DRAFT Section 69021: Appendix I. California OEHHA ~~based~~ Toxicity Criteria

Table A

Line #		Analyte	CAS Registry Number	Cancer Potency Values: Oral Slope Factor (CSF_O) CSFo $(mg/kg\text{-}d)^{-1}$	Reference	Cancer Potency Values: Inhalation Unit Risk (IUR) IUR $(\mu g/m^3)^{-1}$	Reference	Non-cancer Health-Hazard Values: Oral Reference Dose (RfD_O) RfDo (mg/kg-d)	Reference	Chronic Reference Exposure Level (REL) ~~or Reference Concentration (RfC)~~ REL ~~or RfC~~ $(\mu g/m^3)$	Reference
1		Acetaldehyde	75-07-0	--	--	2.70E-06	OEHHA	--	--	--	--
2		Ammonia	7664-41-7	--	--	--	--	--	--	2.00E+02	OEHHA
3		Arsenic	7440-38-2	9.50E+00	OEHHA PHG	~~3.30E-03~~ --	~~OEHHA~~ --	3.50E-06	OEHHA	1.50E-02	OEHHA
4		Arsine	7784-42-1	--	--	--	--	3.50E-06	OEHHA	1.50E-02	OEHHA
5		Benzene	71-43-2	1.00E-01	OEHHA	2.90E-05	OEHHA	--	--	3.00E+00	OEHHA
6		Benzidine	92-87-5	5.00E+02	OEHHA	1.40E-01	OEHHA	--	--	--	--
7		Benzo[a]anthracene	56-55-3	--	--	1.10E-04	OEHHA	--	--	--	--
8		Benzo[a]pyrene	50-32-8	--	--	1.10E-03	OEHHA	--	--	--	--
9		Benzo[b]fluoranthene	205-99-2	--	--	1.10E-04	OEHHA	--	--	--	--
10		Benzo[k]fluoranthene	207-08-9	--	--	1.10E-04	OEHHA	--	--	--	--
11		Beryllium	7440-41-7	--	--	--	--	2.00E-04	OEHHA PHG	7.00E-03	OEHHA
12		Beryllium oxide	1304-56-9	--	--	--	--	2.00E-04	OEHHA PHG	7.00E-03	OEHHA
13		Beryllium sulfate	13510-49-1	--	--	--	--	2.00E-04	OEHHA PHG	7.00E-03	OEHHA
14		Boron Trifluoride	7637-07-2	--	--	--	--	4.00E-02	OEHHA (Fluorides)	--	--
~~15~~		~~Bromoform~~	~~75-25-2~~	~~1.10E-02~~	~~OEHHA~~	--	--	--	--	--	--
~~16~~	15	1,3-Butadiene	106-99-0	6.00E-01	OEHHA	1.70E-04	OEHHA	--	--	2.00E+00	OEHHA
~~17~~		~~2-Butoxyethanol~~	~~111-76-2~~	--	--	--	--	--	--	~~8.20E+01~~	~~OEHHA~~
~~18~~	16	Cadmium	7440-43-9	--	--	4.20E-03	OEHHA	--	--	--	--
~~19~~	17	Carbon tetrachloride	56-23-5	~~1.50E-01~~ --	~~OEHHA~~ --	~~4.20E-05~~ --	~~OEHHA~~ --	--	--	4.00E+01	OEHHA
~~20~~	18	Carbonyl sulfide	463-58-1	--	--	--	--	--	--	1.00E+01	OEHHA
~~21~~		~~Chlordane~~	~~57-74-9~~	~~1.30E+00~~	~~OEHHA~~	~~3.40E-04~~	~~OEHHA~~	--	--	--	--
~~22~~	19	Chromium (VI)	18540-29-9	5.00E-01	OEHHA PHG	1.50E-01	OEHHA	--	--	--	--
~~23~~	20	Chrysene	218-01-9	--	--	1.10E-05	OEHHA	--	--	--	--
~~24~~	21	Dibenz[a,h]anthracene	53-70-3	4.10E+00	OEHHA ECP	1.20E-03	OEHHA	--	--	--	--
~~25~~	22	3,3'-Dichlorobenzidine	91-94-1	1.20E+00	OEHHA	3.40E-04	OEHHA	--	--	--	--
~~26~~	23	1,1-Dichloroethene	75-35-4	--	--	--	--	--	--	7.00E+01	OEHHA
~~27~~		~~1,3-Dichloropropene~~	~~542-75-6~~	~~9.10E-02~~	~~OEHHA~~	~~1.60E-05~~	~~OEHHA~~	--	--	--	--
~~28~~		~~cis-1,3-Dichloropropene~~	~~10061-01-5~~	~~9.10E-02~~	~~OEHHA (1,3-Dichloropropene)~~	~~1.60E-05~~	~~OEHHA (1,3-Dichloropropene)~~	--	--	--	--
~~29~~		~~trans-1,3-Dichloropropene~~	~~10061-02-6~~	~~9.10E-02~~	~~OEHHA (1,3-Dichloropropene)~~	~~1.60E-05~~	~~OEHHA (1,3-Dichloropropene)~~	--	--	--	--
~~30~~		~~1,4-Dioxane~~	~~123-91-1~~	--	--	~~7.70E-06~~	~~OEHHA~~	--	--	--	--
~~31~~	24	Epichlorohydrin	106-89-8	8.00E-02	OEHHA	2.30E-05	OEHHA	--	--	~~3.00E+00~~ --	~~OEHHA~~ --
~~32~~	25	bis(2-Chloroethyl) ether	111-44-4	2.50E+00	OEHHA	7.10E-04	OEHHA	--	--	--	--
~~33~~	26	Ethylene dibromide	106-93-4	--	--	--	--	--	--	8.00E-01	OEHHA
~~34~~	27	Formaldehyde	50-00-0	--	--	--	--	--	--	9.00E+00	OEHHA
~~35~~	28	HCH (mixed isomers)	608-73-1	4.00E+00	OEHHA	1.10E-03	OEHHA	--	--	--	--
~~36~~	29	Hexachlorobenzene	118-74-1	1.80E+00	OEHHA	5.10E-04	OEHHA	--	--	--	--
~~37~~	30	Hexachlorodibenzo-p-dioxin Mixture (2:1 1,2,3,7,8,9- and 1,2,3,6,7,8-)	Hexachlorodibenzo-p-dioxin Mixture	--	--	3.80E+00	OEHHA (WHO-05 TEF)	--	--	--	--
~~38~~	31	Hydrochloric acid	7647-01-0	--	--	--	--	--	--	9.00E+00	OEHHA
~~39~~	32	Indeno[1,2,3-cd]pyrene	193-39-5	--	--	1.10E-04	OEHHA	--	--	--	--
~~40~~	33	Lead and compounds[#]	7439-92-1	--	--	--	--	~~1.0 ug/dL~~ **See Table B**	OEHHA	--	--
~~41~~	34	Lead subacetate	1335-32-6	3.80E-02	OEHHA	1.10E-05	OEHHA	--	--	--	--

Table A

Line #		Analyte	CAS Registry Number	Cancer Potency Values: Oral Slope Factor (CSF_O) CSFo (mg/kg-d)$^{-1}$	Cancer Potency Values: Oral Slope Factor (CSF_O) Reference	Cancer Potency Values: Inhalation Unit Risk (IUR) IUR ($\mu g/m^3$)$^{-1}$	Cancer Potency Values: Inhalation Unit Risk (IUR) Reference	Non-cancer Health-Hazard Values: Oral Reference Dose (RfD_O) RfDo (mg/kg-d)	Non-cancer Health-Hazard Values: Oral Reference Dose (RfD_O) Reference	Non-cancer Health-Hazard Values: Chronic Reference Exposure Level (REL) ~~or Reference Concentration (RfC)~~ REL ~~or RfC~~ ($\mu g/m^3$)	Non-cancer Health-Hazard Values: Chronic Reference Exposure Level (REL) ~~or Reference Concentration (RfC)~~ Reference
~~42~~		~~Manganese (non-diet)~~	~~7439-96-5 (non-diet)~~	--	--	--	--	--	--	~~9.00E-02~~	~~OEHHA~~
~~43~~	35	Mercuric Chloride	7487-94-7	--	--	--	--	1.60E-04	OEHHA REL	3.00E-02	OEHHA
~~44~~	36	Mercury	7439-97-6	--	--	--	--	1.60E-04	OEHHA REL	3.00E-02	OEHHA
~~45~~	37	Methylene Chloride	75-09-2			1.00E-06	OEHHA	--	--	4.00E+02	OEHHA
~~46~~	38	4,4'-Methylene-bis(2-chloroaniline)	101-14-4	1.50E+00	OEHHA	--	--	--	--	--	--
~~47~~	39	Methylene diphenyl diisocyanate	101-68-8	--	--	--	--	--	--	8.00E-02	OEHHA
~~48~~	40	Polymeric methylenediphenyl diisocyanate	9016-87-9	--	--	--	--	--	--	8.00E-02	OEHHA
~~49~~	41	Mirex	2385-85-5	1.80E+01	OEHHA	5.10E-03	OEHHA	--	--	--	--
~~50~~	42	1-Naphthylamine	134-32-7	1.80E+00	OEHHA	--	--	--	--	--	--
~~51~~	43	Nickel	7440-02-0	--	--	2.60E-04	OEHHA	1.10E-02	OEHHA	1.40E-02	OEHHA
~~52~~	44	Nickel Hydroxide	12054-48-7	--	--	2.60E-04	OEHHA	1.10E-02	OEHHA	1.40E-02	OEHHA
~~53~~	45	Nickel Oxide	1313-99-1	--	--	2.60E-04	OEHHA	1.10E-02	OEHHA	2.00E-02	OEHHA
~~54~~	46	Nickel refinery dust	Nickel refinery dust	--	--	2.60E-04	OEHHA	1.10E-02	OEHHA	1.40E-02	OEHHA
~~55~~	47	Nickel subsulfide	12035-72-2	--	--			1.10E-02	OEHHA	1.40E-02	OEHHA
~~56~~	48	N-Nitroso-di-n-butylamine	924-16-3	1.10E+01	OEHHA	3.10E-03	OEHHA	--	--	--	--
~~57~~	49	Styrene	100-42-5	--	--	--	--	--	--	9.00E+02	OEHHA
~~58~~	50	Tetrachloroethene	127-18-4	5.40E-01	OEHHA PHG	6.10E-06	OEHHA	--	--	--	--
~~59~~	51	Toluene	108-88-3	--	--	--	--	--	--	3.00E+02	OEHHA
~~60~~	52	Toluene 2,4/2,6-Diisocyanates	26471-62-5	3.90E-02	OEHHA	--	--	--	--	8.00E-03	OEHHA
~~61~~	53	Toluene-2,4-diisocyanate	584-84-9	3.90E-02	OEHHA (toluene diisocyantes)	--	--	--	--	8.00E-03	OEHHA (toluene diisocyantes)
~~62~~	54	Toluene-2,6-diisocyanate	91-08-7	3.90E-02	OEHHA (toluene diisocyantes)	--	--	--	--	8.00E-03	OEHHA (toluene diisocyantes)
~~63~~	55	o-Toluidine	95-53-4	1.80E-01	OEHHA	--	--	--	--	--	--
~~64~~	56	Toxaphene	8001-35-2	1.20E+00	OEHHA	--	--	--	--	--	--
~~65~~	57	1,1,1-Trichloroethane	71-55-6	--	--	--	--	--	--	1.00E+03	OEHHA
~~66~~	58	2,4,6-Trichlorophenol	88-06-2	7.00E-02	OEHHA	2.00E-05	OEHHA	--	--	--	--
~~67~~	59	Vinyl chloride	75-01-4	~~0.27~~ --	~~OEHHA~~ --	7.80E-05	OEHHA	--	--	--	--

FOOTNOTES:

"--" = ~~No OEHHA toxicity value~~

~~(mg/kg-d)$^{-1}$ = per (milligram per kilogram--day)~~

~~($\mu g/m^3$)$^{-1}$ = per (microgram per cubic meter)~~

CAS = Chemical Abstracts Service

~~DTSC = California Department of Toxic Substances Control~~

IUR = inhalation unit-risk factor

OEHHA = California Office of Environmental Health Hazard Assessment

PHG = Public Health Goal ~~toxicity factor~~

RfD = chronic oral reference dose

~~RfD for Lead is expressed as ug/dL (microgram per deciliter)~~

REL = chronic reference exposure level

CSFo = oral slope factor

~~SL = screening level~~

WHO-05 TEF = 2005 World Health Organization, Toxicity Equivalency Factor

DRAFT Section 69021: Appendix I. California OEHHA ~~based~~ Toxicity Criteria

Table B

Line #	Analyte	CAS Registry Number	Non-Cancer Health-Hazard Values: Benchmark Incremental Change in Blood Lead (µg/dL)	Reference
1	Lead and compounds[#]	7439-92-1	1.0	OEHHA

FOOTNOTES:

[#] The toxicity criterion for lead represents a benchmark incremental change in blood lead concentration. The units are in microgram per deciliter (ug/dL).

CAS = Chemical Abstracts Service

OEHHA = California Office of Environmental Health Hazard Assessment