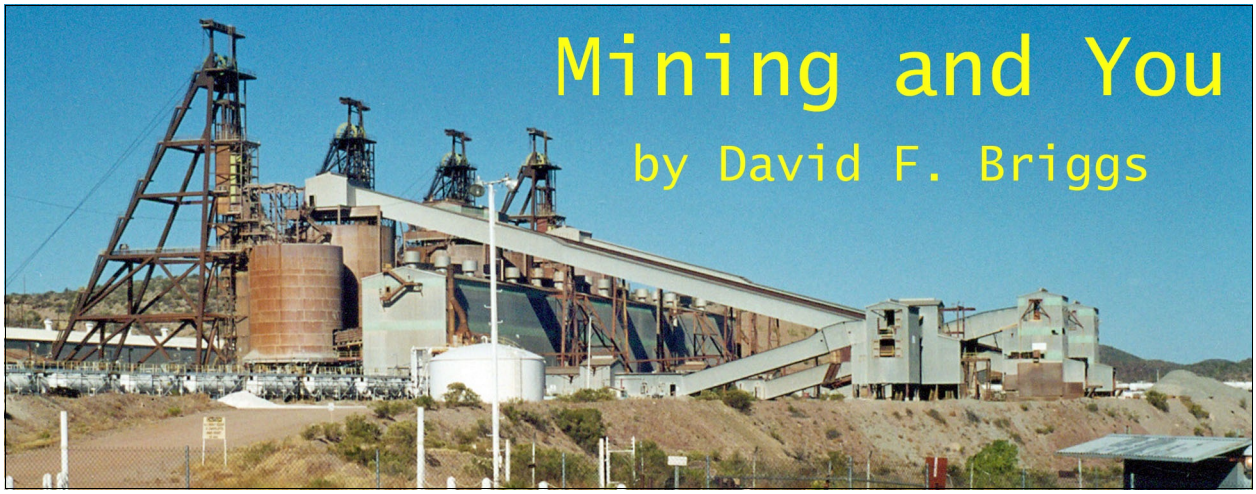

H. R. 2467 - A Threat to America's Economic and National Security

by David F. Briggs

Abstract

The most recent attempt to reform the General Mining Act of 1872 was introduced in the U. S. House of Representatives on June 20, 2013. Titled: "The Abandoned Mine Lands Cleanup and Taxpayer Fairness Act" (H. R. 2467), this proposed legislation imposes numerous unrealistic restrictions and onerous regulations on mining businesses, which far exceed those currently required by other industries. If enacted, the effects of this bill will be far-reaching; severely impacting local, state and national economies, increasing America's reliance on foreign imports and unnecessarily jeopardizing our national security.

Any true mining reform must not solely deal with royalties and environmental issues related to mining activities on our public lands. It must also ensure our domestic mining industry remains healthy so it can supply the minerals we require to fulfill the needs of present and future generations of Americans.

Introduction

Once again, reform of the General Mining Act of 1872 has been brought to the forefront of public debate with the introduction of the Abandoned Mine Lands Cleanup and Taxpayer Fairness Act (H. R. 2467) in the House of Representatives on June 20, 2013 by Congressmen Edward Markey, Rush Holt and Raúl Grijalva.

The primary goals of this mining reform legislation include:

- increasing the taxpayers' return on investment through the imposition of a 12.5 percent royalty on gross income derived from the production of locatable minerals from federal lands;

- the establishment of an Abandoned Mine Lands Program, which will be funded through a $0.07/ton of material mined at all hard rock mines; and

- the reduction of environmental impacts on public lands by the mining industry.

In attempting to accomplish these goals, this bill employs tactics that have proved unsuccessful in the past. The implementation of the first two goals will be accomplished through collection of royalties and fees from domestic hard rock mining operations. However, the methods that will be used to reduce the environmental impacts of mining on our public lands are considerably more complicated and problematic. Reduction of environmental impacts on public lands will be accomplished by:

- reducing the total acreage of land available for mining activities through an unprecedented and reckless withdrawal of extensive tracts public lands from mineral entry without regard for their mineral potential;

- placing unrealistic restrictions on how the mining industry is permitted to use the land;

- imposing restrictive and unrealistic time limits on exploration and mining activities;

- significantly increasing the costs and risks of exploring, developing and mining locatable minerals on public lands; and

- requiring the mining industry to comply with a new set of environmental standards that are virtually impossible to meet.

Like many bills before Congress, the authors of this legislation were so focused on designing a bill that will meet their goals, they failed to fully consider the undesirable impacts that would result from the passage of such legislation. When combined with their ignorance of the science, engineering, technologies and business realities of the industry they are trying to regulate, this tunnel-vision makes the negative impacts resulting from the provisions contained within this legislative proposal especially severe.

Tens if not hundreds of thousands of jobs will be directly and indirectly impacted by provisions contained within this bill as our domestic mining industry pre-maturely shutters many of its existing operations and investments used to search for and develop new mines are spent elsewhere. These financial hardships will be especially severe in rural communities, where many mining operations are located. Considering the federal government's poor track record in coping with the millions of jobs lost during the Great Recession of 2008, how will it deal with those unemployed as a result of this legislation? Furthermore, are the social costs that will accompany these job losses really warranted?

The United States is already very dependent on foreign sources for metals and minerals we require to supply our economic and national security needs. Pre-mature mine closures and disincentives to invest in future mining projects will only further weaken our ability to provide for these needs. In

addition, many of the scientific and technological skills our nation requires to remain competitive on the world market and ensure our national security will be eroded as the mining industry relocates many its employment opportunities overseas. Is it really wise to enact legislation, which will only compound these problems?

Our dependence on the importation of foreign oil has been often cited as one of the primary reasons why American troops were sent to fight and die in Iraq on two different occasions since 1990. How will future shortages of minerals and metals critical to our economic and national security needs impact future foreign policy decisions? Will more Americans have to pay with their lives because our leaders have failed to learn the lessons of history?

The purpose of this paper is to closely examine the details of each of the individual provisions contained within H. R. 2467 and discuss the wide range of impacts they will have on the future of the domestic mining industry and our nation, if this legislation is ever enacted into law. Less restrictive alternatives, which can accomplish similar goals without compromising our economic or national security needs, will also be offered.

Mineral Development on Public Lands

Under U. S. law, public lands contain three distinct categories of minerals; locatable minerals, leasable minerals and salable minerals. The manner in which the natural resource sector acquires access and title to each is different.

Access and title to locatable minerals on public lands are acquired through the location of a mining claim at a site and making a valid mineral discovery. The list of locatable minerals is long and includes all metallic minerals (gold, silver, copper, lead, zinc, nickel, molybdenum, iron, manganese etc.), some non-metallic minerals (fluorspar, mica, chemical or metallurgical grade limestone, gypsum, barite, perlite etc.) and certain uncommon varieties of minerals. These are just some of the locatable minerals. A more complete list of locatable minerals is more difficult to prepare, because our laws have used economics, their intended use and/or uniqueness of characteristics to define them.

Leasable minerals were initially defined under provision of the Mineral Leasing Act of 1920 (30 U.S.C. ¶181). They include energy leasables (oil, gas, oil shale, coal and geothermal) and non-energy leasables (sodium, potassium, potash, trona, phosphate and sulphur). Furthermore, all locatable minerals situated on public lands purchased or received under the Acquired Lands Act of 1947 as well as those found on American Indian Reservations are only subject to lease (43 CFR Group 3500). Access to these minerals is acquired through the issuance of a lease, which has a specified term and requires the lessee to pay a rental fee and royalties on any minerals produced from the lease. Petroleum and natural gas leases are secured through a competitive bidding process, which requires an initial payment to the federal government in addition to the rental fees and royalties.

Saleable minerals include some of our most basic natural resources, such as sand, gravel, stone,

pumice, pumicite, cinders and dirt. Commonly used in construction and many other every day uses, these materials are generally bulky and characterized by low unit prices. Their transportation costs are very high, making adequate local supplies of these resources critical to the economic viability of any community. While saleable minerals are generally sold under a contract to the public at a fair market price, they are given to local and state governments for use in public works projects.

H. R. 2467 specifically targets locatable minerals on public lands. However, if this bill is enacted into law, how long will take the federal government to find a way to apply its more onerous provisions dealing with land use and the environment to leasable and saleable minerals?

Application of H. R. 2467 to Pre-existing Mining Claims

All mining, mill site and tunnel sites claims located after the date of the enactment of H. R. 2467 will be subject to all of the provisions contained within this bill. Pre-existing mining claims for which a plan of operation has not been approved or a notice filed prior to the date of its enactment will also be subject all of its requirements. However, if a plan of operation has been approved, but such operations have not commenced prior to the date of the enactment, these mining operations have five years to bring its mining activities into compliance with all of the provisions contained within this bill.

Finally this bill is poorly drafted and contains sections that are referred to but absent from the text of this document. This appears to be the case for the application of its provisions to federal lands where existing mining operations are producing locatable minerals in commercial quantities prior to the date of its enactment. The manner in which this bill will deal with this issue is unclear. Attempts to clarify this and other points with the staff of the legislators, who introduced this bill, have been unanswered or met with evasive responses (Bragato, personal communication, 2013).

Issues Involving Unpatented Mining Claims

U. S. law (30 USC ¶22) states: "Except as otherwise provided, all valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, shall be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States."

Under this provision, U. S. law guarantees the right to explore a property, develop its resources, produce those resources and reclaim the site without ever locating a single mining claim. However for practical proposes, most prudent persons locate mining claims at the site in order to protect their rights against rival claimants, protect their rights in the event the federal government withdraws the area from mineral entry at some future date and to acquire a perfected title to the minerals should a valid discovery be made (Skaer, 2007). However, the Code of Federal Regulations (36 CFR ¶228.4 or 43 CFR ¶3809.11a) require mining operators to obtain government approval of a proposed plan for mining operations before mining commences.

Provisions contained in H. R. 2467 would change the current U. S. law, requiring any mineral activities resulting in the disturbance of surface resources on federal lands to require a mining claim located under general mining laws and for said claim to be maintained in compliance with such laws.

U. S. law (30 USC ¶622a) states: "Any mining claim hereafter located under the mining laws of the United States shall not be used, prior to issuance of patent therefore, for any purposes other than prospecting, mining or processing operations and uses reasonably incident thereto."

H. R. 2467 also attempts to modify both 30 USC ¶22 and 30 USC ¶622a, stating that neither lode or placer claims can be located for the purpose of securing Federal land for a waste rock facility, tailings impoundments or other purposes incident to processing locatable minerals extracted elsewhere. This provision demonstrates a profound ignorance for the realities the mining industry faces in doing its day to day business. If the mining industry is not permitted to obtain adequate physical access to the surface rights of a property to develop and efficiently mine a mineral discovery, any mineral rights it may have received in making a valid discovery are worthless.

When mining companies decide to evaluate an exploration target for its mineral potential, they acquire exclusive rights to an area that is sufficiently large enough to cover the entire target. At this stage, the specifics of what areas will be mined and what will be used to support the mine facilities are unknown. And these specifics will remain uncertain until the area is evaluated, an economic discovery has been made and a plan of operation has been submitted and approved by the appropriate governmental authorities.

Future Site of the Rosemont Copper Project, Pima Co., Arizona
(Photo taken by David Briggs, August 2008)

This is illustrated by the following example. Discovered during the early 1960s, the Rosemont deposit in Pima County, Arizona has been evaluated over the last five decades. And even today, we still do not know what the final areal configuration of the mine site will be until the U. S. Forest

Service releases its Final EIS and Record of Decision.

Under U. S. Code of Federal Regulations (43 CFR Ch 11 ¶3832.32) a mine operator can locate more than one five-acre mill site per mining claim, if each site is used for processing facilities, waste rock and tailings disposal sites, leach pads, water process and treatment plants, mine administrative or support facilities as well as other unspecified ancillary uses that may reasonably be needed to support its operation. The only limitations that are placed on the total acreage used for these activities is what is reasonably necessary for an efficient and reasonably compact mining operation.

However, under a provision contained in H. R. 2467, the current U. S. legal code will be modified, limiting the number of five-acre mill site claims permitted at a particular mining project to the number of valid mining claims located at the site. When combined with the provision that restricts ancillary facilities from being placed on mining claims, this will create impractical restrictions on how much land can be used for waste rock facilities, tailings impoundments, leach pads and other site facilities. Not only will it result in the premature curtailment of mining operations, it will also give the Bureau of Land Management and Forest Service considerably more discretionary authority to reject future mining projects, due to a company's need to use public lands for support facilities. Finally, it ignores other less restrictive ways to reduce the areal footprint of future mining operations through the introduction of new technologies such as dry stack tailings impoundments and concurrent reclamation practices.

Under the terms of H. R. 2467, both placer and lode claims must contain locatable minerals, which the claim holder intends to extract. It also requires that validity of each of these mining claims must be supported by a discovery of a valuable mineral deposit within the meaning of the general mining laws. However, the General Mining Law of 1872 does not define the term "discovery". For many years, both the Department of Interior and the courts have used the "prudent man" test to judge the validity of a mining claim. Under this method, a discovery had to be of sufficient size and quality that the reasonable probability of successfully developing a mine would be sufficient to encourage an individual of ordinary prudence to invest time and money in this endeavor. Since the early 1980s, both the Department of Interior and the courts have modified the method used to judge the validity of a mining claim with the addition of a "marketability" test. This validity test requires sufficient exploration and evaluation to have been performed on a claim to demonstrate that it could profitably mined under present conditions. This is the type of discovery, which is required for a mineral patent (Papke and Davis, 2002).

A discovery can be made before or after a mining claim has been located. In the early days, discoveries were generally made prior to the location of a mining claim. Today, most of the discoveries are made only after much exploration and analysis of the data, which can take many years and cost tens of millions of dollars. Accordingly, the courts have recognized that claim holders require time to make a valid discovery and have granted them possessory rights to their claims (Union Oil Co. of California vs. Smith, 249 US 537 [1919]). These rights remain in force so long as the claim holder maintains actual physical occupancy of each claim, excludes rival locators, pays an annual claim maintenance fee and continues a diligent effort to make a discovery (Cole vs. Ralph, 252 US 286, 294 [1920] and Geomet Exploration vs. Lucky Mc, AZ 601 P2d 1339 [1979]).

It should be noted that neither of the methods that have been historically used to determine the validity of a mining claim place any limits on the time it takes to prove validity. If a claim holder is unable to prove his claims are valid within the arbitrary ten-year term of the exploration permit required by this proposed legislation, will the federal government declare those claims invalid? If so, this would have a chilling impact on raising the investment capital required to explore and develop mineral deposits within the United States. Where are the minerals we will require in the future for our economic and national security needs going to come from if it is too risky to do so here, in the United States?

Secure Access to Mineral Holdings

The Multiple Land Use Doctrine as described in the Federal Land Policy and Management Act of 1976 ensures that our public lands and their various resource values will be utilized in the combination, which best meets the present and future needs of the American people. It also guarantees that our public lands will be made available for all uses, including a wide range of commercial activities as well as being preserved for its watershed, fish and wildlife, natural scenic, scientific and historical values (Anonymous, 2001).

Many provisions in H. R. 2467 will unnecessarily limit or deny the mining industry access to public lands. If this attempt to restrict Americans' use of their public lands is successful, would other historic uses of federal lands such as ranching, harvesting timber or even recreational uses be similarly restricted in the future?

Recognizing that economic mineral deposits are rare occurrences located in certain restricted geologically favorable areas and are essential for our economic and national security, current law grants a claim holder pre-discovery rights to explore and develop favorable areas in accordance with a strict set of guidelines, which are designed to mitigate any environmental damage to the land. Under H. R. 2467, mining becomes a discretionary use of our public lands, where the Secretaries of Interior and Agriculture are granted absolute, discretional authority to deny access of public lands during any stage of mining activity, which would otherwise comply with all environmental laws and regulations. In short, it makes what should be a scientific, technical and economic decision with regard to the use of public land, a political decision.

H. R. 2467 allows states, counties, communities and Indian tribes to petition for the withdrawal of public lands from mineral entry in order to protect specific values, such as value of a watershed to supply drinking water, wildlife habitat values, cultural or historic resources or value for scenic vistas important to the local economy or other such values. Indian tribes may also request withdrawals as a way to protect religious or cultural values that are important to the Indian tribe. Despite lacking any criteria on how to judge the merits of these petitions, this bill requires the Secretaries of Interior and Agriculture to grant such petitions unless it can be shown to be against the national interest. It essentially places mining at the bottom of list of all land use priorities.

These important decisions are not only being made without regard for an area's mineral potential, but could effectively prevent any examination of an area from being made at all. This clause could be easily used target controversial projects, known to contain undeveloped mineral resources located within historical mining districts (i.e. Mt. Emmons, Rosemont and Hermosa), which have been evaluated by the mining industry over considerable periods of time and at great expense. While any individual occurrence may not be able to be shown to be in the national interest, the cumulative impact of granting all of these petitions on a case by case basis will certainly have a profound negative impact on our economic and national security, because it would jeopardize America's ability to meet its current and future demands for natural resources. Furthermore, considering that substantial investment has already been made on many of these holdings in reliance of existing laws, it will almost certainly expose the federal government to substantial takings litigation.

This proposed piece of legislation will also withdraw enormous tracts of public domain from mineral development, including wilderness study areas, areas of critical environmental concern (ACEC), Wild and Scenic Rivers systems and roadless areas. Among the ill-defined criteria used to identify proposed withdrawals are "areas of critical environmental concern", which could potentially construed to mean all public lands.

Furthermore, this legislation requires that no permits to conduct any mining activities will be authorized if it might impair the land or resources of a National Park or National Monument. For purposes of this provision the term impair includes any diminution of the affected land including wildlife, scenic assets, water resources, air quality and acoustic qualities or other unspecified changes that would lessen a citizen's experience at one of these sites. Similar regulations apply to National Conservation System units, which in addition to National Parks and National Monuments also include: the National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Conservation Areas, National Recreational Areas and National Wilderness Preservation System.

These provisions would effectively terminate any claimant's right to explore and develop pre-existing mining claims located within or adjacent to these sites prior to the enactment of this legislation. It will effectively create enormous mining-free buffer zones of several orders of magnitude greater than the "protected" sites they are designed to protect. All present and future mineral activity will be prohibited from these buffer zones. Furthermore, the areal extent and boundaries of these poorly defined, mining-free, buffer zones are left to the discretionary whims of the Secretary of Interior, which are solely based on political factors. It would simply make it too risky for the mining industry to invest its time and limited capital resources on any of these areas. Finally, these withdrawals are chosen without regard for the mineral potential of these lands or their importance to meeting our nation's present or future economic or national security needs.

H. R. 2467's arbitrary term of ten years for an exploration permit ignores the realities faced by today's mining industry, when exploring and evaluating mineral properties. The geological settings of many deposits are quite complex and require considerable time and expense to adequately assess their economic potential. By its very nature, minerals exploration is a repetitious process in which exploration targets may be examined many times before an economic discovery is made. There are

many documented cases where it has required more than fifty years of evaluation, accompanied by advances in technology before a known mineral occurrence could be shown to be economically feasible to mine. Furthermore, arbitrary limitations placed on exploration permits will discourage investing in exploration programs, which will ultimately result in a decline in mineral discoveries that will be required to meet our future demands for a wide variety of mineral products. Finally, an unrealistic and poorly defined definition of what does or does not constitute exploration under provisions of this bill has a potential to severely limit exploration activities conducted on public lands.

Core Drilling at Rosemont Project, Pima County, Arizona
(Photo taken by David Briggs, January 2007)

The Rosemont copper deposit in Pima County, Arizona has been explored by a number of different mining companies since its discovery during the early 1960s. How would a ten year limit on exploration impact the mining industry's ability to evaluate these resources?

Similar arbitrary and unrealistic term limits for operations permits of twenty years with an uncertain possibility of a single, twenty year extension is also problematic, considering many existing mining operations have been in production for more than forty years. Advances in technology as well as variations in metals prices commonly allow mining operations to remain economical much longer than initially projected. Term limits create too much uncertainty to attract the huge amounts of investment capital required to find and develop new mining operations in the United States. Unwise arbitrary restrictions that limit a mining operation's life to forty years will almost certainly result in premature closures, leaving economical reserves in the ground, where they will be of no benefit to anyone and potentially creating environmental exposure to mineralized material.

Current permitting procedures at our nation's mines are adequately performed and administered by a number of local, state and federal agencies, who presently have the authority to resolve any issue that might arise. There is no need to add another layer of bureaucracy to an already cumbersome and time-consuming process.

Panorama of Morenci Copper Mine, Greenlee County, Arizona
(Photo taken by David Briggs, July 2007)

Copper has been mined at Morenci, Arizona for more than 100 years. Under provisions contained in H. R. 2467, mining operations would be required to cease operations and be reclaimed after 40 years, leaving much of the remaining mineral resource in ground.

Any true mining reform must recognize that minerals deposits are valuable, non-renewable resources, which must be developed and mined in the most efficient manner possible. Anything that interferes with this process, will ultimately result in much greater impact to the environment, because the demand for the products made from these minerals will push mining industry to develop other less developed properties both inside and outside of the United States to supply this demand. With regard to developing properties located in other countries, environmental damage will likely be greater due to less stringent laws and regulations.

Uncertainties created by H. R. 2467's provisions involving access to public lands only increase the risks of doing business. Before making these substantial investments, mining companies must know that their rights to evaluate and occupy public lands are secure. Otherwise, the risks are simply too great to attract the investment capital required to find and develop the natural resources necessary to fulfill the needs of present and future generations of Americans. This legislation significantly reduces our ability to supply the minerals we require to ensure our security and to maintain and improve our infrastructure and standard of living. This will result in our increased dependence on foreign sources for raw materials, which will not only increase our nation’s already enormous trade

deficits, but will also leave our national security needs vulnerable to decisions made by foreign governments (Figure 1).

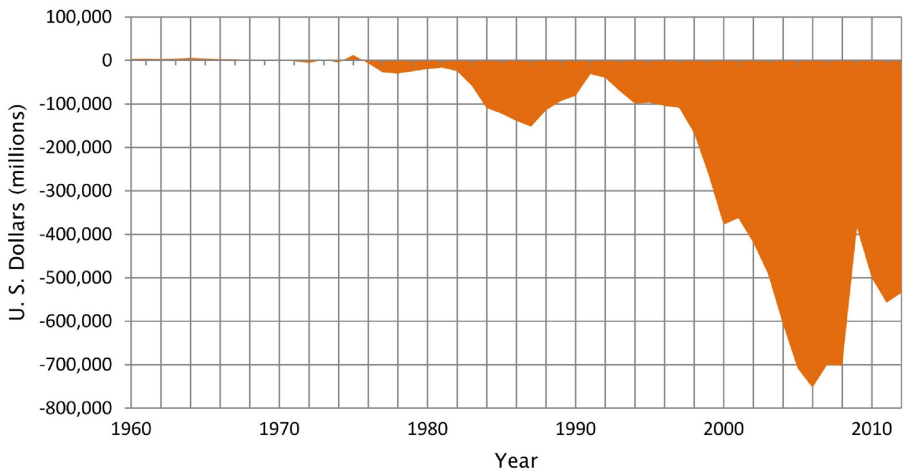

Figure 1. U. S. Balance of Trade for 1960-2012 (Source: U. S. Census Bureau)

Figure 1. U. S. Balance of Trade for 1960-2012 (Source: U. S. Census Bureau)

Equitable Alternatives to Gross Income Royalties

The domestic mining industry commonly pays royalties on production from its operations and would not oppose compensation being made to the federal government for locatable minerals mined from public lands as long as it can be done in a fair and equitable manner.

Under the provisions in H. R. 2467, a 12.5 percent royalty on gross income would be imposed on production of all locatable minerals from federal lands. It is unclear whether this royalty would be levied on production from public lands covered by an pre-existing operations permit, but it would apply to federal lands added through a modification to a pre-existing operations permit that is submitted after the date of enactment of this legislation.

The proposed 12.5 percent royalty on gross income significantly exceeds royalties that have been historically paid by the metals mining industry. Although similar gross income royalties are common for leasable minerals, such as oil, gas and coal, doing the same for locatable minerals, such as copper and gold, would significantly threaten the economic viability of many metals mining projects.

Initial and on-going capital expenditures of metals mining projects are considerably greater than those for other extractive industries. These costs alone can exceed $1 billion at a single mine site. Mining and reclamation costs are also greater than those for leasable minerals. Furthermore, every metals mining project typically requires is own infrastructure, which is specifically designed to treat the ores from that mine site. On- and off-site processing costs required to produce a marketable product from ores, containing a metal content of less than 1.0 percent, are considerably greater than treatment costs for leasable minerals, which only require limited amounts of processing before most of the mined material becomes a marketable product.

In summary, the value of marketable products is used as the basis to calculate gross income royalties. This method fails to accurately reflect the value of the raw minerals contained within the ores prior to treatment.

A more equitable approach to this issue would impose a net smelter return (NSR) royalty or net profits interest (NPI) royalty on locatable minerals produced from federal lands. In its simplest form, NSR royalties represent a small percentage of the proceeds received by a mine operator from the smelter or refinery. The costs of off-site services (transportation, smelting, refining and associated insurance) are deducted from the value of the metals contained within the concentrates and the proceeds "net" of these costs are returned to the mine operator. NSR royalties vary depending on the commodity, but generally average 2 to 3 percent of net smelter returns.

NPI royalties represent a percentage of an operation's revenues, after deducting all on- and off-site mining and beneficiation costs, including depreciation, depletion and amortization. NPI royalties also vary depending on commodity, but generally range from 5 to 15 percent of net profits. At this point it should be noted that the difference in these royalty rates is due to the lower base value from which NPI royalties are determined, which permits the deduction of all on- and off-site costs. Both methods use the value of raw minerals contained within the ores before treatment as a basis to calculate royalties (Silver and Courtney, 2009).

This proposed legislation is based on the flawed assumption that it will maximize the taxpayer's return on investment. In realty, this approach will actually produce less total revenues over the long-term for federal coffers than would be received had a royalty structure more in line with those historically used by the mining industry been chosen.

H. R. 2467 ignores the basic economic law of supply and demand, which determines the price of locatable minerals on the world market. Our domestic producers have no control over these commodity prices. The 12.5 percent gross income royalty will significantly impair the U. S. mining industry's ability to remain competitive on the world market. Maximizing short-term gains with the higher gross income royalty significantly increases the probability a mining project will become unprofitable and makes it particularly vulnerable during periods of low commodities prices. If you remove the mining industry's incentive to produce locatable minerals at our domestic mines, they

will close these facilities. Closed mines or mines that are never developed will generate no revenues for local, state and federal governments. Other indirect economic impacts include the loss of income tax revenues and increased social costs that would result from a significant loss of jobs at shuttered mines as well as at many other companies, which provide goods and services for these mining operations.

If the federal government is truly interested in maximizing the taxpayers' return on investment, it needs to find ways to encourage and promote the exploration and responsible development of our mineral resources. One way to accomplish this goal is the establishment of a royalty structure, which maximizes returns over the entire life of a mining project. This requires a lower rate, which will enable a mining operation to remain profitable during periods of low commodity prices. Both the NSR or NPI royalty structures optimize the use of our natural resources, allowing both business and government to maximize the benefits received from mining locatable minerals on our public lands.

Other Issues Involving Royalties

In imposing royalties on mining claims, the federal government needs to recognize obligations that have been made to underlying private royalty holders and the impacts this legislation may have on them. It should not negatively impact revenues derived from state mineral and severance taxes, which help compensate states for large tracts of federal lands within their borders that are not subject to taxation. Furthermore, total costs (including state and federal income taxes, sales taxes, other taxes and federal and private royalties) must not be so great as to make it impossible for a mine operator to recover its initial and sustaining capital expenditures as well as its up-front investments for exploration and project development.

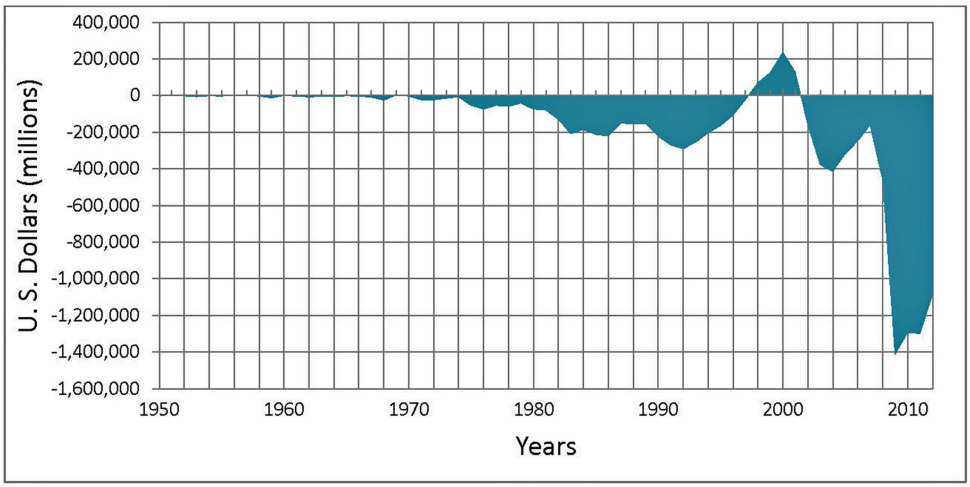

Figure 2. Federal Budget Deficits for 1950-2012 (Source: Office of Management and Budget)

Finally, this act requires that any royalties collected under provisions in H. R. 2467 will be deposited in the Treasury and used for federal budget deficit reduction or if there is no federal budget deficit, it will be used to reduce the federal debt (Figure 2). Considering the federal

government's propensity to spend more than it receives, this provision is self-serving and meaningless. For once, let's be honest with the American people. If the federal government receives these funds, it will most certainly find a way to spend them.

Needless Regulation, Bureaucratic Interference and Harassment

H. R. 2467 authorizes the Secretary of Interior and Secretary of Agriculture to establish a new duplicative set of standards and unnecessary public review processes, which are currently performed under the National Environmental Policy Act of 1969 (NEPA) and by other existing federal, state and local laws and regulations. Current permitting procedures at our nation's mines are adequately performed and administered by a number of local, state and federal agencies, who presently have the authority to resolve any issue that might arise.

With the permitting process currently averaging seven to ten years and costing tens of million dollars to complete, it has become much more difficult to attract the investment capital required to find and develop the natural resources necessary to fulfill the needs of present and future generations of Americans. We clearly do not need another time consuming and costly layer of bureaucratic red tape that would result in further delays in an already cumbersome permitting process. These delays have reduced our ability to supply the minerals we require to ensure our national security and to maintain and improve our infrastructure and standard of living. Today, less than half of the minerals used by the U. S. manufacturing sector are derived from domestic sources (Quinn, 2012). This dependence on foreign sources for raw materials has not only contributed to America's large trade deficits, but has also left our national security needs vulnerable to decisions made by foreign governments (Figure 1).

This legislation goes into minute detail on the how the royalties from the mining industry will be collected, safeguards to ensure what is owed to the federal government is paid to the federal government and even the liability of mine operators, who are found to have lost or wasted mineral products derived from a mining claim. This last point on waste is particularly relevant, considering many of the provisions contained within this act will result in the same thing the federal government is attempting to avoid.

This bill will significantly raise the costs of doing business at most mining operations, which will result in them raising the cut-off grades of the ores being mined. By forcing the mining operations to selectively mine the higher grade portions of an ore body than would have been mined otherwise, it will result in this low grade material's mineral content being left unmined or disposed of in waste rock dumps, where it is of no value to anyone. Furthermore, the low grade of this remaining material will make the economic recovery of its metal content at some future date much more unlikely, especially when you consider this bill's reclamation requirements, which will effectively sterilize the site for future production.

H. R. 2467 attempts to micro-manage every single aspect of mining activity, ranging from exploration through development, production and reclamation to the extent that every decision made during the course of doing business must be approved by the Department of Interior or Department of Agriculture. Not only do these agencies lack the resources to perform this function, they also do not have the experience or expertise to make such decisions. The intent of this proposed legislation is to impair and harass an industry, which has worked very hard to comply with local, state and federal laws.

In this regard, our leaders are making the same types of mistakes that culminated in the natural gas crisis of the mid-1970s, when the federal government's attempts to resolve one problem resulted in a much worse problem, namely the widespread natural gas shortages in the mid-west and northeast. With the gradual lifting of these regulations over the next two decades and the eventual complete deregulation of the production, transportation and sale of natural gas in 1992, natural gas shortages have become a thing of the past (Anonymous, 2013b). "Those who fail to learn the lessons of history are doomed to repeat it." Does our nation have to suffer again because our elected representatives in Washington have not learned from the mistakes of the past?

Under a provision in H. R. 2467, any person who has reason to believe they are or may be adversely affected by mineral activities due to any violation of the requirements of a permit approved under this law may request an inspection. The federal government has ten working days from the receipt of the request to determine whether a violation exists. If it involves an imminent threat to the environment or danger to health or safety of the public, the ten day period shall be waived and the inspection shall be conducted immediately.

It's important to note that state and federal regulatory agencies already have the authority to conduct unannounced site visits to review any environmental or mine safety aspects of an operation they choose to inspect. However, this and other provisions contained in H. R. 2467 significantly expand these powers, essentially granting the Secretary of Interior and Secretary of Agriculture the authority to inspect all mineral activities to ensure compliance with all provisions contained in this legislation.

One of the particularly troubling aspects is how this provision could be used to deal with issues related to locatable minerals and the validity of mining claims. While current mining law (30 USC ¶¶22 et seq.) does not require validity examinations before allowing exploration or mineral development, provisions contained in H. R. 2467 could be conceivably used to require such determinations (Wooldridge, 2005b).

Furthermore, provisions of this type have been repeatedly used against the mining industry by its critics, whose sole intent is to harass and impede legal activities conducted during all phases of mining activity, including exploration, development, production and reclamation. In order to discourage this type of behavior, proposed legislation should also contain a provision making those who can be shown to have abused this privilege responsible for all damages, including legal fees,

that may result from such fraudulent claims.

Finally, the language in H. R. 2467 fails to show proper respect for Americans, who work for the mining industry, unfairly treating them as second class citizens, who cannot be trusted to comply with U. S. laws and regulations. This approach only alienates good, hard-working citizens, who also have an important role to play in any true reform of federal mining laws.

Environment and Reclamation Issues

The Federal Land Policy and Management Act of 1976 contains the clause; "unnecessary or undue degradation of lands," which among other things sets the minimum environmental standards that must be met during the planning, development and operation of all mining projects on federal lands (Anonymous, 2001). In legal terms, this clause recognizes the fact that some environmental damage will always occur during the course of man's activities. However, H. R. 2467 unfairly singles out the hard rock mining industry compared to all other forms of industrial activity by imposing the higher, unrealistic standard of "undue degradation", which precludes unavoidable degradation that may result from mining activities. This change is not needed because case histories do not identify any instances where the "unnecessary or undue degradation" standard has caused any problems (Struhsacker and Todd, 2008). An additional layer of competing and incompatible environmental standards will only cause confusion for the mining industry and the regulatory agencies, who implement and enforce these regulations. These extreme measures will likely result in the premature closure of many existing mining operations and will make it virtually impossible to successfully permit the future mining projects, which will be required to meet our present and future demands for locatable minerals.

Among the potential impacts to which the "undue degradation" standard would apply, include but are not limited to, are surface and groundwater withdrawals, surface and groundwater quality, visual impacts and preservation of paleontological and cave resources.

H. R. 2467 requires that surface and groundwater withdrawals made as a result of mining activity cause no undue degradation or material alteration/damage to the hydrologic balance. This provision is unrealistic and would almost certainly negatively impact both existing and future underground and open pit mining projects, as all would require significant dewatering to conduct profitable operations. Mining, by its very nature, occurs within the aquifers and, therefore, cannot avoid material alteration of the hydrologic balance.

As a condition of compliance, an operations permit issued under the provisions set forth in H. R. 2467 requires a mining project's reclamation plan to demonstrate that ten years following mine closure, no treatment of surface or ground water will be required to meet water quality standards at

the point of discharge. This provision employs an arbitrary and unrealistic, one solution fits all approach to resolve a very complex issue, which really requires more flexible site specific solutions to effectively deal with water quality issues that may arise at existing and future mining projects. It would be virtually impossible for every existing mine or any new mining project to meet the standards set forth in this provision and it may be incompatible with existing environmental regulatory standards.

Another provision of this proposed legislation includes the reduction of the visual impact of mineral activities to the surrounding topography, including as necessary the backfilling of open pits. While some mining operations that have several small open pits can be mined in such a way as to use the mined out pits as sites for waste rock storage from other areas on the site, large open pit mining operations seldom have this option. It will also take decades to achieve at large open pits, thereby extending negative impacts related to dust, traffic, noise, and fuel consumption by large earth-moving and haulage equipment as well as significantly extending the time required to reclaim the areas from which this material had been moved. Depending on mineralogy of the rocks at the site, backfilling of open pits may result in greater damage to the water quality than no backfilling at all. Negative impacts on water quality resulting from partial backfilling are particularly severe. The requirement to backfill open pits at most sites will almost certainly make extraction of any low grade resources that may remain in the pit uneconomic at some future date. Finally, this provision ignores the benefits of innovative reclamation practices, which allow a mine site to be reclaimed over the productive life of a mining operation.

This bill refers to “preservation of paleontological and cave resources," but fails to define this phrase. Sedimentary strata contain billions if not trillions of fossils. Are activities at a mine site to be halted every time someone finds a single fossil? There are several types of mineral occurrences that actually form in natural caverns. Will future production of these mineral resources be banned as a result of this legislation? Similarly, if exploration activities at particular project fail to locate a cave prior to the commencement of mining, will this bill halt a billion dollar project to preserve a single cave, which is found after the commencement of mining operations? And how does one evaluate such a discovery? Physical inspection of any caverns encountered in the high wall of an open pit would never be permitted under Mining Safety and Health Administration (MSHA) safety regulations. Research or tourist activities related to the potential discovery of natural cave would likely not be possible during operations or following mine closure.

H. R. 2467 also requires that complete reclamation of a mining operation must commence after a project has been temporarily suspended for a period of more than five years. Reclamation plans and demonstration of financial assurance to cover reclamation costs are required components of all modern mine operation plans and permits. The requirement to conduct reclamation within five years will severely restrict an operation’s ability to wisely and efficiently mine a rare non-renewable resource. Arbitrary limitations like this fail to recognize the existence of global commodity price cycles that are driven by factors outside of a mining company's control or advances in technology that may permit the resumption of operations at some future date. Pre-mature reclamation of a site could actually make resumption of mining operations uneconomical under any circumstances. Even

if an operation resumed production after pre-mature reclamation, resources required to reclaim the site would be wasted because it would have to be reclaimed for a second time once production of the remaining resources had been completed.

Ajo Copper Mine, Pima County, Arizona (Photo taken by David Briggs, July 2004)

Although copper operations at Ajo, Arizona ceased production in August 1984, a mineral resource of more than one billion tons, averaging 0.32% copper still remains in this open pit. How would provisions in H. R. 2467 impact efforts to resume production at this and other former mine sites?

The bill also requires information on the location and nature of mineral activities located on adjacent non-federal lands, resulting in the application of the undue degradation standard to private properties and state lands. Under current law, the federal government has no jurisdiction over private or state lands, unless they require a federal permit. Significantly, expanding its authority over adjacent lands, is this provision the loop hole the federal government intends to exploit in its effort to acquire jurisdiction over all state and private lands?

Patenting and Sustainable Development

Under the General Mining Law of 1872, the claim holders have a right to acquire the title to any unpatented mining claim they may hold, so long as they can demonstrate those claims contain a valid mineral discovery. Since October 1, 1994, however, there has been a moratorium on the issuance of patents on unpatented mining and mill site claims. To date, this moratorium has been temporary, being annually renewed through various Department of Interior appropriations bills.

If enacted H. R. 2467 would make this moratorium permanent, leaving land exchanges as the only method a mining company can use to patent a mining claim. However, successful land exchanges can be very long and politically arduous processes, which commonly leaves mining companies with extremely limited or non-existent opportunities to acquire title to the land they require for efficient production of their ores (Struhsacker, 2002). Examples include ASARCO's unsuccessful attempt to complete a land exchange at Rosemont southeast of Tucson, Arizona during the late 1990s and Resolution Copper's on-going, eight-year attempt to acquire title to its new discovery near Superior, Arizona.

At the present time, U. S. law allows a claimant of unpatented mining claims certain rights to occupy the land during the course of exploring, developing and mining a valid mineral discovery. Once mining activities have been completed, the site must be reclaimed in accordance with federal land use objectives, which require it to be returned to as many pre-mining uses as possible or other beneficial uses that conform to applicable land use plans developed by the Department of Interior or Department of Agriculture. In most cases, approved uses are limited to open space, wildlife habitat, recreation and in some instances ranching and the harvesting of timber. During this process, all mine site infrastructure, including roads, utilities, buildings and all other facilities must be removed and the land returned to its natural state.

Although reclamation provisions contained within H. R. 2467 generally conform with current requirements under U. S. law, this approach is short-sighted and overlooks significant advantages that patenting would provide in achieving many of the stated goals set forth in this legislation. Current land management policies create numerous legal and regulatory barriers that thwart a wide variety of productive uses of mined lands following the completion of mining activities, which would actually promote sustainable development. The impacts of these policies are particularly severe in rural mining communities, where they perpetuate "boom and bust" cycles of their local economies.

One solution to these problems would be to replace the current process of patenting mining claims with one that includes an option to purchase the surface rights to land for its fair-market value. Compensation for the mineral rights can be accomplished through a royalty agreement as was discussed earlier. Privatization of mining claims would allow existing mine infrastructure to remain in place, providing additional incentives for property owners to invest in a wide range of post-mining activities, which could promote sustainable development through the creation of long-term employment opportunities and the generation of revenues for federal, state and local governments. It is a win-win for all parties involved, the land owner, the government and all Americans. Examples of such projects include conventional and/or renewable energy power generating plants, industrial parks or landfills. Secondly, it promotes the conservation of natural resources by encouraging the mining industry to plan its projects and manage their land holdings in a manner that would facilitate future commercial activities at the site. Finally, it would also minimize the taxpayer's liability by making the private land owners solely responsible for maintaining the land in compliance with all local, state and federal environmental regulations (Struhsacker, 2002).

In summary, two of the principal complaints made by critics of mining are its transient nature and its permanent alteration of a pristine landscape. Hard rock mining is unique in that the beneficial minerals of value only constitute a minor or trace component of the rock materials mined and that large volumes of rock are typically excavated to extract the desired contained metals, thereby creating substantial surface impacts. These surface and subsurface impacts cannot be completely eliminated, but can be mitigated to the best extent possible based on sound engineering, environmental and reclamation practices and an understanding of the entire mining life cycle. As long as modern society remains dependent on the products derived from mining, we have an obligation encourage the long-term productive use of the land once mining has been completed. Utilization of already disturbed sites for other productive uses promotes resource conservation, ultimately minimizing environmental damage, elsewhere (Skaer, 2002). Lifting the moratorium on patenting of mining claims is just one option that real mining reform could employ to accomplish this goal.

Reclamation of Abandoned Mine Lands

Under provisions in H. R. 2467, the Secretary of Interior is authorized to collect a displaced material reclamation fee of $0.07/ton of displaced material from all hard rock mining operations located on federal, state, Indian and private lands. These fees will be deposited in a separate account on the books of the Treasury of the United States, where it will be reserved for the reclamation and restoration of land and water resources that have been adversely impacted by historical production of hard rock minerals, mining and related activities.

There is no need for a separate displaced material reclamation fee. All of the royalties collected from hard rock mining operations should be used to reclaim historic abandoned mine lands. Furthermore, placement of these funds in Treasury accounts, where they can be "invested" in public debt securities is unacceptable. That is how the Social Security Trust Fund became insolvent with its funds originally intended to be used to provide for the needs of every American after retirement being diverted to pay for programs unrelated to its original intent.

It is important that these funds only be distributed to Bureau of Land Management, U. S. Forest Service, Army Corps of Engineers and state governmental agencies, who have a proven track record of successfully reclaiming historic abandoned mine sites (Skaer, 2009c). Under no circumstances should these funds be distributed to non-governmental organizations (NGOs), like the Center for Biological Diversity. They neither have the technical or scientific expertise nor a proven track record in accomplishing these tasks.

Conclusions

Mining reform is a very complex issue involving our economy, national security, royalties, the use of our public lands and the environment. Like previous attempts to reform U. S. mining laws,

priorities set forth in H. R. 2467 are so focused on dealing with environmental and social issues related to mining locatable minerals on public lands, it fails to respond to any of the significant and widespread negative impacts that would result from regressive provisions contained in this legislation should it be enacted into law.

The possibility of this legislation accomplishing its stated goals is nil, because the proposed gross income royalty of 12.5 percent and other provisions contained within this bill will make it too costly for domestic mining operations to remain competitive on the world market. With reduced domestic exploration efforts and fewer operating mines, the total revenues remitted to local, state and federal governments from these sources will be only a fraction of what they are now. Its heavy-handed approach attempts to address potential environmental problems at future mines by creating conditions that will effectively eliminate the development of new mining projects in this nation. It will not resolve the environmental issues at existing or former operations, because without a healthy domestic mining industry there will be no funds to pay for this reclamation. If enacted, H. R. 2467 will likely end up costing taxpayers billions in lost tax revenues and associated social costs resulting from the loss of jobs in the mining industry and other businesses that provide goods and services to our nation's mines. The costs resulting from a weakened national security are incalculable.

Throughout history, our nation has greatly benefitted from our vast mineral wealth, which has made America great. In successfully dealing with these complex issues, any mining reform legislation must use a more balanced and equitable approach. The mining industry fully supports this concept. Recognizing that economic mineral deposits are rare, and only occur at sites where favorable geological factors are present, any successful mining reform legislation must include:

- provisions that are designed to reduce our nation's dependence on foreign imports and strengthen our national security.

- provisions that provide the mining industry secure access to the land and minerals throughout all phases of mining activity.

- provisions that require any consideration to withdraw public lands from mineral entry to be accompanied by a detailed study on the positive and negative impacts such an action would have on local communities, the state and the nation. One of component of this study would be an assessment of the area's present and future mineral potential and how such a withdrawal of could impact our economic and national security needs for these minerals.

- provisions that preserve the Multiple Land Use Doctrine. All future withdrawals of public lands from mineral entry must be accomplished through the passage of legislation by both Houses of Congress and signed by the President. Use of the Antiquities Act to deny mineral entry should be expressly prohibited by any future mining reform legislation.

- provisions that encourage the private sector to find innovative solutions, which will help local, state and federal governments to meet other unrelated challenges. This includes practices that promote sustainable development, which allows mined lands to be returned to a wide variety of productive uses once mining activities are completed.

- provisions that encourage the conservation and efficient extraction of our natural resources. This includes development and use of new technology and modern mining, environmental, engineering and mine safety practices, which will minimize a mining operation's impact on the surrounding environment.

- provisions that recognize our existing federal, state and local environmental laws are capable of dealing with any issue that might arise during the course of conducting mining activities. Any new environmental standards that may be required must be realistic, attainable and compatible with existing laws.

- provisions that will enable the time required to permit a mining project to be shortened so long as protections provided under the National Environmental Protection Act of 1969 (NEPA) are not compromised.

- provisions that provide for a royalty to be collected from the production of locatable minerals on public lands, which is based on historical royalties that have been paid by the hard rock mining industry.

- provisions that continue to support existing federal and state abandoned mine lands reclamation programs and fund these programs with revenues collected by the federal royalties on production of locatable minerals and donations by persons, corporations, associations and foundations.

- provisions that recognize mining operations can have many lives as a result of changes in commodity prices, the costs of extracting and processing the ores and advances in technology.

- provisions that recognize the modern day realities of the challenges, risks, costs, and time lines in exploring for, developing, mining and processing locatable minerals on public lands as well as reclaiming the mine sites once mining has been completed.

While these suggestions are representative of the mining industry's position on this subject, any successful resolution of the complex issues raised by mining reform is going to require an out of the

box approach. Its success will require the full participation of all parties involved; business, environmental community, government and the public. If we can find ways to work together to constructively resolve our differences, I am confident we can find practical solutions for these difficult and challenging issues.

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