

**APPENDIX B**

**Selection of 1.3 Class Emissions based on their higher risk (as Emissions x TCDD-TEF)**

Dioxin Congener	Toxicity Factor (unitless)	1.1 Class Emissions	Emissions x TEF	1.3 Class Emissions	Emissions x TEF
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1	6.31E-11	6.31E-11	2.30E-12	2.30E-12
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	1	3.17E-12	3.17E-12	6.70E-12	6.70E-12
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	0.1	9.95E-12	9.95E-13	3.50E-12	3.50E-13
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	0.1	9.08E-12	9.08E-13	8.90E-12	8.90E-13
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	0.1	8.76E-12	8.76E-13	6.10E-12	6.10E-13
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	0.01	2.90E-11	2.90E-13	2.90E-11	2.90E-13
1,2,3,4,6,7,8,9-Octachlorodibenzo(p)dioxin*	0.0003	6.21E-11	1.86E-14	3.70E-11	1.11E-14
TCDD-TE			6.94E-11	TCDD-TE	
				1.12E-11	

Furan Congener	Toxicity Factor (unitless)	1.1 Class Emissions	Emissions x TEF	1.3 Class Emissions	Emissions x TEF
2,3,7,8-Tetrachlorodibenzofuran	0.1	3.20E-10	3.20E-11	4.00E-11	4.00E-12
1,2,3,7,8-Pentachlorodibenzofuran*	0.03	3.14E-12	9.41E-14	8.00E-11	2.40E-12
2,3,4,7,8-Pentachlorodibenzofuran*	0.3	1.84E-11	5.52E-12	1.60E-10	4.80E-11
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1	4.05E-11	4.05E-12	2.60E-10	2.60E-11
1,2,3,6,7,8-Hexachlorodibenzofuran	0.1	1.47E-11	1.47E-12	1.60E-10	1.60E-11
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1	1.78E-11	1.78E-12	1.20E-10	1.20E-11
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1	7.38E-12	7.38E-13	1.90E-10	1.90E-11
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01	5.01E-11	5.01E-13	7.30E-10	7.30E-12
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01	1.07E-11	1.07E-13	1.90E-10	1.90E-12
1,2,3,4,6,7,8,9-Octachlorodibenzofuran*	0.0003	6.84E-11	2.05E-14	5.30E-10	1.59E-13
TCDF-TE			4.63E-11	TCDF-TE	
				1.37E-10	

Source of Citations
Source: EPA 2005, Incineratin Guidance, p. 2-69
World Health Organization, 1998
Van De Berg, et al., 1998
* EPA 2013 Update

TCDD-TE, 1.1 Class Risk	6.94E-11	Higher
TCDD-TE 1.3 Class Risk	1.12E-11	
TCDF-TE, 1.1 Class Risk	4.63E-11	Higher
TCDF-TE, 1.3 Class Risk	1.37E-10	
Total-TE, 1.1 Class Total Risk	1.16E-10	Higher
Total-TE (1.3 Class)	1.27E-10	

Dioxin or Difuran	TEF	Adjusted Slope
		Factor (mg/kg/day) <sub>1</sub>
2,3,7,8-Tetrachlorodibenzo(p)dioxin	1	1.30E+05
1,2,3,7,8-Pentachlorodibenzo(p)dioxin	1	1.30E+05
1,2,3,4,7,8-Hexachlorodibenzo(p)dioxin	0.1	1.30E+04
1,2,3,6,7,8-Hexachlorodibenzo(p)dioxin	0.1	1.30E+04
1,2,3,7,8,9-Hexachlorodibenzo(p)dioxin	0.1	1.30E+04
1,2,3,4,6,7,8-Heptachlorodibenzo(p)dioxin	0.01	1.30E+03
1,2,3,4,6,7,8,9-Octachlorodibenzo(p)dioxin*	0.0003	3.90E+01
2,3,7,8-Tetrachlorodibenzofuran	0.1	1.30E+04
1,2,3,7,8-Pentachlorodibenzofuran*	0.03	3.90E+03
2,3,4,7,8-Pentachlorodibenzofuran*	0.3	3.90E+04
1,2,3,4,7,8-Hexachlorodibenzofuran	0.1	1.30E+04

1,2,3,6,7,8-Hexachlorodibenzofuran	0.1	1.30E+04
1,2,3,7,8,9-Hexachlorodibenzofuran	0.1	1.30E+04
2,3,4,6,7,8-Hexachlorodibenzofuran	0.1	1.30E+04
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.01	1.30E+03
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.01	1.30E+03
1,2,3,4,6,7,8,9-Octachlorodibenzofuran*	0.0003	3.90E+01
Dioxin Slope Factor	1.30E+05	