

Nevada Division of Environmental Protection
Bureau of Air Quality Planning
Calendar Year 2008 Actual Production/Emission Reporting Form Addendum for Mercury Emissions

Cumulative NMCP Mercury Addendum 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: AQOP AP1041-0723.01; NMCP AP1041-2218								
System Description: Juniper Mill Electric Induction Furnace (S2.001 - 1 of 2, only one operates at a time)								
Hg	36.80	tpy	0.0083	lbs/hr	3.1689	382	0.0000	Induction Furnace emissions factor derived from 2008 M29 stack test.
System Description: Juniper Mill Electric Induction Furnace (S2.001.1 - 1 of 2, only one operates at a time)								
Hg	35.80	tpy	0.0074	lbs/hr	2.9163	394	0.0000	Induction Furnace emissions factor derived from 2008 M29 stack test.
System Description: Juniper Mill Carbon Kiln (S2.002)								
Hg	5,582.00	tpy	0.07268	lbs/hr	548.1526	7,542	0.0000	Carbon Kiln emissions factor derived from July 2007 M29 stack test (Jan. 1 - June 20), August 2008 M29 test (June 21 - Nov. 5) and January 2009 M29 test (Nov. 6 - Dec. 31). Three test values were unnecessary due to scrubber system malfunction from June 21, 2008 through November 5, 2008. See revised submittal dated July 16, 2009.
System Description: Mercury Retort Circuit A (S2.004)								
Hg	20.43	tpy	0.000028	lbs/hr	0.0945	3,375	2.5900	Retort A emissions factor derived from 2008 M29 stack test.
System Description: Mercury Retort Circuit B (S2.005)								
Hg	15.99	tpy	0.000028	lbs/hr	0.0778	2,778	2.0500	Retort B emissions factor derived from 2008 M29 stack test.
System Description: Mercury Retort Circuit C (S2.005.1)								
Hg	12.83	tpy	0.000073	lbs/hr	0.1752	2,400	1.6900	Retort C emissions factor derived from 2008 M29 stack test.
System Description: Mercury Retort Circuit D (S2.005.2)								
Hg	16.45	tpy	0.0000066	lbs/hr	0.0195	2,958	2.4700	Retort D emissions factor derived from 2008 M29 stack test.
System Description: Pinon Carbon Kiln (S2.021)								
Hg	0.00	tpy	0	lbs/hr	0.0000	0	0.0000	System did not operate in 2008.
System Description: Sage Mill Autoclave (Phase 1 - S2.023)								
Hg	1,844,351.00	tpy	0.083	lbs/hr	685.2480	8,256	0.0000	Autoclave #1 emissions factor derived from 2008 M29 stack test.
System Description: Sage Mill Autoclave (Phase 2 - S2.024)								
Hg	1,884,498.00	tpy	0.033	lbs/hr	272.2500	8,250	0.0000	Autoclave #2 emissions factor derived from 2008 M29 stack test.
System Description: Electro-winning Cells (six cells ducted to common stack)								
Hg	N/A	gals/yr	0.01	lbs/hr	87.8400	8,784	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Juniper Mill Pregnant & Barren Strip Solution Tanks								
Hg	N/A	gals/yr	0.0083	lbs/hr	72.9072	8,784	0.0000	Preg./Barren Tanks emissions factor derived from 2008 M29 stack test.
System Description: Pinon Mill Pregnant Strip Solution Tank								
Hg	N/A	gals/yr	0.000136	lbs/hr	1.1946	8,784	0.0000	Emissions estimate - refer to attached calculation.
System Description: Pinon Mill Barren Strip Solution Tank								
Hg	N/A	gals/yr	0.000136	lbs/hr	1.1946	8,784	0.0000	Emissions estimate - refer to attached calculation.
System Description: Laboratory Sample Prep. Room, Fire Assay Room, Wet Lab Room, Slurry Prep. Room, LECO Room, Instrumentation Room, Met Lab Room & Autoclave Room								
Hg					3.9471		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY 2006 Facility Total: 434.3715		8.9100	CY 2006 Co-product: 17,820.00 lbs/yr
					CY 2007 Facility Total: 929.9303		13.2160	CY 2007 Co-product: 26,432.00 lbs/yr.
					CY 2008 Facility Total: 1,679.1864		8.8000	CY 2008 Co-product: 17,600.00 lbs/yr.
Source: Queenstake Resources USA, Inc - Jerritt Canyon Mine: AQOP AP1041-0778; NMCP AP1041-2217								
System Description: West Roaster Process (System 40 - S2.036 & PF1.213)								
Hg	176,670.00	tpy	0.0524	lbs/hr	144.3096	2,754	0.3500	Roaster emissions factor derived from average of 2008 M29 stack tests.
System Description: West Roaster Quench Stack								
Hg		tpy		lbs/hr				No 2008 testing completed.
System Description: East Roaster Process (System 42 - S2.041 & PF1.214)								
Hg	158,125.00	tpy	0.0333	lbs/hr	73.5264	2,208	0.3600	Roaster emissions factor derived from average of 2008 M29 stack tests.
System Description: East Roaster Quench Stack								
Hg		tpy		lbs/hr				No 2008 testing completed.
System Description: Carbon Bed Venturi Scrubber (System 49 - Carbon Kiln - S2.041 & System 51 - Retort - S2.051)								
					0.0000		0.0000	System did not operate in 2008, no testing completed.
System Description: Ore Dryer (System 35 - S2.026)								
Hg	334,037.00	tpy		lbs/hr		1,868	0.0000	No 2008 testing completed.
System Description: Refining Process Induction Furnace (System 50 - S2.050)								
Hg		tpy		lbs/hr		229	0.0000	No 2008 testing completed. Mercury co-product accounted for under roasters.

Source: Queenstake Resources USA, Inc - Jerritt Canyon Mine: AQOP AP1041-0778; NMCP AP1041-2217 (continued)								
System Description: Laboratory Units Including Large Ore Drying Ovens (5 Units) and Electro-winning Cells								
Hg				2.1363		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.	
			CY 2006 Facility Total:	293.9245		2.9600	CY 2006 Co-product: 5,920.00 lbs/yr.	
			CY 2007 Facility Total:	1,966.3934		1.0200	CY 2007 Co-product: 2,040.00 lbs/yr.	
			CY 2008 Facility Total:	219.9723		0.7100	CY 2008 Co-product: 1,420.00 lbs/yr.	
Source: Newmont Mining Corporation - Gold Quarry: AQOP AP1041-0793; NMCP AP1041-2219								
System Description: ROTP Dry-Grinding Static Separator (System 42 - S2.120 - S2.0124)								
Hg	3,349,657.00	tpy	0.001141	lbs/hr	8.9774	7,868	0.0000	Static Separator emissions factor derived from 2008 M29 stack test.
System Description: ROTP Ore Preheaters (System 43 - S1.125 - S2.130)								
Hg	3,336,226.00	tpy	0.02867	lbs/hr	228.5859	7,973	0.0000	Ore Preheater's emissions factor derived from 2008 M29 stack test.
System Description: ROTP Ore Roasters (System 44 - S2.131 - S2.156)								
Hg	3,336,226.00	tpy	0.000488	lbs/hr	3.8908	7,973	5.2000	Ore Roaster's factor derived from 2008 M29 stack test.
System Description: ROTP North Calcine Quench Circuit (System 47 - S2.158 & S2.159)								
Hg	1,521,049.00	tpy	0.005671	lbs/hr	45.2149	7,973	0.0000	North Quench Circuit emissions factor derived from 2008 M29 stack test.
System Description: ROTP South Calcine Quench Circuit (System 51 - S2.160 & S2.161)								
Hg	1,815,176.00	tpy	0.006853	lbs/hr	53.8783	7,862	0.0000	South Quench Circuit emissions factor derived from 2008 M29 stack test.
System Description: AARL Carbon Kiln #2 Scrubber Stack (System 73 - S2.058 & S2.059)								
Hg	6,085.50	tpy	0.0059213	lbs/hr	35.0541	5,920	0.0300	Kiln Scrubber Stack emissions factor derived from 2008 M29 stack test.
System Description: AARL Carbon Kiln #2 Combustion Stack (System 73 - S2.058 & S2.059)								
Hg	30,411.90	MMBtu/yr	0.000252	lbs/hr	1.4918	5,920	0.0000	Kiln Comb. Stack emissions factor derived from 2008 M29 stack test.
System Description: Zadra Carbon Kiln #1 Scrubber Stack (System 72 - S2.056 & S2.057)								
Hg	7,467.00	tpy	0.0005433	lbs/hr	4.0894	7,527	0.0200	Kiln Scrubber Stack emissions factor derived from 2008 M29 stack test.
System Description: Zadra Carbon Kiln #1 Combustion Stack (System 72 - S2.056 & S2.057)								
Hg	61,497.80	MMBtu/yr	0.000481	lbs/hr	3.6205	7,527	0.0000	Kiln Comb. Stack emissions factor derived from 2008 M29 stack test.
System Description: Refinery Mercury Retort Circuit (System 77 - S2.041 - S2.046)								
Hg	62.10	tpy	0.0005193	lbs/hr	1.5953	3,072	1.5200	Retort emissions factor derived from 2008 M29 stack test.
System Description: Refinery Induction & Pour Furnaces (System 78 - S2.047 - S2.049)								
Hg	84.90	tpy	0.0071887	lbs/hr	4.4232	615	0.0000	Induction Furnace emissions factor derived from 2008 M29 stack test.
System Description: AARL Carbon Stripping (Pregnant) Tanks								
Hg	15,341.90	tpy	0.00291	lbs/hr	25.5614	8,784	0.0000	Carbon Strip Tanks emissions factor derived from 2008 M29 stack test.
System Description: Refinery Barren Tank & Electro-winning Cells								
Hg	47,395,947.00	gals/yr	0.000528	lbs/hr	4.1322	7,826	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory, Met Laboratory & Integrated Laboratory								
Hg					1.8984		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:	310.6937		2.7200	CY 2006 Co-product: 5,440.00 lbs/yr.	
			CY 2007 Facility Total:	504.4204		6.1600	CY 2007 Co-product: 12,320.00 lbs/yr.	
			CY 2008 Facility Total:	422.4137		6.7700	CY 2008 Co-product: 13,540.00 lbs/yr.	
Source: Newmont Mining Corporation - Midas Operations: AQOP AP1041-0766.01; NMCP AP1041-2253								
System Description: Refinery Furnace #1 (S2.035)								
Hg	69.49	tpy	0.041	lbs/hr	14.5837	356	0.0000	Furnace #1 emissions factor derived from 2008 M29 stack test.
System Description: Refinery Furnace #2 (S2.036)								
Hg	110.41	tpy	0.031	lbs/hr	16.8485	544	0.0000	Furnace #2 emissions factor derived from 2008 M29 stack test.
System Description: Retort A (S2.037)								
Hg	127.37	tpy	0.002	lbs/hr	7.0480	3,524	0.0000	Retort A emissions factor derived from 2008 M29 stack test.
System Description: Retort B (S2.038)								
Hg	89.73	tpy	0.000351	lbs/hr	1.0379	2,957	0.0000	Retort B emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory								
Hg				lbs/hr	1.8239		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:	17.1801		0.0000	CY 2006 Co-product: 0.00 lbs/yr.	
			CY 2007 Facility Total:	4.2457		0.0000	CY 2007 Co-product: 0.00 lbs/yr.	
			CY 2008 Facility Total:	41.3420		0.0000	CY 2008 Co-product: 0.00 lbs/yr.	
Source: Barrick, Bald Mountain Mine - Huntington Valley: AQOP AP1041-1362; NMCP AP1041-2246								
System Description: Propane Fired Carbon Regeneration Kiln (System 1 - S2.001)								
Hg	138.09	tpy	0.000078	lbs/hr	0.1318	1,690	0.0000	Carbon Kiln emissions factor derived from 2008 M29 stack test.
System Description: Electro-winning Circuit (IA1.024)								
Hg	53,022.00	tpy	0.0455	lbs/hr	269.5420	5,924	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Propane Fired Retort Furnace (System 2 - S2.002)								
Hg	5.00	tpy	0.000017	lbs/hr	0.0160	940	2.6000	Retort emissions factor derived from 2008 M29 stack test.

Source: Barrick, Bald Mountain Mine - Huntington Valley: AQOP AP1041-1362; NMCP AP1041-2246 (continued)								
System Description: Propane Fired Bullion Furnace (System 3 - S2.003)								
Hg	3.00	tpy	0.038	lbs/hr	5.4720	144	0.0000	Bullion Furnace emissions factor derived from 2008 M29 stack test. Third test run invalid, sample only captured 31 dscf vs. 60 dscf., and only ran for 61 minutes vs. 120 minutes. Em. factor reduced from .063 to .038 lbs/hr.
System Description: Barren Strip Solution Tank								
Hg	53,022.00	tpy	0.000006	lbs/hr	0.0355	5,924	0.0000	Barren Strip Sol. Tank emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory								
Hg					3.1246		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:		204.3025		2.9400	CY 2006 Co-product: 5,880.00 lbs/yr.
			CY 2007 Facility Total:		57.4138		2.2750	CY 2007 Co-product: 4,550.00 lbs/yr.
			CY 2008 Facility Total:		278.3220		2.6000	CY 2008 Co-product: 5,200.00 lbs/yr.
Source: Kennecott Rawhide Mining Company - Denton-Rawhide Mine: AQOP AP1041-1116.02; NMCP AP1041-2245								
System Description: Carbon Regeneration Kiln (System 1 - S2.001)								
Hg	314.80	tpy	0.0000782	lbs/hr	0.0615	7,870	0.0000	Carbon Kiln emissions factor derived from 2008 M29 stack test.
System Description: Electro-winning Circuit (IA3.007)								
Hg		gals/yr	0.00001073	lbs/hr	0.0608	5,667	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: System 1 - Mercury Retort (System 2 - S2.002)								
Hg	9.24	tpy	4.87E-07	lbs/hr	0.0002	472	0.0262	Retort emissions factor derived from 2008 M29 stack test.
System Description: System 2 - Refinery Induction Furnace (System 4 - S2.004)								
Hg	7.79	tpy	0.1574	lbs/hr	12.9540	82	0.0000	Refinery Furnace emissions factor derived from 2008 M29 stack test.
System Description: Fire Assay Laboratory								
Hg					0.0142		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:		351.5928		0.0621	CY 2006 Co-product: 124.20 lbs/yr.
			CY 2007 Facility Total:		39.5645		0.0276	CY 2007 Co-product: 55.20 lbs/yr.
			CY 2008 Facility Total:		13.0908		0.0262	CY 2008 Co-product: 52.40 lbs/yr.
Source: Hycroft Resources & Development, Inc. - Crofoot/Lewis Project: AQOP AP1041-0334.02; NMCP AP1041-2255								
System Description: Mercury Retort #1								
Hg					0.0000			Facility did not operate in 2008.
System Description: Mercury Retort #2								
Hg					0.0000			Facility did not operate in 2008.
System Description: Mercury Retort #3								
Hg					0.0000			Facility did not operate in 2008.
System Description: Furnace #1								
Hg					0.0000			Facility did not operate in 2008.
System Description: Furnace #2								
Hg					0.0000			Facility did not operate in 2008.
System Description: Furnace #3								
Hg					0.0000			Facility did not operate in 2008.
			CY 2006 Facility Total:		0.0000		0.0000	CY 2006 Co-product: 0.00 lbs/yr.
			CY 2007 Facility Total:		0.0000		0.0000	CY 2007 Co-product: 0.00 lbs/yr.
			CY 2008 Facility Total:		0.0000		0.0000	CY 2008 Co-product: 0.00 lbs/yr.
Source: Antler Peak Gold, Inc. (formerly Metallic Ventures, Inc.): AQOP AP1041-1202; NMCP AP1041-2248								
System Description: Dore Furnace, Carbon Reactivation Kiln								
Hg					0.2838		0.0000	Facility did not operate in 2008. Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:		0.0000		0.0000	CY 2006 Co-product: 0.00 lbs/yr.
			CY 2007 Facility Total:		0.0000		0.0000	CY 2007 Co-product: 0.00 lbs/yr.
			CY 2008 Facility Total:		0.2838		0.0000	CY 2008 Co-product: 0.00 lbs/yr.
Source: Coeur D'Alene Mining Corporation - Coeur Rochester Mine: AQOP AP1044-0063.02; NMCP AP1041-2242								
System Description: Refinery Furnace								
Hg	112.14	tpy	0.0249	lbs/hr	7.4576	300	0.0000	Refinery Furnace emissions factor derived from 2008 M29 stack test.
System Description: Retort								
Hg	112.14	tpy	0.000152	lbs/hr	0.5764	3,792	15.6000	Retort emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory								
Hg					1.8805		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
			CY 2006 Facility Total:		2.8872		16.1000	CY 2006 Co-product: 32,200.00 lbs/yr.
			CY 2007 Facility Total:		137.0958		15.4000	CY 2007 Co-product: 30,800.00 lbs/yr.
			CY 2008 Facility Total:		9.9144		15.6000	CY 2008 Co-product: 31,200.00 lbs/yr.

Source: Newmont Mining Corporation - Lone Tree Mine: AQOP AP1041-0059; NMCP AP1041-2251								
System Description: Electro-winning Cells (East Stack)								
Hg	3,781,440.00	gals/yr	0.00238	lbs/hr	5.7691	2,424	0.0000	EW Cells emissions factor derived from 2008 stack test.
System Description: Electro-winning Cells (West Stack)								
Hg	3,781,440.00	gals/yr	0.0014	lbs/hr	3.3936	2,424	0.0000	EW Cells emissions factor derived from 2008 stack test.
System Description: Electro-winning Cells (Scavenger Stack)								
Hg	7,562,880.00	gals/yr	0.00205	lbs/hr	4.9692	2,424	0.0000	EW Cells emissions factor derived from 2008 M29 stack test.
System Description: Pregnant and Barren Solution Tanks								
Hg	311.50	tpy - carbon	0.0181	lbs/hr	51.1144	2,824	0.0000	P/B Tanks emissions factor derived from 2008 M29 stack tests.
System Description: Sample Room, Fire Assay Room, Wet Laboratory, LECO Laboratory, Met Laboratory								
Hg					1.8788		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
							0.0000	CY 2006 Facility Total: 622.1013 CY 2006 Co-product: 0.00 lbs/yr.
							0.0000	CY 2007 Facility Total: 148.0964 CY 2007 Co-product: 0.00 lbs/yr.
							0.0000	CY 2008 Facility Total: 67.1251 CY 2008 Co-product: 0.00 lbs/yr.
Source: Barrick Cortez, Inc. - Cortez Hills and Pipeline Projects: AQOP AP1041-2141; NMCP AP1041-2220								
System Description: Refinery Induction Furnaces #1 & 2								
Hg	23.70	tpy	0.117	lbs/hr	70.2234	600	0.0000	Refinery Furnace's emissions factor derived from 2008 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #1 (S2.006)								
Hg	976.50	tpy	0.000107	lbs/hr	0.1871	1,748	0.0000	Carbon Kiln #1 emissions factor derived from 2008 M29 stack test.
System Description: Electric Carbon Reactivation Kiln #2 (S2.007)								
Hg	1,012.40	tpy	0.0000213	lbs/hr	0.0404	1,896	0.0000	Carbon Kiln #2 emissions factor derived from 2008 M29 stack test.
System Description: East Electro-winning Cells (IA1.096: Train #1 - 3 cells)								
Hg	50.00	gals/min	0.0000675	lbs/hr	0.5929	8,784	0.0000	EW Cells emissions factor derived from 2008 M29 stack test.
System Description: West Electro-winning Cells (IA1.097: Train #2 - 3 cells)								
Hg	50.00	gals/min	0.0000215	lbs/hr	0.1889	8,784	0.0000	EW Cells emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory Furnace Baghouse								
Hg	27.80	tpy	0.000134	lbs/hr	1.0613	7,920	0.0000	Furnace emissions factor derived from 2008 M29 stack test.
System Description: Pregnant and Barren Strip Solution Tanks								
Hg		gals/yr	0.000315	lbs/hr	2.7670	8,784	0.0000	Furnace emissions factor derived from 2008 M29 stack test.
System Description: Assay Laboratory (Analytical Lab Building), Met Laboratory, Strip Circuit Area (Mill Building), Refinery Gold Sludge Drying Oven								
Hg					0.8029		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
							0.1200	CY 2006 Facility Total: 166.7059 CY 2006 Co-product: 240.00 lbs/yr.
							0.3200	CY 2007 Facility Total: 208.0466 CY 2007 Co-product: 640.00 lbs/yr. Kiln #1 value (.29) is for both kilns.
							0.0000	CY 2008 Facility Total: 75.8638 CY 2008 Co-product: lbs/yr.
Source: Florida Canyon Mining, Inc. - Florida Canyon Mine: AQOP AP1041-0106.02; NMCP AP1041-2256								
System Description: Mercurt Retorts (System 6 - S2.003)								
Hg	9.792	tpy	0.000002	lbs/hr	0.0002	116.2	0.2875	Retort emissions factor derived from 2008 M29 stack test.
System Description: Mercurt Retorts (System 6 - S2.004)								
Hg	1.4705	tpy	0.0000158	lbs/hr	0.0157	992.4	0.0000	Retort emissions factor derived from 2008 M29 stack test.
System Description: Summit Valley Electro-winning Cell A (Model #75EC18)								
Hg	40.00	gals/min	0.00086	lbs/hr	7.5542	8,784	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Summit Valley Electro-winning Cell B (Model #75EC18)								
Hg	40.00	gals/min	0.000067	lbs/hr	0.5885	8,784	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Combustion Air International Carbon Kiln (System 9 - S2.007)								
Hg	2,883.00	tpy	0.02409	lbs/hr	149.2376	6,195	0.0000	Carbon Kiln emissions factor derived from 2008 M29 stack test.
System Description: Inductotherm Dore Furnace (System 7 - S2.005)								
Hg	8.89	tpy	0.00102	lbs/hr	0.3221	316	0.0000	Dore Furnace emissions factor derived from 2008 M29 stack test.
System Description: Pregnant Tank								
Hg	8,784.00	hrs/yr		lbs/hr	0.0000	8,784	0.0000	No emissions factor available - closed circuit.
System Description: Barren Tank								
Hg	8,784.00	hrs/yr		lbs/hr	0.0000	8,784	0.0000	No emissions factor available - closed circuit.
System Description: Assay Laboratory								
Hg					4.5934		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
							0.2264	CY 2006 Facility Total: 440.7382 CY 2006 Co-product: 452.80 lbs/yr.
							0.0072	CY 2007 Facility Total: 19.0000 CY 2007 Co-product: 14.40 lbs/yr.
							0.2875	CY 2008 Facility Total: 162.3117 CY 2008 Co-product: 575.00 lbs/yr.
Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AQOP AP1041-0444.01; NMCP AP1041-2250								
System Description: Carbon Regeneration Kiln [System 25 - S2.121 (uncontrolled)]								
Hg	See below	tpy	0.0052	lbs/hr	3.8688	744	0.0000	Carbon Kiln emissions factor (uncontrolled) derived from 2007 M29 stack test. New controls commenced operation 02/01/08.

Source: Round Mountain Gold Corporation - Smoky Valley Common Operation: AQOP AP1041-0444.01; NMCP AP1041-2250 (continued)								
System Description: Carbon Regeneration Kiln [System 25 - S2.121 (controlled)]								
Hg	3,963.00	tpy	0.00012	lbs/hr	0.0942	7,848	0.0000	Carbon Kiln emissions factor derived from 2008 M29 stack test.
System Description: Pregnant Strip Solution Tank (Shares a common stack with S2.121)								
Hg	30-70	gals/min		lbs/hr	0.0000	8,784	0.0000	Emissions combined with Carbon Kiln.
System Description: Barren Strip Solution Tank #1 (Shares a common stack with S2.121)								
Hg	30-70	gals/min		lbs/hr	0.0000	8,784	0.0000	Emissions combined with Carbon Kiln.
System Description: Barren Strip Solution Tank #2 (Shares a common stack with S2.121)								
Hg	30-70	gals/min		lbs/hr	0.0000	8,784	0.0000	Emissions combined with Carbon Kiln.
System Description: Electric Induction Furnace [System 24 - S2.130 (uncontrolled)]								
Hg	See below	tpy	0.0203	lbs/hr	1.2444	61	0.0000	Induction Furnace emissions factor (uncontrolled) derived from 2007 M29 stack test. New controls commenced operation 02/01/08.
System Description: Electric Induction Furnace [System 24 - S2.130 (controlled)]								
Hg	46.32	tpy	0.0000892	lbs/hr	0.0496	556	0.0000	Induction Furnace emissions factor derived from 2008 M29
System Description: Refinery Electro-winning Vent & Ovens, Assay Laboratory Ovens.								
Hg					3.0603		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY 2006 Facility Total: 57.0585		0.0085	CY2006 Co-product: 17.00 lbs/yr.
					CY 2007 Facility Total: 59.6652		0.0000	CY2007 Co-product: 0.00 lbs/yr.
					CY 2008 Facility Total: 8.3173		0.0000	CY2008 Co-product: 0.00 lbs/yr.
Source: Homestake Mining Company - Ruby Hill Project: AQOP AP1041-0713.01; NMCP AP1041-2252								
System Description: Electric Carbon Regeneration Kiln (S2.019)								
Hg	180.90	tpy		lbs/hr		2,510	0.0300	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Electric Mercury Retort (S2.022)								
Hg	3.14	tpy		lbs/hr		848	0.2100	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Electric Refinery Induction Furnace (S2.013)								
Hg	3.63	tpy		lbs/hr		75	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Electro-winning Cells 1 & 2 (IA1.005)								
Hg		gals/yr		lbs/hr		8,784	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Pregnant and Barren Strip Solution Tanks								
Hg		gals/yr		lbs/hr		8,784	0.0000	Pregnant and Barren Strip Solution Tanks vented to a common stack with Electro-winning Cells.
System Description: Assay Laboratory								
Hg					1.3883		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY 2006 Facility Total: 28.7825		0.5000	CY2007 Co-product: 1,000.00 lbs/yr.
					CY 2007 Facility Total: 35.2201		0.3800	CY2007 Co-product: 760.00 lbs/yr.
					CY 2008 Facility Total: 1.3883		0.2400	CY2008 Co-product: 480.00 lbs/yr.
Source: Marigold Mining Company - Marigold Mine: AQOP AP1041-0158.02; NMCP AP1041-2254								
System Description: Carbon Kiln (System 13A - S2.013A)								
Hg	740.00	tpy	0.000013	lbs/hr	0.0745	5,732	0.3600	Carbon Kiln emissions factor derived from 2008 M29 stack test.
System Description: Electro-winning Circuit (3 cells)								
Hg	6,281.00	hrs/yr	0.00077	lbs/hr	4.8364	6,281	0.0000	Electro-winning Cells emissions factor derived from 2008 M29 stack test.
System Description: Pregnant and Barren Strip Solution Tank								
Hg	6,281.00	hrs/yr		lbs/hr	0.0000	6,281	0.0000	Pregnant and Barren Strip Solution Tanks vented to a common stack with Electro-winning Cells, therefore, emissions factor is for both units.
System Description: Mercury Retort (System 14 - S2.014)								
Hg	10.75	tpy	0.00077	lbs/hr	1.0149	1,318	0.2090	Retort emissions factor derived from 2008 M29 stack test.
System Description: Tilting Crucible Furnace (System 15 -S2.015)								
Hg	5.79	tpy	0.0027	lbs/hr	0.5427	201	0.0000	Furnace emissions factor derived from June 2008 M29 stack test. October 2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Assay Laboratory								
Hg					4.0198		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY 2006 Facility Total: 908.0610		0.1675	CY 2006 Co-product: 335.00 lbs/yr.
					CY 2007 Facility Total: 5.2255		0.2450	CY 2007 Co-product: 490.00 lbs/yr.
					CY 2008 Facility Total: 10.4883		0.5690	CY 2008 Co-product: 1,138.00 lbs/yr.
Source: Borealis Mining Company: AQOP AP1041-2125; NMCP AP1041-2228								
System Description:								
Hg					0.0000		0.0000	Facility did not operate in 2008.
					CY 2006 Facility Total: 0.0000		0.0000	CY 2006 Co-product: 0.00 lbs/yr.
					CY 2007 Facility Total: 0.0000		0.0000	CY 2007 Co-product: 0.00 lbs/yr.
					CY 2008 Facility Total: 0.0000		0.0000	CY 2008 Co-product: 0.00 lbs/yr.

Source: Barrick Turquoise Ridge, Inc. - Getchell Mine: AQOP AP1041-0292.01; NMCP AP1041-2249								
System Description: Assay/Met Laboratory								
Hg					4.9462		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
				CY 2006 Facility Total:	10.6752		0.0000	CY 2006 Co-product: 0 lbs/yr.
				CY 2007 Facility Total:	4.9660		0.0000	CY 2007 Co-product: 0 lbs/yr.
				CY 2008 Facility Total:	4.9462		0.0000	CY 2008 Co-product: 0 lbs/yr.
Source: Royal Standard Minerals, Inc. - Manhattan Mine: AQOP AP1041-1457; NMCP AP1041-2303								
System Description: Dore Smelting Furnace								
Hg					4.1040		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
				CY 2006 Facility Total:	0.0000		0.0000	CY 2006 Co-product: 0.00 lbs/yr.
				CY 2007 Facility Total:	4.1040		0.0000	CY 2007 Co-product: 0.00 lbs/yr.
				CY 2008 Facility Total:	4.1040		0.0000	CY 2008 Co-product: 0.00 lbs/yr.
Source: Newmont Mining Corporation - Phoenix Mine: AQOP AP1041-0220.02; NMCP AP1041-2247								
System Description: Electric Carbon Regeneration Kiln (S2.002)								
Hg	2,674.00	tpy	0.000121	lbs/hr	0.4314	3,565	0.0000	Carbon Kiln emissions factor derived from 2008 M29 stack test. Third test run deemed invalid - possible switch of test results at laboratory w/Retort.
System Description: Retort (S2.014)								
Hg	23.00	tpy	0.00000415	lbs/hr	0.0066	1,596	0.0000	Retort emissions factor derived from 2008 M29 stack test. Third test run deemed invalid - possible switch of test results at laboratory w/Carbon Kiln.
System Description: Pregnant & Barren Tanks Solution Vent System								
Hg		gals/yr		lbs/hr	0.0940		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
System Description: Electro-winning Cells (4 cells operated in 2 banks)								
Hg		gals/yr		lbs/hr	0.2733		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
				CY 2006 Facility Total:	2.3061		0.0000	CY 2006 Co-product: 0.00 lbs/yr.
				CY 2007 Facility Total:	0.4579		0.0000	CY 2007 Co-product: 0.00 lbs/yr.
				CY 2008 Facility Total:	0.8053		0.0000	CY 2008 Co-product: 0.00 lbs/yr.
Source: Barrick Goldstrick Mines, Inc.: AQOP AP1041-0739.01; NMCP AP1041-2221								
System Description: Roasters #1 & #2 (System 18 - S2.209)								
Hg	5,592,072.00	tpy		lbs/hr		7,922	65.3000	2008 M29 stack test deemed invalid - no cyclonic flow check; no sampling traverse point determination.
System Description: Roaster Circuit #1 Quenching Process(System 19 - S2.210)								
Hg	2,842,979.00	tpy		lbs/hr		7,933	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Roaster Circuit #2 Quenching Process(System 19 - S2.211)								
Hg	2,749,093.00	tpy		lbs/hr		7,931	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Carbon Reactivation Kiln #2 (System 61 - S2.004.1)								
Hg	8,001.00	tpy	0.0154	lbs/hr	111.9734	7,271	0.0000	Carbon Kiln emissions factor derived from average of three separate M29 stack tests conducted in February and April, 2008.
System Description: Pregnant Strip Solution Tank A (Uncontrolled)								
Hg	Not Reported	gals/yr		lbs/hr		8,136	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Pregnant Strip Solution Tank B (Uncontrolled)								
Hg	Not Reported	gals/yr		lbs/hr		8,136	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Barren Strip Solution Tank A (Uncontrolled)								
Hg	Not Reported	gals/yr		lbs/hr		8,136	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Barren Strip Solution Tank B (Uncontrolled)								
Hg	Not Reported	gals/yr		lbs/hr		8,136	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Pregnant and Barren Strip Solution Tanks A (Controlled)								
Hg	Not Reported	gals/yr		lbs/hr		648	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Pregnant and Barren Strip Solution Tanks B (Controlled)								
Hg	Not Reported	gals/yr		lbs/hr		648	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check.
System Description: Autoclave #1 (System 66 - S2.015)								
Hg	793,120.00	tpy		lbs/hr		7,955	0.0000	2008 M29 stack test deemed invalid - no sampling trav. pt. determination.
System Description: Autoclaves #2 & #3 (System 66 - S2.016 & S2.017)								
Hg	1,936,154.00	tpy		lbs/hr		15,308	0.0000	2008 M29 stack test deemed invalid - no sampling trav. pt. determination.
System Description: Autoclave #4 (System 66 - S2.018)								
Hg	1,060,379.00	tpy		lbs/hr		8,170	0.0000	2008 M29 stack test deemed invalid - no sampling trav. pt. determination.
System Description: Autoclaves #5 & #6 (System 66 - S2.019 & S2.020)								
Hg	2,174,549.00	tpy		lbs/hr		16,244	0.0000	2008 M29 stack test deemed invalid - no sampling trav. pt. determination.

Source: Barrick Goldstrick Mines, Inc.: AQOP AP1041-0739.01; NMCP AP1041-2221 (continued)								
System Description: Mercury Retorts #1 (System 67 - S2.009)								
Hg	Not Reported	tpy	0.0022	lbs/hr	4.2064	1,912	See Below	Retort emissions factor derived from February, 2008 M29 stack test. April and July/August, 2008 M29 stack test deemed invalid - no cyclonic flow check; fixed delta P; isokinetic calculation error with wrong pitot tube coefficient.
System Description: Mercury Retorts #2 (System 67 - S2.010)								
Hg	Not Reported	tpy	0.0002	lbs/hr	0.4028	2,014	See Below	Retort emissions factor derived from February, 2008 M29 stack test. April and July/August, 2008 M29 stack test deemed invalid - no cyclonic flow check; fixed delta P; isokinetic calculation error with wrong pitot tube coefficient.
System Description: Mercury Retorts #3 (System 67 - S2.011)								
Hg	Not Reported	tpy	0.0013	lbs/hr	2.6468	2,036	See Below	Retort emissions factor derived from February, 2008 M29 stack test. April and July/August, 2008 M29 stack test deemed invalid - no cyclonic flow check; fixed delta P; isokinetic calculation error with wrong pitot tube coefficient.
System Description: Mercury Retorts #1 - #3 (System 67 - S2.009 - S2.011 Cumulative Co-product)								
Hg						2,0300		Cumulative co-product for all three mercury retorts.
System Description: East & West Refinery Furnaces & Electrowinning Cells Combined Operation (System 68 - S2.013 & S2.014, vented through common carbon filter)								
Hg	86.00	tpy	0.0254	lbs/hr	12.1412	478	0.0000	Furnaces's/EW Cells emissions factor derived from April, 2008 M29 stack test.
System Description: Electrowinning Cells only								
Hg	Not Reported	gals/yr	0.0042	lbs/hr	30.2484	7,202	0.0000	EW Cells emissions factor derived from April, 2008 M29 stack test.
System Description: Mill #1 Air Pre-Heater and Dry Grinding Process (System 15 - S2.204 & S2.205.01 - S2.205.12)								
Hg	2,480,296.00	tpy		lbs/hr		7,891	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check; no sampling traverse point determination.
System Description: Mill #2 Air Pre-Heater and Dry Grinding Process (System 16 - S2.206 & S2.207.01 - S2.207.12)								
Hg	2,551,853.00	tpy		lbs/hr		8,051	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check; no sampling traverse point determination.
System Description: Analytical Laboratory Assay Facility (System 70 - S2.051)								
Hg	Not Reported	tpy		lbs/hr		8,784	0.0000	2008 M29 stack test deemed invalid - no cyclonic flow check; no sampling traverse point determination.
System Description: Assay, Mill, Mill Met, Autoclave, Autoclave Met and Roaster Pumphouse Laboratories, Strip Circuit Area and Ore Fines Fee System.								
Hg					4.4367		0.0000	Potential to emit (PTE), not actual - see De Minimis Designation Tech. Rev.
					CY 2006 Facility Total:	616.7650	98.5500	CY 2006 Co-product: 197,100.00 lbs/yr.
					CY 2007 Facility Total:	708.6590	58.6300	CY 2007 Co-product: 117,260.00 lbs/yr.
					CY 2008 Facility Total:	166.0557	67.3300	CY 2008 Co-product: 134,660.00 lbs/yr.

Note that the total value is lower than actual industry-wide emissions due to invalidated tests or, in the case of Queenstake Resources USA, Inc., no testing completed due to scheduling difficulties resulting from the temporary NDEP ordered shutdown of the facility.



CY 2008 Cumulative Totals			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. Co-product: 205,865.40 lbs/yr	
Process Emissions	lbs/yr		Co-Product	tpy
	3,165.9			102.9
CY 2007 Cumulative Totals			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: 195,361.60 lbs/yr	
Process Emissions	lbs/yr		Co-Product	tpy
	4,832.5			97.7
CY 2006 Cumulative Totals			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
	4,468.2			133.3