
THE MINING LAW REVIEW

FIFTH EDITION

EDITOR
ERIK RICHER LA FLÈCHE

LAW BUSINESS RESEARCH

THE
MINING LAW
REVIEW

Fifth Edition

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ERIK RICHER LA FLÈCHE

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EDITOR'S PREFACE

I am pleased to have participated in the preparation of the fifth edition of *The Mining Law Review*. The *Review* is designed to be a practical, business-focused 'year in review' analysis of recent changes and developments, their effects and a look forward at expected trends.

This book gathers the views of leading mining practitioners from around the world and I warmly thank all the authors for their work and insights.

The first part of the book is divided into 21 country chapters, each dealing with mining in a particular jurisdiction. Countries were selected because of the importance of mining to their economies and to ensure broad geographical representation. Mining is global but the business of financing mining exploration, development and – to a lesser extent – production is concentrated in a few countries, Canada and the United Kingdom being dominant. As a result, the second part of this book includes six country chapters focused on financing.

The advantage of a comparative work is that knowledge of the law and developments and trends in one jurisdiction may assist those in other jurisdictions. Although the chapters are laid out uniformly for ease of comparison, each author had complete discretion as to content and emphasis.

The mining sector continues to face challenging and uncertain times. The current down-cycle is longer than most and shows no sign of abating for most minerals. Stockpiles are high and production capacity has yet to be curtailed in a meaningful manner. Projections are for prices to remain generally soft until such time as supply and demand is rebalanced.

While times are tough, we know that mining is cyclical and that continued world population and economic growth as well as the depletion of current resources mean that growth in the mining sector will resume. The question is when.

To compound matters, when growth resumes it is likely to be uneven. Firstly, recovery is unlikely for some minerals. For example, the market for thermal coal is flat or declining as coal is being phased out in many plants and is being replaced by natural gas or renewable energy. Second, the use of rare earths and other 'high-tech metals' will continue to grow at a faster rate as the use of high technology and energy storage products becomes more generalised. Third, demand growth will be more diffused. China is the world's largest consumer of commodities but it will no longer be sufficient to look only at China to understand the

market. China is moving away from mineral intensive infrastructure and export-led growth and moving to a slower, domestic service-led economy. The Indian subcontinent, despite impressive economic and demographic growth and sizeable infrastructure and other needs, is unlikely to replace China. As a result, it will be necessary to look at a selection of markets to understand future demand growth.

The mining world is thus condemned to adapt. To survive, miners must be lean, innovative, able to scale production according to demand and unafraid to close higher-cost facilities. This state of affairs has become the new normal.

As you consult this book you will find more on topics apposite to jurisdictions of specific interest to you, and I hope that you will find this book useful and responsive.

Erik Richer La Flèche
Stikeman Elliott LLP
Montreal
September 2016

Chapter 21

UNITED STATES

Karol L Kahalley, Kristin A Nichols and Robert A Bassett¹

I OVERVIEW

i Government policy towards mining and international investment

The US government values the mining industry for its production of domestic raw materials, strategic minerals and high-wage jobs, despite the US's reputation for creating a burdensome permitting and environmental regulatory regime. Federal, state and local governments receive billions of dollars annually in taxes, royalties and fees from the mining industry. The United States seeks and attracts international investment, including financial investment and direct investment in mining operations.

US law generally permits foreign investments in US industries, including mining. The US government places few restrictions on such investments, unless they are deemed to have national security implications. Projects involving the export of particular minerals, such as uranium or rare earth elements, can receive greater scrutiny when foreign companies are involved. Foreign investors are increasingly looking to the United States as a secure source of investment in mineral projects and to obtain reliable sources of minerals.

ii Risk factors

Security of title and tenure for mining claims, leases and licences is key to attracting foreign investment in US mining. There is little risk of expropriation of mining operations by government seizure or political unrest. The US political landscape is characterised by inaction in the area of mining law reform; Congress has been working towards comprehensive mining law reform for many decades, but the General Mining Law has remained relatively unchanged since its passage in 1872. Thus, there is little risk that title to land for mining operations will be threatened by government intervention as long as all required fees, rentals and royalties are paid in a timely manner.

¹ Karol L Kahalley is of counsel, Kristin A Nichols is an associate and Robert A Bassett is a partner at Holland & Hart LLP.

Perhaps the biggest risk in US mining ventures is the delay caused by the environmental review, compliance and permitting of a project. These steps can be very costly and time-consuming, and even without protracted litigation, it is not unusual for a major mining project to require in excess of 10 years to obtain all the necessary environmental approvals.

iii Mine ownership

Ownership of the US mining industry is in private hands: there are no government-owned mines or mining companies. Many companies operating US mines are based in the United States, such as Newmont Mining Corporation (gold), Peabody Energy Corporation (coal), US Steel (iron ore) and Freeport-McMoRan (copper). Many other operations in the United States are owned by foreign companies, including Barrick Gold's numerous mines (gold) and Rio Tinto's subsidiaries such as Kennecott Utah Copper Corporation (copper-molybdenum).

iv Significant trading agreements concerning minerals

Many international treaties of general application apply to mining industry investment by foreign persons into the United States, but none specifically address investments in the mining industry or trading in various minerals. However, one failed transaction of note was the attempted acquisition by Chinese National Offshore Oil Corporation of the rare earth element mine at Mountain Pass, California (then owned by Unocal), which was blocked by the US government on national security grounds in 2005.

v Notable developments

The most notable development in the US mining industry from a legal perspective has been the issuance of proposed regulations by the US Securities and Exchange Commission for disclosure of reserves and resources by mining companies listed on US stock exchanges. These proposed regulations would eliminate the outdated Industry Guide 7 and would bring the US closer in line with the Committee for Mineral Reserves International Reporting Standards and with Canada's National Instrument 43-101. However, differences between the international standards and the proposed regulations are many, and final rules are not expected to be issued for quite some time.

On the regulatory front, the coal industry continues to face significant challenges to the leasing and development of federal coal reserves. In 2015, the US Environmental Protection Agency (EPA) issued final regulations to cut heat-trapping carbon dioxide emissions from existing power plants by 32 per cent by 2030. Those regulations have since been challenged in the DC Circuit Court of Appeals by numerous stakeholders. On 9 February 2016, the United States Supreme Court issued a stay pending the outcome of litigation surrounding the validity of EPA's regulations. Additionally, the Bureau of Land Management (BLM) – the agency tasked with leasing federal coal – has initiated a programmatic review of the existing coal regulatory scheme, which was directed by the Secretary of the Interior. Among other things, the review will include consideration of the environmental impacts associated with coal mining on public lands and BLM's methodology for determining the fair market value of federal coal. In the interim, the Secretary of the Interior has issued a moratorium on all federal coal leasing. Any new regulations could render coal leasing on federal lands impractical or infeasible. On the legislative front, Senators Lisa Murkowski and Maria Cantwell introduced bipartisan legislation known as the Energy Policy Modernization Act of 2015, which includes

measures to expand domestic mineral production and decrease permitting times for critical and strategic minerals. The legislation is under consideration by Congress, which is currently resolving differences between similar versions of the bill.

The US Geological Survey reports that, in 2015, United States mines produced an estimated US\$78.3 billion of mineral raw materials – down 3 per cent from US\$80.8 billion in 2014. Declining demand for metals, especially in China, reduced investment demand, and the increase in global inventories resulted in decreasing prices and production for most metals. In fact, several US metal mines idled in 2015, including a major molybdenum mine in Idaho and the only US rare earth mine at Mountain Pass, California. Nevertheless, 14 states each produced more than US\$2 billion worth of nonfuel mineral commodities in 2015.

II LEGAL FRAMEWORK

i Introduction

The US legal system consists of many levels of codified and uncodified federal, state and local laws. The government's regulatory authority at each level may originate from constitutions, statutes, administrative regulations or ordinances, and judicial common law. The US Constitution and federal laws are the supreme law of the land, generally pre-empting conflicting state and local laws. In many legal areas, the different authorities have concurrent jurisdiction, requiring regulated entities to comply with multiple levels of regulation. Mining on federal lands, for example, is generally subject to multiple layers of concurrent federal, state and local statutes and administrative regulations.

Federal and state governments have developed comprehensive mining regulatory schemes. Although the United States is a common law nation, practising US mining law often resembles practising mining law in civil law countries because the regulatory schemes are set out in detailed codifications.² However, these mining law codifications are subject to precedential interpretation by courts pursuant to common law principles (and in some situations by quasi-judicial administrative bodies). As such, US mining law may originate from federal, state and local laws, including constitutions, statutes, administrative regulations or ordinances, and judicial and administrative body common law.

Determining which level of government has jurisdiction over mining activities largely depends on surface and mineral ownership. A substantial amount of mining in the United States occurs on federal lands where the federal government owns both the surface and mineral estates. Federal law primarily governs mineral ownership, operations and environmental compliance, with state and local governments having concurrent or independent authority over certain aspects of federal land mining projects (e.g., permitting, water rights and access authorisations). If the resource occurs on private land, estate ownership is a matter of state contract law, but operations and environmental compliance are still regulated by applicable federal and state laws. Estate ownership on state-owned land is regulated by state law, and operations and environmental compliance are regulated by applicable federal and state laws.

2 See, e.g., 43 CFR Sections 3000.0-5-3936.40 (BLM minerals management regulations).

ii Regulation of the mining industry

The General Mining Law of 1872 (GML)³ is the principal law governing locatable minerals on federal lands. The GML affords US citizens the opportunity to explore for, discover and purchase certain valuable mineral deposits on federal lands open for mineral entry. Locatable minerals include non-metallics (asphaltum, bog iron, cement, diamonds, feldspar, granite, marble, salt, slate, umber, uranium, etc.), and metallic minerals including copper, gold, lead, nickel, silver and zinc. Locating these mineral deposits entitles the locator to certain possessory interests:

- a* unpatented mining claims, which provide the locator an exclusive possessory interest in surface and subsurface lands, and the right to develop the minerals; and
- b* patented mining claims, which pass title from the federal government to the locator, converting the property to private land. However, a mining patent moratorium has been in place since 1994 and no new patents are being issued.

The Federal Land Policy and Management Act of 1976 (FLPMA)⁴ governs federal land use, including access to and exercise of GML rights on lands administered by BLM and the US Forest Service (USFS). The FLPMA recognises ‘the Nation’s need for domestic sources of minerals’,⁵ and provides that the FLPMA shall not impair GML rights, including, but not limited to, rights of ingress and egress.⁶ However, the FLPMA also provides that mining authorisations must not ‘result in unnecessary or undue degradation of public lands’.⁷ More generally, BLM and the USFS have promulgated extensive regulations governing mineral development on public lands.⁸

The National Environmental Policy Act (NEPA),⁹ requires federal agencies to prepare an environmental impact statement (EIS) for all major federal actions significantly affecting the quality of the human environment. Mining operations on federal lands or with a federal nexus generally will involve an EIS or a less intensive environmental assessment (EA) examining environmental impacts. The NEPA process will involve consideration of other substantive environmental statutes.

The United States Securities and Exchange Commission (SEC) regulates mineral resources and reserves reporting by entities subject to SEC filing and reporting requirements. The SEC’s reporting classification system is based on the SEC’s 1992 ‘Industry Guide 7’, which provides for declaration only of proven and probable reserves. The SEC generally does not recognise other reporting codes, such as the Committee for Mineral Reserves International Reporting Standards, which provide additional disclosures and which are used by many other mineral-producing nations. As noted above, the SEC recently issued proposed regulations, which would lead to increased disclosure obligations for mining companies. If adopted, the SEC regulations would supersede Industry Guide 7 and require the disclosure of exploration results, mineral resources and mineral reserves.

3 30 USC Sections 21 to 54, and Sections 611 to 615, as amended.

4 43 USC Sections 1701 to 1787.

5 43 USC Section 1701(a)(12).

6 43 USC Section 1732(b).

7 43 CFR Section 3809.411(d)(3)(iii); see also 43 USC Section 1732(b).

8 See, e.g., 43 CFR Sections 3000.0-5-3936.40; 36 CFR Sections 228.1-228.110.

9 42 USC Sections 4321-4370m-12.

III MINING RIGHTS AND REQUIRED LICENCES AND PERMITS

i Title

In the United States, land generally can be severed into surface and subsurface estates, creating a split estate where the surface and mineral rights can be held by different parties. The ability to sever the unified estate depends on land ownership. Federal land mineral interests are regulated by federal law, and title cannot be transferred to private citizens until the minerals have been severed. Under the GML, locatable mineral claims may be patented, transferring title to the locator, but there has been a patent moratorium in place since 1994. Unpatented GML claims provide the locator exclusive possessory surface and mineral interests, but the locator does not obtain title to the mineral estate. Ownership of state-land minerals is controlled by state law and varies by state. State laws generally are similar to federal laws, in that title remains with the state until the minerals are severed pursuant to statutory procedures. Severance of private land estates is governed by state law, and generally private citizens are free to split their surface and mineral estates.

Once the mineral estate is severed and enters the private market, title to the minerals can be bought, sold, leased or rented as a matter of contract law, subject to reservations in the severance document and applicable laws. The federal government, particularly in the western United States, may have reserved the mineral estate to itself when it transferred ownership of the surface lands to private citizens or state governments, which could affect the surface owners' ability to alienate the minerals.

ii Surface and mining rights

The process for developing locatable minerals rights on federal lands under the GML involves:

- a* discovery of a 'valuable mineral deposit', which under federal law means that a prudent person would be justified in developing the deposit with a reasonable prospect of developing a successful mine, and that the claims can be mined and marketed at a profit;
- b* locating mining claims by posting notice and marking claim boundaries;
- c* recording mining claims by filing a location certificate with the proper BLM state office within 90 days of the location date and recording pursuant to county requirements;
- d* maintaining the claim through assessment work or paying an annual maintenance fee; and
- e* additional requirements for mineral patents (as mentioned above, there is a moratorium on patents).

The Mineral Lands Leasing Act of 1920¹⁰ provides US citizens the opportunity to obtain a prospecting permit or lease for coal, gas, gilsonite, oil, oil shale, phosphate, potassium and sodium deposits on federal lands. The process for obtaining a permit or lease involves filing an application with the federal agency office with jurisdiction over the affected land. Depending on the type of permit or lease applied for, applicants may be required to:

- a* pay rental payments;
- b* file an exploration plan;
- c* pay royalty payments based on production; or
- d* furnish a bond covering closure and reclamation costs.

10 30 USC Sections 181 to 287, as amended.

These permits and leases are often subject to conditions and stipulations directed at protecting resource values.

The Materials Disposal Act of 1947¹¹ provides for the disposal of common minerals found on federal lands, including, but not limited to, cinders, clay, gravel, pumice, sand or stone, or other materials used for agriculture, animal husbandry, building, abrasion, construction, landscaping and similar uses. These minerals may be sold through competitive bids, non-competitive bids in certain circumstances or through free use by government entities and non-profit entities.

Although the GML and Mineral Lands Leasing Act require mine claimants, permittees and lessees to be US citizens, a 'citizen' can include a US incorporated entity that is wholly owned by non-US entities or corporations. There are generally no restrictions on foreign acquisition of these types of US mining rights through parent-subsidiary corporate structures.

iii Additional permits and licences

Additional permits and licences required to conduct mining activities may include:

- a* a mine plan of operations;
- b* a reclamation plan and permits;
- c* air quality permits;
- d* water pollution permits (pollutant discharge elimination system permit, storm water pollution prevention plan, spill prevention control and countermeasure plan);
- e* dam safety permits;
- f* artificial pond permits;
- g* hazardous waste materials storage and transfer permits;
- h* well-drilling permits;
- i* road use and access authorisations;
- j* right-of-way authorisations; and
- k* water rights.

iv Closure and remediation of mining projects

The FLPMA requires BLM and the USFS to prevent 'unnecessary or undue degradation' of public lands.¹² Casual-use hardrock mining operations on BLM lands that will result in no or negligible surface disturbance do not require any reclamation planning. Notice-level exploration operations requiring less than five acres of surface disturbance must meet BLM reclamation standards and provide financial guarantees that the reclamation will occur.¹³ Plan-level operations require a plan of operations that includes a detailed reclamation plan.¹⁴ BLM reclamation standards include saving topsoil for reshaping disturbed areas, erosion and water control measures, toxic materials measures, reshaping and revegetation where

11 30 USC Sections 601 to 615, as amended.

12 43 USC Section 1732(b).

13 43 CFR Sections 3809.320, 3809.500(b).

14 43 CFR Sections 3809.11, 3809.401.

reasonably practicable, and rehabilitation of fish and wildlife habitat.¹⁵ Mining in BLM wilderness study areas additionally requires surface disturbances be ‘reclaimed to the point of being substantially unnoticeable in the area as a whole’.¹⁶

Mining activities on National Forest lands must be conducted ‘so as to minimise adverse environmental impacts on National Forest System surface resources’.¹⁷ Operators must take measures that will ‘prevent or control onsite and offsite damage to the environment and forest surface resources’, including erosion control, water run-off control, toxic materials control, reshaping and revegetation where reasonably practicable, and rehabilitation of fish and wildlife habitat.¹⁸

State laws may also include closure and reclamation requirements, including, for example, water and air pollution controls, recontouring and revegetation, fish and wildlife protections, and reclamation bonding requirements. Mining projects can often address both federal and state requirements through a single closure and reclamation plan and financial guarantee.

IV ENVIRONMENTAL AND SOCIAL CONSIDERATIONS

i Environmental, health and safety regulations

NEPA is the principal environmental law implicated by mining on federal lands. NEPA requires federal agencies to take a ‘hard look’ at the environmental consequences of federal projects before action is taken. An agency must prepare an EIS for all major federal actions significantly affecting the quality of the human environment. An agency may first prepare an EA to determine whether the effects are significant. If the effects are significant, the agency must prepare the more comprehensive EIS. If the effects are insignificant, the agency generally will issue a finding of no significant impact, ending the process. NEPA does not dictate a substantive outcome; however, the analysis generally requires consideration of other substantive environmental statutes and regulations, including the Clean Air Act,¹⁹ the Clean Water Act²⁰ and the Endangered Species Act.²¹ NEPA is administered by the federal agency making the decision that may significantly affect the environment.

The Clean Air Act regulates air emissions from stationary and mobile sources. The Clean Air Act is administered by the EPA and states with delegated authority. The Clean Water Act regulates pollutant discharges into the ‘waters of the United States, including the territorial seas’.²² The Clean Water Act is administered by the EPA, US Army Corps of Engineers and states with delegated authority. The Endangered Species Act requires federal agencies to ensure their actions are not likely to jeopardise the continued existence of any

15 43 CFR Section 3809.420.

16 43 CFR Section 3802.0-5(d).

17 36 CFR Section 228.1.

18 36 CFR Section 228.8(g).

19 42 USC Sections 7401 to 7671.

20 33 USC Sections 1251 to 1388.

21 16 USC Sections 1531 to 1544.

22 33 USC Section 1311(a); 33 USC Section 1362 (defining ‘navigable waters’).

threatened or endangered species, or to destroy or adversely modify designated critical habitat, and prohibits the unauthorised taking of such species. The US Fish and Wildlife Service and National Marine Fisheries Service administer the Endangered Species Act.

The Federal Mine Safety and Health Act²³ requires the Mine Safety and Health Administration (MSHA) to inspect all mines each year to ensure safe and healthy work environments.²⁴ The MSHA is prohibited from giving advance notice of an inspection, and may enter mine property without a warrant.²⁵ MSHA regulations set out detailed safety and health standards for preventing hazardous and unhealthy conditions, including measures addressing fire prevention, air quality, explosives, aerial tramways, electricity use, personal protection, illumination and others.²⁶ MSHA regulations also establish requirements for testing, evaluating and approving mining products; miner and rescue team training programmes; and notification of accidents, injuries and illnesses at the mine.²⁷

Currently, there are no specific mining sustainable development regulations in the US. However, issues of socio-economic impact, cumulative effects and environmental impact often are addressed during a NEPA review.

ii Environmental compliance

Mining projects on federal lands, or that otherwise have a federal nexus, will likely have to go through some level of NEPA environmental review. State laws may also require environmental analysis. Where analysis is required by different agencies, it may be possible to pursue an agreement among the agencies to allow the operator to produce one comprehensive environmental review document that all agencies can rely on.

There is no statutory deadline for federal agencies to complete their NEPA review. Small mine project reviews may take in excess of a year to complete. Larger project reviews usually take longer. Third parties may sue the federal agency completing the review to ensure that the agency considered all relevant factors and rationally related the decisions made to the facts found. Prosecuting the litigation would extend the project approval time, and if the agency loses, additional time would be required for the agency to redo its flawed NEPA analysis. In some instances where mines were proposed in especially sensitive areas, it has taken decades to obtain approval.

iii Third-party rights

The US contains numerous reservations comprised of federal lands set aside by treaty or administrative directive for specific native American tribes or Alaska natives. Tribal reservation title generally is held by the United States in trust for the tribes, and the US Bureau of Indian Affairs administers the reservations. Alaska native lands are owned and administered by Alaska native corporations. Mineral development within the tribal reservations and Alaska native lands requires negotiation with the appropriate administrator.

23 30 USC Sections 801 to 966.

24 30 USC Section 813.

25 30 USC Section 813.

26 See, e.g., 30 CFR Sections 56.1-56.20014 (safety and health standards for surface metal and non-metal mines).

27 30 CFR Sections 5.10-36.50, 46.1-49.60, 50.10.

Tribal cultural interests are considered through NEPA, the National Historic Preservation Act (NHPA),²⁸ and the Native American Graves Protection and Repatriation Act (NAGPRA).²⁹ NEPA analysis will include social and cultural impacts, and may require tribal consultation. Section 106 of the NHPA requires federal agencies to inventorise historic properties on federal lands and lands subject to federal permitting, and to consult with interested parties and the State Historic Preservation Office.³⁰ NAGPRA imposes procedural requirements that apply to inadvertent discovery and intentional excavation of tribal graves and cultural items on federal or tribal lands.

iv Additional considerations

Not all federal lands are open to mineral entry, including national parks, national monuments, most Reclamation Act project areas, military reservations, wilderness areas, and wild and scenic river corridors. Project proponents should research mineral access when considering exploration activities on federal lands.

Federal mining laws do not require community engagement or corporate responsibility. Those projects that require NEPA review, however, will be subject to public notice and comment requirements, and the review will involve consideration of the project's cultural, societal and economic impacts. State laws may impose a 'public interest' standard for projects requiring state approval. For example, mining operations that require state water rights may need to show that the use of the water is in the 'public interest', which may include consideration of wildlife, fisheries and aquatic habitat values.

V OPERATIONS, PROCESSING AND SALE OF MINERALS

i Processing and operations

US mining laws do not restrict or limit importing mining equipment or machinery. If the equipment has dual military-civilian use, it is on the Commercial Control List and may be licensable by the Department of Commerce pursuant to the Export Administration Regulations.³¹

Foreign employees are governed by general US immigration laws and are required to obtain a work visa or other authorisation. A limited number of visas are available for skilled workers, professionals and non-skilled workers, but these workers must be performing work for which qualified US workers are not available.³²

ii Sale, import and export of extracted or processed minerals

There are no restrictions or limitations on the sale, import or export of extracted or processed minerals, unless deemed a national security risk by the US Department of Homeland Security or State Department.

28 54 USC Section 300101 to 307108.

29 25 USC Section 3001 to 3013.

30 54 USC Section 306108.

31 15 CFR Sections 730.1, 774 Supp. No. 1.

32 8 USC Section 1153(b)(3)(C).

iii Foreign investment

US mining laws generally do not restrict or limit foreign investment. As discussed in Section III.ii, *supra*, although there is a US citizenship requirement for obtaining locatable and leasable minerals on federal lands, foreign companies are free to rely on a US subsidiary to secure such rights.

Foreign investments are subject to US national security laws. The Committee on Foreign Investment in the United States, for example, is an inter-agency committee chaired by the Secretary of the Treasury that has authority to review foreign investments to protect national security, and make recommendations to the President to block the same.³³ The President may exercise this authority if the President finds that the foreign interest might take action impairing national security, and other provisions of the law do not provide the President with appropriate authority to act to protect national security.³⁴

VI CHARGES

i Royalties

There are generally no royalties levied on the extraction of federally owned minerals, with the exception of fuel minerals and other minerals governed by the Mineral Leasing Act. Many states, however, charge royalties on mineral operations on state-owned lands and taxes that function like a royalty on all lands, such as severance taxes, mine licence taxes or resource excise taxes. These functional royalties can differ depending on land ownership and the minerals extracted.

ii Tax considerations

There are no federal taxes specific to minerals extraction (see above regarding state mining taxes as functional royalties). General federal, state, county and municipal taxes apply to mining companies, including income taxes, payroll taxes, sales taxes, property taxes and use taxes.

Federal tax laws generally do not distinguish between domestic and foreign mining operators. However, if a non-US citizen acquires real property, the buyer must deposit 10 per cent of the sale's price in cash with the US Internal Revenue Service as insurance against the seller's income tax liability. The cash requirement can be problematic for a cash-strapped buyer that may have purchased the mine property with stock.

There are no federal tax advantages or incentives specific to mining.

iii Duties

There are no federal duties on minerals extraction.

33 50 USC Appendix Section 2170.

34 50 USC Appendix Section 2170(d)(4).

iv Indemnification

Locatable minerals claimants must pay an annual maintenance fee of \$155 per claim in lieu of performing assessment work required pursuant to the GML and the FLPMA.³⁵ Failure to perform assessment work or pay maintenance fees will open the claim to relocation by a rival claimant as if no location had been made.³⁶ Certain waivers and deferments apply.

Leasable minerals permittees and lessees must pay annual rent based on acreage. The rental rates differ by mineral and some rates increase over time.³⁷ Prospecting permits automatically terminate if rent is not paid on time; BLM will notify late lessees that they have 30 days to pay.³⁸

State laws may also include closure and reclamation requirements, including water and air pollution controls, recontouring and revegetation, fish and wildlife protections, and reclamation bonding requirements. Mining projects often can address both federal and state requirements through a single closure and reclamation plan and financial guarantee.

Federal and state laws generally require financial guarantees prior to commencing operations to cover closure and reclamation costs. These reclamation bonds ensure that the regulatory authorities will have sufficient funds to reclaim the mine site if the permittee fails to complete the reclamation plan approved in the permit.

VII OUTLOOK AND TRENDS

While recent production in the US minerals industry has remained low, there are some encouraging trends. The USGS primary metals leading index growth rate suggests that non-metallic mineral industry activity is likely to increase moderately throughout 2016. In addition, increased residential construction activity is expected to strengthen metals consumption. With residential construction continuing to improve, construction spending increased by 10 per cent in 2015 compared to 2014 figures. However, metal consumption from the manufacturing industry declined. In 2015, steel imports accounted for approximately 30 per cent of domestic steel consumption.

Coal production continues to decline relative to 2015 production. According to the US Energy Information Administration, a combination of low natural gas prices, restrictive environmental regulations and low demand for coal exports are the primary causes for the precipitous decline in US coal production. In fact, coal production is projected to reach an annual decline of 168 million short tons over the previous year, which would represent the largest decrease in production since the beginning of data collection in 1949. On a more positive note, the US Energy Information Administration predicts an increase in coal consumption in 2017 due in large part to projected rising natural gas prices and increased electrical generation demand.

35 43 CFR Sections 3834.11(a), 3830.21.

36 43 CFR Section 3836.15.

37 43 CFR Section 3504.15.

38 43 CFR Section 3504.17.

PART II

CAPITAL MARKETS

Appendix 1

ABOUT THE AUTHORS

KAROL KAHALLEY

Holland & Hart LLP

Karol Kahalley has been a mining attorney with the firm of Holland & Hart, LLP in Denver, Colorado for 20 years. As a leading expert on US mining law, Ms Kahalley has successfully represented clients in acquiring mineral properties and developing mining operations throughout the United States, including on tribal lands. Her work includes hard rock minerals, oil and gas, oil shale, potash, uranium, coal, rare earth minerals and geothermal resources. She is a recognised expert on the creation and interpretation of mining royalties.

Ms Kahalley has been a lecturer at and published numerous articles for the Rocky Mountain Mineral Law Foundation. She is an adjunct professor at the University of Denver College of Law in international mining law and policy.

KRISTIN A NICHOLS

Holland & Hart LLP

Kristin Nichols is an associate in the energy, environment and natural resources practice group of Holland & Hart, LLP in Denver, Colorado. Ms Nichols advises clients on a wide variety of natural resource issues, including energy development on federal, state, and tribal lands, regulatory compliance and public land use litigation. She represents natural resource clients in appeals to federal district court and federal administrative boards, including the Interior Board of Land Appeals.

ROBERT A BASSETT

Holland & Hart LLP

Robert A Bassett is the mining team leader at Holland & Hart, LLP in Denver, Colorado, a full-service law firm with offices throughout the western US and in Washington, DC. Holland & Hart has one of the largest mining law practice groups in the nation. Mr Bassett has nearly 30 years of experience in mining law, and provides clients with practical solutions for financing and developing mining projects.

Mr Bassett has published numerous articles for the Rocky Mountain Mineral Law Foundation, where he chairs the International Committee and the International Bar Association Section on Energy and Natural Resources Law, where he coordinated the Model Mine Development Agreement Project.

Mr Bassett is an adjunct professor at the University of Denver College of Law in international mining law and policy, and has been a lecturer at the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee.

HOLLAND & HART LLP

6380 South Fiddlers Green Circle
Suite 500
Greenwood Village
Colorado 80111
United States
Tel: +1 303 290 1600
Fax: +1 303 290 1606
bbassett@hollandhart.com
kkahalley@hollandhart.com
kanichols@hollandhart.com
www.hollandhart.com