

## Appendix A. Mercury concentrations on water bodies located near artisanal gold mining areas around the world

Country	Source	Distance from Mining Center	THg	Mercury Released from ASGM (Ton/yr) <sup>a</sup>	Reference
Brazil	Madeira River & tributaries (Rondônia)	-	<0.1 - 0.55 µg/L 0.2-8.6 µg/L at Mutum Paraná (outfall)	45	Pfeiffer et al. <sup>1</sup>
Brazil	Rivers from the Amazon	-	0.01 – 8.0 µg/L Up to 800 ng/L	45	Lacerda & Pfeiffer <sup>2</sup>
Brazil	Gurupi, Piria and Macaco Rivers	Collected at sites within the gold mining field	(Hg in organic form) < 200 ng/L	45	Palheta & Taylor <sup>3</sup>
Brazil	Drinking water	Collected at sites within the gold mining field	(Hg in organic form)	45	Palheta & Taylor <sup>3</sup>
Brazil	Drinking Water from Wells (Amapá)	-	Up to 1.1 µg/L	45	Lodenus & Malm <sup>4</sup>
Brazil	Tartarugalzinho River (Amapá)	Direct effluent from the mining areas	Mean 7.5 µg/L (Dissolved + Particulated)	45	Lodenus & Malm <sup>4</sup>
Brazil	Madeira River & Tributaries (Brazilian Amazon)	-	<0.04 – 9.97 µg/L	45	Malm et al. <sup>5</sup>
Brazil	Forest Streams (Brazilian Amazon)	-	0.15 – 10.97 µg/L	45	Malm et al. <sup>5</sup>
China	Streams near the Linglong gold deposit area (Shandong)	-	Average 60.93 µg/L	444.5	Ning et al. <sup>6</sup>
					Feng et al (2006) <sup>7</sup>
					Hidayati et al. (2009) <sup>8</sup>
Colombia	Cabí River (Chocó)	Upstream water intake	Up to 3.18 µg/L	75	Bermudez, H. (2013, October 23) Email conversation.
Colombia	Ayapel Swamp (Córdoba)	-	Up to 5.0 µg/L	75	Redacción Vivir (2013, August 26). Mercurio en

el agua de Ayapel. El Espectador (Colombia) Newspaper

Colombia	Grande Marsh (Bolívar)	Downstream mining districts in south of Bolívar and northeast of Antioquia	0.16 – 0.46 µg/L THg		Marrugo et al. (2008) <sup>9</sup>
Ecuador	Calera River (Puyango river catchment)	Sites immediately downstream of mining and processing activities	0.25-3.3 µg/L	50	Tarras-Wahlberg et al. <sup>10</sup>
Ghana	Rivers, streams, at Birim North District	1 -2 Km from the mining district	0.113 – 0.987 µg/L	4.5	Nartey et al. <sup>11</sup>
Indonesia	Talawaan River (north Sulawesi)	-	Up to 13.5 ug/L	175	Limbong et al. <sup>12</sup>
	Talawaan River	Talawaan Tatelu mining district	< 0.05 µg/L	175	Palapa et al. (2015)
	Citeluk River (Banten)	Near Ciberang mining district	3.26 ± 4.34 µg/L	175	Palapa et al. (2015)
Nicaragua	House-hold well water	Downstream mining district	1.6 – 409.8 ng/L	-	Wickre et al. <sup>13</sup>
Philippines	Mamunga River tributaries (Diwalwal mining center)	Drainage downstream. Distance not specified	Up to 2,906 µg/L	70	Appleton et al. <sup>14</sup>
Philippines	Mamunga River tributaries (Diwalwal mining center)	8 km d/s	Up to 103 µg/L	70	Appleton et al. <sup>14</sup>
Philippines	Mamunga River tributaries (Diwalwal mining center)	14 Km d/s	Up to 7.0 µg/L	70	Appleton et al. <sup>14</sup>
Tanzania	Rwamagasa area— drainage system	-	0.04 µg/L	45	Taylor et al. <sup>15</sup>
United States	Carson River-Lahontan Reservoir System (Nevada)	Downstream of Hg contaminated mine tailings piles	1.5 – 2.1 µg/L	1.5	Bonzongo et al. <sup>16</sup>
Venezuela	Rivers Cuyuní, Junin, Uey, and Bárbara	Downstream mining district	2.01 – 20.13 µg/L	15	Farina et al. <sup>17</sup>

a) Mean estimates up to 2010 (Source: <http://www.mercurywatch.org>)