Subcommittee on Energy and Mineral Resources Paul Gosar, Chairman Hearing Memorandum

March 17, 2017

То:	All Subcommittee on Energy and Mineral Resources Members
From:	Majority Committee Staff Subcommittee on Energy and Mineral Resources (5-9297)
Hearing:	Oversight Hearing entitled "The Importance of Domestically Sourced Raw Materials for Infrastructure Projects"

The subcommittee hearing will take place on **Tuesday**, **March 21st at 10:00 A.M. in Room 1324 Longworth House Office Building.** This hearing will focus on the role and importance of mining for the provision of raw materials utilized in any infrastructure project.

Policy Overview

- All infrastructure projects rely upon a mining operation.
- The United States contains many of the needed raw materials however access is stymied by an arduous and uncertain regulatory scheme.
- Expedited permitting regimes for infrastructure projects will have little to no effect if the mines that supply materials to those projects do not share the same accelerated process.
- Sourcing raw materials domestically keeps costs down, creates both direct and indirect jobs, reduces the holistic impact of mining by minimizing transportation costs, and keeps the dollars invested in American infrastructure in the United States.

Invited Witnesses (in alphabetical order)

Mr. Michael Brennan President and COO Bramco, Inc. (On behalf of Associated Equipment Distributors) Louisville, Kentucky

Ms. Cathleen Kelly Senior Fellow, Energy and Environment Center for American Progress Washington, D.C. Mr. C. Howard Nye Chairman of the Board, President, and Chief Executive Officer Martin Marietta (On behalf of National Sand Stone and Gravel Association) Raleigh, North Carolina

Dr. Nigel Steward Managing Director, Copper & Diamonds Operations Rio Tinto Salt Lake City, Utah

Background

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**.¹

Roads, railways, buildings, stadiums, bridges, airports, and other structures are supported primarily by steel and concrete. There are over 4 million miles of roads in the U.S.,² and the U.S. National Highway System contains 6 billion tons of steel.³ The primary ingredients of steel production are metallurgical coal and iron ore. 98 percent of the iron ore mined in the world is used to make steel, the foundation of the world's tallest buildings.⁴ For instance, there are roughly 57,000 tons of steel contained in New York City's Empire State Building. The exterior

⁴ World Steel Association,

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

² United States Geological Survey, "Materials in Use in U.S. Interstate Highways, <u>https://pubs.usgs.gov/fs/2006/3127/2006-3127.pdf</u>

³United States Geological Survey, "Materials in Use in U.S. Interstate Highways, <u>https://pubs.usgs.gov/fs/2006/3127/2006-3127.pdf</u>

https://www.worldsteel.org/publications/factsheets/content/00/text_files/file0/document/fact_raw%20materials_201 4.pdf

of the Empire State Building is composed of 200,000 cubic feet of Indiana limestone and granite, 10 million bricks and 730 tons of aluminum and stainless steel.⁵

Copper, too, is an ideal industrial metal due to its flexibility, thermal and electric conductivity, and resistance to corrosion. In fact, 43 percent of the U.S. copper demand comes from the construction industry.⁶

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. The current 7 to 10 year permitting average timeline was identified as the most serious risk to mining projects in the United States.⁷

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. The U.S. is among the world's largest producers of many key metals and minerals, particularly copper, gold, lead, molybdenum, silver, and zinc. Furthermore substantial domestic reserves of 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.⁸

Current State of and Regulatory Challenges Faced by the Mining Industry

In the early 1990s, the U.S. accounted for 20 percent of the worldwide exploration budget; today it hovers around 7 percent.⁹ Without increased domestic exploration, significant declines in U.S. mineral production are unavoidable as present reserves are exhausted.

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. However, by 2016, the U.S. import dependence for non-fuel mineral materials more than

⁶ United States Geological Survey, "Mineral Commodity Summaries 2016", http://minerals.usgs.gov/minerals/pubs/commodity/copper/mcs-2016-coppe.pdf

⁵ Empire State Realty Trust and Buildings.com,

<u>http://www.esbnyc.com/sites/default/files/esb_fact_sheet_4_9_14_4.pdf; http://www.buildings.com/article-details/articleid/3180/title/the-empire-state-building-an-innovative-skyscraper.aspx</u>

⁷ Behre Dolbear, "2014 Ranking of Countries for Mining Investment", <u>http://www.dolbear.com/wp-content/uploads/2016/04/2014-Where-to-Invest.pdf</u>

⁸ National Research Council, "Competitiveness of the U.S. Minerals and Metals Industry", National Academy Press, Washington, D.C., 1990

⁹ SNL Metals & Mining, World Exploration Trends 2015 Special Report for the PDAC International Convention

doubled from 30 to 64 commodities. 20 commodities were imported entirely to meet the nation's requirements, and another 50 commodities required imports of more than 50 percent.¹⁰

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.¹¹ This proposal is a step in the right direction as it returns the USGS to its mission of geological exploration.

Factors contributing to the decline in domestic mineral exploration activities and other downward trends in the domestic mining industry in the late 1990s are directly related 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.¹²

Navigating the permitting process became increasingly 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.

Finally, because the problems associated with long permitting timeframes for infrastructure and renewable energy projects are extensive, many of these projects have been granted enhanced coordination and timely processing of permits by federal regulators, such that the project proponents are able to begin construction in a timely manner. This hearing will investigate the appropriateness of providing mining projects with this expedited process.

Sourcing raw materials domestically keeps costs down, creates both direct and indirect jobs, reduces the holistic impact of mining by minimizing transportation costs, and keeps the dollars invested in American infrastructure in the United States.

¹⁰ United States Geological Survey, "Mineral Commodity Summaries 2017", https://minerals.usgs.gov/minerals/pubs/mcs/2017/mcs2017.pdf

¹¹ 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

¹² 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