E-02	4/99			1
TRICHLOROETHYLENE[TAC]	79-01-6			6.0E+02	4/00			2.0E-06 TAC	7.0E-03	10/90			1
TRIETHYLAMINE	121-44-8	2.8E+03	4/99	2.0E+02	9/02								1
URETHANE (Ethyl carbamate)	51-79-6							2.9E-04	1.0E+00	4/99 [7/90]			1
Vanadium Compounds	*N/A*												*1*
Vanadium (fume or dust)	*7440-62-2*	*3.0E+01*	*4/99*										*1*
VANADIUM PENTOXIDE	1314-62-1	3.0E+01	4/99										1
VINYL ACETATE	108-05-4			2.0E+02	12/01								1
VINYL BROMIDE	593-60-2			7.0E+00 RfC	1996								1
VINYL CHLORIDE[TAC] (Chloroethylene)	75-01-4	1.8E+05	4/99	2.6E+01	7/90			7.8E-05 TAC	2.7E-01	12/90			1
VINYLIDENE CHLORIDE (1,1-Dichloroethylene)	75-35-4			7.0E+01	1/01								1
XYLENES (mixed isomers)	1330-20-7 1210	2.2E+04	4/99	7.0E+02	4/00								1
m-XYLENE	108-38-3	2.2E+04	4/99	7.0E+02	4/00								1
o-XYLENE	95-47-6	2.2E+04	4/99	7.0E+02	4/00								1
p-XYLENE	106-42-3	2.2E+04	4/99	7.0E+02	4/00								1
ZINC AND COMPOUNDS	7440-66-6 [1211]			3.5E+01	7/90								1
Zinc oxide	*1314-13-2*			*3.5E+01*	*7/90*								*0.8034*

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Table 1
CONSOLIDATED TABLE OF OEHHA/ARB APPROVED RISK ASSESSMENT HEALTH VALUES ❁

Purpose: The purpose of this reference table is to provide a quick list of all health values that have been approved by the Office of Environmental Health Hazard Assessment (OEHHA) and the Air Resources Board (ARB) for use in facility health risk assessments conducted for the AB 2588 Air Toxics Hot Spots Program. The OEHHA has developed and adopted new risk assessment guidelines that update and replace the California Air Pollution Control Officers Association's (CAPCOA) *Air Toxics "Hot Spots" Program Revised 1992 Risk Assessment Guidelines, October 1993*. The OEHHA has adopted five technical support documents for these guidelines.

This table lists the OEHHA adopted inhalation and oral cancer slope factors, noncancer acute Reference Exposure Levels (RELs), and inhalation and oral noncancer chronic RELs. In addition, it lists the substances in Appendix A-I *(Substances For Which Emissions Must Be Quantified)* and Appendix F (*Criteria For Inputs For Risk Assessment Using Screening Air Dispersion Modeling*) of the ARB's *Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines (EICG) (July 1997)*. OEHHA is still in the process of adopting new noncancer chronic RELs. Therefore, new health values will periodically be added to, or deleted from, this table. Users of this table are advised to monitor the OEHHA website (*www.oehha.ca.gov*) for any updates to the health values.

❁ Substances written in *italics* do not have explicit OEHHA approved health values, but are included in this table to clarify applicability of OEHHA adopted heath effects values to individual or grouped substances listed in the *Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines*, Appendix A-I list of *"Substances For Which Emissions Must Be Quantified"*.

▼ Chemical Abstract Service Number (CAS): For chemical groupings and mixtures where a CAS number is not applicable, the 4-digit code used in the *Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines (EICG) Report* is listed. The 4-digit codes enclosed in brackets [ ] are codes that have been phased out, but may still appear on previously reported Hot Spots emissions. For information on the origin and use of the 4-digit code, see the EICG report.

◆ Date Value Reviewed [Added]: These columns list the date that the health value was last reviewed by OEHHA and the Scientific Review Panel, and/or approved for use in the AB 2588 Air Toxics Hot Spots Program. If the health value is unchanged since it was first approved for use in the Hot Spots Program, then the date that the value was first approved for use by CAPCOA is listed within the brackets [ ].

- April 1999 is listed for the cancer potency values and noncancer acute RELs, which have been adopted by the OEHHA as part of the AB 2588 Hot Spot Risk Assessment Guidelines.
- February 2000, April 2000, January 2001, and December 2001 are listed for the first set of 22, the second set of 16, the third set of 22, and the fourth set of 12 noncancer chronic RELs, respectively. The chronic REL for carbon disulfide was adopted in May 2002. Chronic RELs for phosphine and triethylamine were adopted in September 2002. Chronic RELs for fluorides including hydrogen fluoride were adopted August 2003. Chronic REL for silica [crystalline respirable] was adopted February 2005.
- October 2000 is listed for the oral chronic RELs and oral cancer slope factors. 1996 is listed for the U.S. EPA Reference Concentrations. Dates of 1990-1992 and 1996 are listed for chronic RELs that may eventually be dropped or replaced.
- Cancer potency value adopted for naphthalene in August 2004.
- For the substances identified as Toxic Air Contaminants, the Air Resources Board hearing date is listed. The dates for acetaldehyde, benzo[a]pyrene, and methyl tertiary-butyl ether represent the dates the values were approved by the Scientific Review Panel.

❣ Inhalation cancer potency factor: The "unit risk factor" has been replaced in the new risk assessment algorithms by a factor called the "inhalation cancer potency factor". Inhalation cancer potency factors are expressed as units of inverse dose [i.e., $(mg/kg\text{-}day)^{-1}$]. They were derived from unit risk factors [units = $(ug/m^3)^{-1}$] by assuming that a receptor weighs 70 kilograms and breathes 20 cubic meters of air per day. The inhalation potency factor is used to calculate a potential inhalation cancer risk using the new risk assessment algorithms defined in the OEHHA, *Air Toxics Hot Spots Program; Part IV; Technical Support Document for Exposure Assessment and Stochastic Analysis (September 2000)*.

♣ Molecular Weight Adjustment Factor: Molecular weight adjustment factors (MWAF) are only to be used when a toxic metal has a cancer potency factor. For most of the Hot Spots toxic metals, the OEHHA cancer potency factor applies to the weight of the toxic metal atom contained in the overall compound. Some of the Hot Spots compounds contain various elements along with the toxic metal atom (e.g., "Nickel hydroxide", CAS number 12054-48-7, has a formula of H_2NiO_2). Therefore, an adjustment to the reported pounds of the overall compound is needed before applying the OEHHA cancer potency factor for "Nickel and compounds" to such a compound. This ensures that the cancer potency factor is applied only to the fraction of the overall weight of the emissions that are associated with health effects of the metal. In other cases, the Hot Spots metals are already reported as the metal atom equivalent (e.g., CAS 7440-02-0, "Nickel"), and these cases do not use any further molecular weight adjustment. (Refer to Note [7] in Appendix A, List of Substances in the EICG Report for further information on how the emissions of various Hot Spots metal compounds are reported.) The appropriate molecular weight adjustment factors (MWAF) to be used along with the OEHHA cancer potency factors for Hot Spots metals can be found in the MWAF column of this table.

So, for example, assume 100 pounds of "Nickel hydroxide" emissions are reported under CAS number 12054-48-7. To get the Nickel atom equivalent of these emissions, multiply by the listed MWAF (0.6332) for Nickel hydroxide:

- 100 pounds x 0.6332 = 63.32 pounds of Nickel atom equivalent

This step should be completed prior to applying the OEHHA cancer potency factor for "Nickel and compounds" in a calculation for a prioritization score or risk assessment calculation. (For more information see Chapter 8 of OEHHA's document, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.)

Note: The value listed in the MWAF column for Asbestos is not a molecular weight adjustment. This is a conversion factor for adjusting mass to fibers or structures. See Appendix C of OEHHA's document *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for more information on Asbestos, or see the EICG report for reporting guidance. Also see the Asbestos footnote (designated by the symbol ⌑)

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N/A	Not Applicable
RfC/RfD	United States Environmental Protection Agency (U.S. EPA) Reference Concentrations (RfCs) and oral Reference Doses (RfDs) from the U.S. EPA Integrated Risk Information System (1996) have been added if the U.S. EPA health value and/or endpoint was different from the 1993 CAPCOA value or endpoint and OEHHA has not adopted a new value as part of the Hot Spot Risk Assessment Guidelines. The RfCs and RfDs listed meet the criteria of Appendix F of the Air Resources Board's Emission Inventory Criteria and Guidelines Report effective July 1, 1997. These RfC/RfDs may be replaced by new OEHHA values in the future.
TAC	Toxic Air Contaminant: The Air Resources Board has identified this substance as a Toxic Air Contaminant.
AveP	The averaging period of noncancer acute RELs is generally a one-hour exposure. However, some are based on several hour exposure for reproductive/developmental endpoints (see section 1.6 of OEHHA's technical support document for *The Determination of Acute Reference Exposure Levels for Airborne Toxicants, March 1999).* Typically the RELs for the following substances are compared to modeled emission concentrations of the same duration rather than maximum one-hour concentrations (e.g., a 4-hour REL should be compared to the maximum 4-hour average concentration from the air dispersion model). 4-Hour: Arsenic and Inorganic Arsenic Compounds 6-Hour: Benzene, Carbon disulfide, Ethylene glycol monoethyl ether, Ethylene glycol monoethyl ether acetate, Ethylene glycol monomethyl ether 7-Hour: Carbon tetrachloride, Chloroform
¤	Asbestos: The units for the Inhalation Cancer Potency factor for asbestos are (100 PCM fibers/m^3)$^{-1}$. A conversion factor of 100 fibers/0.003 µg can be multiplied by a receptor concentration of asbestos expressed in µg/m^3. Unless other information necessary to estimate the concentration (fibers/m^3) of asbestos at receptors of interest is available. A unit risk factor of 1.9 E 10^{-4} (µg/m^3)$^{-1}$ and an inhalation cancer potency factor of 2.2 E 10^{+2} (mg/kg BW * day)$^{-1}$ are available. For more information on asbestos quantity conversion factors, see Appendix C of OEHHA's *The Air Toxics Hot Spots Program Risk Assessment Guidelines; Part II; Technical Support Document for Describing Available Cancer Potency Factors*, and Appendix C of OEHHA's document *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.*
∅	Hexavalent Chromium: The oral cancer slope factor for chromium 6+ and compounds has been withdrawn by the Office of Environmental Health Hazard Assessment.
✷	Inorganic Lead: Inorganic Lead was identified by the Air Resources Board as a Toxic Air Contaminant in April 1997. Since infomation on noncancer health effects show no identified threshold, no Reference Exposure Level has been developed. The document, *Risk Management Guidelines for New, Modified, and Existing Sources of Lead, March 2001,* has been developed by ARB and OEHHA staff for assessing noncancer health impacts from sources of lead. See Appendix F of OEHHA's document *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for an overview of how to evaluate noncancer impacts from exposure to lead using these risk management guidelines.
❖	Polycyclic Aromatic Hydrocarbons (PAHs): These substances are PAH or PAH-derivatives that have OEHHA-developed Potency Equivalency Factors (PEFs) which were approved by the Scientific Review Panel in April 1994 (see ARB document entitled *Benzo[a]pyrene as a Toxic Air Contaminant*). PAH inhalation slope factors listed here have been adjusted by the PEFs. See Appendix G of OEHHA's document *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for more information. See section 8.2.3 of OEHHA's *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for conducting health risks when total (unspeciated) PAHs are reported.
★	Polychlorinated Biphenyls: (unspeciated mixtures) Lowest Risk: For use in cases where congeners with more than four chlorines comprise less than one-half percent of total polychlorinated biphenyls. High Risk: For use in cases where congeners with more than four chlorines do not comprise less than one-half percent of total polychlorinated biphenyls. Low Risk: This number would not ordinarily be used in the Hot Spots program. Chronic Oral: The chronic oral value is U.S. EPA's 1996 oral Reference Dose for Aroclor-1254.
V	Polychlorinated Biphenyls (speciated): Values calculated using WHO_{97} TEF procedure. See OEHHA memo dated August 29, 2003.
•	Polychlorinated Dibenzo-*p*-dioxins and Polychlorinated Dibenzofurans (also referred to as chlorinated dioxins and dibenzofurans): The OEHHA has adopted the World Health Organization 1997 (WHO_{-97}) Toxicity Equivalency Factor scheme for evaluating the cancer risk due to exposure to samples containing mixtures of polychlorinated dibenzo-*p*-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF) and determining cancer risks for a number of specific PCB congeners. See Appendix A of OEHHA's *Technical Support Document For Describing Available Cancer Potency Factors* for more information about the scheme. See Appendix E of OEHHA's *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for the methodology for calculating 2,3,7,8-equivalents for PCDD, PCDFs and a number of specific PCB congeners. See section 8.2.3 of OEHHA's *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for conducting health risks when total (unspeciated) chlorinated dioxins and furans are reported.
■	Particulate Emissions from Diesel-Fueled Engines: The inhalation cancer potency factor and chronic REL were derived from whole diesel exhaust and should be used only for impacts from the inhalation pathway. The inhalation impacts from speciated emissions from diesel-fueled engines are already accounted for in the inhalation cancer potency factor and REL. However, at the discretion of the risk assessor, speciated emissions from diesel-fueled engines may be used to estimate acute noncancer health impacts or the contribution to cancer risk or chronic noncancer health impacts for the non-inhalation exposure pathway. See Appendix D of OEHHA's document *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* for more information.

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