Appendix B

Longview Air Toxics Health Risk Screening Analysis Summary - All Compounds

Compound	CAS No.	Longview Frequency Measured >MRL (% of samples)	Longview Annual Average Concentration (ug/m^3)	Screening Values: **ODEQ** Ambient Benchmark Concentration - ABC (ug/m^3)	Screening Values: **EPA** Final Chronic Screening Value (ug/m^3)	Screening Values: **WDOE** Acceptable Source Impact Level - ASIL (ug/m^3)	Potential Health Concern?
1,1,2,2-Tetrachloroethylene	127-18-4	4.8%	< 0.95	35	**0.17**	1.1	Possible
1,2,4-Trimethylbenzene	95-63-6	54.0%	< 1.16	na	na	na	No
1,2-Dimethylbenzene	95-47-6	52.4%	< 0.86	700	10	1500	No
1,3,5-Trimethylbenzene	108-67-8	12.7%	< 0.58	na	na	na	No
1,4/1,3-Dimethylbenzene	108-38-3	74.6%	< 3.14	700	10	1500	No
2,2,4-Trimethylpentane	540-84-1	3.2%	< 0.49	na	na	na	No
2,5-Dimethylbenzaldehyde[a.]	5779-94-2	1.7%	< 0.084	na	na	na	No
2-Butanone (MEK)	78-93-3	89.8%	0.358	na	500	1000	No
2-Hexanone	591-78-6	23.8%	< 0.49	na	na	67	No
4-Ethyltoluene	622-96-8	4.8%	< 0.52	na	na	na	No
4-Methyl-2-Pentanone (MIBK)	108-10-1	4.8%	< 0.44	na	300	680	No
Acetaldehyde	75-07-0	98.3%	1.362	**0.45**	**0.45**	**0.45**	Yes
Acetone	67-64-1	100.0%	1.44	na	na	5900	No
Arsenic	7440-38-2	100.0%	1.20E-03	**0.0002**	**0.00023**	**0.00023**	Yes
Benzaldehyde	100-52-7	94.9%	0.178	na	na	na	No
Benzene	71-43-2	82.5%	1.27	**0.13**	**0.13**	**0.12**	Yes
Beryllium	7440-41-7	5.3%	< 1.00E-05	0.0004	0.00042	0.00042	No
Butyraldehyde	123-72-8	98.3%	0.217	na	na	na	No
Cadmium	7440-43-9	47.4%	< 2.28E-04	0.0006	0.00056	0.00056	No
Carbon Disulfide [a.]	75-15-0	1.6%	< 0.33	800	70	100	No
Carbon Tetrachloride	56-23-5	11.1%	< 0.67	**0.07**	**0.067**	**0.067**	Possible
Chloroethane[a.]	75-00-3	1.6%	< 0.28	na	1000	10000	No
Chloromethane	74-87-3	92.1%	0.84	90	9	340	No
Chromium [a.]	1606-583-1	1.8%	< 3.29E-03	na	**0.000083**	0.17 [b.]	Possible
Cobalt	7440-48-4	82.5%	3.24E-04	0.1	0.01	0.17	No
Crotonaldehyde	4170-30-3	15.3%	< 0.071	na	na	20	No
Cyclohexane	110-82-7	15.9%	< 0.66	na	na	3400	No
Dichlorodifluoromethane	75-71-8	92.1%	1.95	na	na	16000	No
Dichlorotetrafluoroethane[a.]	76-14-2	1.6%	< 0.73	na	na	23000	No
Ethyl Benzene	100-41-4	38.1%	< 0.71	na	100	1000	No
Formaldehyde	50-00-0	100.0%	0.792	3	0.98	**0.077**	Yes
n-Heptane	142-82-5	57.1%	< 1.09	na	na	5500	No
Hexaldehyde	66-25-1	98.3%	0.179	na	na	na	No
n-Hexane	110-54-3	12.7%	< 0.4	7000	20	200	No
Isopropanol	67-63-0	84.1%	1.66	na	na	3300	No
Isovaleraldehyde	590-86-3	78.0%	0.176	na	na	na	No
Lead	7439-92-1	100.0%	5.16E-03	0.5	0.15	0.5	No
Manganese	7439-96-5	100.0%	7.80E-03	0.2	**0.005**	0.4	Yes
Methylene Chloride	75-09-2	55.6%	< 0.67	2.1	2.1	**0.56**	Possible
Naphthalene	91-20-3	58.1%	< 1.70E-03	0.03	0.029	170	No
Nickel	7440-02-0	52.6%	< 1.84E-03	0.05	0.0021	0.0021	No
PAH							
Benzo[e]pyrene[a.]	192-97-2	1.6%	< 4.07E-04	.0009 (c.)	0.3	na	No
Coronene	191-07-1	14.5%	< 8.50E-04	na	na	na	No
Dibenzofuran	132-64-9	80.6%	1.69E-03	na	na	na	No
Dibenzothiophene	132-65-0	58.1%	< 5.45E-04	na	na	na	No
Perylene	198-55-0	0.0%	< 4.11E-04	na	na	na	No

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PAH (OR Group) - ABC [c.]	na	50.0%	< 1.10E-03	**0.0009 (c.)**	na	na	Possible
Acenaphthene	83-32-9	66.1%	< 1.10E-03		0.3		
Acenaphthylene	208-96-8	53.2%	< 1.10E-03		0.3		
Anthracene	120-12-7	80.6%	1.36E-03		0.3		
Benzo[a]anthracene	56-55-3	29.0%	< 5.27E-04		0.0091		
Benzo[a]pyrene	50-32-8	32.3%	< 4.36E-04		0.00091		
Benzo[b]fluoranthene	205-99-2	45.2%	< 7.23E-04		0.0091		
Benzo[g,h,i]perylene	191-24-2	27.4%	< 4.73E-04		0.3		
Benzo[k]fluoranthene	207-08-9	21.0%	< 3.70E-04		0.0091		
Chrysene	218-01-9	27.4%	< 5.16E-04		0.091		
Dibenz[a,h]anthracene	53-70-3	12.9%	< 4.24E-04		0.00083		
Fluoranthene	206-44-0	82.3%	2.40E-03		0.3		
Fluorene	86-73-7	80.6%	3.00E-03		0.3		
Indeno[1,2,3-cd]pyrene	193-39-5	30.6%	< 5.52E-04		0.0091		
Phenanthrene	85-01-8	80.6%	1.09E-03		0.3		
Pyrene	129-00-0	80.6%	1.80E-03		0.3		
PAH (WA Group) - ABC [d.]	na	28.3%	< 3.50E-03	na	na	**0.00048** [d.]	Possible
Benzo[a]anthracene	56-55-3	29.0%	< 5.27E-04		0.0091		
Benzo[a]pyrene	50-32-8	32.3%	< 4.36E-04		0.00091		
Benzo[b]fluoranthene	205-99-2	45.2%	< 7.23E-04		0.0091		
Benzo[k]fluoranthene	207-08-9	21.0%	< 3.70E-04		0.0091		
Chrysene	218-01-9	27.4%	< 5.16E-04		0.091		
Dibenz[a,h]anthracene	53-70-3	12.9%	< 4.24E-04		0.00083		
Indeno[1,2,3-cd]pyrene	193-39-5	30.6%	< 5.52E-04		0.0091		
Propionaldehyde	123-38-6	96.6%	0.232	na	na	na	No
Selenium	7782-49-2	57.9%	< 1.70E-04	na	2	0.67	No
Styrene	100-42-5	6.3%	< 0.49	na	100	1000	No
m-Tolualdehyde	620-23-5	22.0%	< 0.087	na	na	na	No
o-Tolualdehyde	529-20-4	5.1%	< 0.084	na	na	na	No
p-Tolualdehyde	104-87-0	6.8%	< 0.084	na	na	na	No
Toluene	108-88-3	92.1%	3.57	400	40	400	No
Trichloroethylene	79-01-6	9.5%	< 0.6	**0.5**	**0.5**	**0.59**	Possible
Trichlorofluoromethane	75-69-4	44.4%	< 0.85	na	na	19000	No
Trichlorotrifluoroethane	26523-64-8	27.0%	< 0.83	na	na	27000	No
Valeraldehyde	110-62-3	59.3%	< 0.075	na	na	590	No
1,1,1-Trichloroethane	71-55-6	0.0%	< 0.571	1000	100	6400	No
1,1,2,2-Tetrachloroethane	79-34-5	0.0%	< 0.719	na	**0.017**	23	Possible
1,1,2-Trichloroethane	79-00-5	0.0%	< 0.571	na	**0.063**	180	Possible
1,1-Dichloroethane	75-34-3	0.0%	< 0.424	na	0.63	2700	No
1,1-Dichloroethylene	75-35-4	0.0%	< 0.415	na	20	67	No
1,2,4-Trichlorobenzene	120-82-1	0.0%	< 0.777	na	20	120	No
1,2-Dibromoethane (EDB)	106-93-4	0.0%	< 0.804	**0.002**	**0.002**	**0.005**	Possible
1,2-Dichlorobenzene	95-50-1	0.0%	< 0.629	na	na	1000	No
1,2-Dichloroethane	107-06-2	0.0%	< 0.424	**0.04**	**0.004**	**0.038**	Possible
1,2-Dichloropropane	78-87-5	0.0%	< 0.484	na	**0.053**	4	Possible
1,3-Butadiene	106-99-0	0.0%	< 0.232	**0.03**	**0.03**	**0.004**	Possible
1,3-Dichlorobenzene	541-73-1	0.0%	< 0.063	na	na	na	No
1,4-Dichlorobenzene	106-46-7	0.0%	< 0.629	**0.09**	**0.091**	1.5	Possible
3-Chloropropene	107-05-1	0.0%	< 0.327	na	**0.1**	1	Possible
Acrylonitrile	107-13-1	0.0%	< 0.227	**0.01**	**0.015**	**0.015**	Possible
Bromodichloromethane	75-27-4	0.0%	< 0.701	na	na	na	No
Bromoform	75-25-2	0.0%	< 1.082	na	**0.91**	**0.91**	Possible

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Bromomethane	74-83-9	0.0%	< 0.407	5	0.5	5	No
Chlorobenzene	108-90-7	0.0%	< 0.482	na	100	150	No
Chloroform	67-66-3	0.0%	< 0.511	98	9.8	**0.043**	Possible
cis-1,2-Dichloroethylene	156-59-2	0.0%	< 0.415	na	na	na	No
cis-1,3-Dichloropropene	10061-01-5	0.0%	< 0.475	na	na	na	No
Dibromochloromethane	124-48-1	0.0%	< 0.892	na	na	na	No
Hexachloro-1,3-Butadiene	87-68-3	0.0%	< 1.116	na	**0.045**	**0.7**	Possible
Methyl-tert-Butyl Ether (MTBE)	1634-04-4	0.0%	< 0.377	na	3.8	500	No
Tetrahydrofuran	109-99-9	0.0%	< 0.309	na	na	2000	No
trans-1,2-Dichloroethene	156-60-5	0.0%	< 0.415	na	na	na	No
trans-1,3-Dichloropropene	10061-02-6	0.0%	< 0.475	na	na	na	No
Vinyl bromide	593-60-2	0.0%	< 0.458	na	**0.031**	73	Possible
Vinyl Chloride	75-01-4	0.0%	< 0.268	**0.1**	**0.11**	**0.012**	Possible

a. Compound was reported above the MRL only once over the term of the study.
b. ASIL is for chromium compounds not including hexavalent chromium.
c. ABC is compared to the toxicity equivalency factor weighted sum of concentrations for up 15 individual PAH compounds (Oregon DEQ PAH Group).
d. ASIL is compared to the sum of up to 7 PAH compounds as one TAP equivalent in potency to BaP (Washington DOE PAH Gooup).