

# CRS Report for Congress

Received through the CRS Web

## **Hardrock Mining: State Regulation**

**March 14, 2005**

Aaron M. Flynn  
Legislative Attorney  
American Law Division

# Hardrock Mining: State Regulation

## Summary

Various state and federal laws play important roles in the regulation of mining activities. Mining for hardrock minerals on federal public lands is governed primarily by the General Mining Act of 1872. The General Mining Act authorizes a prospector to locate and claim an area believed to contain a valuable mineral deposit, subject to the payment of certain fees. The General Mining Act does not, however, require payment of a production-related royalty, as is required for federal oil, gas, and other minerals governed by more recently enacted laws. Critics of the General Mining Act suggest that the lack of a royalty payment serves as an unnecessary subsidization of the mining industry, while proponents of the current system suggest that it encourages investment in the domestic mining industry. Legislation has been introduced in previous Congresses that would have required royalty payments, but such provisions have not been enacted into law.

Many states have enacted laws governing mineral rights and mineral development on state-owned lands. Of these laws, those applicable to hardrock minerals on state-owned lands vary considerably. Unlike the comparable federal law, however, many states now provide for state-owned hardrock mineral leases and authorize royalty and rental payment collection.

In addition to financial issues, environmental regulation of hardrock mining also varies significantly under federal and state law. Significantly, the federal Surface Mining Control and Reclamation Act, which requires certain environmental remediation activities with respect to surface coal mining on federal *and* non-federal lands, is not applicable to hardrock minerals. Legislative proposals to address concerns related to hardrock mining environmental impacts and abandoned mine reclamation have been introduced in past Congresses (e.g. H.R. 2141 and H.R. 504 in the 108th Congress), but none have been enacted into law. In addition to federal regulation, states are authorized to implement surface mining reclamation laws and many have chosen to regulate hardrock mining operations in addition to surface coal mining. These laws vary from state to state, but most apply equally to federal, state, and private lands.

This report provides a survey of state laws governing these above-mentioned aspects of hardrock mining. It is not meant to serve as a comprehensive description of each state's regulatory program, but instead provides an overview of the regulation of several specific activities associated with hardrock mineral development; focusing on (1) state imposed royalty rates and rental charges for hardrock minerals on state lands and (2) reclamation and bonding requirements for hardrock mining activities applicable to all mining operations.

## **Contents**

Overview ..... 1

## **List of Tables**

State-by-State Summaries of Hardrock Mining Regulation ..... 4

# Hardrock Mining: State Regulation

## Overview

Both federal and state laws play important roles in the regulation of the mining activities. Mineral development rights on federal public lands are governed by several statutes applicable to specific resources. The 1872 General Mining Act<sup>1</sup> governs access to hardrock minerals<sup>2</sup> on federal public lands. The General Mining Act authorizes claimants to locate and patent lode and placer claims on federal public lands.<sup>3</sup> Briefly, to stake a legitimate claim a prospector must locate a valuable mineral deposit<sup>4</sup> on or underlying federal lands eligible for entry under the act,<sup>5</sup> and comply with the procedures set out in the regulations of the Bureau of Land Management (BLM).<sup>6</sup> The claimant may remove all minerals from the claim, subject to the terms of the Mining Act, even without obtaining a patent (title) to the minerals or lands.<sup>7</sup> The Mining Act does require the payment of certain fees to insure that a

---

<sup>1</sup> General Mining Act of 1872, Act of May 10 1872, ch. 152, 17 Stat. 91, codified at 30 U.S.C. §§ 21-54 (2003).

<sup>2</sup> Hardrock minerals include most metals and non-fuel nonmetals, such as gold, silver, copper, zinc, barite, and fluorspar.

<sup>3</sup> A lode is a mineral deposit found in a continuous vein form that is reasonably distinguishable from neighboring nonmineral rock. Common examples are gold, silver, or tin. 30 U.S.C. § 23. A placer claim is defined as those mineral deposits which are not lodes, and are usually widely dispersed, unconsolidated mineral deposits such as gypsum. Location is the process by which a mining claim is found and its boundaries delineated. Patenting is a method through which the federal government passes title to a private entity.

<sup>4</sup> 30 U.S.C. 22, 23; *see* United States v. Coleman, 390 U.S. 599 (1968).

<sup>5</sup> 30 U.S.C. §§ 23, 28, 35-36.

<sup>6</sup> 43 U.S.C. § 1744(a), (c).

<sup>7</sup> The law also authorizes mineral claimants to patent — or acquire title to — the federal lands or minerals encompassed within a mining claim, so long as established procedures are satisfied and specified conditions are met. 30 U.S.C. §§ 29, 37. The availability of a patent is often cited as a reasonable incentive to encourage domestic mining operations, or conversely as an anachronistic windfall to industry. *See* Andrew P. Morriss, *et al.*, *Homesteading Rock: A Defense of Free Access Under the General Mining Law of 1872*, 34 ENVTL. L. 745 (2004); Daphne Werth, Comment, *Where Regulation and Property Rights Collide: Reforming the Hardrock Act of 1872*, 65 U. COLO. L. REV. 427, 443 (1994). It should be noted that the minerals on a valid claim may be developed without a patent, and Congress has imposed an annual moratorium on the processing of new patent applications, most recently in Pub. L. No. 108-447.

claim is maintained;<sup>8</sup> however, unlike the laws governing oil, gas, and several other minerals, the Mining Act does not require payment of a production-related royalty. Legislation has been introduced in previous Congresses to reform the General Mining Act in a variety of ways, including provisions for royalty payments, although no such legislation has been enacted into law.<sup>9</sup>

Most states also have statutes governing exploration and mining on state lands, with laws ranging from single-paragraph authorizations to detailed regulation applying different standards to different minerals and land classifications. This makes it difficult to describe a common model for state mining regulation. Many states, like the federal system outlined above, provide separate regulatory regimes for hardrock minerals and oil, gas, and coal. Unlike current federal law, however, many states now charge royalty fees associated with hardrock mineral production in addition to land use rental fees. In some instances royalty and rental rates are specified by statute, and, in others, such determinations are left to state administrative agencies.

State and federal law also regulate certain aspects of the environmental impacts caused by mining activities, often regardless of whether such activities take place on federal, state, or private lands. At the federal level, multiple environmental laws will generally impact mineral development, including the National Environmental Policy Act,<sup>10</sup> the Clean Air Act,<sup>11</sup> the Federal Water Pollution Control Act (Clean Water Act),<sup>12</sup> the Safe Drinking Water Act,<sup>13</sup> the Toxic Substance Control Act,<sup>14</sup> the Comprehensive Environmental Response Compensation and Liability Act,<sup>15</sup> and the Endangered Species Act.<sup>16</sup>

In addition, the federal Surface Mining Control and Reclamation Act (SMCRA)<sup>17</sup> was enacted to regulate the environmental impacts of surface coal mining operations on federal, state, and private lands. SMCRA requires coal mine operators to obtain a permit for surface mines or surface operations associated with underground mines and provides specific reclamation standards for land and

---

<sup>8</sup> 30 U.S.C. § 28f(a).

<sup>9</sup> See Robert J. Uram, *Prospects for Mining Law Reform*, 12 NAT. RESOURCES & ENV'T 191, 191-95 (1998) (providing an overview of attempts to reform the General Mining Act).

<sup>10</sup> 42 U.S.C. §§ 4321-4347.

<sup>11</sup> 42 U.S.C. §§ 7401-7671.

<sup>12</sup> 33 U.S.C. §§ 1251-1387.

<sup>13</sup> 42 U.S.C. §§ 300f-300j(25).

<sup>14</sup> 15 U.S.C. §§ 2601-2692.

<sup>15</sup> 42 U.S.C. §§ 9601-9675.

<sup>16</sup> 16 U.S.C. §§ 1531-1544.

<sup>17</sup> 30 U.S.C. §§ 1201-1338.

resources affected by these activities.<sup>18</sup> In addition, operators must, among other things, submit reclamation and operation plans and supply performance bonds and financial guarantees sufficient to cover the costs of reclamation.<sup>19</sup> The states are authorized to implement SMCRA, and, while its provisions are not applicable to hardrock mining operations, many states have enacted state laws with similar reclamation requirements applicable to hardrock mining activities as well.<sup>20</sup>

This report provides a survey of state laws governing hardrock mining. It is not meant to serve as a comprehensive description of each state's regulatory program, but instead provides an overview of the regulation of several specific activities associated with hardrock mineral development. This report focuses on (1) state imposed royalty rates and rental charges for hardrock minerals on state lands and (2) reclamation and bonding requirements for hardrock mining activities. As mentioned above, state reclamation and bonding requirements are typically applicable on federal state and private lands. Variations from this scheme are specifically identified.

---

<sup>18</sup> *See id.* §§ 1265(b)(1)-(25), 1291(28), 1266(b)(1)-(12).

<sup>19</sup> *See* 30 U.S.C. § 1259(a), (b). The performance bond must cover the entire area of mining operations and is “conditional upon faithful performance” of all SMCRA and permit requirements. The exact amount is set by the regulatory authority, federal or state as appropriate, and can be forfeited if the operator fails to adequately perform the requisite reclamation. Several different types of bonds are permissible under the act and additional alternative bonding programs may be implemented with approval by the Secretary of the Interior. *See also* 43 C.F.R. §§ 3809.500 to 600(BLM bonding requirements for locatable minerals; 43 C.F.R. § 3452.3(b) (bond required under the Mineral Leasing Act); 36 C.F.R. § 228.13 (U.S. Forest Service bonding requirements).

<sup>20</sup> *Id.* § 1253(a).

### State-by-State Summaries of Hardrock Mining Regulation

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Alabama</b></p>	<p>Ala. Code §§ 9-17-60 <i>et seq.</i> The Commissioner of Conservation and Natural Resources (CNR) is authorized to lease any lands under CNR jurisdiction for exploration, development, and production of oil, gas and other minerals. Lands of any other state agency may be leased for mineral development by the Commissioner upon written request of the head of such agency.</p> <p>Land is leased on the basis of competitive bids with leases going to the highest bidder or otherwise most advantageous offer. (9-17-65). State law does reference <b>rentals, royalties</b> and other revenues, designating which state agencies and state funds will receive which proportions of accrued funds. (9-17-65). State statute does not, however, appear to set a particular royalty or rental rate for state-owned hardrock minerals.</p>	<p>ALA. CODE §§ 9-16-1 <i>et seq.</i> The state requires a surface mining permit that applies to hardrock mining operations. Section 9-16-7 governs basic reclamation requirements. A <b>performance bond</b> is required under section 9-16-8 for surface mining. Bond form is to be determined by the director of the state Department of Industrial Relations, signed by the operator as principal and a state licensed corporate surety. The bond amount is set by statute at \$2,500 for each acre covered by the permit. In lieu of this bond, the operator may deposit cash or negotiable U.S. bonds or AL state or municipal bonds. AL law also provides for increasing or reducing the total penalty of the bond (or cash/securities) as land is added to or withdrawn from the permit. (9-16-6). Bond substitution is required if the corporate surety cancels the bond or loses its AL license. When an operator has completed reclamation on a given tract of land, the bond is to be <b>released</b>. Bonds may be <b>forfeited</b> pursuant to civil action for violations of final director orders. (9-16-11). Forfeited bonds are placed in the Surface Mining Reclamation Fund and used for reclamation purposes. (9-16-12).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Alaska</b></p>	<p>ALASKA STAT. §§ 38.05.135 <i>et seq.</i> State owned lands are generally open to mineral development and may be obtained by “<b>permit or lease</b> for the purpose of exploration, development, and the extraction of minerals.”</p> <p>Hardrock mineral <b>royalty</b> rates are set by statute at 3% of net income as determined under section 43.65. (38.05.212). They are also subject to the exploration incentive credit authorized by section 27.30. Royalties may be taken in kind when the commissioner of the Division of Lands determines it to be in the best interests of the state. (38.05.182). Interest on late royalty payments is also provided for at the higher of 11% or “the rate of five percentage points above the annual rate charged member banks for advances by the 12th Federal Reserve District as of the first day of that calendar quarter ....” in which the royalty is deemed late. (38.05.135).</p> <p>The holder of a mineral interest must pay a yearly <b>rental</b> fee in advance for the right to continue to hold the mining right. Rental fees are set at \$200 for a two-year term for each site and are thereafter determined by formula based on the number of years since location and either the number of lease acres or number of claims held. Rental amounts are also credited against the production royalty. (38.05.211). Failure to pay rent/royalty constitutes abandonment of mining rights. (38.05.265).</p>	<p>ALASKA STAT. §§ 27.19.010 <i>et seq.</i> Minerals other than oil, gas, and coal are subject to the following reclamation standards. Mines are to be operated in a manner that prevents “unnecessary and undue degradation” of land and waters, and the operation must be reclaimed so as “to leave the site in a stable condition.” (27.19.020). A reclamation plan must be approved before mining can take place, and financial assurance in an amount reasonably necessary to ensure performance of the plan must be provided.</p> <p><b>Financial assurance</b> is generally capped at \$750 per acre, but there is no cap for lode claims. A bonding pool is also provided for certain eligible mining operations where participants pay a deposit and an annual fee not to exceed 15% and 5% of the otherwise required financial assurance amount, respectively. (27.19.040).</p> <p>Bonds may take the following forms: (1) a surety bond; (2) a letter of credit; (3) a certificate of deposit; (4) a corporate guarantee that meets certain financial tests; (5) payments into the mine reclamation trust fund; or (6) any other form that meets the above-referenced financial tests. (27.19.040).</p> <p>Violation of reclamation requirements results in <b>forfeiture</b> of the bond to the state pool. (27.19.040). Violators must pay five times the normal bond amount for future operations. (27.19.070).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Arizona</b></p>	<p>ARIZ. REV. STAT. §§ 27-231 <i>et seq.</i> The state land commissioner is authorized to <b>lease</b> state-owned metallic ore and industrial minerals.</p> <p><b>Rental:</b> The commissioner must establish the annual land rental for each lease prior to issuance. Rental fees are based on an appraisal of the land not including the contributory value of mining. The annual rental must also be (1) at least the average rental assessed in Colorado, New Mexico and Utah; and (2) payable in advance of lease agreement execution and at the beginning of each annual period thereafter. (27-234(A)). Royalty appraisal costs are added to the amount due as rental. (27-234(E)).</p> <p><b>Royalties</b> must be at least 2% of the gross value of produced minerals, and are to be paid monthly based on the previous month. (27-234(B), (I)). The commissioner may raise rates based on standard appraisal methods and market rates to obtain fair market value. Royalty appraisal is performed before the lease is issued and at each renewal. Rates may be adjusted at any time if circumstances justify changes. (27-234(C)). Gross value of minerals produced is based on: (1) monthly average price as quoted by the mineral commodities market/industry trade journals, as determined by the commissioner and specified in the lease; or (2) an appraisal that establishes the fair market price if there is no published price quote. (27-234(B)).</p>	<p><b>Financial Security for State Mineral Leases:</b> ARIZ. REV. STAT. § 27-235(E). The land commissioner may require financial security to guarantee payment of royalties. Financial security is also required for (1) surface reclamation to a reasonable condition as described in the lease and (2) losses to land caused by specified damages. <b>Form:</b> cash deposit, a certificate of deposit, a surety bond or any other form of financial assurance acceptable to the commissioner.</p> <p><b>Metal Mine Reclamation:</b> ARIZ. REV. STAT. §§ 27-901 <i>et seq.</i>, applicable to non-state lands only. Reclamation plan and <b>financial assurance</b> required for surface disturbances over five acres. (27-921, 27-923, 27-951). Plans must be renewed annually and be accompanied by additional financial assurance, if necessary. (27-955). Financial assurance must be in a form provided for in 40 C.F.R. § 264.143(f) or other form acceptable to the inspector. (27-991, 27-931). <b>Amount:</b> Inspector determines amount, assuming 3<sup>rd</sup> party will reclaim land, unless operator can show financial ability to perform reclamation; generally \$2000 per acre of disturbance, unless reduction based on rules or ability of operator to perform reclamation is established. (27-992, 27-993). Operators may apply for <b>release</b> for reclaimed areas and may provide financial assurance incrementally. The Inspector must adopt rules for <b>forfeiture</b> that provide for a hearing. (27-995 - 27-997).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Arkansas	<p>ARK. CODE ANN. §§ 22-5-801 <i>et seq.</i> The Commissioner of State Lands is authorized to <b>lease</b> oil, gas and “other minerals” on state lands. A lease or permit is required before “taking” any minerals. (22-5-805).</p> <p><b>Royalties:</b> The Natural Resources Committee must establish a schedule of minimum fees and royalties, as well as the terms and conditions for various types of permits and leases. No permit or lease can be granted for less than the minimums prescribed in the schedule. (22-5-804). Accurate accounting of produced minerals is required, and lease/permit holders must pay monthly royalties based on the amount of “actual consideration” for the minerals taken under the lease or permit. The holder of lease/permit is absolutely liable for all royalties, and the Commissioner may require a corporate surety bond to guarantee the royalty payment. (22-5-809).</p>	<p><b>The Arkansas Open-Cut Land Reclamation Act:</b> ARK. CODE ANN. §§ 15-57-301 <i>et seq.</i> applicable to open-cut mining for “materials for commercial purposes.”</p> <p><b>Bond form:</b> cash, securities, or other collateral, including letters of credit and mortgages on real property, as prescribed by Dep’t of Env’tl. Quality. Bonds must be signed by the operator and a licensed corporate surety. (15-37-316). The bond <b>amount</b> shall be equal to the estimated reclamation cost. The Dep’t may retain independent experts to establish the amount. Bond amounts may be altered as necessary. Bond and substituted security regulations must be promulgated to ensure small operators will not be precluded from developing mineral resources due to high bond amounts. (15-57-316).</p> <p><b>Forfeiture:</b> Bonds are conditioned on compliance with all statutory and regulatory requirements and are subject to forfeiture until the affected area has been reclaimed, approved, and released. (15-57-317). Operators with substantial violations may not receive a new or renewed permit unless a change of circumstances justifies an exception. (15-57-316).</p> <p><b>Bond release</b> may be incremental and occurs on a Dep’t determination that land has been reclaimed. (15-57-316).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>California</b></p>	<p>State statutes do not appear to specify which minerals are leasable; however, mineral leases are referenced in multiple provisions, described below.</p> <p><b>Rent:</b> The lease must provide for an annual rental of not less than \$1 per acre, as determined by the State Lands Commission. (CAL. PUB. RES. CODE § 6895).</p> <p><b>Royalty:</b> The lease must provide for a royalty, to be taken in money or in kind, at the option of the Commission, of not less than 10 percent of the gross value of all mineral production from the leased lands. (6895).</p> <p>Until a mining permittee applies for a lease for a mining area, all minerals produced from the area that would be covered by a permit are subject to a 20% royalty. (6896).</p> <p>An <b>annual reporting fee</b> is also required and is to be adopted by the Mining and Geology Board for each active or idle surface mining operation. The maximum fee for any single mining operation may not exceed \$4,000 annually and may not be less than \$100 annually. In addition, the board shall collect \$5 per ounce of gold and ten cents per ounce of silver. (2207).</p>	<p><b>Reclamation:</b> Surface mining operations require submission and approval of a reclamation plan. (CAL. PUB. RES. CODE § 2770).</p> <p><b>Financial Assurance</b> is required of all operators until reclamation is complete. Assurance must be approved by the lead agency and resubmitted annually. (2770, 2207). <b>Form:</b> surety bonds executed by an admitted surety insurer, irrevocable letters of credit, trust funds, or other forms of financial assurances specified by the Board, which are determined to be adequate. The amount is to be adjusted annually to account for new lands disturbed by surface mining operations, inflation, and accomplished reclamation. (2773.1).</p> <p>To pursue <b>forfeiture</b>, the Board must hold a public hearing, determine that operator is financially incapable of or has abandoned reclamation, notify the operator that forfeiture will be sought, and allow 60 days for reclamation to commence. Upon forfeiture, use of the proceeds must be to reclaim land. (2773.1).</p> <p><b>Release</b> occurs upon written notification by the lead agency that reclamation has been completed in accordance with the plan. (2773.1).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Colorado</b></p>	<p>The State Board of Land Commissioners may <b>lease</b> state land for the removal of minerals. The Board must determine a <b>rent</b> to be charged and a <b>royalty</b> amount to be applied to produced minerals. (COLO. REV. STAT. § 36-1-113).</p> <p>The Board has the authority to adjust rentals under any existing, expired, or defaulted lease when, in its opinion, conditions justify changes. (36-1-114).</p> <p>All leases of state or school land are conditioned upon the payment of rent in advance, and the violation of this condition results in a forfeiture of the lease, at the option of the Board. (36-1-117).</p>	<p><b>Performance and financial warranties</b> are required before a mining permit may be issued. A performance warranty is a written promise by the operator to meet reclamation requirements. A financial warranty is a written promise to be responsible for reclamation costs up to the amount specified by the Board, together with proof of <b>financial responsibility</b>. The Board must prescribe the amount and duration of financial warranties and adjust amounts from time to time. (COLO. REV. STAT. § 34-32.5-117).</p> <p>Surety may be: (1) a surety bond issued by a corporate surety licensed in CO; (2) a letter of credit issued by a U.S. licensed bank; (3) a certificate of deposit; (4) a deed of trust or security agreement encumbering real or personal property and creating a first lien in favor of the state; (5) assurance that, upon commencement of production, the operator will establish a trust comprised of periodic payments representing a fraction of receipts, (6) a lien on project fixtures and equipment of sufficient value, (7) a certified financial statement for the warrantor's most recent fiscal year and a certification by an independent auditor that the financial warrantor is the issuer of one or more currently outstanding senior credit obligations that have been rated "A" or better by a nationally recognized rating organization and the warrantor's net worth is at least two times the amount of all financial warranties; (8) a certified financial statement for the financial warrantor's most recent fiscal year</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Colorado (cont.)</b>		<p>and a certification by an independent auditor that (a) the warrantor's net worth is at least ten million dollars and is at least two times the amount of all financial warranties, (b) the warrantor's tangible fixed assets in the U.S. are worth at least twenty million dollars, (c) the financial warrantor's total liabilities-to-net-worth ratio are not more than two to one; and (d) the warrantor's net income, excluding nonrecurring items, is positive; (9) proof that the operator is a department or division of state government or a unit of county or municipal government.</p> <p>Operators may file a written notice of reclamation completion, and, subject to Board inspection, the Board must <b>release</b> all applicable warranties. If the Board finds noncompliance with reclamation requirements, then it must notify the operator within 60 days of property inspection. (34-32.5-117).</p> <p><b>Forfeiture</b> may be pursued when an operator has violated a cease and desist order, an operator is in default under his performance warranty, or a warrantor has failed to maintain his financial warranty in good standing or no longer has the financial ability to carry out his obligations. The Board must notify the operator and all warrantors and provide opportunity for a hearing. Forfeited funds must be used to reclaim lands. (34-32-118).</p>
<b>Connecticut</b>	State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.	State statutes do not appear to address reclamation and bonding requirements for hardrock mining operations.

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Delaware</b></p>	<p>The Department of Natural Resources and Environmental Control may <b>lease</b> public lands for “the exclusive right of mining, exploring by geophysical and other methods, and operating for and producing therefrom, oil, gas, casing head gas, casing head gasoline ....” It is not clear whether this includes hardrock minerals. (DEL. CODE ANN. tit. 7 § 4511).</p> <p><b>Rent</b> payments associated with the lease of public lands are to be deposited with the State Treasurer and placed in a specified account. (7 § 4512).</p> <p><b>Offshore</b> and submerged land mineral (including hardrock mineral) leases may be granted by the Governor and the Secretary of the Dep’t of Nat. Res. and Env’tl. Control. (7 § 6102).</p> <p><b>Royalties</b> for offshore production are set by statute at not less than 12.5 % of production; however, it is unclear if this is meant to apply to minerals other than oil. (7 § 6112).</p> <p>Annual <b>rental</b> of submerged lands is to be at least 25 cents per acre, as specified by the Secretary. (7 § 6114).</p>	<p><b>Submerged lands bonds:</b> Sufficient bonding or insurance requirements, as determined by the Secretary, are required to secure performance and the faithful compliance by the lessee with lease terms and to secure the public against damages arising from operations. (DEL. CODE ANN. tit. 7 § 6115). The Secretary may require, prior to any exploration or exploitation of offshore minerals, that a <b>bond</b> in the amount of at least \$1,000,000 be posted to secure the State against any damages or claims arising from the offshore operations. (29 § 8003).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Florida</b></p>	<p><b>Mineral Leases:</b> The Board of Trustees of the Internal Improvement Trust Fund may sell or <b>lease</b> any mineral or similar substance in, on, or under state land “the title to which is vested in the state, the Department of Management Services, the Department of Environmental Protection, the Fish and Wildlife Conservation Commission, the State Board of Education, or any other state board, department, or agency; provided that the board of trustees may not grant such a sale or lease on the land of any other state board, department, or agency without first obtaining approval therefrom.” (FLA. STAT. ANN. § 253.45).</p> <p><b>Royalty and rent</b> provisions do not directly address hardrock minerals, stating: “[t]he board shall determine in advance the amount of royalty, never less than one-eighth in kind, or in value, and a definite rental, increasing annually after the first two years, upon lands not developed for oil or gas, or upon which no well has been commenced in good faith to secure production in paying quantities of gas or oil.” (253.53). Royalties are also to be reduced by deducting any oil or gas used in production, but again the provision would appear applicable only to oil and gas production. (253.57.)</p>	<p><b>Reclamation:</b> FLA. STAT. ANN. §§ 378.401 <i>et seq.</i> The Department of Environmental Protection must require operators to submit and abide by a reclamation plan with baseline reclamation standards for various categories of minerals established by law.</p> <p><b>Financial Security:</b> The Board of Trustees may require a surety or property bond, an irrevocable letter of credit, or other proof of financial responsibility from each <i>lessee of public land or mineral interest</i> prior to any mineral extraction. The surety bond or irrevocable letter of credit must be from a surety company or bank authorized to do business in FL. The surety bond, irrevocable letter of credit, or other proof of financial responsibility serves as security and is to be <b>forfeited</b> to the board to pay for any damages caused by mining operations performed by the lessee. (253.571).</p> <p>Greater financial security amounts must be considered for mining operations planned for the waters of the state or under other particular circumstances that may pose the risk of greater potential damages. (253.571).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Georgia</b></p>	<p>The State Properties Commission is authorized to permit exploration and to <b>lease</b> state lands for mineral development upon such terms and conditions as the Commission shall determine. (GA. CODE ANN. § 50-16-43).</p> <p><b>Rent and Royalties:</b> Each lease must provide for a primary term of not more than ten years. Oil and gas royalties are specified, but not other minerals. The lease must provide for <b>delay rentals</b> in the sum of at least 10¢ per net mineral acre payable on or before the first anniversary date of the lease, 25¢ per net mineral acre payable on or before the second anniversary date of the lease, 50¢ per net mineral acre payable on or before the third anniversary date of the lease, and at least \$ 1.00 per net mineral acre payable on or before each subsequent anniversary date during the primary term of the lease. (50-16-43).</p>	<p><b>Georgia Surface Mining Act:</b> GA. CODE ANN. §§ 12-4-70 <i>et seq.</i> apply to all hardrock mined lands. (12-4-72). A permit to conduct surface mining operations is required and a reclamation and land use plan must be approved. Operators must file a <b>bond</b>, unless the director of the Commission issues an exemption. If an operator is exempted and subsequently violates rules/lease/plan terms, the director may require bond submission. Bonds must be written by a director-approved and GA-licensed surety. In determining bond <b>amount</b>, the director must consider the character and nature of the land reclamation requirements as approved in the plan. Amount cannot exceed \$2,500 per acre. Bonds are conditioned upon the faithful performance of the requirements law and regulations. Amount and reclamation requirements are to be reviewed at least every five years and adjusted according to circumstances. (12-4-75).</p> <p><b>Form:</b> bond, government securities, cash, or any combination thereof. (12-4-75).</p> <p><b>Release &amp; Forfeiture:</b> Release occurs upon the director's determination that reclamation has been completed. Upon failure to complete reclamation requirements, the state may pursue forfeiture and reclaim lands with recovered funds. (12-4-75).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Hawaii</b></p>	<p>Any minerals on state lands may be <b>leased</b> by the Board of Land and Natural Resources. (HAW. REV. STAT. §§ 182-4, 182-5).</p> <p>Leases are awarded at public auction at which bidders may be required to bid on the amount of annual <b>rental</b> (to be paid in advance, price based on an upset price fixed by the board), and <b>royalty</b>, based on the gross proceeds or net profits. (182-4, 182-9).</p> <p>Specific royalties are set for each “long dry ton” of bauxite, bauxitic clay, gibbsite, diasporite, boehmite, and all ores of aluminum at the higher amount of either (1) twenty-five cents or (2) the equivalent of the price of one pound of virgin pig aluminum. Royalties for ore processed into aluminous oxide in the State are set at 80% of the rate of royalty for ore processed outside the State. Royalties must also be set at a rate to encourage establishment and continuation of the HI mining industry. (182-7).</p>	<p><b>State Land Bond requirement:</b> HAW. REV. STAT. §§ 182-1 <i>et seq.</i> Lessees must file with the Board a bond, in a form and in an amount approved by the Board. The bond must be conditioned upon the faithful performance by the lessee of all the lease terms and statutory requirements, and also conditioned upon the full payment by the lessee of all damages suffered by the other land occupiers. (182-3).</p> <p><b>Strip Mine Reclamation:</b> HAW. REV. STAT. §§ 181-1 <i>et seq.</i> apply to all hardrock mined lands. The Board is empowered to issue strip mine permits and to approve reclamation plans. Permits are accompanied by an annual fee based on number of acres mined ranging from \$100 for less than ten acres to \$500 for one hundred acres. (181-4, 181-6).</p> <p>A <b>bond</b>, conditioned on performance of reclamation requirements, must be filed. It generally must be signed by HI licensed corporate surety. The amount will be set by the Board, but cannot exceed \$300 an acre. The amount is to be adjusted to reflect any additional mined land or completed reclamation. A surety’s signature is not required if a cash deposit in the amount of the bond is made. (181-5).</p> <p><b>Release</b> occurs upon showing that land has been reclaimed as required by law/regulation/permit terms. (181-5).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Idaho</b></p>	<p>State lands are open to hardrock mineral “casual” exploration to the extent the Board of Land Commissioners has not withdrawn lands. (IDAHO CODE §§ 47-702, 47-1403).</p> <p>The Board may <b>lease</b> tracts (not exceeding six hundred forty acres) for prospecting and mining for an <b>annual rental</b>, not less than \$1 per acre per year, to be determined by the Board. The Board may set a production <b>royalty</b> as the Board deems fair and in the interest of the state. Rental payments are deducted from royalties each year. (47-704, 47-710).</p>	<p><b>State Lands:</b> Non-casual exploration requires a <b>reclamation</b> plan and a <b>bond</b> in such form as prescribed by the Board. The amount may not exceed \$750 per affected acre. Bonds are conditioned on the payment of all damages to the land and resources thereon caused by the entry and/or exploration. (IDAHO CODE § 47-703A).</p> <p>Violations of responsibilities under law/regulations/leases may result in a legal action for an injunction and to <b>forfeit</b> the operator’s bond and recover the cost of reasonable repair and reclamation. (47-718)</p> <p><b>Placer and Dredge Reclamation:</b> IDAHO CODE §§ 47-1317 <i>et seq.</i> apply to all lands. Requires permit and <b>bond</b> in an amount necessary to pay the estimated reasonable costs of reclamation required under the permit for each acre of land to be disturbed during the first season of operation plus 10%, not to exceed \$1,800 per acre. Bond <b>amount</b> must be adjusted annually to reflect changes in conditions. Exemption from bonding is possible if the applicant has insured faithful performance of the requirements of the reclamation act and regulations by having a current and valid bond with the U.S. government, which equals or exceeds the amount required by state law.</p> <p><b>Form:</b> surety, cash, certificate of deposit, or other bond acceptable to the director. (47-1317).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Idaho (cont.)		<p><b>Release &amp; Forfeiture:</b> Release occurs upon termination of mining operations and compliance with all reclamation requirements. Failure to reclaim lands results in forfeiture proceedings as required by sections 47-1318 and 47-1320.</p> <p><b>Surface Mining Reclamation:</b> IDAHO CODE §§ 47-1501 <i>et seq.</i> apply to all lands. Requires approval of reclamation plan and <b>bond</b> submission. Bond <b>amount</b> is to be determined by Board (estimated reasonable costs of reclamation plus 10%). Generally, bond amount may not exceed \$2,500 per acre, unless the Board holds a hearing, determines it is necessary, and notifies operator. Bonds are not required if the operator deposits cash and government securities in amounts equal to that of the required bond. (47-1512.) The law also provides for appropriate <b>forfeiture</b> proceedings. (47-1513).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Illinois	State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.	<p><b>Abandoned Mined Lands and Water Reclamation Act:</b> 20 ILL. COMP. STAT. 1920/1.01 <i>et seq.</i> generally apply to coal mining, but contains non-coal reclamation provision. The Department of Natural Resources is authorized and empowered to fill or seal abandoned tunnels, shafts, and entryways and remove equipment, structures, and facilities which it determines could endanger life and property and constitute a hazard. Annual expenditures cannot exceed 2% of the Department's annual budget for mine land reclamation through 1999. All expenditures had to be made by 2001. (1920/2.11)</p> <p><b>Surface Mining Reclamation:</b> 225 ILL. COMP. STAT. 715/1 <i>et seq.</i> Surface mining disturbing more than ten acres cannot proceed without permit. (715/4). <b>Financial security</b> is required, and must be adjusted in accordance with changes in circumstances. (715/5). <b>Bond amount</b> must be between \$600 and \$5,000 per acre as determined by the Director of the Department. (715/8).</p> <p><b>Form:</b> as the Director prescribes or operator may deposit cash, certificates of deposits, government securities, or irrevocable letters of credit in an amount equal to bond requirements. (715/8).</p> <p><b>Forfeiture:</b> procedures provided for by statute, forfeiture fully satisfies reclamation obligations. (715/11).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Indiana</b>	<p>State may grant permits for extraction, removal, and disposition of minerals on or under land or non-navigable waters. (IND. CODE 14-35-1-1).</p> <p>Commercial production and accompanying <b>royalty</b> payments must be established by the end of the initial term. (14-35-1-9).</p>	<p><b>State Land Bond requirement:</b> Permits must be accompanied by sufficient <b>bond</b> in an amount to be determined by the department for the restoration of land or water disturbed by exploration and mining (IND. CODE 14-35-1-10).</p> <p>Other reclamation statutes do not appear to apply to hardrock mining operations.</p>
<b>Iowa</b>	<p>The state, counties, cities, and other political subdivisions may <b>lease</b> public lands under their respective jurisdictions for the purpose of metallic minerals exploration and production.</p> <p>Royalties are not specifically provided for; however, statutes indicate that revenues derived from the leasing of state-owned lands are to be paid into the general fund of the state. Revenues derived from the leasing of other public lands shall be paid into the general fund of the respective lessor political subdivision. (IOWA CODE § 458A.21).</p>	<p><b>Reclamation:</b> State law provides for reclamation of all lands affected by mining for gypsum, clay, stone, sand, gravel, or other ores or mineral solids, except coal. (IOWA CODE § 208.1). Operations cannot begin without a license. (208.7).</p> <p><b>Bond:</b> Permit application shall be accompanied by a bond or security. (208.14). Bonds must be in a <b>form</b> prescribed by the state and conditioned on faithful performance by the operator of all reclamation requirements. Bonds must be signed by the operator as principal and by a IA licensed corporate surety. In lieu of a bond, the operator may deposit cash or certificates of deposit subject to the same bond conditions. Bond <b>amount</b> must be equal to the cost of reclaiming the site as required under section 208.17 and as estimated by the Division. (208.23).</p> <p>A bond may not be <b>released</b> until required reclamation work has been performed. (208.17). <b>Forfeiture</b> procedures are provided under § 208.28. If the proceeds from bond forfeiture are insufficient to satisfy the cost of reclamation, the operator shall be liable for remaining costs. (208.28).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Kansas</b></p>	<p>Various governmental entities agencies are authorized to <b>lease</b> state lands under their jurisdiction for mineral production, including the Board of County Commissioners of any county, the KS Board of Regents, and the Secretary of the Department of Wildlife and Park Lands. (KAN. STAT. ANN. §§ 19-110, 32-850, 75-52,136).</p> <p>Board of County Commissioner and Board of Regent issued leases require a <b>royalty</b> of not less than one eighth part of the produced minerals. County leases may provide for a payment to the county of the market value of such royalty in lieu of payment in kind. (19-110, 32-850, 75-52,136).</p>	<p><b>State Lease Liability:</b> Lessee is liable for all surface damage caused by any act or omission of the lessee. (KAN. STAT. ANN. § 76-166).</p> <p><b>Surface-mining Land Conservation and Reclamation Act:</b> KAN. STAT. ANN. §§ 49-601 <i>et seq.</i> apply to surface mining of hardrock minerals on all lands. Licensing is required and must be renewed yearly. (49-605).</p> <p>A <b>bond</b> or <b>security</b> is required. <b>Form:</b> as prescribed by the state; bond shall be signed by the operator as principal and by a corporate surety licensed to do business in KS. Operators may deposit cash, certificates of deposit, or government securities subject to the same conditions as bonds, in lieu thereof. Minimum bond <b>amount</b> is \$250 per acre, and the maximum is \$1,500 per acre. States may waive or reduce the amount to the extent that the operator has a sufficient bond or security on file with the city or county where the site or affected land is located. (49-615).</p> <p><b>Forfeiture</b> proceedings are provided for by statute. Forfeiture of the operator’s bond fully satisfies all obligations of the operator to reclaim affected land covered by the bond. (49-619, 49-620).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Kentucky</b>	State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.	<b>Surface Coal Mining Regulation:</b> KY. REV. STAT. ANN. § 350.010 <i>et seq.</i> Although generally inapplicable to hardrock minerals, the statute does authorize some regulation of “strip mining,” which is defined in a manner that would appear to include hardrock minerals. Certain provisions are arguably applicable to noncoal strip mined land. ( <i>See</i> 350.050, 350.152, 350.445).

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Louisiana</b></p>	<p>The State Mineral Board is authorized to <b>lease</b> minerals for development and production on any lands belonging to the state. (LA. REV. STAT. ANN. §§ 30:124, 30:152).</p> <p>Minimum <b>royalties</b> must be stipulated in the lease, and royalties for various minerals are specified. Hardrock minerals are covered by the general provision requiring one-eighth of all minerals produced and saved; or if the lease is on behalf of a School Board, one-sixth of all minerals produced and saved. The state may choose to take any royalty in kind. (30:127, 30:142). The state may remit 10% of all royalties to the parish where production occurs. (30:145).</p> <p>Where a lease provides for delay <b>rental</b>, the annual rental shall not be for less than one-half the cash bonus. (30:127).</p> <p><b>Proceeds</b> from mineral royalties, leases, and any bonuses are to be paid into the Bond Security and Redemption Fund, and when it is fully funded, into the Louisiana Investment Fund for Enhancement. (30:136.1).</p>	<p>State statutes do not appear to address reclamation for hardrock mineral mines.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Maine</b></p>	<p>The Bureau of Geology and Natural Areas and other agencies with jurisdiction over state-owned lands have jurisdiction for the purpose of mineral development and mining on that land. (ME. REV. STAT. ANN. tit.12 § 549).</p> <p>Exploration permits are required, at which point <b>claims</b> may be located. <b>Rental fees</b> are levied when an exploration claim is recorded, increasing each year as follows:</p> <p>First year \$ .25 per acre  2nd year \$ .75 per acre  3rd year \$ 1.50 per acre  4th year \$ 2.50 per acre  5th year \$ 5.00 per acre  6th year \$20.00 per acre  7th year \$30.00 per acre</p> <p><b>Leases</b> are available to persons with a valid recorded exploration claim. Lessees must make <b>royalty</b> payments annually or more frequently as specified in the lease; the amount of royalty payments is set jointly by the director Bureau of Geology and Natural Areas and the director of the agency having jurisdiction over the state lands. The royalty rate set must reasonably relate to applicable royalty rates generally prevailing. (549-B).</p>	<p><b>State Lands Bond:</b> Lessees are required to provide a bond in an amount necessary to reclaim the area mined and to protect against damage to any property located outside the leased area caused by the mining operations. The amount is determined by the director of the agency with jurisdiction over the state lands. In lieu of a bond, other security may be provided so long as determined by the relevant agency director to provide the same protection as a bond. (ME. REV. STAT. ANN. tit. 12 § 549-B).</p> <p><b>Reclamation:</b> Applicable to all lands. Mining activities require a reclamation plan for the maintenance of the mine site during mining and for a period after termination of mining. <b>Security</b> is required for metallic ore mining to ensure reclamation, closure, and postclosure care maintenance requirements are met. <b>Form:</b> a bond payable to the State or other satisfactory forms, including a security deposit with the State, an escrow account and agreement, insurance, or an irrevocable trust. <b>Amount</b> is determined by considering the character of the overburden, the future suitable use of the land involved and the cost of grading and reclamation to be required. <b>Forfeited</b> security must be expended for the reclamation of the area subject to the bond. (ME. REV. STAT. ANN. tit. 38 § 490).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Maryland</b>	State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.	<p><b>Surface Mining Reclamation:</b> MD. CODE ANN., ENVIR. §§ 15-801 <i>et seq.</i> apply to hardrock minerals on all lands. The law establishes a Reclamation Fund for carrying out purposes of the act and to reclaim lands affected prior to enactment of the law. (15-805). A license and surface mining permit are required before operations may begin. Applications for these must be accompanied by submission of a reclamation plan along with various fees based on the number of acres affected. (15-807, 15-808).</p> <p><b>Bonds</b> must be filed prior to commencement of operations. <b>Amount:</b> maximum of \$1,250 per affected acre, but not less than a total of \$8,000. The Department of the Environment may make adjustments if the bond fee is unreasonable and excessive upon consideration of the size of the operation, the amount of land to be mined, the acreage that is unreclaimed at any one time, the proposed method of regrading and revegetation of the site, the proposed use of the land after reclamation, and any other relevant factors. Liability under the bond extends throughout operations and for five years after its expiration unless the bond is released. (15-823).</p> <p><b>Release</b> is authorized upon completion of operations and reclamation and may be incremental. (15-824). <b>Forfeiture</b> occurs on failure to perform reclamation in accordance with plan under procedures provided for by statute. (15-825).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Massachusetts	<p>The Division of Mineral Resources, within the Department of Environmental Protection, administers all laws and regulations pertaining to hardrock mining on state lands. The Division has authority to license exploration, <b>lease</b> minerals for extraction, and set charges and fees for mining operations. Leases may not be issued until the Dep't has received reliable information on the quantities, quality, and location of the resources, as well as potential impacts on natural resources. (MASS. GEN. LAWS ch. 21, § 54).</p>	<p><b>Bond:</b> A licensee or lessee must keep the state indemnified against all claims and costs in relation to the license or lease by posting a bond satisfactory to the director. No extraction can occur until the bond is posted. (MASS. GEN. LAWS ch. 21, § 54).</p> <p>Additional reclamation laws are not applicable to noncoal minerals. (MASS. GEN. LAWS ch. 21B, § 2).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Michigan	<p>There would not appear to be a generally applicable law governing leasing on state-owned lands. However, state-owned unpatented overflowed lands, made lands, and lake bottomlands are subject to <b>lease</b> for the removal of “metallic minerals, marl, stone, rock, sand, gravel, earth, oil, and gas” from or under the beds thereof. Leases may include such consideration as may be considered fair and reasonable. Special leasing rules apply to lands adjacent to and underlying the Great Lakes. (MICH. COMP. LAWS §§ 324.33936, 324.33938).</p>	<p><b>Ferrous Metallic Mine Reclamation:</b> MICH. COMP. LAWS §§ 324.63101 <i>et seq.</i> apply to all lands. A permit is required before operations may begin. Permits require submission of mining and reclamation plan. (324.63103a). Security may be required if the supervisor of reclamation has reasonable doubts about an operator’s ability to perform reclamation. Security may be a performance bond or other satisfactory form of financial assurance. (324.63107).</p> <p><b>Nonferrous Metallic Mine Reclamation:</b> MICH. COMP. LAWS §§ 324.63201 <i>et seq.</i> apply to all lands. A permit is required before operations may begin, as is an environmental impact assessment for the proposed mining operation. These require preparation of a mining, reclamation, and environmental protection plan. Operators must maintain <b>financial assurance</b> until the Dep’t determines reclamation is complete. <b>Form:</b> a conformance bond, escrow, cash, certificate of deposit, irrevocable letter of credit, or other equivalent security, or any combination thereof, covering at least 75% of the total required amount; the balance of the required total amount, if any, shall consist of a statement of financial responsibility. Assurance <b>amount</b> must be sufficient to cover the cost to administer reclamation. Amounts shall be adjusted every three years or as the Dep’t deems necessary.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Minnesota</b></p>	<p>The commissioner of natural resources may designate state lands as mining units and execute <b>leases</b> to prospect for “iron ore and other ores.” Generally, leases may cover only one mining unit. (MINN. STAT. §§ 93.14, 93.15).</p> <p>Lease form is provided by statute, and incorporates minimum <b>royalty</b> rates. Increases to royalty rates are provided for by equations referencing the Producer Price Index for Iron Ores and the Iron and Steel Subgroup of the Metals and Metal Products Group. Base royalty rates are set for various categories of ores, ranging from \$.11 to \$.18 per ton. (93.20)</p> <p><b>Rental</b> for state lands is \$1,250 for the first year after the date of the lease and \$5,000 per year for the remainder of the term; provided, that for a taconite iron ore mining lease the rent is set at \$400 per year for the first five years and \$1,600 per year thereafter. (93.20).</p>	<p><b>Mined Land Reclamation:</b> MINN. STAT. §§ 93.44 <i>et seq.</i> apply to metallic minerals on all lands. A permit to mine for metallic minerals is required prior to operations. Applications must include a proposed plan for reclamation or restoration, or both.</p> <p><b>Financial Assurance:</b> A bond or other financial assurance satisfactory to the commissioner is required and must be reviewed annually. Operators must also supply a certificate showing the applicant has a public liability insurance policy in force for the mining operation or evidence that the applicant has satisfied other state or federal self-insurance requirements. Insurance must cover personal injury and property damage. (93.481, 93.49).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Mississippi</b></p>	<p>The Mississippi Major Economic Impact Authority may <b>lease</b> state owned lands for mineral development for such consideration and upon such terms and conditions as it deems just and proper. (MISS. CODE ANN. §§ 29-7-1 <i>et seq.</i>) Certain types of lands, including designated offshore tracts, are not subject to lease.</p> <p><b>Royalties</b> to the state must be at least three-sixteenths of oil and gas or other minerals.</p>	<p><b>Mississippi Surface Mining and Reclamation Act:</b> MISS. CODE ANN. §§ 53-7-1 <i>et seq.</i> apply to surface mining on all lands. The Mississippi Commission on Environmental Quality Permit Board may issue surface mining permits. A reclamation plan must also be submitted. Reclamation must be consistent with local, physical, environmental, and climatological conditions and current mining and reclamation technology. The Board may, in its discretion, authorize the reclamation of non-permit lands in lieu of the lands included in the permit application. (53-7-31).</p> <p>Operators must submit a <b>performance bond</b> in an amount sufficient to properly reclaim the permit area, but not less than \$500 nor more than \$2,500 per acre. No bond will be required if mining is funded by Mississippi Department of Transportation or the Division of State Aid Road Construction and the operator has submitted a bond to one of those entities. (53-7-23). <b>Form:</b> bonds must be executed by the applicant and a state-licensed corporate surety; in lieu of the surety bond cash, negotiable U.S./MS bonds, assignment of real property, personal property, or savings account, negotiable certificates of deposit, or a letter of credit of a qualified bank are acceptable. Bond <b>amount</b> may be adjusted to reflect changed circumstances. (53-7-37).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Mississippi (cont.)</b>		<p><b>Forfeiture</b> proceedings must be conducted in accordance with section 49-17-31 through 49-17-41 and may be pursued when the commission finds that (i) reclamation of the affected area is not proceeding in accordance with the plan and the operator fails to take the required corrective action, or (ii) revegetation has not been completed in conformance with the plan within two years or longer, or upon revocation of a permit. (53-7-35).</p> <p>Upon completion of operations, the operator may file for the <b>release</b> of the performance bond or deposit. The application must describe of the results achieved in accordance with the operator's reclamation plan. The Dep't and state water authorities must then inspect the site. Release may occur, incrementally or in whole, upon Permit Board's satisfaction with reclamation performance. (53-7-67).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Missouri	State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.	<p><b>Metallic Mineral Waste Management Act:</b> MO. ANN. STAT. §§ 444.350 <i>et seq.</i> apply to all lands. The director of the Department of Natural Resources coordinates all environmental regulation and oversees the permitting process. Permitting requires submission of a closure plan and inspection-maintenance plan that provide for compliance with applicable water pollutant discharge permits, dam safety registration requirements, waste management program requirements, and air pollution control regulations. Plans must be reviewed every five years and updated as necessary. (444.362, 444.365).</p> <p><b>Financial assurance</b> is required before a permit will issue. <b>Form:</b> bond, certificate of deposit, letter of credit, insurance, company guarantee, escrow agreement or other form of financial assurance as approved by the director. <b>Amount:</b> generally \$1,000 per acre or fraction thereof, subject to director discretion, but not less than \$20,000 per permit.</p> <p>Once the director determines that reclamation has been completed for any area, the financial assurance must be <b>released</b> or reduced proportionately. <b>Forfeiture</b> procedures are provided by law, requiring written notice of violations and a 90-day period for corrective measures. (444.368, 444.378).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Missouri (cont.)</b>		<p><b>Land Reclamation Act:</b> MO. ANN. STAT. §§ 444.760 <i>et seq.</i> apply on all lands to surface mining for minerals other than iron, lead, zinc, gold, silver, coal, surface or subsurface water, fill dirt, natural oil or gas together with other chemicals recovered therewith. (444.765). Covered operations require permit from the Land Reclamation Commission.</p> <p><b>Bonds</b> must be filed with the Commission and signed by a surety. In lieu of surety bond, the operator may furnish a bond secured by a personal certificate of deposit or irrevocable letter of credit. <b>Amount:</b> \$8,000 per permit up to eight acres and \$500 for each acre thereafter. An additional bond of \$4,500 per acre is required when topsoil will be removed. (444.778). Bonds are retained until the Commission is satisfied that operators have (1) complied with applicable regulations and plans and (2) begun operation of a sanitary land fill or solid waste disposal area. (444.770). <b>Release</b> procedures are provided by statute (444.775).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Montana</b></p>	<p><b>Mineral Leases on State Lands:</b> MONT. CODE ANN. §§ 77-3-101 <i>et seq.</i> The board of Land Commissioners may <b>lease</b> state lands, including submerged lands, for the purpose of prospecting for or mining metalliferous minerals or gems. The term of the lease and any applicable limitations are to be determined by the Board. (77-3-102). Before issuance of any lease, the department must investigate the character of the lands and mineral deposits to determine if mining is appropriate and to determine the royalty and rental amounts. (77-3-112).</p> <p>The Board may require <b>rental</b> payment “in conjunction with the work requirements” or “cash rentals as an alternative or otherwise.” (77-3-115).</p> <p>Leases are to specify applicable <b>royalties</b>. Royalties, along with all other considerations, must constitute the “full market value” of the conveyed leasehold. In no case will royalties be less than 5% of the returns from or of the full market value of the recovered metalliferous minerals or gems. (77-3-106). Bonds to cover royalty payments or to protect other state land lessees/purchasers may also be required. (77-3-119, 77-3-120).</p>	<p><b>Hardrock Mining Impact Regulation:</b> MONT. CODE ANN. §§ 90-6-301 <i>et seq.</i> The Hardrock Mining Impact Board is authorized to regulate certain aspects of hardrock mining on all lands. Applicants for mining permits must submit an impact plan describing economic effects of mining operations. Upon approval of the plan, developers may make payments as specified in the plan directly to a local government unit or to the board to be deposited into an impact fund for use in implementing the plan. Local governments may also enter into agreements with developers for the issuance of any special industrial local government facility impact bonds to provide for the construction, renovation, improvement, or acquisition of local government facilities resulting from the large-scale mineral development. (90-6-310).</p> <p><b>Metal Mine Reclamation:</b> MONT. CODE ANN. §§ 82-4-301 <i>et seq.</i> apply to mines for any ore, rock, or substance, other than oil, gas, bentonite, clay, coal, sand, gravel, peat, soil materials, or uranium on all lands. General exemptions for small miners are provided, although special bonding requirements apply to placer or dredge mining (equal to state estimate for reclamation, but not to exceed \$10,000). (82-4-305). Exemptions for small scale activities are also allowed, although such operations cannot generally use mercury, cyanide, or leaching chemicals. (82-4-310).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Montana (cont.)</b>		<p>Exploration licenses and operation permits are also required, each of which must be accompanied by a reclamation plan. A plan must be developed for each operation with specific requirements regarding erosion control, water issues, pollutants, vegetative cover, and other issues. (82-4-332).</p> <p>Adequate <b>performance bonds</b> are also required. <b>Form:</b> bond, cash deposit, an assignment of a certificate of deposit, an irrevocable letter of credit, or other surety acceptable to the department. <b>Bond amount</b> covering reclamation costs must be filed, and may not be less than \$200 per acre. The amount is subject to review annually and extensive review every five years. The Dep't may modify bond amounts to account for changed circumstances. (82-4-338).</p> <p><b>Forfeiture</b> of the bond may be had to abate public dangers at the operation site. (82-4-338). Forfeiture for failure to reclaim lands and <b>release</b> of bonds for successfully reclaimed lands are provided for under § 82-4-341.</p>
<b>Nebraska</b>	<p><b>Development of Mineral Lands:</b> NEB. REV. STAT. §§ 72-301 <i>et seq.</i> All state owned lands are open to mineral development. <b>Lease</b> terms shall not exceed three years. (72-303).</p> <p>The lease must provide for a <b>royalty</b> that is not less than 5% of production. An additional <b>rent</b> may be charged as determined by the Board of Educational Lands and Funds. (72-308).</p>	<p>State statutes do not appear to address reclamation for hardrock mineral mines.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Nevada	<p>State law provides for coal, oil, gas, and geothermal leases of state lands, but does not appear to address hardrock minerals specifically. General lease provisions authorize the administrator of the Division of State Lands to lease <i>lands</i> subject to terms and conditions deemed appropriate. (NEV. REV. STAT. §§ 322.010-322.075).</p>	<p><b>State reclamation law</b> is applicable to all minerals. A permit is required before any mining operation can commence. Reclamation plans must provide for vegetative cover and land reclamation to an extent comparable to adjacent areas. Reclamation should be performed simultaneously with operations or promptly upon completion or abandonment of operations. (NEV. REV. STAT. §§ 519A.210, 519A.160).</p> <p>An applicant must agree in writing to be responsible for all reclamation and must file a <b>bond</b> or other surety in a form and amount approved by the Division and as required by its regulations. (519A.210, 519A.160).</p> <p>Bond <b>forfeiture</b> procedures are provided for by statute. (519A.270, 519A.280).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>New Hampshire</b>	<p>The Commissioner of the Department of Resources and Economic Development is directed to make recommendations to the Long Range Capital Planning and Utilization Committee in accordance with state law requiring Committee and governor review prior to <b>lease</b> or disposal of state land (N.H. REV. STAT. §§ 12-E:9, 4:40). The Commissioner is authorized to issue mineral prospecting permits and to determine lease terms, including “the amount of acreage, duration of lease, <b>rental</b> cost, <b>royalties</b> and any conditions concerning extraction of minerals or reclamation of the leased land ....” (12-E:9).</p>	<p><b>Reclamation:</b> The Commissioner is directed to review all mining permits applications and may deny permits if the operation will not comply with reclamation laws, the impact will be too great or is in an area unsuitable for mining because of historical, archaeological or environmental reasons, or the reclamation plans or pollution prevention measures are insufficient. (N.H. REV. STAT. § 12-E:2). Permit applications must include a reclamation plan, and permits may be modified and subjected to new conditions as the Director deems necessary, consistent with promulgated regulations.</p> <p>Upon approval of a plan, a <b>bond</b> or other security satisfactory to the commissioner must be filed with the state. <b>Bond amount</b> is to be the estimated cost of reclamation based on the future suitable use of the land, but in no case shall the bond be less than \$1,000 per acre. Amounts are to be reviewed and adjusted at least every three years. Bonds may be <b>released</b>, in whole or in part, upon reclamation performance to the satisfaction of the Commissioner and in no case sooner than three years from its filing. (12-E:6).</p>
<b>New Jersey</b>	<p>State statutes do not appear to address leases, royalties, or rental fees for state-owned hardrock minerals.</p>	<p>State statutes do not appear to address reclamation for hardrock mineral mines.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>New Mexico</b></p>	<p>The Commissioner of Public Lands may issue <b>leases</b> for hardrock minerals on state lands. (N. M. STAT. ANN. § 19-8-24).</p> <p>Annual <b>rental</b> is required for all leases, to be paid in advance, in an amount fixed by the Commissioner. Rent may not be less than five cents per acre for the primary term nor less than fifty cents per acre for the secondary term; total annual rental per lease may not be less than \$10. (19-8-21).</p> <p><b>Royalties</b> are required for all leases and generally may not be less than 2% of gross returns from all ores or materials mined and extracted from the land. Additional royalties: not less than 2% of premiums and bonuses received; not less than 5% on production bonuses and premiums for deposits of rare earths, precious or semi-precious stones, uranium, thorium, plutonium or any other materials determined to be needed for the production of fissionable materials; special rental and royalty rates for nonproducing leases; and special rates for potassium, sodium, phosphorus and “other minerals of similar occurrence and their salts ....” (19-8-21, 19-8-24).</p>	<p><b>Bonds for State Leases:</b> Lessees may be required to file a bond or undertaking of not less than \$5,000 for the benefit of any surface lessee, patentee or contract purchaser, to secure against damage to livestock, water, crops or other tangible land improvements. A blanket bond of not less than \$10,000 for holders of multiple leases may be filed instead. Bond requirement may be waived by holder of surface rights. (N. M. STAT. ANN. § 19-8-24).</p> <p><b>New Mexico Mining Act:</b> N. M. STAT. ANN. §§ 69-36-1 <i>et seq.</i> generally govern reclamation of all lands mined for hardrock minerals and apply to all processes of obtaining useful minerals “from the earth’s crust or from previously disposed or abandoned mining wastes, including exploration, open-cut mining and surface operation, the disposal of refuse from underground and in situ mining, mineral transportation, concentrating, milling, evaporation, leaching and other processing.” (69-36-3). The State Mining Commission is responsible for regulating mining operations under the act and is required to establish permit and reclamation requirements incorporating site-specific characteristics. (69-36-12). Operations and reclamation requirements must (1) use the most appropriate technology and the best management practices; (2) assure protection of human health and safety, the environment, wildlife and domestic animals;</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
New Mexico (cont.)		<p>(3) include backfilling or partial backfilling when necessary; (4) generally require permit areas that will achieve a “self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure”; (5) be designed to reduce the formation of acid and other toxic drainage; (6) require that nonpoint surface releases of toxic substances be contained within the permit area; (7) require facilities to be designed to facilitate contemporaneous reclamation; and (8) preserve topsoil in a usable condition for sustaining vegetation. (69-36-7).</p> <p>The statute requires <b>financial assurance</b>. The <b>amount</b> must be sufficient to assure completion of performance requirements if the work must be performed by the state or a third party contractor. Amount is subject to periodic review to account for inflation or other reclamation cost changes. Financial requirements must not duplicate nor be less comprehensive than federal financial requirements. Financial assurance cannot be any type or variety of self-guarantee or self-insurance. (69-36-7).</p> <p><b>Release</b> will occur upon a permittee’s application and commission inspection of the site, and may be incremental. Release of amounts for revegetation is subject to additional requirements. (69-36-7).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>New York</b></p>	<p>The Commissioner of General Services may issue a permit, consent, or <b>lease</b> to enter upon state lands to explore for minerals, work mines, and extract minerals. For appropriated state lands, the state entity with jurisdiction over such lands is entitled to notice from the commissioner of any mining application and shall have a period of not less than thirty days to report in writing to the Commissioner. (N.Y. PUB. LANDS LAW §§ 81, 83).</p> <p><b>Annual rental and royalties</b> are to be set by the Commissioner at a reasonable and proper rate. The minimum royalty cannot be less than 2% of the market value of all minerals. Royalty payments are made semi-annually. (82).</p>	<p><b>The New York State Mined Land Reclamation Law:</b> N.Y. ENVTL. CONSERV. LAW §§ 23-2701 <i>et seq.</i> apply to all minerals on all lands. The Department of Environmental Conservation regulates reclamation and is authorized to establish environmental standards and criteria for mining and reclamation of the affected land and to permit mining and reclamation activities. (23-2709.) A mining permit governs certain aspects of operations and must be accompanied by a “mined land-use plan,” which governs mining and reclamation activities. (23-2713.)</p> <p><b>Financial security</b> in the form of a bond signed by a qualified surety (or other form accepted by the Dep’t) is required and must be sufficient to ensure performance of applicable reclamation requirements. The Dep’t determines the <b>amount</b>, conditions and terms of the security. It must generally remain in force until reclamation is complete, although incremental <b>release</b> is authorized. (23-2715.)</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>North Carolina</b></p>	<p>The State, acting at the request of the Department of Environment and Natural Resources, may sell, <b>lease</b>, or otherwise dispose mineral deposits on submerged lands. (N.C. GEN. STAT. § 146-8).</p> <p>The Department of Administration may sell, <b>lease</b>, or otherwise dispose of mineral rights or deposits in the vacant and unappropriated lands, swamplands, and lands acquired by the State by virtue of being sold for taxes (but not submerged lands), for such consideration, in such portions, and upon such terms as are deemed proper by the Department and approved by the Governor and Council of State. (146-9).</p>	<p><b>The Mining Act of 1971:</b> N.C. GEN. STAT. §§ 74-46 <i>et seq.</i> govern reclamation of surface effects of hardrock mining operations on all lands. A permit from the Department of Environment and Natural Resources is required before mining can commence. Permits require a reclamation plan, with specific requirements as to erosion, revegetation, and reclamation time frames. (74-49, 74-53).</p> <p>Permits will not become effective until an applicant has submitted an acceptable <b>performance bond</b> or other security (74-50, 74-54). <b>Bond amount</b> must be set by the Dep't and is based on the area to be reclaimed under the approved reclamation plan(s) to which the bond pertains, less any area where reclamation has been completed and released, pursuant to § 74-56. <b>Alternative forms:</b> cash deposit, an irrevocable letter of credit, a guaranty of payment from an acceptable bank, an assignment of a savings account in an acceptable bank on an assignment form prescribed by the Department, or other security acceptable to the Department. (74-56, 74-59).</p> <p><b>Bond release and forfeiture</b> procedures are also provided by statute. (74-56, 74-59).</p>
<p><b>North Dakota</b></p>	<p>The state may issue prospecting permits or <b>leases</b> for the purpose of prospecting for and mining minerals contained in state lands. (N.D. CENT. CODE §§ 38-11-01, 38-11-02).</p>	<p><b>Abandoned Surface Mine Reclamation:</b> N.D. CENT. CODE §§ 38-14.2-01 <i>et seq.</i> apply to all lands mined for noncoal minerals. The Public Service Commission is authorized to develop a reclamation plan for abandoned mine sites. The law creates an abandoned mine fund, from which moneys may be used to reclaim lands to protect against subsidence, erosion and sedimentation, and water pollution, among other things. (38-14.2-04).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Ohio	<p>Various entities are authorized to issue mining permits and <b>leases</b> for state lands. The director of natural resources is responsible for the bed of Lake Erie. (OHIO REV. CODE ANN. § 1505.07). The chief of the Division of Water is responsible for canal lands. (1520.02). The chief Division of Wildlife is responsible leasing of lands under the division's jurisdiction. (1531.06). Finally, counties, townships, and boards of education are authorized to lease minerals on lands under their authority. (307.11, 505.11, 3313.45).</p> <p>Consideration for such leases shall be on a <b>royalty</b> or <b>rental</b> basis, as determined by the relevant entity.</p>	<p><b>Noncoal Surface Mining Regulation:</b> OHIO REV. CODE ANN. §§ 1514.01 <i>et seq.</i> apply to hardrock mining operations on all lands. A permit from the Division of Mineral Resources Management is required for surface mining operations. Permit applications must include a plan of reclamation, which must provide for various environmental standards, including reclamation adequate for the land's intended future uses, soil stability and erosion protections, revegetation, removal of unwanted structures, and prevention of water contamination. (1514.02).</p> <p>Applicants must also provide proof of adequate liability insurance, various filing fees, and a <b>performance bond</b>. (1514.02). The performance bond may take the form of a surety bond, cash, an irrevocable letter of credit, or certificates of deposit. <b>Amount:</b> Unless otherwise provided by rule, \$10,000 plus \$1,000 per acre. (1514.04).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Oklahoma</b></p>	<p>The Commissioners of the Land Office are authorized to offer mineral <b>leases</b> for sale through competitive bids. (OKLA. STAT. tit. 64, § 454).</p> <p>Leases require an <b>annual rental</b> of not less than \$1 per acre, or if minerals are produced, a <b>royalty</b> not less than 5% of the gross receipts from sale of minerals produced. If the minerals are not sold, a royalty of 5% of the market value of the minerals produced may be elected by the Commissioners. The Commissioners are to require a bond sufficient for the faithful performance of all lease requirements. (455).</p> <p>The Department of Central Services is authorized to <b>lease</b> minerals on lands under its jurisdiction upon a basis of a retained <b>royalty</b> of not less than 1/8 of all minerals produced and such additional cash <b>bonus</b> as may be procured. (OKLA. STAT. tit. 74, § 107).</p>	<p><b>The Mining Lands Reclamation Act:</b> OKLA. STAT. tit. 45, §§ 721 <i>et seq.</i> apply to all lands. Operators must obtain a permit from the Department of Mines for each mining operation. Permit applications are to be accompanied by a plan of reclamation, which must, among other things, set forth the proposed use to be made of the affected land, the grading to be accomplished, the type of revegetation, and an approximate time frame for such efforts.</p> <p>A <b>bond</b> to cover reclamation requirements must be filed as required by the Director of the Dep't of Mines. <b>Form:</b> Bonds shall be co-signed by the operator as principal and by a "good and sufficient corporate surety," or operators may deposit cash government securities, certificates of deposit or an irrevocable letter of credit, or by using existing reclaimed areas in excess of cumulative reclamation requirements. <b>Bond amount</b> is to be determined by the Dep't based on permit performance requirements and consideration of the character and nature of the overburden, the future suitable land use, and the cost of reclamation to be required. <b>Minimum:</b> \$2,000. Withdrawals of land from permit or amendments to permit must be reflected in bond amount. (724). Financial surety must remain in effect until the land has been reclaimed and released by the Dept in accordance with 45 Okl.St. Ann. §§ 728 and 729.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Oregon</b>	The Department of State Lands is authorized to issue mineral <b>leases</b> and also appears to have authority to fix terms, conditions, and <b>royalties</b> (as provided in § 274.530). (OR. REV. STAT. §§ 273.225, 273.551).	<p><b>Reclamation of Surface-Mined Lands:</b> OR. REV. STAT. §§ 517.702 to 517.951. apply to all lands. Operators cannot engage in surface mining without a permit from the State Department of Geology and Mineral Industries for each operation. (517.790). Additional permit requirements and more stringent review of certain reclamation issues are applicable to nonaggregate mineral mines. (517.915).</p> <p>Permits require a <b>bond</b> or security acceptable to the Dep't. The <b>amount</b> is to be determined by the Dep't, but may not exceed the total cost for reclamation (if performed by the state) or, generally, \$10,000 per acre. Amount is to be calculated and adjusted based upon the total area expected to be in a disturbed condition in the following year. (517.810). Amount can be increased to the lower of actual cost of reclamation or \$100,000 per acre if specified threats may be present. (517.950). The state must also provide a pooling program to assist operators in complying with bonding requirements. (517.815).</p> <p><b>Release and adjustment</b> are to be performed in accordance with § 517.870.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Pennsylvania</b>	State statutes do not appear to address leases, rental fees, or royalties for hardrock minerals on state lands.	<p><b>Noncoal Surface Mining Conservation and Reclamation Act:</b> 52 PA. CONS. STAT. §§ 3301 <i>et seq.</i> apply to hardrock mining on all lands. The Department of Environmental Resources may issue an operating permit. Applicants must also submit a complete and detailed plan for the reclamation of the affected land. (3307).</p> <p>Applicants must file a <b>bond</b> for the land affected by each operation. The <b>amount</b> is to be the total estimated cost to the state of completing the reclamation plan or an amount established by the Dep't under regulations for an alternate bonding program. The minimum amount is \$5,000 per permit area. Liability under the bond is for the duration of surface mining and a period of five years after reclamation work, unless the bond is released. Alternative bond forms are provided (e.g. irrevocable bank letters of credit, cash) and self-bond may be accepted. Stricter bonding requirements are applicable when overburden produced will exceed specified levels.</p> <p><b>Forfeiture</b> proceedings are provided for by statute. (3309).</p>
<b>Rhode Island</b>	State statutes do not appear to address leases, rental fees, or royalties for hardrock minerals on state lands.	State statutes do not appear to address reclamation or bonding requirements for hardrock mining operations.

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>South Carolina</b></p>	<p>The Public Service Authority may issue mineral <b>leases</b> on lands owned by the Authority; the State Budget and Control Board and county forfeited land commissions may, with the approval of the Attorney General, issue <b>leases</b> on state lands/waters under the ownership, management or control of the Board or commissions, respectively. (S.C. CODE ANN. §§ 10-9-10, 10-9-30)..</p>	<p><b>South Carolina Mining Act:</b> S.C. CODE ANN. §§ 48-20-10 <i>et seq.</i> apply to all lands. South Carolina Department of Health and Environmental Control may issue certificates of exploration and operating permits. Both must be accompanied by a reclamation plan. The basic objective of reclamation is to “establish on a continuing basis the vegetative cover, soil stability, water conditions, and safety conditions appropriate to the area.” (48-20-50, 48-20-60, 48-20-90).</p> <p>Adequate <b>bonding</b> is also required. The Dep’t sets the amount of the performance bond or other security within statutory limits: for exploration, bonds must be \$2,500; for operations, bonds must be based on affected land. Less than 10 acres: \$10,000. Between 10 and 15 acres: \$15,000. 15 acres or more: \$25,000. Over 25 acres: may be in excess of \$25,000. (48-20-70, 48-20-110). Bonds must be signed by a surety approved by the Department of Insurance or be an acceptable alternative form: cash deposit, registered securities acceptable to the department, an assignment of a savings account in a SC bank, or other securities acceptable to the department. (48-20-110).</p> <p><b>Release</b> must be done pursuant to section 48-20-130.  <b>Forfeiture</b> is ordered pursuant to section 48-20-170.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>South Dakota</b></p>	<p>The Commissioner of School and Public Lands may <b>lease</b> mineral interests owned by the state, although for leases on lands administered by the Department of Game, Fish and Parks, the consent of the department is a prerequisite. (S.D. CODIFIED LAWS § 5-7-1).</p> <p><b>Annual rentals</b> are required. They must be paid in advance in an amount to be fixed by the Commissioner. Rental may not be less than \$1 per acre for the primary term, nor less than \$2 per acre for the secondary term. The annual rental for any one lease may not be less than \$10. (5-7-54).</p> <p><b>Royalties</b> are required. They may not be less than 2% of the gross returns from the sale of ores and mineral products, less reasonable transportation, smelting, reduction, or other customary charges, as determined by the Commissioner. An additional royalty of not less than 2% of any premiums and bonuses received in connection with the discovery, production or marketing is also required. (5-7-55).</p> <p>A bond to secure surface lessees, patentees, or contract purchasers against damage to livestock, water, crops, or other tangible land improvements caused by the mining lessee may also be required. (5-7-57).</p>	<p><b>South Dakota Mined Land Reclamation Act:</b> S.D. CODIFIED LAWS §§ 45-6B-1 <i>et seq.</i> apply to noncoal minerals on all lands. The Board of Minerals and Environment may issue permits for operations. Permit applications must include a reclamation plan and post-closure plan for mine waste disposal facilities. (45-6B-7). Reclamation is to be reasonably designed to minimize the disruption from the mining operation and to rehabilitate affected plant cover, soil stability, water and other resources.</p> <p><b>Bonding</b> is required. Generally, the <b>amount</b> is to be set by the Board based on a site inspection, the reclamation plan, and “the magnitude, type, and costs of reclamation activities planned for the affected land and the nature, extent, and duration of the mining.” The amount must be sufficient to cover reclamation costs and may be adjusted over time, as necessary (45-6B-21, 45-6B-26, 45-6B-27). If cyanide or another leaching agent is used, additional assurance (at least \$25,000 but not more than \$500,000) may be required. (45-6B-20.1). <b>Form</b> may be as required by the Board; cash or government securities are acceptable. (45-6B-20, 45-6B-23). Additional assurance may be insurance, cash, company net worth, or as required by the Board. (45-6B-20.1).</p> <p><b>Forfeiture</b> and <b>Release</b> proceedings are provided for. (45-6B-25, 45-6B-66 - 45-6B-68).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Tennessee	The Governor of the state may <b>lease</b> any of the property owned by the state at a reasonable <b>rental</b> or <b>royalty</b> in order that mineral resources may be properly developed. (TENN. CODE ANN. § 12-2-101).	<p><b>Tennessee Mineral Surface Mining Law of 1972:</b> TENN. CODE ANN. §§ 59-8-201 <i>et seq.</i> apply to hardrock mining on all lands. The Commissioner of Environment and Conservation may issue operations permits. Permits are conditioned upon approval of a bond as provided in § 59-8-207 and a mining and reclamation plan as provided in § 59-8-208.</p> <p><b>Bonds</b> must be executed by the operator and a qualified corporate surety approved by the Commissioner. Additional acceptable <b>forms</b> of security are: cash, negotiable U.S. treasury bonds, or negotiable general obligation municipal or corporate bonds with at least an “A” rating by Moodys and/or Standard and Poors. (59-8-207). Bond <b>amount</b> shall not be less than \$600 per acre or fraction thereof. The amount shall be increased or decreased to account for any change in the acreage covered by the permit as provided in § 59-8-205(a)(2).</p> <p><b>Forfeiture</b> procedures are provided by § 59-8-211.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Texas</b></p>	<p>Any tract of land that belongs to the state, including submerged lands, and land sold with a reservation of minerals to the state are subject to prospect by any person for those minerals. (TEX. NAT. RES. CODE ANN. § 53.011).</p> <p>The General Land Office may issue a prospecting permit for a one year period. <b>Rent</b> at an amount set by the Commissioner is required. Payment extends a permit for one year; a permit cannot be extended for more than five years. (53.013).</p> <p>A prospecting permittee may file an application to <b>lease</b> an area covered by its permit for mining purposes. (53.015). The <b>royalty</b> under the lease may not be less than 1/16 of the value of the minerals produced under the lease. (53.018).</p>	<p><b>Texas Surface Coal Mining and Reclamation Act:</b> TEX. NAT. RES. CODE ANN. §§ 134.001 <i>et seq.</i> primarily address coal mine regulation, but also govern “iron ore and iron ore gravel mining and reclamation operations to the extent [they] can be made applicable” on all lands. (134.012). The Railroad Commission of Texas is given jurisdiction over mining and reclamation. A reclamation plan is required for surface mined land and for the surface effects of underground mining. (134.015, 134.041).</p> <p>A <b>performance bond</b> is required. The <b>form</b> is to be determined by the Commission, although self-insurance or compliance with an alternative system may be allowable. Acceptable forms include cash, negotiable U.S./TX bonds, or negotiable certificates of deposit. (134.123, 134.124, 134.126). The Commission is to determine the security <b>amount</b> based on estimated reclamation needs; it may not be less than \$10,000 per permit area. Additional bonds may be required to cover a succeeding increment of mining in the permit area. (134.121, 134.122).</p> <p><b>Release of Bond or Deposit</b> is governed by section 134.131.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<b>Utah</b>	<p>Mineral <b>leases</b> of all state lands, except school and institutional trust lands, are made through the Division of Forestry, Fire and State Lands, with the consent of the state agency with jurisdiction over the land. (UTAH CODE ANN. § 65A-4-3).</p> <p>Mineral deposits in state-owned lands may be leased on a <b>rental</b> and/or <b>royalty</b> basis. (65A-6-1). The Division is directed to promulgate rules prescribing the annual rental and royalty rates. (65A-6-2). Mineral leases must provide for a minimum annual rental of not less than \$1 per acre. (65A-6-4, 65A-6-6).</p>	<p><b>Utah Mined Land Reclamation Act:</b> UTAH CODE ANN. §§ 40-8-1 <i>et seq.</i> apply to exploration, development, and extraction of hardrock minerals on all lands. Every operator is obligated to conduct reclamation and is responsible for reclamation costs and expenses. (40-8-12.5).</p> <p>After a notice of intention for mining operations has been approved, the operator must provide <b>surety</b>, in a form and amount determined by either the Division or the Board of Oil, Gas and Mining, based on the type of reclamation needed. The form of surety that the operator may provide includes, but is not limited to: collateral, a bond or other form of insured guarantee, deposited securities, or cash.</p> <p>If any operator fails or refuses to carry out the necessary land reclamation as outlined in the approved notice of intention, the Board may, after notice and hearing, declare any surety filed for this purpose <b>forfeited</b>. The state Attorney General is to then proceed with the necessary legal actions to obtain forfeiture. (40-8-14).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Vermont</b></p>	<p>A U.S. citizen, after discovering a valuable mine on state lands may file a notice of discovery and a bond and then may work such mine or quarry. (VT. STAT. ANN. tit. 29, § 302; <i>see also</i> VT. STAT. ANN. tit. 10, § 2606 for leases on parklands).</p> <p>A <b>royalty</b> of 2% of the market value of all mineral products is required. Valuation for royalty determinations is made when such products are first in a marketable form. (29, § 302).</p> <p>Operators must also file a <b>bond</b> with the Commissioner of Buildings and General Services in such sum and with such sureties as the Commissioner requires. The bond is to secure to the state all sums of money due as a result of mineral production. (29, § 306).</p>	<p>State statutes do not appear to address reclamation or bonding requirements for hardrock mining operations.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
Virginia	<p>State law authorizes several state agencies to <b>lease</b> the minerals underlying state lands under their jurisdiction for mineral production. <b>Rental</b> and/or <b>royalty</b> rates may be set by these agencies as they see fit, except that leases on certain submerged lands require a royalty. (VA. CODE ANN. §§ 28.2-1208, 53.1-31).</p>	<p><b>Regulation of Mining Activity:</b> VA. CODE ANN. §§ 45.1-181 <i>et seq.</i> apply to all lands. Operators must obtain a mining permit accompanied by an operations plan. The operations plan describes the specifications for surface grading and restoration to a surface suitable for the proposed use of the land after reclamation is completed. (45.1-182.1).</p> <p>A <b>bond</b> is required in an <b>amount</b> that is based on the number of acres of land which the operator estimates will be affected by mining operations during the next year. The amount may not be less than \$200 nor more than \$1,000 per acre. The minimum amount of bond furnished shall be \$1,000, except in areas of five acres or less, which are subject only to the general per acre amount requirements. Bonds must be executed by the operator and a corporate licensed surety; in lieu of this bond form, the operator may deposit cash or collateral security acceptable to the Director. (59-8-207). Bonds may be adjusted annually to reflect new disturbances and work completed (45.1-185).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Washington</b></p>	<p>The Department of Natural Resources may issue permits and <b>leases</b> “for prospecting, and contracts for the mining of valuable minerals and specified materials, except rock, gravel, sand, silt, coal, or hydrocarbons, upon and from any public lands belonging to or held in trust by the state ...” (WASH. REV. CODE §§ 79.14.300, 79.14.310).</p> <p>An <b>annual rental</b> as set by the Board of Natural Resources is required. (79.14.350). <b>Royalties</b> are required under all mining contracts and mineral leases. The rate is to be set by the Board. (79.14.410).</p>	<p><b>Surface Mining Reclamation:</b> WASH. REV. CODE §§ 78.44.010 <i>et seq.</i> apply to surface mining on all lands. The Department of Natural Resources is given the exclusive authority to regulate surface mine reclamation. (78.44.050). The Dep’t is responsible for issuing reclamation permits.</p> <p>Permits cannot be issued until the applicant has deposited an acceptable <b>performance security</b>. (78.44.087). <b>Form:</b> bank letters of credit acceptable to the Dep’t; a cash deposit; negotiable securities acceptable to the Dep’t; an assignment of a savings account or interest in real property; a savings certificate in a WA bank; or an adequate corporate surety bond. (78.44.087). The Dep’t may determine the <b>amount</b> using a standardized performance security formula developed by the Dep’t. Adjustments to the bond amount may be made at any time. (78.44.087).</p> <p><b>Metals mining and milling operations</b> are subject to additional requirements. (WASH. REV. CODE 78.56.030 <i>et seq.</i>). The Department of Ecology Metals Mining Coordinator oversees the permitting, construction, operation, and reclamation phases of a metals mine project. (78.56.060). Additional <b>performance security</b> may be required (78.56.110).</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>West Virginia</b></p>	<p>The public land corporation, within the Department of Natural Resources, is vested with the title of the state of West Virginia in public lands and may enter into <b>leases</b> for the development and extraction of minerals. (W. VA. CODE §§ 20-1A-1, 20-1A-3, <i>see also</i> § 20-1-7 ).</p> <p>Minerals may be leased “at not less than the fair market value, as determined by an appraisal made by an independent person or firm chosen by the corporation ....” (20-1A-6). The corporation must also hire an independent auditing firm to periodically review a lessee’s books and accounts to ensure that the appropriate <b>royalties</b> are being paid. (20-1A-6).</p> <p>A lessee may is also required to provide a bond for the proper performance of the lease. (20-1A-6).</p>	<p>State statute does not appear to address reclamation and bonding requirements for hardrock mining operations.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Wisconsin</b></p>	<p>The Board of Commissioners of Public Lands may grant <b>leases</b> on any public lands, except state park lands and state forest lands, to prospect for and to extract ore, minerals and other deposits. Leases may be made only for a “full and fair consideration paid or to be paid to the state, the amount and terms whereof shall be fixed by said board ...” (WIS. STAT. § 24.39).</p> <p><b>State park and forest lands</b> may be leased for mineral development. Leases must contain “proper covenants to guard against trespass and waste.” Any <b>rents</b> arising from these leases are to be paid into the state treasury.</p> <p><b>Prospecting licenses</b> may also be granted. These require “proper security” to ensure that licensees will fully report on mineral discoveries and will restore the surface to its “former condition and value” if no discovery is made. (26.08).</p>	<p><b>Metallic Mining Regulation:</b> WIS. STAT. §§ 293.01 <i>et seq.</i> apply to all lands. The Department of Natural Resources may issue prospecting and mining permits, both of which must be accompanied by reclamation plans and <b>bonds</b>. It may also issue exploration licenses, which also subject licensees to a bonding requirement. (293.35, 293.37, 293.21).</p> <p>Bonds must be signed by an adequate surety and conditioned on faithful performance of reclamation requirements. In lieu of a bond, the operator may deposit cash, certificates of deposit, or government securities. The <b>amount</b> of the security is to be equal to the estimated cost of reclamation “in relation to that portion of the site that will be disturbed by the end of the following year.” (293.51).</p> <p><b>Exploration bonds:</b> Applications for exploration licenses are to be accompanied by a bond in the amount of \$5,000 conditioned on faithful performance of the termination requirements. (293.21). The amount can be adjusted upward at any time.</p> <p>Bond <b>release</b> is governed by § 293.63.</p>

State	State Mineral Royalties and Rental Fees	Reclamation and Bonding
<p><b>Wyoming</b></p>	<p>The Board of Land Commissioners may establish rules and regulations governing the issuance of mineral <b>leases</b> and covering the conduct of development and mining operations. “Mineral leases may be issued upon such monthly or annual minimum <b>rental</b> payment basis as shall be fixed by the board, which payment shall be annually applied against such <b>royalty</b> as shall accrue for the same lease.” (WYO. STAT. ANN. § 36-6-101).</p>	<p><b>Surface Mining Reclamation:</b> WYO. STAT. ANN. §§ 35-11-401 <i>et seq.</i>, applicable to surface mining on all lands. Mining permits are required and establish that operators must comply with mining and reclamation plans. Regulations establishing specific reclamation standards must be promulgated. (35-11-402).</p> <p>Mining licenses and the filing of a <b>bond</b> are also required before operations can begin. (35-11-410). The Administrator of the Land Quality Division can fix the <b>amount</b> of, collect, and maintain performance bond requirements. Minimum: generally, \$1,000 per acre of affected land, total amount may not be less than \$10,000, except for specified minerals or small operations which must be at least \$200 per acre. Within 90 days after mining operations commence, an additional bond of \$100 per acre may be required if necessary to insure reclamation. (35-11-401, 35-11-417). <b>Form:</b> All bonds must be signed by the operator as principal, by a good and sufficient corporate surety. A self-bonding program may be created by regulation. (35-11-417).</p> <p><b>Release</b> of 75% of bond is authorized on completion of reclamation plan, but remainder must be retained five years after the date of reduction. (35-11-423). <b>Forfeiture</b> procedures are set out in section 35-11-421.</p>