

# Subcommittee on Energy and Mineral Resources

Paul Gosar, Chairman  
Hearing Memorandum

July 17, 2017

**To:** All Subcommittee on Energy and Mineral Resources Members

**From:** Majority Committee Staff  
Subcommittee on Energy and Mineral Resources (5-9297)

**Hearing:** Oversight Hearing entitled “*Seeking Innovative Solutions for the Future of Hardrock Mining*”

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The subcommittee will hold a hearing on **Thursday, July 20, 2017 at 9:00 A.M. in room 1324 Longworth House Office Building**, focusing on the laws and procedures governing hardrock mining in the United States and highlight areas where reform is needed.

## **Policy Overview**

- All infrastructure projects rely upon mining operations.
- Many of the needed raw materials are available in the United States; however, access is stymied by an arduous and uncertain regulatory scheme.
- Mining of mineral resources creates tangible value, introducing new money into the nation’s economic system. Harvesting domestic mineral resources contributes to local economies, creates jobs, and benefits our nation’s overall economic security.
- An inappropriately structured federal royalty rate on hardrock mining would further disincentivize mining investments in the US and one instituted without permitting reform would be devastating to the hardrock mining industry.
- Good Samaritan legislation for abandoned hardrock mine site reclamation can be a positive force to resolve the legacy issue of abandoned mine lands.

## **Invited Witnesses (in alphabetical order)**

*Mr. James (Jim) Cress*  
Counsel  
Bryan Cave LLP  
Denver, Colorado

*Mr. Murray Hitzman*  
Associate Director for Energy and Minerals  
United States Geological Survey  
Reston, Virginia

*Mr. Mitchell Krebs*  
President and CEO  
Coeur Mining  
Chicago, Illinois

*Ms. Lauren Pagel*  
Policy Director  
Earthworks  
Washington, DC

*Mr. Bret Parke*  
Deputy Director  
Arizona Department of Environmental Quality  
Phoenix, Arizona

## **Background**

Hardrock mining of federal land in the United States has a storied past, a challenging present, and multiple needs for reform. This hearing will focus on pressing issues facing the hardrock industry and provide oversight for potential innovative solutions for the future of hardrock mining.

America's miners play an indispensable role in powering and building our nation. The aggregates industry's products form the literal foundation of many of our infrastructure projects, but infrastructure cannot be simply thought of as roads and bridges. Everything from railroads to seaports, power plants to wind farms, waste treatment facilities to communications grids and data storage centers – America's infrastructure projects begin with mining.

Mineral production is a key economic activity, supplying the raw materials for all infrastructure projects. Mining of mineral resources creates tangible value, introducing new money into the nation's economic system. Additional value is added to the raw mined product through manufacturing, construction, and other uses. Harvesting domestic mineral resources contributes to local economies, creates jobs, and benefits our nation's overall economic security. In 2016 alone, the value of nonfuel mineral production in the U.S. was \$74.6 billion.<sup>1</sup>

According to the National Research Council, one of the primary advantages the U.S. possesses over its strongest international industrial competitors is its domestic resource base.<sup>2</sup> The U.S. is among the world's largest producers of many key metals and minerals, particularly copper, gold, lead, molybdenum, silver, and zinc.<sup>3</sup> Furthermore substantial domestic reserves of

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<sup>1</sup> United States Geological Survey, "*Mineral Commodity Summaries 2017*", <https://minerals.usgs.gov/minerals/pubs/mcs/2017/mcs2017.pdf>

<sup>2</sup> The National Academies, National Research Council Report "*Competitiveness of the U.S. Minerals and Metals Industry*" 1990

<sup>3</sup> *Id.*

these resources still exist. Yet, U.S. mineral exploration stagnated or declined during most of the 1990s and 2000s while global mineral exploration trends were strongly positive.<sup>4</sup>

### Mining Begins with Exploration

In the early 1990s, the U.S. accounted for 20 percent of the worldwide exploration budget; today it hovers around 7 percent.<sup>5</sup> Without increased domestic exploration, significant declines in U.S. mineral production are unavoidable as present reserves are exhausted.

Factors contributing to the decline in domestic mineral exploration activities and other downward trends in the domestic mining industry are attributed to regulatory and administrative changes during that time period, including revisions to the Bureau of Land Management's 3809 Regulations and the Solicitor's Millsite Opinion.<sup>6</sup>

The lack of exploration expenditures and other factors has led to an increased import dependency for non-fuel mineral materials. For example, in 1986, the U.S. was dependent on foreign sources for 30 non-fuel mineral materials; of those, 6 were entirely imported to meet the nation's requirements, with another 16 imported to meet more than 60 percent of the country's needs.<sup>7</sup> However, by 2017, the U.S. import dependence for non-fuel mineral materials more than doubled from 30 to 64 commodities.<sup>8</sup> 20 commodities were imported entirely to meet the nation's requirements, and another 50 commodities required imports of more than 50 percent.<sup>9</sup>

President Trump's recently released budgetary blueprint requests more than \$900 million for the Department of the Interior's U.S. Geological Survey (USGS) to focus investments in essential science programs. This includes funding for the Landsat 9 ground system, as well as research and data collection that informs sustainable energy development and responsible resource management.<sup>10</sup> This proposal is a step in the right direction as it returns the USGS to its mission of geological exploration.

### Hardrock Mining Permitting

In the U.S., any mining activity is preceded by years of environmental studies, permitting, bonding, and stakeholder engagement, both at the state and federal level. One major problem facing domestic mining projects is the lengthy permitting timelines and delays.

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<sup>4</sup> National Research Council, "Competitiveness of the U.S. Minerals and Metals Industry", National Academy Press, Washington, D.C., 1990

<sup>5</sup> SNL Metals & Mining, World Exploration Trends 2015 Special Report for the PDAC International Convention

<sup>6</sup> U.S. Department of the Interior, Bureau of Land Management, "43 CFR Subpart 3809", [http://www.blm.gov/wo/st/en/prog/planning/nepa/webguide/cfr/43\\_cfr\\_3809.html](http://www.blm.gov/wo/st/en/prog/planning/nepa/webguide/cfr/43_cfr_3809.html)

<sup>7</sup> United States Geological Survey, "Mineral Commodity Summaries 2017", <https://minerals.usgs.gov/minerals/pubs/mcs/2017/mcs2017.pdf>

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> Office of Management and Budget, "America First: A Budget Blueprint to Make America Great Again", [https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018\\_blueprint.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/2018_blueprint.pdf)

Navigating the permitting process became increasingly costly and cumbersome over time, as federal and state agencies with various land management and regulatory responsibilities in mineral exploration and development projects worked at cross purposes to one another. Legal challenges to Records of Decision by anti-mining groups also contributed to delays and uncertainties in obtaining the necessary permits for exploration and development. As such, the U.S. now averages 7 to 10 years for final permitting approval.<sup>11</sup>

A major problem facing domestic mining projects is the lengthy permitting timelines and delays. Indeed, in the “*Ranking of Countries for Mining Investment*,” by the Behre Dolbear Group (mining industry advisors), permitting timelines were identified as the most serious risk to mining projects in the United States.<sup>12</sup>

In the 2012 and 2013 reports, the U.S. ranked last with Papua New Guinea (out of 25 major mining countries) in permitting delays. In 2014, the U.S. improved in its overall ranking. However, the 7 to 10 year permitting timelines still presented the greatest risk to mining projects in the United States.<sup>13</sup>

By comparison Canada has demonstrated an ability to provide specific timelines without compromising environmental protections. Canada reformed its permitting regime with Bill C-38 “*Jobs, Growth and Long-Term Prosperity Act*”, which received Royal Assent on June 29, 2012.<sup>14</sup> One of the major elements of this legislation was the “one project, one review, two year maximum” provision.<sup>15</sup>

#### National Environmental Policy Act

Enacted in 1970, the National Environmental Policy Act (NEPA) declared a national public policy regarding the environment and was intended to increase awareness regarding the effects of federal actions on the environment.<sup>16</sup> NEPA requires federal agencies to take a hard look at the environmental impacts of literally any action that has a federal nexus, including actions requiring a federal permit, license, or funding. The heart of the NEPA process is the “Environmental Impact Statement” (EIS), a lengthy and intensive process by which the agency conducts a thorough analysis of all the environmental impacts for every federal action that significantly impacts the quality of the human environment.<sup>17</sup> The NEPA process can be very expensive and time consuming for private entities seeking permits. According to a recent Government Accountability Office (GAO) Report, federal agencies are conducting several thousands of NEPA reviews annually on impacting a huge number of activities, though the real

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<sup>11</sup> 2014 Ranking of Countries for Mining Investment. <http://www.dolbear.com/wp-content/uploads/2016/04/2014-Where-to-Invest.pdf>. 2014

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> Canadian Law C38. “Jobs, Growth and Long-Term Prosperity Act.” (2012).

<sup>15</sup> Canadian Office of Finance. *Economic Action Plan 2012*. <http://www.budget.gc.ca/2012/plan/pdf/Plan2012-eng.pdf>. March 2012

<sup>16</sup> 40 C.F.R. § 1502.

<sup>17</sup> *Id.*

cost and time associated with these NEPA reviews is regularly not measured or tracked.<sup>18</sup> According to a GAO report, the average time to complete an EIS under NEPA was over 4.5 years.<sup>19</sup> In addition, NEPA has become a magnet for litigation, with many NEPA-related lawsuits against the federal government filed or open each year.

### Rulemaking on CERCLA § 108(b) Bonding

The Committee on Natural Resources has jurisdiction over laws that impact the hard rock mining industry. Under section 108(b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) the Environmental Protection Agency (EPA) is considering creating a regulatory regime for the hard rock mining industry regarding aspects of risk management and financial assurance. Financial assurance is a critical component of any operation to ensure that cleanup, closure, and post-closure activities are carried out once production ceases. The EPA's current regulatory considerations under section 108(b) are the result of a lawsuit brought by non-governmental organizations.

Mining is a critical component of our national economy and mining operations can have a significant impact on the environment. That is why, since the enactment of CERCLA, Congress and the states have crafted rigorous laws to ensure that mining operations protect the environment and the interests of taxpayers. Federal and state regulations have evolved to respond to past deficiencies and ensure that the highest level of environmental protection is achieved; including significant and sufficient bonding requirements.

If finalized, this rule would disregard the comprehensive regulations by states and other federal agencies. The Bureau of Land Management, the U.S. Forest Service, and the majority of western states continue to raise concerns regarding duplication and preemption. The redundant imposition of many billions of dollars of financial assurance requirements on the mining industry will only serve to disincentivize critical investments in US. The comment period for the proposed rule closed on July 11, 2017.

### Royalties

In mineral economics, gross proceeds refers to the amount the mineral actually sold for or what the mineral would have sold for in an arms-length transaction; whereas, net proceeds are the gross proceeds minus allowable deductions for tax purposes.

Comparisons have been made to more homogenous commodities that have well understood reserves or reservoirs like coal, oil, and natural gas. However different hardrock mineral commodities have different market values, depending on their scarcity, location in the ground, concentration of the ore body, processing requirements, method of mining, and original capital investments. These economic and technical variables lead to different return on

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<sup>18</sup> <http://naturalresources.house.gov/news/documentsingle.aspx?DocumentID=319306>

<sup>19</sup> See p. 14, GAO Report: "National Environmental Policy Act: Little Information Exists on NEPA Analyses" <http://www.gao.gov/assets/670/662546.pdf>

investments from operation to operation. A one size fits all gross royalty does not take into account the technical differences of every mine.

The cutoff grade refers to the lowest concentration of a mineral in a given amount of rock that can be economically mined, processed, and sold. A royalty adds to the cost of mining activities and therefore raises the cutoff grade. If this royalty is inappropriately high an entire mine could be made economically infeasible.

In fact, there is a test case of how an inappropriately high royalty rate can impact production in the US. The royalty rate on Soda Ash (Sodium Carbonate) mined on federal land was 4% until the end of fiscal year 2015. The royalty rate increased to 6% in Fiscal Year (FY) 2016. In FY 2016 the total tonnage mined on federal lands was approximately 4.7 million tons as compared to 6.7 million tons in the previous fiscal year. Soda Ash is a low profit margin commodity and therefore the smallest of changes in additional financial burdens can render operations uneconomic. The raising of the royalty rate resulted in fewer tons mined on federal lands and in turn fewer royalties being collected on soda ash mined on federal lands.

### Hardrock Abandoned Mine Lands

Today there are as many as 500,000 abandoned mines across the US.<sup>20</sup> Some of which pose health and safety hazards and others that pose environmental risks as exemplified by the Gold King mine spill. This value is only an estimate and there is no comprehensive inventory of abandoned hardrock mines.

It is important to note that the vast majority of abandoned mine lands (AML) features in the West are small prospect pits that do not present a health or safety issue or environmental problems. These are generally shallow pits that remain from a time before regulations governed modern activities.

Many of the hardrock mines or workings were operated in the 1800s and early 1900s prior to the enactment of the nation's environmental and land management laws in the late 1960s and 1970s that provide the regulatory framework that govern modern mining and reclamation practices in the United States. As such, hardrock AML sites are those that were abandoned before January 1, 1981, the date that BLM's 3809 mining regulations required by the Federal Land Policy and Management Act of 1976 (FLPMA), were finalized.

Many of the Western States have partnered with industry to address problem sites and have remediated, reclaimed or secured numerous sites. In several instances the cleanup was paid for by the hardrock mining industry. In addition, several federal agencies have programs for remediation of AML sites located on Federal land.<sup>21</sup>

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<sup>20</sup> Official government website managed by the Bureau of Land Management. <https://abandonedmines.gov/>.

<sup>21</sup> Official government website managed by the Bureau of Land Management. <https://abandonedmines.gov/>.

While progress has been made in addressing some of the problem sites, there are legal barriers to creating a more aggressive and substantial program that relies on the expertise and resources of the mining industry and other parties acting as “Good Samaritans” in helping to clean up hardrock AML sites.

The principle legal challenges include CERCLA and Clean Water Act (CWA) liability. Under current law, a mining company, non-profit organization, government or individual acting as a “Good Samaritan” runs the risk of being held liable for historic discharges and other existing safety and environmental problems.

States like Pennsylvania have recognized the mutual benefits of such partnerships and have implemented their own programs for involving third parties in mine reclamation. In 1999, Pennsylvania enacted the “Environmental Good Samaritan Act,” enabling outside organizations to reclaim and treat polluted water at AML sites.<sup>22</sup> This program has led to partnerships with 53 conservation groups that have resulted in the reclamation of almost 80 sites in over 20 counties throughout the state.<sup>23</sup>

### United States Bureau of Mines

The U.S. no longer has a federal entity promoting mineral development. The U.S. Bureau of Mines (USBM) was an entity of the federal government in the Department of the Interior that operated from May 6, 1910 until the bureau’s closure on March 30, 1996. The purpose of the bureau was to promote the health, safety and economic viability of the mining industry. The USBM is still authorized but currently unfunded. Many from the mining community have pointed to the disbandment of the USBM as the beginning of the decline of mining in the U.S.

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<sup>22</sup> Commonwealth of Pennsylvania. Department of Environmental Protection. Environmental Good Samaritan Act Fact Sheet. [ftp://newftp.epa.gov/GKM\\_DOCUMENTS/SITE\\_FILE\\_MATERIALS/9.28.16/R08-1136194.PDF](ftp://newftp.epa.gov/GKM_DOCUMENTS/SITE_FILE_MATERIALS/9.28.16/R08-1136194.PDF) Accessed May 17, 2017.

<sup>23</sup> Statement of John Stefanko, Deputy Secretary, Active and Abandoned Mine Operations, Pennsylvania Department of Environmental Protection, on behalf of the Commonwealth of Pennsylvania, The Interstate Mining Compact Commission, and the National Association of Abandoned Mine Land Programs re. Legislative Hearing on the Discussion Draft of The Community Reclamation Partnerships Act before the Energy and Mineral Resources Subcommittee of the House Natural Resources Committee – May 24, 2017