

Nevada Division of Environmental Protection  
Bureaus of Air Pollution Control & Air Quality Planning  
Calendar Year 2017 Actual Production/Emission Reporting Spreadsheet for Mercury Emissions from the Precious Metals Mining Industry

Cumulative Nevada Mercury Control Program (NMCP): Mercury Operating Permit To Construct (MOPTC) Data Submittals

Pollutant ID	Production/Heat Rate	Production Units (eg. tons/yr)	Emissions Factor	Emissions Factor Units	Hg Annual Emissions (lbs/yr)	Hours Operated	Hg Co-Product (tons/yr)	Notes
Source: Newmont Mining Corporation - Twin Creeks Mine: FIN A0003; Class 1 AQOP AP1041-0723.03; MOPTC AP1041-2218								
System Description: Juniper Mill Electric Induction Furnace #1 (S2.008/TU4.001 - 1 of 2, only one operates at a time)								
Hg	54.02	tpy	0.001916	lbs/hr	0.8264	431	0.0000	Induction Furnace emissions factor derived from 2017 M29 stack test.
System Description: Juniper Mill Electric Induction Furnace #2 (S2.008.1/TU4.002 - 1 of 2, only one operates at a time)								
Hg	50.25	tpy	0.001082	lbs/hr	0.4441	410	0.0000	Induction Furnace emissions factor derived from 2017 M29 stack test.
System Description: Juniper Mill Carbon Kiln (S2.002/TU4.003)								
Hg	5,349.24	tpy	0.00039	lbs/hr	2.9036	7,445	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort A (Circuit #1: S2.006/TU4.004)								
Hg	42.40	tpy	0.00000166	lbs/hr	0.0052	3,130	0.0000	Retort A emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort B (Circuit #2: S2.007/TU4.005)								
Hg	39.23	tpy	0.00000337	lbs/hr	0.0106	3,144	0.0000	Retort B emissions factor derived from 2017 M29 stack test.
System Description: Sage Mill Autoclave #1 (S2.009/TU4.014)								
Hg	1,932,368.00	tpy	0.000029	lbs/hr	0.2338	8,061	0.0000	Autoclave #1 emissions factor derived from 2017 M29 stack test.
System Description: Sage Mill Autoclave #2 (S2.010/TU4.015)								
Hg	1,849,425.00	tpy	0.0000301	lbs/hr	0.2377	7,897	0.0000	Autoclave #2 emissions factor derived from 2017 M29 stack test.
System Description: Electro-winning Cells (S2.056/TU4.009 - six cells ducted to common stack)								
Hg	74.58	MMGals/yr	0.0000938	lbs/hr	0.8217	8,760	0.0000	Electro-winning Cells emissions factor derived from 2017 M29 stack test.
System Description: Juniper Mill Pregnant & Barren Strip Solution Tanks (S2.053 - S2.055/TU4.006 - TU4.008)								
Hg	80.58	MMGals/yr	0.001095	lbs/hr	9.5856	8,754	0.0000	Preg./Barren Tanks emissions factor derived from 2017 M29 stack test.
System Description: Pinon Mill Pregnant & Barren Strip Solution Tanks (S2.057 & S2.058/TU4.010 & TU4.011)								
Hg	84.53	MMGals/yr	0.000267	lbs/hr	2.2028	8,250	0.0000	Preg./Barren Tanks emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		11.0290	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Laboratory Sample Prep., Fire Assay, Wet Lab, Slurry Prep., LECO, Instrumentation, Met Lab, & Autoclave Rooms (S2.040 - S2.044/DM3.001 - DM3.042)								
Hg					3.9781		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
				CY2006 Facility Total:	434.3715		8.9100	CY2006 Co-product: 17,820 lbs/yr
				CY2007 Facility Total:	929.9303		13.2160	CY2007 Co-product: 26,432 lbs/yr.
				CY2008 Facility Total:	1,679.1864		8.8000	CY2008 Co-product: 17,600 lbs/yr.
				CY2009 Facility Total:	425.7559		5.9080	CY2009 Co-product: 11,816 lbs/yr.
				CY2010 Facility Total:	178.8392		5.4670	CY2010 Co-product: 10,934 lbs/yr.
				CY2011 Facility Total:	452.1731		3.9940	CY2011 Co-product: 7,988 lbs/yr.
				CY2012 Facility Total:	695.2002		4.6530	CY2012 Co-product: 9,308 lbs/yr.
				CY2013 Facility Total:	148.5169		7.7370	CY2013 Co-product: 15,474 lbs/yr.
				CY2014 Facility Total:	68.4077		10.0105	CY2014 Co-product: 20,021 lbs/yr.
				CY2015 Facility Total:	20.2603		5.2900	CY2015 Co-product: 10,580 lbs/yr.
				CY2016 Facility Total:	19.9695		10.2200	CY2016 Co-product: 20,439 lbs/yr.
				<b>CY2017 Facility Total:</b>	<b>21.2494</b>		<b>11.0290</b>	<b>CY2016 Co-product: 22,058 lbs/yr.</b>

Source: Jerritt Canyon Gold, LLC - Jerritt Canyon Mine: FIN A0004; Class 1 AQOP AP1041-3422; MOPTC AP1041-2217								
System Description: West Roaster Process (S2.031 & S2.033/TU4.002 & TU4.002A - West Roaster & West Quench Tank)								
Hg	577,722.00	tpy	0.001138	lbs/hr	7.4027	6,505	0.0000	Roaster emissions factor derived from 2017 M29 stack test.
System Description: East Roaster Process (S2.032 & S2.034/TU4.003 & TU4.003A - East Roaster & East Quench Tank)								
Hg	613,147.00	tpy	0.001471	lbs/hr	10.2323	6,956	0.0000	Roaster emissions factor derived from 2017 M29 stack test.
System Description: Ore Dryer (S2.022/TU4.001)								
Hg	1,299,088.00	tpy	0.002814	lbs/hr	14.6919	5,221	0.0000	Ore Dryer emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort (S2.039.1/TU4.008)								
Hg	19.95	tpy	0.0000866	lbs/hr	0.1268	1,464	0.0000	Retort emissions factor derived from 2017 M29 stack test.
System Description: Refining Process Induction Furnace (S2.039.2/TU4.009)								
Hg	12.15	tpy	0.001205	lbs/hr	0.1687	140	0.0000	Furnace emissions factor derived from 2017 M29 stack test.
System Description: Electro-winning Cells & Pregnant/Barren Strip Solution Tanks (S2.038.1 - S2.038.4/TU4.004 - TU4.007)								
Hg	8,696,521.00	gal/yr	0.014668	lbs/hr	111.9168	7,630	0.0000	EW Cells and P/B Tanks emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		5.0200	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Laboratory Units Including Five Large Ore Drying Ovens (S2.042.1 - S2.042.3/DM3.001 - DM3.017)								
Hg					4.2726		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	293.9245			2.9600	CY2006 Co-product: 5,920 lbs/yr.
			CY2007 Facility Total:	1,966.3934			1.0200	CY2007 Co-product: 2,040 lbs/yr.
			CY2008 Facility Total:	219.9723			0.7100	CY2008 Co-product: 1,420 lbs/yr.
			CY2009 Facility Total:	138.9704			2.1000	CY2009 Co-product: 4,200 lbs/yr.
			CY2010 Facility Total:	34.9527			11.0380	CY2010 Co-product: 22,076 lbs/yr.
			CY2011 Facility Total:	69.8714			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	29.8595			1.5200	CY2012 Co-product: 3,040 lbs/yr.
			CY2013 Facility Total:	26.6023			2.5600	CY2013 Co-product: 5,120 lbs/yr.
			CY2014 Facility Total:	13.4934			3.9820	CY2014 Co-product: 7,964 lbs/yr.
			CY2015 Facility Total:	97.0995			5.3400	CY2015 Co-product: 10,675 lbs/yr.
			CY2016 Facility Total:	134.1763			4.4500	CY2016 Co-product: 8,900 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>148.8118</b>			<b>5.0200</b>	<b>CY2017 Co-product: 10,035 lbs/yr.</b>

Source: Newmont Mining Corporation - Gold Quarry: FIN A0002; Class 1 AQOP AP1041-0793.02; MOPTC AP1041-2219								
System Description: Mill 6 Static Separator Double Rotator Air Pre-Heater (S2.120/TU4.001)								
Hg	3,554,595.00	tpy	0.000512	lbs/hr	3.8605	7,540	0.0000	Static Separator emissions factor derived from 2017 M29 stack test.
System Description: CFB North and South Ore Preheaters (S2.126 & S2.129/ TU4.002 & TU4.003)								
Hg	3,580,661.00	tpy	0.000394	lbs/hr	3.0953	7,856	0.0000	Ore Preheater's emissions factor derived from 2017 M29 stack test.
System Description: CFB North and South Ore Roasters (S2.133 & S2.145/TU4.004 & TU4.005)								
Hg	3,580,661.00	tpy	0.0000172	lbs/hr	0.1351	7,856	0.0000	Ore Roaster's factor derived from 2017 M30B stack test.
System Description: ROTP North Calcine Quench Circuit (S2.158 & S2.159/TU4.006 - TU4.009)								
Hg	1,824,143.00	tpy	0.00992	lbs/hr	77.9315	7,856	0.0000	North Quench Circuit emissions factor derived from 2017 M29 stack test.
System Description: ROTP South Calcine Quench Circuit (S2.160 & S2.161/TU4.010 - TU4.013)								
Hg	1,756,518.00	tpy	0.0128	lbs/hr	100.5056	7,852	0.0000	South Quench Circuit emissions factor derived from 2017 M29 stack test.
System Description: AARL Carbon Stripping Circuit Pregnant Tanks (S2.228 & S2.229/TU4.014 & TU4.015)								
Hg	46,495,028.00	gals/yr	0.0000302	lbs/hr	0.2548	8,436	0.0000	Pregnant Strip Tanks emissions factor derived from 2017 M29 stack test.
System Description: Refinery Barren Tank & Electro-winning Cells (S2.230/TU4.016 & TU4.017)								
Hg	46,495,028.00	gals/yr	0.000284	lbs/hr	2.2124	7,790	0.0000	Barren Tank/EW Cells emissions factor derived from 2017 M29 stack test.
System Description: Electric Refinery Induction Furnaces (S2.047 - S2.049/TU4.024 - TU4.026)								
Hg	85.70	tpy	0.00168	lbs/hr	0.8333	496	0.0000	Induction Furnace emissions factor derived from 2017 M29 stack test.
System Description: Carbon Kiln #1 (Zadra Building) Scrubber Stack (S2.056/TU4.027)								
Hg	8,425.00	tpy	0.00014	lbs/hr	1.1572	8,266	0.0000	Kiln Scrubber Stack emissions factor derived from 2017 M29 stack test.
System Description: Carbon Kiln #2 (AARL Building) Scrubber Stack (S2.058/TU4.028)								
Hg	8,139.00	tpy	0.000386	lbs/hr	3.0513	7,905	0.0000	Kiln Scrubber Stack emissions factor derived from 2017 M29 stack test.
System Description: Refinery Mercury Retort Circuit #1 (S2.225/TU4.029)								
Hg	24.20	tpy	4.84E-08	lbs/hr	0.0001	1,267	0.0000	Retort Circuit #1 emissions factor derived from 2017 M29 stack test.
System Description: Refinery Mercury Retort Circuit #2 (S2.226/TU4.030)								
Hg	20.10	tpy	0.00000015	lbs/hr	0.0003	1,805	0.0000	Retort Circuit #2 emissions factor derived from 2017 M29 stack test.
System Description: Refinery Mercury Retort Circuit #3 (S2.227/TU4.031)								
Hg	22.00	tpy	2.91E-07	lbs/hr	0.0003	1,150	0.0000	Retort Circuit #3 emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		11.0100	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory, Met Laboratory & Integrated Laboratory (S2.230/DM3.001 - DM3.074)								
Hg					0.9080		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	310.6937			2.7200	CY2006 Co-product: 5,440 lbs/yr.
			CY2007 Facility Total:	504.4204			6.1600	CY2007 Co-product: 12,320 lbs/yr.
			CY2008 Facility Total:	422.4137			6.7700	CY2008 Co-product: 13,540 lbs/yr.
			CY2009 Facility Total:	280.6857			5.3900	CY2009 Co-product: 10,780 lbs/yr.
			CY2010 Facility Total:	397.1321			5.7000	CY2010 Co-product: 11,400 lbs/yr.
			CY2011 Facility Total:	222.6075			3.8500	CY2011 Co-product: 7,700 lbs/yr.
			CY2012 Facility Total:	231.8539			7.6100	CY2012 Co-product: 15,220 lbs/yr.
			CY2013 Facility Total:	96.6344			4.3200	CY2013 Co-product: 8,640 lbs/yr.
			CY2014 Facility Total:	115.9110			6.2800	CY2014 Co-product: 12,560 lbs/yr.
			CY2015 Facility Total:	180.7430			5.2700	CY2015 Co-product: 10,540 lbs/yr.
			CY2016 Facility Total:	132.1134			6.2500	CY2016 Co-product: 12,500 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>193.9456</b>			<b>11.0100</b>	<b>CY2017 Co-product: 22,020 lbs/yr.</b>

Source: Klondex Midas Operations, Inc. - Midas/Ken Snyder Mine: FIN A0175; Class 2 AQOP AP1041-0766.02; OPTC AP1041-2989; MOPTC AP1041-2253								
System Description: Refinery Furnace #1 (S2.044/TU4.001)								
Hg	143.40	tpy	0.00232	lbs/hr	2.7005	1,164	0.0000	Furnace #1 emissions factor derived from 2017 M29 stack test.
System Description: Refinery Furnace #2 (S2.045/TU4.002)								
Hg	143.40	tpy	0.001201	lbs/hr	1.3980	1,164	0.0000	Furnace #2 emissions factor derived from 2017 M29 stack test.
System Description: Retort A (S2.047/TU4.003)								
Hg	48.80	tpy	0.00352	lbs/hr	9.6378	2,738	0.0000	Retort A emissions factor derived from 2017 M29 stack test.
System Description: Retort C (S2.052/TU4.005)								
Hg	42.40	tpy	0.0000245	lbs/hr	0.0613	2,500	0.0000	Retort C emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (S2.044 & S2.045/DM3.001 - DM3.012)								
Hg				lbs/hr	2.3159		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	17.1801			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	4.2457			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	41.3420			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	6.4395			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	14.2333			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	32.0815			0.0099	CY2011 Co-product: 19.87 lbs/yr.
			CY2012 Facility Total:	21.8322			0.0100	CY2012 Co-product: 10.40 lbs/yr.
			CY2013 Facility Total:	16.3548			0.0059	CY2013 Co-product: 11.90 lbs/yr.
			CY2014 Facility Total:	2.6214			0.0030	CY2014 Co-product: 5.72 lbs/yr.
			CY2015 Facility Total:	3.0071			0.0020	CY2015 Co-product: 3.96 lbs/yr.
			CY2016 Facility Total:	6.5749			0.0020	CY2016 Co-product: 3.24 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>16.1134</b>			<b>0.0000</b>	<b>CY2017 Co-product: 0.18 lbs/yr.</b>
Source: KG Mining (Bald Mountain), Inc - Huntington Valley/Mooney Basin/South Ops.: FIN 0393; Class 2 AQOP AP1041-1362.02; Class 2 AQOP AP1041-3861; MOPTC AP1041-2246								
System Description: Assay Laboratory (DM3.001 - DM3.018)								
Hg					2.3239		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Review.
			CY2006 Facility Total:	204.3025			2.9400	CY2006 Co-product: 5,880 lbs/yr.
			CY2007 Facility Total:	57.4138			2.2750	CY2007 Co-product: 4,550 lbs/yr.
			CY2008 Facility Total:	278.3220			2.6000	CY2008 Co-product: 5,200 lbs/yr.
			CY2009 Facility Total:	5.8995			1.5600	CY2009 Co-product: 3,120 lbs/yr.
			CY2010 Facility Total:	7.8188			1.4300	CY2010 Co-product: 2,860 lbs/yr.
			CY2011 Facility Total:	3.2198			1.6100	CY2011 Co-product: 3,220.00 lbs/yr.
			CY2012 Facility Total:	3.1464			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	3.6439			0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:	3.6439			0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:	3.1239			0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:	3.1239			0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>2.3239</b>			<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>

Source: Rawhide Mining, LLC - Denton-Rawhide Mine (formerly Kennecott Rawhide Mining Company): FIN 0406; Class 1 AQOP AP1041-2892; OPTC AP1041-2975; MOPTC AP1041-2245								
System Description: Carbon Regeneration Kiln (S2.001)								
Hg	283.50	tpy	0.0000735	lbs/hr	0.0548	7,461	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Electro-winning Circuit (IA3.007)								
Hg	Not Reported	gals/yr	0.0000351	lbs/hr	0.1202	3,425	0.0000	Electro-winning Cells emissions factor derived from 2017 M29 stack test.
System Description: Refinery Induction Furnace (S2.004)								
Hg	65.05	tpy	0.000189	lbs/hr	0.1327	702	0.0000	Refinery Furnace emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort (S2.002)								
Hg	35.40	tpy	0.0000175	lbs/hr	0.0091	5,210	0.0000	Retort emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0006	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Fire Assay Laboratory (DM3.001 - DM3.008)								
Hg					0.0143		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		351.5928		0.0621	CY2006 Co-product: 124.20 lbs/yr.
			CY2007 Facility Total:		39.5645		0.0276	CY2007 Co-product: 55.20 lbs/yr.
			CY2008 Facility Total:		13.0908		0.0262	CY2008 Co-product: 52.40 lbs/yr.
			CY2009 Facility Total:		12.0029		0.0258	CY2009 Co-product: 51.60 lbs/yr.
			CY2010 Facility Total:		37.6433		0.0079	CY2010 Co-product: 15.80 lbs/yr.
			CY2011 Facility Total:		78.5131		0.0230	CY2011 Co-product: 46.00 lbs/yr.
			CY2012 Facility Total:		7.1176		0.0249	CY2012 Co-product: 49.80 lbs/yr.
			CY2013 Facility Total:		0.0743		0.1270	CY2013 Co-product: 254 lbs/yr.
			CY2014 Facility Total:		0.1924		0.0193	CY2014 Co-product: 38.60 lbs/yr.
			CY2015 Facility Total:		0.3959		0.0102	CY2015 Co-product: 20.40 lbs/yr.
			CY2016 Facility Total:		0.5412		0.0005	CY2016 Co-product: 1.04 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.3312</b>		<b>0.0006</b>	<b>CY2017 Co-product: 1.2 lbs/yr.</b>
Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Mine: FIN 0390; Class 2 AQOP AP1041-0334.02; OPTC AP1041-2974; OPTC AP1041-3269; OPTC AP1041-3344; MOPTC AP1041-2255								
System Description: Mercury Retort #1 (TU4.001)								
Hg	Not Reported	tpy	0.0001	lbs/hr	0.0732	732	0.0000	Retort emissions factor derived from average of 2016 M29 stack tests.
System Description: Smelting Furnace #1 (TU4.002)								
Hg	Not Reported	tpy	0.0002	lbs/hr	0.1376	688	0.0000	Furnace emissions factor derived from average of 2016 M29 stack tests.
System Description: Mercury Retort #2 (TU4.003)								
Hg	Not Reported	tpy	0.000014	lbs/hr	0.0108	768	0.0000	Retort emissions factor derived from 2016 M29 stack test.
System Description: Mercury Retort #3 (TU4.004)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Retort #4 (TU4.005)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Retort #5 (TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Smelting Furnace #2 (TU4.007)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Smelting Furnace #3 (TU4.008)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System not yet constructed.
System Description: Mercury Co-Product								
Hg					0.0000		0.7500	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (DM3.001 - DM3.057)								
Hg					4.4797		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.5299		0.8000	CY2009 Co-product: 1,600 lbs/yr.
			CY2010 Facility Total:		4.5219		4.2000	CY2010 Co-product: 8,400 lbs/yr.
			CY2011 Facility Total:		4.5242		23.0700	CY2011 Co-product: 46,147 lbs/yr.
			CY2012 Facility Total:		4.4784		34.0200	CY2012 Co-product: 68,047 lbs/yr.
			CY2013 Facility Total:		4.4959		27.6700	CY2013 Co-product: 53,340 lbs/yr.
			CY2014 Facility Total:		5.8421		56.9100	CY2014 Co-product: 113,820 lbs/yr.
			CY2015 Facility Total:		5.6891		35.7000	CY2015 Co-product: 71,400 lbs/yr.
			CY2016 Facility Total:		6.6141		7.3750	CY2016 Co-product: 14,750 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>4.7013</b>		<b>0.7500</b>	<b>CY2017 Co-product: 1,500 lbs/yr.</b>

Source: Klondex Aurora Mine, Inc.: FIN 0408; Class 2 AQOP AP1041-3858; OPTC AP1041-2853; MOPTC AP1041-2248								
System Description: Carbon Regeneration Kiln, Solution Tanks & Electro-winning Circuit (S2.002 - S2.005/TU4.001 - TU4.003 & TU4.006)								
Hg	138.50	tpy	0.0000555	lbs/hr	0.0130	2,343	0.0000	Carbon Kiln combined circuit emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retorts, Solution Tanks & Electro-winning Circuit (S2.002 - S2.004, S2.006 & S2.007/TU4.002 - TU4.006)								
Hg	4.63	tpy	0.0000477	lbs/hr	0.0017	352	0.0000	Retorts combined circuit emissions factor derived from 2017 M29 stack test.
System Description: Dore Furnace, Solution Tanks & Electro-winning Circuit (S2.002 - S2.004 & S2.008/TU4.002, TU4.003, TU4.006 & TU4.007)								
Hg	0.05	tpy	0.000005	lbs/hr	0.0000	12	0.0000	Furnace combined circuit emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (S2.002 - S2.004 & S2.008/DM3.002 - DM3.011)								
Hg					0.0076		0.0000	Potential to emit (PTE) of 0.0076 lbs/yr, not actual - see DM Technical Review.
			CY2006 Facility Total:	0.0000			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	0.0000			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	0.2838			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	0.2838			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	0.0222			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	0.0022			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	3.7066			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	0.0276			0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:	0.0076			0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:	0.0000			0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:	0.0076			0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>0.0223</b>			<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: FIN 0412; Class 2 AQOP AP1044-0063.04; MOPTC AP1044-2242								
System Description: Refinery Furnace (S2.003/TU4.001)								
Hg	237.00	tpy	0.000468	lbs/hr	0.4661	996	0.0000	Refinery Furnace emissions factor derived from February 2018 M29 stack test.
System Description: Mercury Retorts (S2.004 & S2.005/TU4.002 & TU4.003)								
Hg	421.00	tpy	0.0000536	lbs/hr	0.0352	6,576	0.0000	Retort emissions factor derived from February 2018 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		9.7000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (S2.016 - S2.019/DM3.001 - DM3.015)								
Hg					1.8805		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	2.8872			16.1000	CY2006 Co-product: 32,200 lbs/yr.
			CY2007 Facility Total:	137.0958			15.4000	CY2007 Co-product: 30,800 lbs/yr.
			CY2008 Facility Total:	9.9144			15.6000	CY2008 Co-product: 31,200 lbs/yr.
			CY2009 Facility Total:	4.4097			10.7000	CY2009 Co-product: 21,400 lbs/yr.
			CY2010 Facility Total:	2.6426			12.3000	CY2010 Co-product: 24,600 lbs/yr.
			CY2011 Facility Total:	3.3523			11.2000	CY2011 Co-product: 22,400 lbs/yr.
			CY2012 Facility Total:	3.2552			20.4000	CY2012 Co-product: 40,800 lbs/yr.
			CY2013 Facility Total:	2.6378			14.5000	CY2013 Co-product: 29,000 lbs/yr.
			CY2014 Facility Total:	2.1938			13.2000	CY2014 Co-product: 26,400 lbs/yr.
			CY2015 Facility Total:	4.2967			10.4000	CY2015 Co-product: 20,800 lbs/yr.
			CY2016 Facility Total:	3.2330			7.9000	CY2016 Co-product: 15,800 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>2.3819</b>			<b>9.7000</b>	<b>CY2017 Co-product: 19,400 lbs/yr.</b>
Source: Newmont Mining Corporation - Lone Tree Mine: FIN 0385; Class 2 AQOP AP1041-3575; MOPTC AP1041-2251								
System Description: Sample Room, Fire Assay Room, Wet Laboratory, LECO Laboratory, Met Laboratory (S2.014 - S2.019/DM3.001 - DM3.034)								
Hg					1.8788		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	622.1013			0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:	148.0964			0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:	67.1251			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	7.2136			0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:	3.0212			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	1.8788			0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:	1.8788			0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:	1.8788			0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:	1.8788			0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:	1.8788			0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:	1.8788			0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>1.8788</b>			<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>

Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: FIN 0001; Class 1 AQOP AP1041-2141; MOPTC AP1041-2220								
System Description: Refinery Induction Furnace #1 (S2.002/TU4.003)								
Hg	39.60	tpy	0.0000107	lbs/hr	0.0026	242	0.0000	Furn. #1 ducted in-line with Retorts, EF derived from 2017 M29 stack test.
System Description: Refinery Induction Furnace #2 (S2.003/TU4.004)								
Hg	7.30	tpy	0.0000128	lbs/hr	0.0014	113	0.0000	Furn. #2 ducted in-line with Retorts, EF derived from 2017 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #1 (S2.007/TU4.005)								
Hg	356.70	tpy	0.000289	lbs/hr	0.2107	729	0.0000	Carbon Kiln #1 emissions factor derived from 2017 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #2 (S2.008/TU4.006)								
Hg	492.80	tpy	0.0000514	lbs/hr	0.0513	999	0.0000	Carbon Kiln #2 emissions factor derived from 2017 M29 stack test.
System Description: East Electro-winning Circuit including Pregnant and Barren Strip Solution Tanks (S2.060, S2.062 & S2.063/TU4.001, TU4.008 & TU4.009)								
Hg	18,089,651.38	gals/yr	0.000233	lbs/hr	1.4837	6,368	0.0000	East EW Circuit emissions factor derived from avg. of 2017 M29 stack tests.
System Description: West Electro-winning Circuit including Pregnant and Barren Strip Solution Tanks (S2.061, S2.062 & S2.063/TU4.002, TU4.008 & TU4.009)								
Hg	18,949,089.12	gals/yr	0.0000186	lbs/hr	0.1184	6,368	0.0000	West EW Circuit emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort A (S2.004/TU4.010)								
Hg	26.00	tpy	0.0000209	lbs/hr	0.0410	1,960	0.0000	Retort A emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort B (S2.005/TU4.011)								
Hg	21.40	tpy	0.00000915	lbs/hr	0.0154	1,680	0.0000	Retort B emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort C (S2.006/TU4.012)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort C did not operate in 2017, not yet constructed.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory, Met Laboratory, Strip Circuit Area (Mill Building), Refinery Gold Sludge Drying Oven, Fire Assay Fusion Furnaces (S2.018a-g/DM3.001 - DM3.020)								
Hg					1.8841		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	166.7059			0.1200	CY2006 Co-product: 240 lbs/yr.
			CY2007 Facility Total:	208.0466			0.3200	CY2007 Co-product: 640 lbs/yr.
			CY2008 Facility Total:	75.8638			0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:	1.3905			0.0170	CY2009 Co-product: 34 lbs/yr.
			CY2010 Facility Total:	5.1862			0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:	5.1815			0.7200	CY2011 Co-product: 1,441 lbs/yr.
			CY2012 Facility Total:	4.2156			1.2100	CY2012 Co-product: 2,412 lbs/yr.
			CY2013 Facility Total:	15.7637			2.2740	CY2013 Co-product: 4,458 lbs/yr.
			CY2014 Facility Total:	2.2159			0.4900	CY2014 Co-product: 980 lbs/yr.
			CY2015 Facility Total:	4.6010			1.1700	CY2015 Co-product: 2,340 lbs/yr.
			CY2016 Facility Total:	6.0125			0.2600	CY2016 Co-product: 524 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>3.8086</b>			<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>

Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: FIN 0386; Class 2 AQOP AP1041-0106.03; MOPTC AP1041-2256								
System Description: Summit Valley Mercury Retort A (S2.005/TU4.004)								
Hg	Not Reported	tpy	3.99E-07	lbs/hr	0.0004	1,005	0.0000	Retort A emissions factor derived from 2017 M29 stack tests.
System Description: Custom Mercury Retort B (S2.006/TU4.005)								
Hg	Not Reported	tpy	8.05E-08	lbs/hr	0.0000	39	0.0000	Retort B emissions factor derived from 2017 M29 stack tests.
System Description: Electro-winning Cell A (IA1.039/DM3.019)								
Hg	Not Reported	tpy	0.0000456	lbs/hr	0.3899	8,551	0.0000	Electro-winning Cell A emissions factor derived from 2017 M29 stack tests.
System Description: Electro-winning Cell B (IA1.039/DM3.020)								
Hg	Not Reported	tpy	0.00000909	lbs/hr	0.0777	8,551	0.0000	Electro-winning Cell B emissions factor derived from 2017 M29 stack tests.
System Description: Carbon Regeneration Kiln (S2.004/TU4.008)								
Hg	Not Reported	tpy	0.001241	lbs/hr	0.9303	750	0.0000	Carbon Kiln emissions factor derived from 10/05/2017 M29 stack test.
System Description: Dore Furnace (S2.003/DM3.018)								
Hg		tpy	0.000223	lbs/hr	0.0584	262	0.0000	Dore Furnace emissions factor derived from 2017 M29 stack tests.
System Description: Pregnant Tank (IA1.039/DM3.016)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Pregnant Tank moved to De Minimis Designation 12/17/09.
System Description: Barren Tank (IA1.039/DM3.017)								
Hg		hrs/yr		lbs/hr	0.0000		0.0000	Barren Tank moved to De Minimis Designation 12/17/09.
System Description: Mercury Co-Product								
Hg					0.0000		0.1800	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory, Electro-winning Cells A & B, Pregnant & Barren Tanks and Dore Furnace (S2.004/DM3.001 - DM3.020)								
Hg					2.2457		0.0000	Calculated PTE = 2.9861 lbs/yr. EW Cells and Dore Furnace reported separately.
			CY2006 Facility Total:		440.7382		0.2264	CY2006 Co-product: 452.80 lbs/yr.
			CY2007 Facility Total:		19.0000		0.0072	CY2007 Co-product: 14.40 lbs/yr.
			CY2008 Facility Total:		162.3117		0.2875	CY2008 Co-product: 575 lbs/yr.
			CY2009 Facility Total:		49.6118		0.8120	CY2009 Co-product: 1,624 lbs/yr.
			CY2010 Facility Total:		111.8133		0.3090	CY2010 Co-product: 618 lbs/yr.
			CY2011 Facility Total:		51.7290		1.2700	CY2011 Co-product: 2,538 lbs/yr. (1,829.00 "liquid"; 709.00 sludge)
			CY2012 Facility Total:		8.2449		0.6300	CY2012 Co-product: 1,252 lbs/yr. (892.00 "liquid"; 360.00 sludge)
			CY2013 Facility Total:		4.2320		1.2150	CY2013 Co-product: 1,450 lbs/yr. (sludge)
			CY2014 Facility Total:		4.1346		0.1250	CY2014 Co-product: 250 lbs/yr. (sludge)
			CY2015 Facility Total:		33.4578		0.8960	CY2015 Co-product: 1,792 lbs/yr. (sludge)
			CY2016 Facility Total:		55.9107		0.1200	CY2016 Co-product: 244 lbs/yr. (sludge)
			<b>CY2017 Facility Total:</b>		<b>3.7025</b>		<b>0.1800</b>	<b>CY2017 Co-product: 352 lbs/yr.</b>
Source: Round Mountain Gold Corporation - Smoky Valley/Gold Hill Common Operation: FIN 0394; Class 2 AQOP AP1041-0444.02; OPTC AP1041-2806; MOPTC AP1041-2250								
System Description: Round Mountain (Smoky Valley) Carbon Reactivation Kiln (S2.121/TU4.001)								
Hg	3,057.00	tpy	0.00000904	lbs/hr	0.0757	8,372	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Round Mountain (Smoky Valley) Electric Induction Furnace (S2.130/TU4.005)								
Hg	29.54	tpy	0.00318	lbs/hr	1.3436	423	0.0000	Furnace emissions factor derived from 2017 M29 stack test.
System Description: Gold Hill Carbon Reactivation Kiln (S2.157/TU4.006)								
Hg	925.00	tpy	0.00000726	lbs/hr	0.0272	3,746	0.0000	Carbon Kiln emissions factor derived from average of 2017 M29 stack tests.
System Description: Gold Hill Carbon Stripping Circuit - Electro-winning Circuit & Pregnant/Barren Strip Solution Tanks (S2.158 - S2.160/TU4.007 - TU4.009)								
Hg	29,782,950.00	gals/yr	0.0000146	lbs/hr	0.1260	8,633	0.0000	Carbon Strip Circ. emissions factor derived from avg. of 2017 M29 stack tests.
System Description: Gold Hill Mercury Retort (S2.161/TU4.010)								
Hg	16.90	tpy	7.73E-07	lbs/hr	0.0019	2,399	0.0000	Retort emissions factor derived from average of 2017 M29 stack tests.
System Description: Gold Hill Smelting Furnace (S2.162/TU4.011)								
Hg	14.21	tpy	0.0000124	lbs/hr	0.0040	324	0.0000	Furnace emissions factor derived from average of 2017 M29 stack tests.
System Description: Smoky Valley ADR Carbon Stripping Circuit - Electro-winning Circuit, Pregnant (1) & Barren (2) Strip Solution Tanks (S2.142 & S2.143/TU4.002 - TU4.004 & TU4.012)								
Hg	22,547,340.00	gals/yr	0.000289	lbs/hr	2.5270	8,744	0.0000	Carbon Strip Circuit emissions factor derived from avg. of 2017 M29 stack tests.
System Description: Mercury Co-Product								
Hg					0.0000		0.3900	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: RMG Refinery Electro-winning Vent & Ovens, Assay Laboratory Ovens (S2.143/DM3.001 - DM3.042)								
Hg					1.7440		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		No		0.0085	CY2006 Co-product: 17 lbs/yr.
			CY2007 Facility Total:		59.6652		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		8.3173		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.5878		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.4525		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		6.6374		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.1960		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		4.7056		0.3150	CY2013 Co-product: 629.90 lbs/yr.
			CY2014 Facility Total:		9.0652		0.3450	CY2014 Co-product: 690 lbs/yr.
			CY2015 Facility Total:		5.4557		0.2940	CY2015 Co-product: 588 lbs/yr.
			CY2016 Facility Total:		6.8767		0.6860	CY2016 Co-product: 1,372 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>5.8494</b>		<b>0.3900</b>	<b>CY2017 Co-product: 780 lbs/yr.</b>



Source: Ruby Hill Mining Company, LLC - Ruby Hill Mine (formerly Homestake Mining Company of California): FIN 0399; Class 2 AQOP AP1041-0713.01; MOPTC AP1041-2252								
System Description: Assay Laboratory (DM3.001 - DM3.010)								
Hg					1.3818		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
			CY2006 Facility Total:	28.7825			0.5000 CY2006 Co-product: 1,000 lbs/yr.	
			CY2007 Facility Total:	35.2201			0.3800 CY2007 Co-product: 760 lbs/yr.	
			CY2008 Facility Total:	1.3883			0.2400 CY2008 Co-product: 480 lbs/yr.	
			CY2009 Facility Total:	7.2874			0.1762 CY2009 Co-product: 352.40 lbs/yr.	
			CY2010 Facility Total:	34.4158			0.0000 CY2010 Co-product: 0.00 lbs/yr.	
			CY2011 Facility Total:	11.1401			0.0495 CY2011 Co-product: 99 lbs/yr.	
			CY2012 Facility Total:	1.3818			0.0000 CY2012 Co-product: 0.00 lbs/yr.	
			CY2013 Facility Total:	1.3818			0.0000 CY2013 Co-product: 0.00 lbs/yr.	
			CY2014 Facility Total:	1.3818			0.0000 CY2014 Co-product: 0.00 lbs/yr.	
			CY2015 Facility Total:	1.3818			0.0000 CY2015 Co-product: 0.00 lbs/yr.	
			CY2016 Facility Total:	1.3818			0.0000 CY2016 Co-product: 0.00 lbs/yr.	
			<b>CY2017 Facility Total:</b>	<b>1.3818</b>			<b>0.0000 CY2017 Co-product: 0.00 lbs/yr.</b>	
Source: Marigold Mining Company - Marigold Mine: FIN 0387; Class 2 AQOP AP1041-3666; MOPTC AP1041-2254								
System Description: Carbon Regeneration Kiln (TU4.001/S2.006)								
Hg	755.90	tpy	0.0000485	lbs/hr	0.1853	3,821	0.0000 Carbon Kiln emissions factor derived from 2017 M29 stack test.	
System Description: Mercury Retort (TU4.002/S2.007A)								
Hg	11.66	tpy	0.00549	lbs/hr	10.8279	1,972	0.0000 Retort emissions factor derived from average of 2017 M29 stack tests.	
System Description: Tilting Crucible Furnace (TU4.003/S2.007B)								
Hg	8.11	tpy	0.034119	lbs/hr	11.3787	334	0.0000 Furnace emissions factor derived from average of 2017 M29 stack tests.	
System Description: Electro-winning Circuit (TU4.004/S2.007C)								
Hg	144,552.00	gal/yr	0.00252	lbs/hr			Electro-winning Circuit emissions factor derived from 2017 M29 stack test of all passive units (fluids systems). The Pregnant and Barren Strip Solution Tanks are vented to a common stack with the Electro-winning Circuit, Mercury Retort and Crucible Furnace. Normally the Retort result is used as a surrogate, but for 2017 the passive units were tested separately and have their own result.	
System Description: Pregnant Strip Solution Tank (TU4.005/S2.007D)								
Hg	See Above	tpy	See Above	lbs/hr				
System Description: Barren Strip Solution Tank (TU4.006/S2.007E)								
Hg	See Above	tpy	See Above	lbs/hr	21.2890	8,448	0.0000	
System Description: Mercury Co-Product								
Hg					0.0000		0.0000 Elemental mercury collected disposed of as hazardous waste, not co-product.	
System Description: Assay Laboratory (DM3.001 - DM3.021)								
Hg					2.1072		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
			CY2006 Facility Total:	908.0610			0.1675 CY2006 Co-product: 335 lbs/yr.	
			CY2007 Facility Total:	5.2255			0.2450 CY2007 Co-product: 490 lbs/yr.	
			CY2008 Facility Total:	10.4883			0.5690 CY2008 Co-product: 1,138 lbs/yr.	
			CY2009 Facility Total:	4.4540			0.8160 CY2009 Co-product: 1,632 lbs/yr.	
			CY2010 Facility Total:	9.3695			1.0330 CY2010 Co-product: 2,066 lbs/yr.	
			CY2011 Facility Total:	11.1707			1.0500 CY2011 Co-product: 2,100 lbs/yr.	
			CY2012 Facility Total:	2.1159			1.4600 CY2012 Co-product: 2,927 lbs/yr.	
			CY2013 Facility Total:	7.5577			0.4765 CY2013 Co-product: 953 lbs/yr.	
			CY2014 Facility Total:	3.3689			0.0000 CY2014 Co-product: 0.00 lbs/yr.	
			CY2015 Facility Total:	24.8525			0.0000 CY2015 Co-product: 0.00 lbs/yr.	
			CY2016 Facility Total:	29.7823			0.0000 CY2016 Co-product: 0.00 lbs/yr.	
			<b>CY2017 Facility Total:</b>	<b>45.7881</b>			<b>0.0000 CY2017 Co-product: 0.00 lbs/yr.</b>	

Source: Borealis Mining Company: FIN 0675; Class 1 AQOP AP1041-2855; MOPTC AP1041-2228								
System Description: Deep Bed Carbon Scrubber: Carbon Regeneration Kiln (S2.003/TU4.001)								
Hg	137.05	tpy	9.29E-07	lb/hr	0.0011	1,236	0.0000	Carbon Kiln emissions factor derived from average of 2017 M29 stack tests.
System Description: Deep Bed Carbon Scrubber: Mercury Retort (S2.004/TU4.002)								
Hg	0.94	tpy	3.95E-07	lb/hr	0.0001	316	0.0000	Retort emissions factor derived from 2017 M29 stack test.
System Description: Deep Bed Carbon Scrubber: Smelting Furnace (2.005/TU4.003)								
Hg	0.73	tpy	0.00000091	lb/hr	0.0001	90	0.0000	Furnace emissions factor derived from average of 2017 M29 stack tests.
System Description: Deep Bed Carbon Scrubber: Solutions Circuit (S2.006 - S2.008/TU4.004 - TU4.006)								
Hg	1,615.58	tpy	6.21E-07	lb/hr	0.0008	1,361	0.0000	Solutions Circuit emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected, no breakout by system provided.
					0.0000		0.0000	CY2006 Facility Total: 0.0000
					0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2007 Facility Total: 0.0000
					0.0000		0.0000	CY2007 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2008 Facility Total: 0.0000
					0.0000		0.0000	CY2008 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2009 Facility Total: 0.0000
					0.0000		0.0000	CY2009 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2010 Facility Total: 0.0000
					0.0000		0.0000	CY2010 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2011 Facility Total: 0.0000
					0.0000		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					12.0456		0.0000	CY2012 Facility Total: 12.0456
					0.0000		0.0000	CY2012 Co-product: 0.00 lbs/yr.
					0.0353		0.1640	CY2013 Facility Total: 0.0353
					0.0353		0.1640	CY2013 Co-product: 327.50 lbs/yr.
					0.0372		0.3510	CY2014 Facility Total: 0.0372
					0.0372		0.3510	CY2014 Co-product: 702 lbs/yr.
					9.4184		0.0000	CY2015 Facility Total: 9.4184
					0.0000		0.0000	CY2015 Co-product: 0.00 lbs/yr.
					0.0201		0.0000	CY2016 Facility Total: 0.0201
					0.0201		0.0000	CY2016 Co-product: 0.00 lbs/yr.
					0.0022		0.0000	<b>CY2017 Facility Total: 0.0022</b>
					0.0022		0.0000	<b>CY2017 Co-product: 0.00 lbs/yr.</b>
Source: Barrick Turquoise Ridge, Inc. - Getchell Mine: FIN 0389; Class 2 AQOP AP1041-0292.01; MOPTC AP1041-2249								
System Description: Assay/Met Laboratory (S2.001.1 - S2.001.4/DM3.001 - DM3.016)								
Hg	Not Reported	tpy	0.000715	lb/hr	6.2634	8,760	0.0000	4.6574 lbs/yr potential to emit (PTE) - see De Minimis Designation Tech. Rev.
					10.6752		0.0000	CY2006 Facility Total: 10.6752
					4.9660		0.0000	CY2006 Co-product: 0.00 lbs/yr.
					4.9660		0.0000	CY2007 Facility Total: 4.9660
					4.9660		0.0000	CY2007 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2008 Facility Total: 4.9462
					4.9462		0.0000	CY2008 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2009 Facility Total: 4.9462
					4.9462		0.0000	CY2009 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2010 Facility Total: 4.9462
					4.9462		0.0000	CY2010 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2011 Facility Total: 4.9462
					4.9462		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2012 Facility Total: 4.9462
					4.9462		0.0000	CY2012 Co-product: 0.00 lbs/yr.
					4.9462		0.0000	CY2013 Facility Total: 4.9462
					4.9462		0.0000	CY2013 Co-product: 0.00 lbs/yr.
					4.7375		0.0000	CY2014 Facility Total: 4.7375
					4.7375		0.0000	CY2014 Co-product: 0.00 lbs/yr.
					4.6574		0.0000	CY2015 Facility Total: 4.6574
					4.6574		0.0000	CY2015 Co-product: 0.00 lbs/yr.
					4.6574		0.0000	CY2016 Facility Total: 4.6574
					4.6574		0.0000	CY2016 Co-product: 0.00 lbs/yr.
					6.2634		0.0000	<b>CY2017 Facility Total: 6.2634</b>
					6.2634		0.0000	<b>CY2017 Co-product: 0.00 lbs/yr.</b>
Source: United Mining Partners, LLC (formerly Noble Technologies Corp.): FIN 1079; Class 2 AQOP AP1041-3645; MOPTC AP1041-2701								
System Description: Furnaces - 2 Drying, 1 Smelting (S2.008/DM3.001 - DM3.014)								
Hg					0.0272		0.0000	Potential to emit (PTE) of 0.02716 lbs/yr, not actual - see DM Technical Review.
					4.0026		0.0000	CY2010 Facility Total: 4.0026
					4.0026		0.0000	CY2010 Co-product: 0.00 lbs/yr.
					4.0026		0.0000	CY2011 Facility Total: 4.0026
					4.0026		0.0000	CY2011 Co-product: 0.00 lbs/yr.
					4.0026		0.0000	CY2012 Facility Total: 4.0026
					4.0026		0.0000	CY2012 Co-product: 0.00 lbs/yr.
					4.0026		0.0000	CY2013 Facility Total: 4.0026
					4.0026		0.0000	CY2013 Co-product: 0.00 lbs/yr.
					4.0026		0.0000	CY2014 Facility Total: 4.0026
					4.0026		0.0000	CY2014 Co-product: 0.00 lbs/yr.
					0.0000		0.0000	CY2015 Facility Total: 0.0000
					0.0000		0.0000	CY2015 Co-product: 0.00 lbs/yr.
					0.0272		0.0000	CY2016 Facility Total: 0.0272
					0.0272		0.0000	CY2016 Co-product: 0.00 lbs/yr.
					0.0272		0.0000	<b>CY2017 Facility Total: 0.0272</b>
					0.0272		0.0000	<b>CY2017 Co-product: X lbs/yr.</b>

Source: GRP Pan, LLC (formerly Midway Gold US, Inc.): FIN 1497; Class 1 AQOP AP1041-3674; Class 2 AQOP AP1041-3831; MOPTC AP1041-3302								
System Description: Carbon Kiln (S2.006/TU4.001)								
Hg	496.00	tpy	0.0129	lbs/hr	58.5970	4,542	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort (S2.008/TU4.002)								
Hg	1.23	lbs/yr	0.00000335	lbs/hr	0.0022	658	0.0000	Retort emissions factor derived from 2017 M29 stack test.
System Description: Melt Furnace (S2.010/TU4.003)								
Hg	0.89	lbs/yr	0.000136	lbs/hr	0.0268	197	0.0000	Furnace emissions factor derived from 2017 M29 stack test.
System Description: Carbon Stripping/Electro-winning Cells & Barren Tanks (S2.011/TU4.004 - TU4.006)								
Hg	486.00	tpy	0.0000679	lbs/hr	0.2630	3,873	0.0000	Carbon Stripping Circuit emissions factor derived from 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg							0.4300	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay Laboratory (S2.011/DM3.001 - DM3.008)								
Hg					2.4700		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2013 Facility Total:		0.0000		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		0.0000		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		2.5131		0.3200	CY2015 Co-product: 637.32 lbs/yr.
			CY2016 Facility Total:		2.4911		0.4900	CY2016 Co-product: 970.07 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>61.3590</b>		<b>0.4300</b>	<b>CY2017 Co-product: 869.9 lbs/yr.</b>
Source: Gold Acquisition Corp. - Relief Canyon Mine: FIN 0904; Class 2 AQOP AP1041-2441; OPTC AP1041-3652; MOPTC AP1041-3585								
System Description: Mercury Retort (S2.009B/TU4.001)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Mercury Retort did not operate in 2017.
System Description: Carbon Regeneration Kiln (S2.011B/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Carbon Regeneration Kiln did not operate in 2017.
System Description: Electro-winning Cells & Barren Tank (S2.012 - S2.015/TU4.003 - TU4.006)								
Hg	0.00	gal/yr	0	lbs/hr	0.0000	0	0.0000	EW Cells & Barren Tank did not operate in 2017.
System Description: Melt Furnace (S2.010B/TU4.007)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Melt Furnace did not operate in 2017.
System Description: Assay Laboratory (S2.012 - S2.015/DM3.001 - DM3.012)								
Hg					0.0000		0.0000	Potential to emit (PTE) of 0.34 lbs/yr, not actual - see DM Tech. Review
			CY2016 Facility Total:		0.3400		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.0000</b>		<b>0.0000</b>	<b>CY2017 Co-product: 0 lbs/yr.</b>
Source: Newmont Mining Corporation - Long Canyon Project: FIN 0959; Class 2 AQOP AP1041-3586; MOPTC AP1041-3833								
System Description: Atomic Adsorption Spectrometer (DM3.001)								
Hg					0.0000		0.0000	Potential to emit (PTE) of 0.00000346 lbs/yr, not actual - see DM Tech. Review
			CY2016 Facility Total:		0.0000		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.0000</b>		<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>
Source: Walker Lane Minerals - Isabella Pearl Mine: FIN 2039; Class 2 AQOP AP1041-3853; OPTC AP1041-3897; MOPTC AP1041-3895								
System Description: ADR Plant - Electro-winning Cells & Pregnant/Barren Tanks (S2.006 & S2.007/TU4.001 - TU4.003)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	EW Cells and P/B Tanks did not operate, not yet constructed.
System Description: ADR Plant - Mercury Retort (S2.008/TU4.004)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant - Carbon Regeneration Kiln (S2.009/TU4.005)								
Hg	0.00	gal/yr	0	lbs/hr	0.0000	0	0.0000	Carbon Regeneration Kiln did not operate, not yet constructed.
System Description: Melt Furnace (S2.010/TU4.006)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Melt Furnace did not operate, not yet constructed.
System Description: Assay Laboratory (S2.006 - S2.009/DM3.001 - DM3.006)								
Hg					0.6220		0.0000	Potential to emit (PTE) of 0.622 lbs/yr, not actual - see DM Tech. Review
			CY2017 Facility Total:		0.0000		0.0000	CY2017 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.6220</b>		<b>0.0000</b>	<b>CY2017 Co-product: X lbs/yr.</b>
Source: Osgood Mining Company, LLC (formerly ATNA Resources, Inc.): FIN 0218; Class 2 AQOP AP1041-3086; MOPTC AP1041-3089								
System Description: Assay Laboratory (DM3.001 - DM3.010)								
Hg					0.0000		0.0000	Potential to emit (PTE) of 2.4156 lbs/yr, not actual - see DM Technical Review
			CY2013 Facility Total:		2.4156		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		2.4156		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		2.4156		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.0000		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.0000</b>		<b>0.0000</b>	<b>CY2017 Co-product: X lbs/yr.</b>

Source: Tonkin Springs, LLC: FIN 0395; Class 2 AQOP AP1041-0482.03; MOPTC AP1041-2726							
System Description: Assay Laboratory (DM3.001 & DM3.002)							
Hg					4.9200		0.0000 Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY2010 Facility Total: 4.9200		0.0000 CY2010 Co-product: 0.00 lbs/yr.
					CY2011 Facility Total: 4.9200		0.0000 CY2011 Co-product: 0.00 lbs/yr.
					CY2012 Facility Total: 4.9200		0.0000 CY2012 Co-product: 0.00 lbs/yr.
					CY2013 Facility Total: 4.9200		0.0000 CY2013 Co-product: 0.00 lbs/yr.
					CY2014 Facility Total: 4.9200		0.0000 CY2014 Co-product: 0.00 lbs/yr.
					CY2015 Facility Total: 4.9200		0.0000 CY2015 Co-product: 0.00 lbs/yr.
					CY2016 Facility Total: 4.9200		0.0000 CY2016 Co-product: 0.00 lbs/yr.
					<b>CY2017 Facility Total: 4.9200</b>		<b>0.0000 CY2017 Co-product: X lbs/yr.</b>
Source: Mt. Hamilton, LLC: FIN 1723; OPTC AP1041-3500; MOPTC AP1041-3520							
System Description: Mercury Retort (S2.003/TU4.001)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant: Carbon Kiln (S2.004B/TU4.002)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Carbon Regeneration Kiln did not operate, not yet constructed.
System Description: ADR Plant: Smelting Furnace (S2.005/TU4.003)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Electro-winning Cells and P/B Tanks (S2.006 - S2.010/TU4.004 - TU4.008)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 EW Cells and P/B Tanks did not operate, not yet constructed.
System Description: Mercury Co-Product							
Hg					0.0000		0.0000 Facility-wide mercury co-product collected - Retort.
System Description: Assay Laboratory (S2.018 - S2.023/DM3.001 - DM3.014)							
Hg					0.0000		0.0000 Potential to emit (PTE) of 4.11 lbs/yr, not actual - see DM Technical Review.
					CY2015 Facility Total: 0.0000		0.0000 CY2015 Co-product: 0.00 lbs/yr.
					CY2016 Facility Total: 0.0000		0.0000 CY2016 Co-product: 0.00 lbs/yr.
					<b>CY2017 Facility Total: 0.0000</b>		<b>0.0000 CY2017 Co-product: X lbs/yr.</b>
Source: WK Mining (USA) LTD.: FIN 1915; AQOP Class 2 AP1041-3670; OPTC AP1041-3668; MOPTC AP1041-3669							
System Description: ADR Plant: Mercury Retort (S2.003/TU4.001)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant: Smelting Furnace (S2.004/TU4.002)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Carbon Regeneration Kiln (S2.005/TU4.003)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Smelting Furnace did not operate, not yet constructed.
System Description: ADR Plant: Electro-winning Cells and P/B Tanks (S2.006 - S2.009/TU4.004 - TU4.007)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 EW Cells and P/B Tanks did not operate, not yet constructed.
System Description: Mercury Co-Product							
Hg					0.0000		0.0000 Facility-wide mercury co-product collected.
System Description: De Minimis Designation (No units listed)							
Hg					0.0000		0.0000 No DM Designation currently issued.
					CY2016 Facility Total: 0.0000		0.0000 CY2016 Co-product: 0.00 lbs/yr.
					<b>CY2017 Facility Total: 0.0000</b>		<b>0.0000 CY2017 Co-product: X lbs/yr.</b>
Source: McEwen Mining, Inc.: FIN 2005; Class 2 AQOP AP1041-3799; OPTC AP1041-3800; MOPTC AP1041-3801							
System Description: ADR Plant: Carbon Regeneration Kiln, Electro-winning Cells, and Eluant (Pregnant)/Barren Tanks (S2.002 - S2.006/TU4.001 - TU4.005)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Thermal Units did not operate, not yet constructed.
System Description: ADR Plant: Mercury Retort (S2.007/TU4.006)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Mercury Retort did not operate, not yet constructed.
System Description: ADR Plant: Refinery Furnace (S2.008A & S2.008B/TU4.007)							
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000 Refinery Furnace did not operate, not yet constructed.
System Description: Mercury Co-Product							
Hg					0.0000		0.0000 Facility-wide mercury co-product collected.
System Description: Assay Laboratory (S2.002 - S2.006/DM3.001 - DM3.009)							
Hg					0.0000		0.0000 Potential to emit (PTE) of 1.9199 lbs/yr, not actual - see DM Technical Review.
					<b>CY2017 Facility Total: 0.0000</b>		<b>0.0000 CY2017 Co-product: 0 lbs/yr.</b>

Source: Comstock Mining, LLC (formerly Plum Mining Company, LLC): FIN 0404; OPTC AP1041-2761; MOPTC AP1041-2690								
System Description: Mercury Retort (S2.025/TU4.001)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Retort did not operate in 2017.
System Description: Refinery Furnace (S2.026 & S2.026.1/TU4.002)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Furnace did not operate in 2017.
System Description: Mercury Co-Product								
Hg					0.0000		0.0000	Facility-wide mercury co-product collected - Retort.
System Description: Assay Laboratory (DM3.001 - DM3.012)								
Hg					0.0309		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		0.0309		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.2755		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		0.9812		0.0003	CY2013 Co-product: 0.583 lbs/yr.
			CY2014 Facility Total:		0.0708		0.0070	CY2014 Co-product: 14 lbs/yr.
			CY2015 Facility Total:		0.2257		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.2284		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.0309</b>		<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>
Source: Mineral Ridge Gold, LLC: FIN 0398; Class 2 AQOP AP1041-2733; MOPTC AP1041-2222								
System Description: Assay Laboratory (DM3.001 - DM3.011)								
Hg					2.9851		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2011 Facility Total:		2.1256		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		2.1256		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		2.9851		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		2.9851		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		2.9851		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		2.9851		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>2.9851</b>		<b>0.0000</b>	<b>CY2017 Co-product: X lbs/yr.</b>
Source: Goldwedge, LLC - Goldwedge Mine (formerly Manhattan Mining Company): FIN 0373; Class 2 AQOP AP1041-1457; MOPTC AP1041-2303								
System Description: Assay Laboratory & Dore Smelting Furnace (DM3.002 - DM3.007)								
Hg					0.3624		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		0.0000		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		4.1040		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		4.1040		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		4.1040		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		4.1040		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		4.1040		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		4.4661		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		4.4661		0.0000	CY2013 Co-product: 0.00 lbs/yr.
			CY2014 Facility Total:		4.4661		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.3624		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.3624		0.0000	CY2016 Co-product: 0.00 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.3624</b>		<b>0.0000</b>	<b>CY2017 Co-product: 0.00 lbs/yr.</b>

Source: Newmont Mining Corporation - Phoenix Mine: FIN 0388; Class 2 AQOP AP1041-0220.03; MOPTC AP1041-2247								
System Description: Electric Carbon Regeneration Kiln (S2.003/TU4.001)								
Hg	1,600.00	tpy	0.0000335	lbs/hr	0.0893	2,666	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort (S2.014/TU4.002)								
Hg	15.00	tpy	0.00000206	lbs/hr	0.0019	930	0.0000	Retort emissions factor derived from July 2017 M29 stack test.
System Description: Mercury Co-Product								
Hg					0.0000		0.0140	Facility-wide mercury co-product collected - Retort.
System Description: Pregnant & Barren Tanks, Electro-winning Cells, Drying Oven and 2 AA Units. SXEW EW Cells and Metallurgical Lab DM status pending determination. (S2.014/DM3.001 - DM3.018)								
Hg					0.5773		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:		2.3061		0.0000	CY2006 Co-product: 0.00 lbs/yr.
			CY2007 Facility Total:		0.4579		0.0000	CY2007 Co-product: 0.00 lbs/yr.
			CY2008 Facility Total:		0.8053		0.0000	CY2008 Co-product: 0.00 lbs/yr.
			CY2009 Facility Total:		1.3102		0.0000	CY2009 Co-product: 0.00 lbs/yr.
			CY2010 Facility Total:		0.3835		0.0000	CY2010 Co-product: 0.00 lbs/yr.
			CY2011 Facility Total:		0.3749		0.0000	CY2011 Co-product: 0.00 lbs/yr.
			CY2012 Facility Total:		0.3724		0.0000	CY2012 Co-product: 0.00 lbs/yr.
			CY2013 Facility Total:		0.5415		0.0370	CY2013 Co-product: 60 lbs/yr.
			CY2014 Facility Total:		0.5799		0.0000	CY2014 Co-product: 0.00 lbs/yr.
			CY2015 Facility Total:		0.5814		0.0000	CY2015 Co-product: 0.00 lbs/yr.
			CY2016 Facility Total:		0.6238		0.0000	CY2016 Co-product: 19 lbs/yr.
			<b>CY2017 Facility Total:</b>		<b>0.6685</b>		<b>0.0140</b>	<b>CY2017 Co-product: 28 lbs/yr.</b>
Source: Barrick Goldstrike Mines, Inc.: FIN 0005; Class 1 AQOP AP1041-0739.02; OPTC AP1041-2805; MOPTC AP1041-2221								
System Description: North Roaster Mill Circuit #1 Air Pre-Heater and Dry Grinding Process (S2.204 & S2.205.01 - S2.205.12/TU4.001)								
Hg	2,681,170.00	tpy	0.00256	lbs/hr	21.53216	8,411	0.0000	Mill Circuit #1 emissions factor derived from 2017 M29 stack test.
System Description: South Roaster Mill Circuit #2 Air Pre-Heater and Dry Grinding Process (S2.206 & S2.207.01 - S2.207.12/TU4.002)								
Hg	2,859,972.00	tpy	0.00244	lbs/hr	20.40084	8,361	0.0000	Mill Circuit #2 emissions factor derived from 2017 M29 stack test.
System Description: Roasters #1 & #2 (S2.209.1 & S2.209.2/TU4.003 & TU4.004)								
								Roaster Circuit emissions factor derived from 2017 M29 stack test. Testing was conducted during dual Roaster operations. Annual hours operated is the average of individual Roaster operations. Roaster #1 operated 7,882 hrs/yr, Roaster #2 operated 7,888 hrs/yr.
Hg	5,775,338.00	tpy	0.00848	lbs/hr	66.8648	7,885	0.0000	
System Description: North Roaster Circuit #1 Quenching Process (S2.210/TU4.005)								
Hg	2,958,096.00	tpy	0.00289	lbs/hr	22.77898	7,882	0.0000	Quench Circuit #1 emissions factor derived from 2017 M29 stack test.
System Description: South Roaster Circuit #2 Quenching Process (S2.211/TU4.006)								
Hg	2,775,580.00	tpy	0.00193	lbs/hr	15.22384	7,888	0.0000	Quench Circuit #2 emissions factor derived from 2017 M29 stack test.
System Description: Analytical Assay Laboratory (S2.051.1/TU4.007)								
Hg	40.00	tpy	0.000193	lbs/hr	1.6901	8,757	0.0000	Assay Lab emissions factor derived from 2017 M29 stack test.
System Description: Carbon Reactivation Kiln (S2.004.1/TU4.008)								
Hg	5,484.00	tpy	0.0000222	lbs/hr	0.1111	5,006	0.0000	Carbon Kiln emissions factor derived from 2017 M29 stack test.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit A (S2.004.1/TU4.009 & TU4.011)								
Hg	Not Reported	gals/yr	0	lbs/hr	0.0000	0	0.0000	P/B Tanks A emissions reported in conjunction with Carbon Reactivation Kiln.
System Description: Pregnant & Barren Strip Solution Tanks - Circuit B (S2.004.1/TU4.010 & TU4.012)								
Hg	Not Reported	gals/yr	0	lbs/hr	0.0000	0	0.0000	P/B Tanks B emissions reported in conjunction with Carbon Reactivation Kiln.
System Description: Autoclave #1 (S2.015/TU4.013)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	Acidic Operation Autoclave #1 did not operate in 2017.
System Description: Autoclaves #2 & 3 (S2.016 & S2.017/TU4.014 & TU4.015))								
								Acidic Operation Autoclaves #2 & 3 emissions factor derived from 2017 M29 stack tests. Testing was conducted during dual Autoclave operations. Annual hours operated is the average of individual Autoclave operations. Autoclave #2 operated 7,739 hrs/yr, Autoclave #3 operated 8,230 hrs/yr.
Hg	1,958,500.00	tpy	0.00064	lbs/hr	5.1104	7,985	0.0000	
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018))								
								Acidic Operation
								Annual Emissions Reporting Form does not specify under which operating scenario testing was conducted, or whether dual scenario operations were undertaken. Therefore, all hours, throughput, and emissions are reported under Alkaline mode.
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	
System Description: Autoclaves #4 - 6 (S2.018 - S2.020/TU4.016 - TU4.018)								
								Alkaline Operation
								Autoclaves #4 - 6 emissions factor derived from 2017 M29 stack test. Testing was conducted during simultaneous operations. Annual hours operated is the average of individual Autoclave operations. Autoclave #4 operated 6,460 hrs/yr; #5 operated 7,590 hrs/yr; and #6 operated 7,651 hrs/yr.
Hg	2,616,362.00	tpy	0.0000612	lbs/hr	0.4427	7,234	0.0000	

System Description: Mercury Retort #1 (S2.009/TU4.019)								
Hg	48.00	tpy	8.77E-07	lbs/hr	0.0031	3,506	0.0000	Retort #1 emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort #2 (S2.010/TU4.020)								
Hg	53.00	tpy	0.00000101	lbs/hr	0.0036	3,603	0.0000	Retort#2 emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort #3 (S2.011/TU4.021)								
Hg	49.00	tpy	4.66E-07	lbs/hr	0.0016	3,529	0.0000	Retort #3 emissions factor derived from 2017 M29 stack test.
System Description: Mercury Retort #4 (S2.341/TU4.025)								
Hg	1.00	tpy	0.00000831	lbs/hr	0.0010	121	0.0000	Retort #4 emissions factor derived from 2017 M29 stack test.
System Description: East & West Refinery Furnaces & Electro-winning Cells combined vented through a common carbon filter and stack (S2.013 & S2.014/TU4.022 & TU4.023)								
Hg	114.00	tpy	0.00287	lbs/hr	2.8987	1,010	0.0000	Furnaces's/EW Cells emissions factor derived from 2017 M29 stack test. Testing was conducted during dual Furnace and EW Cell operations. Annual hours operated is the average of individual Furnace operations. East Furnace (TU4.022) operated 968 hrs/yr; West Furnace (TU4.023) operated 1,051 hrs/yr.
System Description: Electro-winning Cells only (IA1.014/TU4.024)								
Hg	Not Reported	gals/yr	0.00169	lbs/hr	12.4300	7,355	0.0000	EW Cells emissions factor derived from 2017 M29 stack test while the Furnaces were not operating. Total EW Cell operating hours were 8,365 hrs/yr. Combined Furnace/EW Cell operating hours of 1,010 hrs/yr. were subtracted from total hours operated to arrive at 7,355 hours of EW Cell operations only.
System Description: Resin-In-Leach (RIL) Elution Circuit Regeneration Tanks (S2.333.1 - S2.333.8/TU4.026 & TU4.027)								
Hg	Not Reported	gals/yr	0.0000241	lbs/hr	0.1829	7,590	0.0000	RIL Elution Circuit Regeneration Tanks commenced operations 11/18/14. RIL Regen. Tanks emissions factor derived from March 2017 M29 stack test.
System Description: Resin-In-Leach (RIL) Electro-winning Circuit & Pregnant/Barren Tanks (S2.342.1 - S2.342.3/TU4.030 - TU4.032)								
Hg	Not Reported	gals/yr	0.0003786	lbs/hr	3.3165	8,760	0.0000	RIL EW Circuit & P/B Tanks commenced operations 11/24/14. RIL EW Circuit emissions factor derived from average of 2017 M29 stack tests.
System Description: Mercury Co-Product								
Hg					0.0000		148.0100	Facility-wide mercury co-product collected, no breakout by system provided.
System Description: Assay, Mill, Mill Met, Autoclave, Autoclave Met and Roaster Pumphouse Laboratories, Strip Circuit Area and Ore Fines Fee System (S2.051.1/DM3.001 - DM3.079).								
Hg					4.5800		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY2006 Facility Total:	616.7650			98.5500	CY2006 Co-product: 197,100 lbs/yr.
			CY2007 Facility Total:	708.6590			58.6300	CY2007 Co-product: 117,260 lbs/yr.
			CY2008 Facility Total:	166.0557			87.3300	CY2008 Co-product: 134,660 lbs/yr.
			CY2009 Facility Total:	369.7831			61.8730	CY2009 Co-product: 123,746 lbs/yr.
			CY2010 Facility Total:	266.9336			60.1080	CY2010 Co-product: 120,216 lbs/yr.
			CY2011 Facility Total:	630.5519			59.9200	CY2011 Co-product: 119,840 lbs/yr.
			CY2012 Facility Total:	334.9836			44.4100	CY2012 Co-product: 88,820 lbs/yr.
			CY2013 Facility Total:	386.0257			50.6700	CY2013 Co-product: 111,708 lbs/yr.
			CY2014 Facility Total:	227.3012			53.4000	CY2014 Co-product: 117,727 lbs/yr.
			CY2015 Facility Total:	273.8005			66.4800	CY2015 Co-product: 146,563 lbs/yr.
			CY2016 Facility Total:	271.8309			126.6000	CY2016 Co-product: 279,105 lbs/yr.
			<b>CY2017 Facility Total:</b>	<b>177.5724</b>			<b>148.0100</b>	<b>CY2017 Co-product: 326,306 lbs/yr (reported in metric tons). No calomel /elemental breakout provided. CY's 2013-16 lbs/yr corrected to metric tons.</b>

CY 2017 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
707.10		186.56

CY 2017 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.

Co-product: 403,406 lbs/yr (148.01 metric tons, 38.55 short tons)

CY 2016 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
696.68		164.35

CY 2016 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.

Co-product: 328,700 lbs/yr

CY 2015 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
688.12		131.17

CY 2015 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.

Co-product: 262,340 lbs/yr

CY 2014 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
484.21		145.12

CY 2014 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.

Co-product: 290,240 lbs/yr

CY 2013 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
748.63		111.57

CY 2013 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In some instances, 2012 test results were used due to invalidated 2013 test results.

Co-product: 223,140 lbs/yr

CY 2012 Cumulative Totals		
Process Emissions (lbs/yr)		Co-Product (tpy)
1,393.42		115.95

CY 2012 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.

Co-product: 231,900 lbs/yr



Note: The total value is lower than actual industry-wide emissions due to a few thermal units which were unable to test in the reporting year and the absence of 2009 test data for Barrick Goldstrike's autoclaves under alkaline operating conditions. See 2009 Report for details.

<b>CY 2010 Cumulative Totals</b>			CY 2011 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.  Co-product: 213,540 lbs/yr
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,607.96		106.77	
<b>CY 2010 Cumulative Totals</b>			CY 2010 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.  Co-product: 203,180 lbs/yr
Process Emissions (lbs/yr)		Co-Product (tpy)	
1,134.15		101.59	
<b>CY 2009 Cumulative Totals</b>			CY 2009 process emissions were solely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. In general, testing went much better in 2009 than in 2008 with far fewer testing irregularities or instances where test results were invalidated.  Co-product: 180,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
1,336.46		90.18	
<b>CY 2008 Cumulative Totals</b>			CY 2008 process emissions were largely derived using one consistent FRM testing methodology (Method 29). Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy. Some facilities had entire testing events, or in some cases just one or more runs of a test event, invalidated due to irregularities in testing protocol, poor sample handling procedures or laboratory errors. Yukon-Nevada Corporation - Jeritt Canyon Mine (formerly Queenstake Resources) did not test in 2008 due to the temporary NDEP ordered shutdown of the facility.  Co-product: 205,860 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
3,165.90		102.93	
<b>CY 2007 Cumulative Totals</b>			CY 2007 process emissions were largely derived using one consistent FRM testing methodology (Method 29) with scattered M101A and OHM results used in lieu of M29 due to test schedule conflicts/logistics issues. Testing protocols were reviewed prior to test commencement and all final report submittals were reviewed to ensure reporting accuracy.  Co-product: 195,360 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,764.52		97.68	
<b>CY 2006 Cumulative Totals</b>			CY 2006 process emissions and co-product values were accepted "as submitted" due to variability in testing methodology, emission calculation methods and/or the lack of current FRM test results.  Co-product: 266,520 lbs/yr
Process Emissions lbs/yr		Co-Product tpy	
4,468.15		133.26	