State Mineral Production Taxes and Mining Law Reform

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State Mineral Production Taxes and Mining Law Reform

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Introduction

Reform of the “1872 Mining Law,” which forms the basis of the General Mining Law,\(^1\) has been something of a “Holy Grail” for various groups for several decades. These groups range from environmentalists to fiscal conservatives who argue that the 1872 Mining Law results in mines operating on federal lands receiving preferential treatment over other interests and paying too little in taxes and royalties. Former Solicitor General for the Department of Interior John Leshy’s book “*The Mining Law: A Study in Perpetual Motion*”\(^2\) recounts the story of attempts in the 1970s to reform the law and, to some extent, lays the groundwork for the reform efforts beginning in the 1990s and continuing to the present. More recently, the issue of mining reform returned in the 2009 session of Congress; H.R. 3362, sponsored by Rep. Nick Rahall of West Virginia (who also sponsored reform efforts in the 1990s), largely repeats the 1990s reform effort. Additionally, early versions of Obama’s proposed 2011 federal budget contained provisions for the imposition of new federal mining royalties on mines currently subject to the 1872 Mining Law.

The 1872 Mining Law has been criticized for a number of “flaws,” which can be sorted into two broad categories. First are arguments that the 1872 Mining Law gives primacy to mining operations and largely ignores other concerns such as environmental protection. The second category is fiscal; the primary concern here is that the 1872 Mining Law contains no provisions for federal royalties on minerals mined from federally owned lands, leading to what is

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perceived both as foregone revenues as well as differential treatment of mining among states, potentially causing a “race to the bottom.” This argument is bolstered by the “common sense” notion that because deposits on privately owned land accrue royalties to the owners of the land, deposits on publicly owned land should accrue royalties to the owners of the land as well. There are other specific criticisms that can be leveled but they will generally fall into the categories of either environmental and land use issues or fiscal issues. We will briefly look at the first class of issues; specifically, that the General Mining Law of 1872 lacks provisions for environmental protection and that the law gives mining uses priority over all other potential uses of federal lands. However, this main focus of this paper is on the fiscal issues relating to federal royalties. We argue that the arguments in favor of federal royalties ignore the actual constellation of property rights in western states, fail to take into account the current state and local tax systems in the west, and disregard the likely producer response to the imposition of a royalty. These factors, when combined with the underlying economics of the industry, imply that a royalty will have a much smaller than anticipated effect in terms of revenue generation and may reduce the efficiency of the mining industry in the west.

The claims that the 1872 General Mining Law lack environmental protection provisions are true; however this criticism is misplaced as other laws have been passed that do address possible degradation of natural and cultural resources. The 1872 General Mining Law simply defines the process by which individuals can acquire and maintain property rights in mineral resources on federally owned land; as possible environmental degradation would occur as a

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result of the extraction of a resource, rather than the mere ownership of the right to extract said resource, there is no compelling reason that both issues need to be addressed in the same law.

More generally, the criticism that the 1872 General Mining Law gives land use priority to mining uses of federal lands ignores the fact that the law has been amended and augmented numerous times by numerous federal statutes (see, for example, the Federal Land Policy Act of 1976, the Antiquities Act, the Clean Water Act, the Endangered Species Act, etc.) and federal rule making pursuant to these acts, principally CFR 43 3809. It is still true that, \textit{a priori}, mining is presumed to be the highest valued use of public lands. From the standpoint of marketable value produced per acre disturbed, this is clearly true; a gold mine produces far more revenue per acre disturbed than grazing cattle, wildlife habitat, wind farming, or cutting trees. A sticking point in this argument, of course, is the non-use value of the land, i.e., the value of leaving the land undisturbed.\footnote{Cummings, Ronald G., Brookshire, David S., and Schulze, William D., Eds., \textit{Valuing Environmental Goods}, Rowan and Allanheld, 1986.} This invariably brings the debate outside the realm of “pure” economics; critiques based on non-use value of land typically question the underlying assumption of economic value trumping aesthetics or religion, especially with respect to Native American tribal religions. Nonetheless, there is a significant permitting process that puts the presumption that whichever land use maximizes economic value is the best use of a particular piece of land to serious and open public scrutiny. While such processes may be imperfect, they nonetheless undermine the statutory primacy of mining claims by allowing non-economic issues, such as aesthetic or religious concerns, to potentially outweigh purely economic value maximization on a case-by-case basis.

The criticism that there is no provision for federal royalties in the General Mining Law is the concern upon which this paper will primarily focus. As with the concerns mentioned above,
the general premise is also correct insofar as there are no federal royalties on minerals covered under the General Mining Law, but requires further examination. It should first be noted that the issue over potential federal hardrock mineral royalties is largely symbolic. Nationwide, mining is a relatively small industry. In 2007 the Congressional Budget Office estimated the value of hardrock minerals removed from federal lands to be approximately $1.0 billion. At the proposed Obama royalty rate of 5%, this amounts to approximately $50 million in revenue. Thus, the revenue that a royalty would raise is relatively minor, particularly in the context of a $3.9 trillion annual federal budget. Moreover, as we argue below, it would be untenable to enact royalties on already claimed deposits, so any revenues will only be generated from currently unclaimed ore bodies and thus are unlikely to be realized for years, if not decades. Symbolic issues aside, the imposition of a royalty upon hardrock mining would have a negligible effect on total government (combined federal and state) revenues derived from mining activity, as a federal royalty would likely “crowd out” state and local levies.

The 1872 Mining Law settled a significant problem in its day—the issue of extralateral claims. These are claims located next to a known deposit and/or operating mine. The owner(s) of the extralateral claims would wait until they believed that a miner crossed the boundary line between their claims, and then sued. Contemporary accounts suggest that these lawsuits virtually shut down mining on the Comstock Lode in Nevada where Nevada’s future Senator William Stewart was a successful mining attorney. When he got to the Senate, Stewart sponsored a mining law in 1866 and sponsored a second law in 1872 to clear up the issue of title to
subsurface mineral rights, i.e., invalidate extralateral claims. Extralateral claims were only valid if their owner diligently tried to develop them.\textsuperscript{5}

The majority of mines that would be impacted by reforming the Mining Law of 1872 engage in so-called “hardrock” mining (as opposed to “softrock” mining, i.e., coal mining, other fuel minerals like oil and gas, and “common variety” minerals like aggregate and industrial minerals e.g., lime, gypsum, clay). Hardrock minerals are defined here to include non-ferrous metals such as copper, gold, silver, platinum group metals, molybdenum, lithium, etc. These minerals are generally referred to as “locatable” minerals under 30 U.S.C.A. § 22 in that they can be located and claimed following the general guidelines of the General Mining Law of 1872. So called “common variety” minerals, such as sand, gravel, coal, oil, and gas, are considered “leasable” under the Mineral Leasing Act of 1920.\textsuperscript{6} One simple distinction between locatable and leasable minerals is that the former are harder to find, and because of this, the discoverer is rewarded for their discovery with ownership. Such an arrangement would tend to encourage economic efficiency, as prospectors for harder-to-find minerals will require higher potential rewards to compensate for the risk involved. Another important distinction between hardrock minerals and both common variety minerals and fuel minerals is that the latter are generally usable commodities at the point of extraction: the quarry, the mine mouth, or the well-head. Hardrock mineral ores usually require significant beneficiation, or processing, after extraction.

Proponents of federal mining royalties typically attempt to draw a comparison between leasable and locatable minerals. However, there are geological problems with this comparison, which is why the distinction between leasable and locatable minerals was made in the first place.

\textsuperscript{5} Smith, Grant H., \textit{The History of the Comstock Lode}, Nevada Bureau of Mines and Geology, University of Nevada Press, 1943.
\textsuperscript{6} 30 U.S.C.A. Section 201(b).
Leasable minerals like gravel, oil, natural gas, coal, etc., are generally found in horizontal geological structures, like river beds with aggregate, or coal fields, where if one finds a leasable mineral in one place, it is very likely that more of it can be found nearby. Oil and natural gas deposits are similar; if one of these commodities is found at one location, it is likely to be found in a mile (or more) in any direction.\(^7\)

Conversely, locatable minerals have historically been found in vertical geological structures, i.e., veins or faults in the earth’s crust that hosted veins or hydrological structures (e.g., hot springs).\(^8\) Modern mineral exploration and processing techniques, as well as economics (principally, higher prices) have made it possible to locate and process ore from larger, more disseminated geological structures. However, the fact remains that locatable minerals are much more difficult to locate than leasable or common variety, minerals. In short, these geological and economic factors indicate that there is unlikely to a be a one-size-fits-all answer to the issue of mining taxation, and that the taxes and regulations that work for hardrock mining are unlikely to be identical to those that work for other types of minerals.

The call for a federal royalty also ignores the basic definition of a royalty, which is a payment to the owner of a valuable resource whether it is a mineral, a patent, a copyright, etc. When a locatable mineral is found on public land, the discoverer stakes and records a claim and, if done properly, ownership of the mineral is conveyed from the federal government to the discoverer. In other cases the federal government may have conveyed title to another private landowner through, for example, one of the Homestead Acts; in such an instance, a mining

\(^7\) Coggins, George Cameron, and Wilkinson, Charles F., “Federal; Public Land and Resources Law”, Mineola, NY, The Foundation Press, 1981, note that there is little reason to reward “discovery” of these kinds of minerals with ownership since their location is generally local common knowledge, pp. 396 – 400.

company could obtain permission from the landowner to explore and lease the mineral rights with the promise of a royalty if production occurs. The thrust of reform efforts on this issue is to convert the mining claim system to one in which the federal government would retain ownership of mineral rights, like it currently does for leasable minerals. The federal government cannot, however, receive a “royalty” on property that it does not own, and the federal government no longer owns the mineral rights to previously claimed discoveries. There have been discussions about “clawing back” the minerals rights already conveyed—for example the Hardrock Mining and Reclamation Act of 2007 included a 4% royalty for extant mines with operations permits—but this would clearly be challenged as a taking of private property, as the property rights have already been conveyed. As a result, the discussion of moving to a leasing system is therefore only plausible within the context of future mining claims. Furthermore, the argument that a royalty on future claims would increase government revenues needs to be considered within context of existing government revenues accruing from private mining operations. Governments at the federal, state, and local level are currently taxing individuals and corporations engaged in mining; while the federal government only taxes income, state and local governments utilize a variety of methods of taxation, including income taxes, property taxes and sales and use taxes. We argue that a federal royalty would to a large extent “crowd out” some of the currently extant state and local taxes—revenues would simply shift from state and local governments to the federal government. To address this, we turn to a discussion of the current state of mineral taxation at the state level.

**Western State Hardrock Mining Tax Comparisons**
We have attempted to put together a meaningful comparison of state mining taxes for non-ferrous metal mining in the U.S. This task is not as simple as proponents of royalties and taxes have claimed; a coalition of environmental lobbying groups (Earthworks, the Mineral Policy Center, and the Sierra Club) put together a “white paper” which claimed that all western states producing hardrock minerals except Nevada and Alaska employ a gross proceeds tax (which is analogous to a gross royalty). On closer inspection of state statutes regarding taxation of mines, we find this claim to be untrue. All but one western state employs some version of a Net Proceeds Tax; although they may refer to a tax as a “gross” tax, typically, they allow deduction of certain costs of production.

Comparing state taxation of metal mining has difficulties that go beyond the use of terminology like “net” and “gross”. Each state produces a different mix of minerals which, in some cases, they tax differently. For example, in Colorado, molybdenum is taxed differently than other metals. In Utah, beryllium is taxed differently than copper. Each state tends to adapt the tax laws to the economics of the particular mineral produced and the size of the operations in their states.\textsuperscript{10} Nevada and Alaska, on the other hand, take more of a “one size fits all” approach to mineral taxation. Gold miners are subject to the same set of statutes and regulations as copper miners, molybdenum miners, geothermal producers, etc. Small producers are given a reduction in tax rates\textsuperscript{11}, but other than that, all mineral producers are treated alike.

Further confounding the comparison of the tax treatment of mineral producers among states is the role of other, non-mineral related taxes, in determining the overall tax burden of a


\textsuperscript{10} See appendix I

\textsuperscript{11} NRS 362.140 provides for a reduced tax rate for operations with net proceeds less than $4 million.
mining operation. All states have property taxes on property, plant, and equipment, but rates vary. Most states have corporate income taxes and/or sales and use taxes, and the rates vary among states, and in some cases, local jurisdictions within states.

In an effort to address these difficulties, we have taken a hypothetical medium sized gold mine that would be fairly typical of an operation found in Nevada and calculated its tax liabilities if that mine were in various other states. The hypothetical mine produces 250,000 ounces of gold per year which it sells for $1,100 per ounce for gross revenue of $275 million. It employs 350 workers with labor costs including benefits and taxes of $36.4 million. Net operating profits are assumed to be $50 million per year. The tables below show mining specific taxes and total taxes (including mining taxes) in 10 western states. For types of taxes that would vary within states (i.e. property taxes), the statewide average tax rate was used. With few exceptions, the total tax burden does not vary much between states even though mining specific taxes vary significantly. The total tax bill for this hypothetical mine is roughly 20%-30% of net operating profits in each state. Some states like California and New Mexico have relatively low mining specific taxes but are still comparable to other states because of other taxes such as general property, sales and use, and corporate income taxes. The Tables 1 and 2 show rankings by total tax and mining tax burdens.

<Insert Tables 1 and 2 about here>

The results for the two states with the highest mining-specific taxes, Montana and Wyoming, are somewhat misleading. In the case of Montana, the state has adopted a relatively negative attitude toward mining in the past decades. Part of this is due to the legacy of mining in the state and its negative perception. In fact, the hypothetical mine used for this example could not be built in Montana because Montana bans the use of cyanide heap leach processing.
Consequently, it is doubtful that any Montana mine would exist to actually pay the amount shown. If someone discovered a gold deposit in Montana they would likely concentrate the ore to increase the grade of the material, and then ship it out of state for final processing. We have included Montana using the same financial model anyway for reasons of comparability.

The case of Wyoming is slightly different. The major mining products in Wyoming are coal, uranium, and trona. These products are typically sold at the mouth of the mine without significant processing and, hence, without the operator incurring significant costs. The hypothetical mine model used for this exercise anticipates significant processing and costs after the mined material leaves the mine mouth to maintain the comparability of the results; while these costs are tax deductible in other states, they are not in Wyoming. If the gold deposit that the hypothetical mine is based on actually existed in Wyoming the operators would no doubt adapt to the tax regime. This would be done by selling the ore at the mine mouth without processing to avoid being taxed on the value added to the product from processing.

Consequently, if we discount the results for Montana and Wyoming for the reasons above, as a practical matter this leaves Alaska and Nevada as the states with the highest mining-specific taxes for this hypothetical mine. States with the lowest mining-specific tax burdens, California and New Mexico, nonetheless rank in the upper half of the states considered in terms of total taxes paid because of their reliance on general business and other taxes like corporate income taxes, general property taxes on property, plant and equipment, sales taxes, and other levies. Table 3 summarizes the current state of mineral taxation in each of these states, and a more detailed treatment can be found in the Appendix.

<Insert Table 3 about here>
While the total state tax bill for our hypothetical mine is typically between 20% and 30% of net operating profit, what is more important is that the specific composition of the tax varies considerably from state to state. This observation is suggestive of the counterintuitive result that enacting a federal hardrock royalty may have little to no effect on the total tax bill a mine would have to pay, as such a royalty would simply force state governments to reduce state taxes paid by each mining company. While counterintuitive, this argument is based on the logics of fiscal federalism and fiscal decentralization. For any given mining endeavor, the government can view the taxable income as fixed and must choose a level of taxes that maximizes government revenue while generating enough profits to keep the mine in business and encouraging exploration by prospective miners. Once this level of taxation is determined by the government, the specific form that these taxes take is essentially zero-sum. Increases in one form of taxation must be offset by decreases in another; assuming the government has already determined the optimal level of taxation, failure to offset increases in this manner will ultimately risk lost future revenues due to mining capital flowing to other industries or reduced future exploration.¹²

It is likely that in the roughly 150 years of mining in these western states that the negotiation between state governments and mining interests have identified and are near the optimal level of taxation. As a result, state tax officials will view the added federal royalty as pushing the total government revenues from mining above the optimal level. It is thus likely that a federal royalty would ultimately be offset by reductions in state taxes and that such a royalty would crowd out at least some state revenues.

The typical argument against the fiscal federalism/fiscal decentralization position is that competition among states will result in a “race to the bottom.” One with this perspective would

argue that states will have chosen a level of taxation that is less than optimal, for fear that otherwise mining companies will choose to operate in different jurisdictions; state governments are forced to “leave money on the table” when determining how much to tax mines (though this argument applies to any business endeavor, not just mining) out of concern that the company will flee to a neighboring, more favorable, jurisdiction. The potential for this to occur would justify the harmonization (if not centralization) of taxation as a means of avoiding this form of competition. This argument only has merit in the case of processing as the race to the bottom argument is dependent upon the ability of firms/operations to relocate. While the capital and mining expertise are mobile, the mines themselves are inherently immobile. If a neighboring state or a foreign country has a more favorable set of regulations or taxes, there is little a mining company can do as the ore body has a fixed location. In some cases it is economically feasible to ship unprocessed ore hundreds of miles for processing, and concentrated ores are shipped around the globe for refinement—this is commonly done now to take advantage of more efficient refining technologies at other locations—but this is an industrial process, not a mining process.

The fact that mining is in fact two separate processes—extraction and refining—further reduces the ability of a royalty of the sort recently proposed to Congress (gross royalty) to generate funds for the federal government. Mining companies will seek to minimize the value of the tax base at the time of the taxable event. For the gross royalty included in the Rahall bill, the taxable event occurs when the mining company sells their output to the market. This could either be a completely refined metal, a concentrated ore, or an unprocessed ore. Currently, most hardrock mining companies do the majority of their refining “in-house,” often at facilities at the mine location though, as mentioned above, shipping ore to other company-owned refining locations is not uncommon. As a result, the mining company is typically selling a refined
product (i.e. nearly “pure” gold or silver, or doré) to the market. If a gross royalty is imposed, a mining company would have to pay a royalty based on the price they receive for the refined product, likely the market spot price. However, this royalty will create a strong incentive for mining companies to become less vertically integrated; they are likely to separate their extraction and refining processes into two separate companies, and sell unprocessed ores at the minemouth to their related refining company. This will reduce the tax base at the time of the taxable event, as an unprocessed ore will sell for significantly less than a refined metal, and refiners would not be subject to paying a royalty on the incremental value added from the refining process.

Conclusions and Policy Implications

The nature of property rights in the west is highly fragmented; it is possible that one party could own surface rights, another party might own mineral rights, while a third party owns water rights to the same piece of property. Situations such as these have historically created multiple local stakeholders at odds with one another. In recent decades groups with political clout at the federal level, such as environmental lobbies, have entered the fray, moving these land use battles out of the statehouses and on to Capitol Hill. This move has caused political commentators to lose sight of the purpose and function of the fragmentation of rights. In isolation, the laws and institutions that have generated the current state of western property rights, particularly with regard to locatable mineral rights, seem to be antiquated and at odds with the laws regarding other sorts of mineral rights. It is not surprising, then, that stakeholders at odds with mining interests are rallying around this seeming incongruity as a means by which they can claim that their concerns are motivated by advancing the public interest.
It is against this backdrop that we have tried to shed light on two separate, but related topics: the 1872 Mining Law controversy and state taxation of hardrock minerals. As mentioned above, federal land law in general has created a complex system of property rights. In our view, this dysfunctional land/resource holding system has created an unrealistic debate about federal royalties on mineral resources. While all other countries consider minerals as “national patrimony” and state property, the U.S. legal tradition has always considered locatable minerals as private property. In the eastern U.S. these minerals generally belong to the owners of the surface who own the land in “fee simple title”. In the western U.S. some land is owned in “fee” with mineral rights, but a majority of the land in the inter-mountain west, i.e., between the Rocky and the Sierra Nevada mountains, is owned by the federal government. Mineral rights to these lands are owned by private claimants.\(^\text{13}\) By definition, the federal government cannot collect a royalty on what it does not own. As a result, if the mining law were reformed the federal government could collect royalties on future discoveries, but with respect to already claimed mineral rights all the federal government can do is collect an income tax, which it already does. To go further and attempt to enact a royalty on already claimed rights would almost certainly be contested as a violation of the constitutional takings clause.

Moreover, we have argued that moving from the claim-based system embodied in the 1872 Mining Law to a royalty based system, such as the system that applies to leasable minerals, would represent a fundamental change in the property rights regime that would have adverse efficiency effects and negligible fiscal effects. The current policy discussion is focused squarely on federal royalties on minerals produced on federal lands and does not adequately account for the interaction between these proposed federal royalties and the current state of taxation at lower levels.

levels of government. The mining industry contributes to state tax revenue in amounts that appear to be consistent with other industries and the specific economics of producing different minerals. State legislatures have recognized both the benefits of production and nuances of production processes. In short, states adapt their taxation of minerals to the nature of the hardrock mining industry in their states. Likewise, hardrock miners adapt their operating procedures to the tax regime in the state where the minerals are located. This process will generate an equilibrium level of taxation that should be similar across states. Although state tax systems may look quite different in terms of mining specific and general business taxes, when we do an “apples to apples” comparison of a hypothetical gold mine which has the same taxable property value in every state, the overall tax burden varies very little. The imposition of a royalty should have little effect on the equilibrium level of government revenue accruing from mining activity, though the specific forms those revenues take would undoubtedly change.
References

Alaska Statutes Title 43.65, 15 Alaska Administrative Code 065; Alaska Statutes Title 38.05, 11 Alaska Administrative Code 86.221

Arizona Revised Statutes § 42-5201-5202

California Revenue and Tax Code Part 1 § 104 et seq.


Colorado Revised Statutes § 39-29-102 et seq.


Idaho Statutes, Title 47-1201, et seq.


Nevada Revised Statutes chapter 362.140.

New Mexico Statutes Annotated, Chapter 7, Art. 25, Resources Excise Tax Act; Chapter 7, Art. 26, Severance Tax Act.


Utah Code, Title 59, Chapter 5, Severance Tax on Oil, Gas, and Mining; U.C.A. § 59-6-102

Wyoming Constitution, Art. 15, § 9; Title 39, Chapter 14, Mine Product Taxes

<table>
<thead>
<tr>
<th>State</th>
<th>Mining Tax</th>
<th>Other Tax</th>
<th>Total Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>$2,880,000</td>
<td>$12,660,430</td>
<td>$15,540,430</td>
</tr>
<tr>
<td>California</td>
<td>$534,209</td>
<td>$13,239,688</td>
<td>$13,773,897</td>
</tr>
<tr>
<td>Montana</td>
<td>$7,460,750</td>
<td>$5,614,700</td>
<td>$13,075,450</td>
</tr>
<tr>
<td>Utah</td>
<td>$2,145,000</td>
<td>$10,434,807</td>
<td>$12,579,807</td>
</tr>
<tr>
<td>Nevada</td>
<td>$3,187,500</td>
<td>$8,500,000</td>
<td>$11,687,500</td>
</tr>
<tr>
<td>New Mexico</td>
<td>$11,070,250</td>
<td>$10,795,250</td>
<td>$275,000</td>
</tr>
<tr>
<td>Arizona</td>
<td>$1,250,000</td>
<td>$9,183,503</td>
<td>$10,433,503</td>
</tr>
<tr>
<td>Alaska</td>
<td>$3,497,000</td>
<td>$6,496,040</td>
<td>$9,993,040</td>
</tr>
<tr>
<td>Wyoming</td>
<td>$6,307,000</td>
<td>$2,200,000</td>
<td>$8,507,000</td>
</tr>
<tr>
<td>Idaho</td>
<td>$802,500</td>
<td>$6,128,350</td>
<td>$6,930,850</td>
</tr>
</tbody>
</table>
Table 2

Distribution of Total Tax by Tax Type

- Mining Tax
- Other Tax

States: Colorado, California, Montana, Utah, Nevada, New Mexico, Arizona, Alaska, Wyoming, Idaho
<table>
<thead>
<tr>
<th>State</th>
<th>Type of Tax</th>
<th>Mining Tax</th>
<th>Prop. Tax¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>Mining license tax, production royalty, property tax</td>
<td>7% of net on all commodities on all lands</td>
<td>Varies by County</td>
</tr>
<tr>
<td>AS 43.65, 15 AAC 065; AS 38.05, 11 ASC 86.221</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>Severance tax on metalliferous minerals</td>
<td>2.5% of net severance base</td>
<td>Varies by Locality</td>
</tr>
<tr>
<td>A.R.S. § 42-5201-5202</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>Mining discounted cash flow tax Corporate income and other normal bus. taxes apply.</td>
<td>1% of full discounted cash flow</td>
<td>1%ii</td>
</tr>
<tr>
<td>California Revenue and Tax Code, § 104 et seq.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td>Severance tax on metallic minerals and most fuel minerals</td>
<td>Taxes specific to each mineral typev</td>
<td>Varies by Locality</td>
</tr>
<tr>
<td>C.A.R.S. § 39-29-102 et seq.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td>License tax on net value of ores mined</td>
<td>Net proceeds rate of 1%v</td>
<td>Varies by Locality</td>
</tr>
<tr>
<td>I.C. § 47-1201, et seq.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>Net proceeds of mines and mining claims</td>
<td>Taxed as personal property by mineral classification³</td>
<td>Varies by Locality</td>
</tr>
<tr>
<td>Nevada</td>
<td>Net Proceeds of Minerals Tax</td>
<td>5%, reduced rate for small producers, tax based on gross proceeds of minerals less costs of extraction, processing, transportation, marketing, depreciation, and labor</td>
<td>Varies by Localityvii</td>
</tr>
<tr>
<td>NRS chapters 360-377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td>Severance tax on metalliferous and non-metalliferous minerals</td>
<td>Resource and processor’s tax: Potash = 0.50%; molybdenum = 0.125%; all others = 0.75%; and Severance tax: varied bases for gross value of minerals with tax rates ranging from 0.20% to 2 ½ % and coal rates per short ton from 55 to 60 cents.</td>
<td>Varies by Localityviii</td>
</tr>
<tr>
<td>N.M.S.A. Chapter 7, Art. 25, Resources Excise Tax Act; Chapter 7, Art. 26, Severance Tax Act.</td>
<td></td>
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</tr>
<tr>
<td>Utah</td>
<td>Severance tax on metalliferous mines, oil, gas, other hydrocarbonic substances.</td>
<td>Conservation tax: 0.20% of value at the well for oil, gas, natural gas; and Severance tax: 2.6% of taxable value of metals with exemption for first $50,000 of gross value per mine; and 3% to 5% of value of oil and gas at the well.ix</td>
<td>Varies by Locality</td>
</tr>
<tr>
<td>U.C.A, Title 59, Chapter 5, Severance Tax on Oil, Gas, and Mining; U.C.A. § 59-6-102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>Severance tax on coal, crude oil, natural gas, bentonite, trona, sand, gravel, uranium, and other “valuable deposits.” Ad valorem production tax on mine mouth value.</td>
<td>Severance tax rate varies by commodity, ranging from 7% for surface coal to 2% for other “valuable deposits.” Constitution has additional 1.5% tax on various minerals.</td>
<td>Varies by Localityx</td>
</tr>
<tr>
<td>Wyoming Constitution, Art. 15, § 19; Title 39, Chapter 14, Mine Product Taxes</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Appendix

Alaska

Type of Tax: Mining License Tax & Production Royalty & Property Tax & Direct infrastructure cost.

Tax Rate: MLT is 7% of Net - applies to all commodities (base coal, metals, precious metals, industrial minerals) on all lands - federal, state, private, including Native Corporation lands.

Property Tax: Determined by local Borough (county).

Mining Claim Rental (tax): Years 0-5 @ $0.66/ac; 6-10 @ $1.32/ac; 11+ @ $3.30/ac.

Production Royalty: (everything except coal) 3% of Net - (same basis as MLT) applies to State-owned lands.

Alaska Corporate Income Tax: 9% for all industries.

Infrastructure: Airfields, roads, ports, power, power transmission lines, etc. all paid by the miner as there are so few roads or other infrastructure.

Citation: AS 43.65, 15 AAC 065; AS 38.05, 11 ASC 86.221

Arizona

Type of Tax: Severance tax on metalliferous minerals (copper, gold, silver, molybdenum, or substances containing such metals).

Tax Rate: Net severance base multiplied by 2.5%.

Notes: Tax is in lieu of other taxes on mining. Corporate income and property taxes imposed on mining.

Citation: A.R.S. § 42-5201-5202.

California

Type of Tax: Property tax on the present value of discounted cash flows from operations.

Tax Rate: 1% of full discounted cash flow.

Notes: Property, plant and equipment are subject to normal property taxes at a 1% rate. Corporate income and other normal business taxes apply.
Colorado

Type of Tax: Severance tax on metallic minerals; molybdenum ore; crude oil, natural gas, carbon dioxide, oil, gas; coal; and oil shale.

Tax Rate: Metallics: taxable years after 1999 = 2.25% on gross income over $19 million; Molybdenum: 5 cents per ton over 625,000 tons per quarter; Oil, gas, etc.: sliding scale from 2% on gross income under $25,000 to 5% on gross income over $300,00; Coal: 36 cents per ton over 300,000 tons per quarter; and Oil shale: 1% for first year and increases 1% each year until 4% rate reached.

Notes: Gross income defined as “net amount realized by taxpayer”; oil and gas taxes allow 87.5% credit for property taxes; stripper wells are exempt; and coal and metals allow credits up to 50%.

Corporate income and property taxes are also imposed.

Citation: C.R.S. § 39-29-102 et seq.

Idaho

Type of Tax: License tax on net value of ores mined.

Tax Rate: Net proceeds rate of 1%.

Notes: Sand, gravel, and substances which are gaseous or liquid in natural state (e.g. oil, gas) are excluded.

Corporate income and property taxes also imposed on mining.

Citation: I.C. § 47-1201, et seq.

Montana

Type of Tax: Net proceeds of mines and mining claims.

(No net proceeds the tax is at the local ad valorem rate.)

Tax Rate: Taxed as personal property by classification; Class one is all mines except bentonite, coal, and metal mines, at 100% of annual proceeds with deductions allowed based on mineral; and Class two is metal mines at 3% of annual gross proceeds.
Notes: Also imposed a license tax on metalliferous and micaceous mines as a percentage (1.6% to 1.81%) of gross value. Gross value under $250,000 is exempt but 0.5% Resource Indemnity and Groundwater Assessment Tax applies.

Coal, oil, and gas are taxed differently.

Corporate income and property taxes also imposed on mining.

Citation: MCA § 15-6-131; 15-6-132; 15-23-501; 15-23-801; 15-37-101; 15-37-201; and 15-38-104

**Nevada**

Type of Tax: Net Proceeds of Minerals Tax of 5% of gross proceeds from the sale of all minerals (excluding sand and gravel) less costs of extraction, processing, transportation, marketing, depreciation of property, plant and equipment, and all associated labor costs.

Tax Rate: 5% with a reduced rate for small producers.

Other taxes: Modified Business Tax – a payroll tax of .05 % with deductions for employee health care benefits.

Sales and Use taxes vary by county and special districts.

Ad Valorem Property Taxes rates vary by county and special districts but statutorily capped at 3.64 % of 35 % of market value.

Citation: NRS chapter 362 for Net Proceeds, chapter 361 for property taxes, and chapters 360 - 377 for other taxes.

**New Mexico**

Type of Tax: Severance tax on metalliferous and non-metalliferous minerals.

Tax Rate: Resource and processor’s tax: Potash = 0.50%; molybdenum = 0.125%; all others = 0.75%; and Severance tax: varied bases for gross value of minerals with tax rates ranging from 0.20% to 2 ½ % and coals rates per short ton from 55 to 60 cents.

Notes: Oil, natural gas, liquid hydrocarbon, helium, or carbon dioxide are excluded.

Oil and gas are taxed differently.

Corporate income and property taxes also imposed on mining.

Citation: N.M.S.A. Chapter 7, Art. 25, Resources Excise Tax Act; Chapter 7, Art. 26, Severance Tax Act.
Utah

Type of Tax: Severance tax on metalliferous mines, oil, gas, other hydrocarbonic substances.

Tax Rate: Conservation tax: 0.20% of value at the well for oil, gas, natural gas; and Severance tax: 2.6% of taxable value of metals with exemption for first $50,000 of gross value per mine; and 3% to 5% of value of oil and gas at the well.

Notes: Oil or gas derived from coals-to-liquid technology, shale, or tar sand are exempt; sand and gravel, gems, potash, gypsum, sulfur, and others are excluded; and taxable value varies for beryllium and for minerals shipped out of state as ore.

Corporate franchise (income) and property taxes also imposed on mining.

Citation: U.C.A, Title 59, Chapter 5, Severance Tax on Oil, Gas, and Mining; U.C.A. § 59-6-102

Wyoming

Type of Tax: Severance tax on coal, crude oil, natural gas, bentonite, trona, sand, gravel, uranium, and other “valuable deposits.”

Tax Rate:
- Surface Coal – 7%
- Underground Coal – 3.75%
- Crude Oil/Natural Gas – 6%
- Trona – 4%
- Bentonite – 2%
- Sand and Gravel – 2%
- Uranium – 4%
- Other “Valuable Deposits” – 2%

Notes: State constitution has 1 ½ % tax on value of gross product of coal, petroleum, natural gas, oil shale, and other minerals; and state legislature may designate other minerals and impose additional taxes.

No state corporate income tax.

Ad valorem production tax on 100% of value at mouth of mine at local tax rate; ad valorem tax on real/personal property at 11.5% assessment ratio at local tax rate; and state royalties on bentonite (55 to 60 cents per ton), coal (8 to 12.5%), trona (6%), and uranium (5%).
Property tax rates in most instances will vary by locality (county, city, etc). In cases where property taxes are treated specially this is noted. Additionally, there is very little infrastructure in Alaska (roads, power, etc) so most of this is produced directly by miners which is an additional cost. Property tax includes property, plant, and equipment. Metalics in taxable years after 1999: 2.25% on gross income over $19 million; Molybdenum: 5 cents per ton over 625,000 tons per quarter; Oil, gas, etc.: sliding scale from 2% on gross income under $25,000 to 5% on gross income over $300,000; Coal: 36 cents per ton over 300,000 tons per quarter; and Oil shale: 1% for first year and increases increases 1% each year until 4% rate reached. Gross income defined as “net amount realized by taxpayer”; oil and gas taxes allow 87.5% credit for property taxes; stripper wells are exempt; and coal and metals allow credits up to 50%. Sand, gravel, and substances which are gaseous or liquid in natural state (e.g. oil, gas) are excluded. Class one is all mines except bentonite, coal, and metal mines, at 100% of annual proceeds with deductions allowed based on mineral; and Class two is metal mines at 3% of annual gross proceeds. Coal, oil, and gas are taxed differently. Also imposed a license tax on metalliferous and micaceous mines as a percentage (1.6% to 1.81%) of gross value. Gross value under $250,000 is exempt but 0.5% Resource Indemnity and Groundwater Assessment Tax applies. Oil, natural gas, liquid hydrocarbon, helium, and carbon dioxide are excluded. Oil and gas are taxed differently. Oil or gas derived from coals-to-liquid technology, shale, or tar sand are exempt; sand and gravel, gems, potash, gypsum, sulfur, and others are excluded; and taxable value varies for beryllium and for minerals shipped out of state as ore.