

METALLIFEROUS MINES LICENSE TAX

Revenue Description

Montana taxes the gross value of metals mined in the state (15-37-101, MCA). Gross value is the market value of the refined product, less the costs of transporting the unrefined product to a smelter or other facility and refining it (15-23-801, MCA). The first \$250,000 of gross value is exempt from the tax, which essentially exempts smaller mines. The tax rate for production beyond \$250,000 depends on the mineral and the amount of processing at the mine. Concentrate, which is unsmelted ore that may have undergone mechanical processing, is taxed at 1.81%. Gold, silver, and platinum-group metals that have been partially or completely separated from impurities by smelting, but may not have had the individual metals separated, are taxed at 1.6% (15-37-103, MCA).

Revenues from the metalliferous mines license tax are divided between the state and counties where a mine is located or which have economic impacts from large-scale mining. The state general fund receives 58% of the revenue except in FY 2003, when the state received 65%.

Historical and Projected Revenue

Table 1 shows actual general fund receipts for FY 1994 through FY 2004 and projected collections for FY 2005 through FY 2007.

Table 1 Metalliferous Mines License Tax (\$ millions)			
Fiscal Year	Collections	General Fund	Percent Change
A 1994	\$6.230	\$3.610	-10.4%
A 1995	\$5.259	\$3.050	-15.5%
A 1996	\$6.941	\$4.030	32.1%
A 1997	\$4.649	\$2.696	-33.1%
A 1998	\$3.978	\$2.319	-14.0%
A 1999	\$5.711	\$3.305	42.5%
A 2000	\$4.661	\$2.703	-18.2%
A 2001	\$5.924	\$3.417	26.4%
A 2002	\$5.740	\$3.329	-2.6%
A 2003	\$7.056	\$4.586	37.8%
A 2004	\$5.572	\$3.232	-29.5%
F 2005	\$9.064	\$5.257	62.7%
F 2006	\$9.820	\$5.696	8.3%
F 2007	\$10.302	\$5.975	4.9%

Fiscal Year	Revenue
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2006	9.820
2007	10.302

Revenue has varied from year to year because of a change in the tax due date and changes in production and prices. Through December 31, 2002, the tax was paid annually. Beginning January 1, 2003, the tax is paid semiannually. This resulted in taxes on eighteen months of production being recorded as revenue in FY 2003.

The general fund portion of this revenue was higher in FY 2003 due to the change in the timing of payments and because 7% of the revenue that normally goes to reclamation and development grants went to the general fund in FY 2003 only.

The Department of Revenue estimates tax due for the second half of the fiscal year and accrues this as revenue for the fiscal year. At the end of FY 2004, the department under estimated the tax due by \$0.770 million. Actual collections for production in FY 2004 were \$6.342 million. Revenue is projected to increase in FY 2005 through FY 2007 as mines that temporarily stopped production resume production. Several mines have closed and two new mines have opened.

Forecast Methodology and Projection Calculation

There are five steps to estimating metal mines license tax revenues: 1) estimating production of each metal; 2) estimating the price of each metal; 3) estimating the taxable value of production, which is gross value less deductions and exemptions; 4) determining the estimated tax by multiplying taxable value by the tax rate; and 5) allocating revenue between the general fund and other funds.

Revenue was estimated using detailed information on each metal produced by each mine. Since there are only four mines paying the metal mines license tax and they produce different metals, presenting detailed information on individual metals could reveal information about individual taxpayers. To avoid this, production and taxable value estimates are presented as totals for groups of metals. This shows general trends without revealing information about individual taxpayers.

UMetal Production

Estimates of metal production were obtained from the mines. The active large-scale mines in Montana produce gold, platinum, palladium, copper and molybdenum as their primary products. The other metals may be considered by-products. Table 2 shows the projected annual production of gold, silver and platinum group metals and of all other metals.

Table 2				
Projected Metal Production				
Metal	FY 2004	FY 2005	FY 2006	FY 2007
Gold, Silver, Platinum Group (million oz.)	1.673	2.521	2.190	2.265
Other Metals (million lb.)	78.021	124.426	145.951	152.406

Expected production for both metal groups is over 50% greater than actual production in FY 2004. Much of this increase is due to one mine that resumed production midway through FY 2004. Production from this mine in FY 2005 is expected to almost double from FY 2004. Production within the gold, silver and platinum group is projected to fall off 13% in FY 2006, but production within the other metals group is expected to increase 17% in FY 2006 and 4% in FY 2007.

Metal Prices

Most metals are traded on organized exchanges, and prices are public. The commodity exchanges also conduct trading in metal futures contracts. These contracts set a price now for metal to be delivered at a specified time and place in the future. The London Metals Exchange has futures trading in silver, copper, nickel, lead, and zinc. The New York Mercantile Exchange has futures trading in gold, silver, copper, platinum, and palladium.

Futures prices reflect producers', buyers', and traders' expectations of what prices will be in the future. On average, they are good predictors of prices up to several years ahead. Average October 2004 futures prices from the London Metals Exchange and New York Mercantile Exchange were used in the methodology to forecast prices for gold, silver, copper, platinum, palladium, nickel, lead, and zinc.

Futures contracts sold in October 2004 extend to FY 2007 for gold, silver, copper, nickel, and zinc, to FY 2006 for lead, and to FY 2005 for platinum and palladium. For those metals that do not have a future price through FY 2007, the futures price is assumed to hold steady through FY 2007 at an average of previous futures prices. There are no futures markets for rhodium and molybdenum; for these metals the last four months of the spot market is used.

Prices received by mines in Montana differ from the prices established in world markets because of transportation costs and contract terms. The forecast uses actual prices reported on FY 2004 tax returns as the starting point. It assumes that the differences between prices received by the mines and the central market prices will remain the same so that prices received by the mines will change by the same amount each year as the central market prices in New York and London. For example, the average expected New York/London price of gold is \$24.57 per ounce higher in FY 2005 than in FY 2004. Therefore, the price received for gold by a mine in FY 2005 is projected to be \$24.57 per ounce higher than the price the mine received in FY 2004.

Table 3 shows metal price forecasts for FY 2005 through FY 2007 for mines operating in Montana. Mine prices are not given for the platinum group and for molybdenum to ensure preservation of confidential information.

Table 3			
Projected Metal Prices			
Metal	FY 2005	FY 2006	FY 2007
-----Adjusted Weighted Average Mine Price-----			
Gold (oz)	\$411.40	\$427.94	\$441.15
Silver (oz)	\$6.77	\$7.31	\$7.41
Copper (lbs)	\$1.22	\$1.08	\$0.99
Nickel (lbs)	\$6.10	\$4.98	\$4.22
Lead (lbs)	\$0.43	\$0.43	\$0.43
Zinc (lbs)	\$0.48	\$0.50	\$0.50
-----Spot/Futures Market Price-----			
Platinum (oz)	\$826.92	\$826.92	\$826.92
Palladium (oz)	\$224.93	\$224.93	\$224.93
Rhodium (oz)	\$1,095.08	\$1,095.08	\$1,095.08
Molybdenum (lbs)	\$16.11	\$16.11	\$16.11

Taxable Value of Production

The base for the metalliferous mines license tax is the gross value of output as it leaves the mine, less exemptions and deductions. The first \$250,000 of each producer's output is exempt from the tax. Producers are also allowed to deduct certain smelting and refining costs and the costs of transportation to the smelter or refinery.

Table 4 shows the calculation of taxable value. The values shown are the product of the detailed production estimates behind Table 2 and the mine prices in Table 3. The sum of these market values for all metals is shown in the row labeled Market Value. Taxable value is calculated by subtracting total exemptions and deductions from market value. Deductions for smelting, refining and transportation costs were estimated from the deductions claimed on past tax returns and the surveys with the mining companies.

Table 4				
Taxable Value of Metal Mines Production				
(\$ millions)				
Metal	FY 2004	FY 2005	FY 2006	FY 2007
Gold, Silver, Platinum Group	\$315.047	\$328.200	\$393.503	\$430.328
Other Metals	103.464	232.038	231.592	226.572
Market Value	\$418.511	\$560.238	\$625.094	\$656.900
Exemptions and Deductions	-36.005	-40.851	-43.599	-44.854
Taxable Value	\$382.506	\$519.387	\$581.496	\$612.045

Calendar Year Tax Liability

Concentrate, which is unsmelted ore that may have undergone mechanical processing, is taxed at a rate of 1.81%. Gold, silver, and platinum-group metals that are sold as dore, bullion, or matte are taxed at a rate of 1.6%. Smelting the ore produces dore, bullion, and matte. In matte, the metal is still chemically combined with other elements. dore is a mixture of elemental metals. Bullion is pure metal.

Future tax liability is estimated by multiplying the taxable value of each form of each metal by the appropriate tax rate. Table 5 shows the total taxable value calculated in Table 4, the average tax rate, and the tax.

	FY 2004	FY 2005	FY 2006	FY 2007
Taxable Value	\$382.506	\$519.387	\$581.496	\$612.045
Average Tax Rate	1.658%	1.745%	1.689%	1.683%
Tax Liability	\$6.342	\$9.064	\$9.820	\$10.302

Revenue Allocation

Table 6 shows the metal mines license tax, its allocation for FY 2004, and forecasts for FY 2005 through FY 2007. For clarity, the revenue recorded in SABHRS is shown as well as the actual metal mines tax collections for FY 2004. The SABHRS estimate of actual tax collections is \$770,000 less than actual collections due to an under accrual of revenue at fiscal year end.

Revenue is projected to increase from \$6.342 million in FY 2004 to \$9.064 in FY 2005, \$9.820 in FY 2006, and \$10.302 in FY 2007. The revenue increase is due to higher prices and production.

Account	Allocation Percent	SABHRS FY 2004	Actual FY 2004	-----Projected-----		
				FY 2005	FY 2006	FY 2007
General Fund	58.0%	\$3.232	\$3.678	\$5.257	\$5.696	\$5.975
Hard-Rock Mining Impact Trust	2.5%	\$0.139	\$0.159	\$0.227	\$0.246	\$0.258
Service	8.5%	\$0.474	\$0.539	\$0.770	\$0.835	\$0.876
Reclamation and Development Grants	7.0%	\$0.390	\$0.444	\$0.634	\$0.687	\$0.721
Impacted Counties	24.0%	\$1.337	\$1.522	\$2.175	\$2.357	\$2.473
Total Collections	100.0%	\$5.572	\$6.342	\$9.064	\$9.820	\$10.302