

APPENDIX A

Table 1. Safe Fill Numeric Standards For Metals AND INORGANIC REGULATED SUBSTANCES

Regulated Substance	Residential Direct Contact - RDC mg/kg	Residential Generic Value - RGV mg/kg	Safe Fill (Lower of RDC to RGV)			DETERMINATION THAT MATERIAL IS SAFE FILL (S287.12) LOWER OF NRDC OR NRGV⁶	
			TOTAL mg/kg ¹	TOTAL⁴ 10% MG/KG¹	GWMSC BY SPLP mg/L ^{4,5}	MG/KG	MG/L
ANTIMONY	88	27	27	<u>2.7</u>	0.006	<u>27</u>	<u>NA</u>
ARSENIC	12	150	12	<u>1.2</u>	0.05	<u>>12 - <53</u>	<u>NA</u>
BARIUM AND COMPOUNDS	15,000	8200	8,200	<u>820</u>	2.0	<u>8,200</u>	<u>NA</u>
BERYLLIUM	440	320	320	<u>32</u>	0.004	<u>320</u>	<u>NA</u>
BORON AND COMPOUNDS	20,000	6.7	6.7	<u>0.67</u>	0.6	<u>6.7</u>	<u>NA</u>
CADMIUM	110 <u>47</u>	38	38	<u>3.8</u>	0.005	<u>38</u>	<u>NA</u>
CHLORIDES ²	na	na	<u>NA</u>	<u>NA</u>	250	<u>NA</u>	<u>250</u>
CHROMIUM III	190,000	190,000	190,000	<u>19000</u>	0.1	<u>190,000</u>	<u>NA</u>
CHROMIUM VI	660 <u>94</u>	190	190 <u>94</u>	<u>9.4</u>	0.1	<u>>94 - <190</u>	<u>NA</u>
COBALT	13000 <u>4400</u>	24 <u>8.1</u>	24 <u>8.1</u>	<u>0.81</u>	2.2 <u>0.73</u>	<u>>8.1 - <22</u>	<u>NA</u>
COPPER ³	8100 <u>8200</u>	36,000	4,300	<u>430</u>	1.0	<u>4,300</u>	<u>NA</u>
CYANIDE FREE	4,400	200	200	<u>20</u>	0.20	<u>200</u>	<u>NA</u>
LEAD	500	450	450	<u>45</u>	0.005	<u>450</u>	<u>NA</u>
MANGANESE	31000	na	31,000	<u>3100</u>	<u>NA</u>	<u>>31000 - <190,000</u>	<u>NA</u>
MERCURY	19 <u>66</u>	10	10	<u>1.0</u>	0.002	<u>10</u>	<u>NA</u>
NICKEL	4400	650	650	<u>65</u>	0.1	<u>650</u>	<u>NA</u>
NITRATE NITROGEN	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	10	<u>NA</u>	<u>10</u>
NITRITE NITROGEN	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	1.0	<u>NA</u>	<u>1.0</u>
SELENIUM	1100	26	26	<u>2.6</u>	0.05	<u>26</u>	<u>NA</u>
SILVER	1100	84	84	<u>8.4</u>	0.1	<u>84</u>	<u>NA</u>
SULFATE	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	500	<u>NA</u>	<u>500</u>
THALLIUM	15	14	14	<u>1.4</u>	0.002	<u>14</u>	<u>NA</u>
TIN	13,000	240	240	<u>24</u>	22	<u>>240 - <680</u>	<u>NA</u>
VANADIUM	1500	26,000	1,500	<u>150</u>	0.26	<u>20,000</u>	<u>NA</u>
ZINC ³	66,000	12,000	7,500	<u>750</u>	2.0	<u>7,500</u>	<u>NA</u>

¹ Lower of the residential direct contact and residential generic value from the Statewide health standards promulgated under 25 Pa. Code Chapter 250.

² Chloride analysis required of dredged material and sediments **IF FROM TIDAL BASINS only**.

³ Due to phytotoxicity concerns, safe fill numeric standards **UNDER DEFINITION (287.1) AND DETERMINATION (287.12)** for copper and zinc are based on the 40 CFR Part 503 regulations and as listed at §271.914, Table 1.

⁴ **FOR PLACEMENT OF SAFE FILL INTO WATERS AS PART OF AN ACTIVE OR ABANDONED MINE OR ABANDONED QUARRY RECLAMATION IN ACCORDANCE WITH §287.13(a)(2)(i).**

^{4,5} SPLP for metals only if safe fill placement into or along **SURFACE** waterways **OR** as part of an active or abandoned mine or abandoned quarry reclamation and where groundwater monitoring is being conducted **IN ACCORDANCE WITH §287.13(a)(1) AND (a)(2)(ii).**

na -- not applicable

NA -- NOT APPLICABLE

⁶ **NONRESIDENTIAL SHS – CAP AS ESTABLISHED FOR MATERIALS IN §287.12 RELATING TO DETERMINATION THAT A MATERIAL IS SAFE FILL.**