

Strategic and Critical Minerals Policy

Witnesses

Daniel McGroarty

President, American Resources Policy Network

Ed Richardson

President, Magnetic Materials Association

Robert Latiff

President and Consultant, R. Latiff Associates

Robert Jaffe

Morningstar Professor of Physics, Massachusetts Institute of Technology

Roderick Eggert

Director and Professor, Division of Economics and Business, Colorado School of Mines

Hal Quinn

President and CEO, National Mining Association

Subcommittee Members Present

Doug Lamborn, Chairman (R-CO)

Rush Holt, Ranking Member (D-NJ)

Mike Coffman (R-CO)

Glenn Thompson (R-PA)

Jeff Duncan (R-SC)

Bill Flores (R-TX)

Bill Johnson (R-OH)

Dan Benishek (R-MI)

Paul Gosar (R-AZ)

Full Committee Members Present

Ed Markey, Ranking Member (D-MA)

Due to increased interest in the domestic supply and demand of a group of metals known as rare earth elements, the Subcommittee on Energy and Mineral Resources held a hearing on May 24, 2011 to discuss ways of reinvigorating the United States rare earth mining industry.

Chairman Doug Lamborn (R-CO) in his opening remarks suggested that the United States needs to begin looking for opportunities to “decrease foreign dependence mineral materials.” After displaying the unique physical properties of neodymium with a pair of magnets on the dais, Lamborn listed the diverse set of industries that rely on rare earth materials for manufacturing. While noting that rare earths are not the only minerals or group of minerals that are supplied entirely by foreign sources, Lamborn said “we will continue to ship American jobs overseas and forfeit our economic competitiveness unless we take steps to develop our own mineral resources.”

Ranking Member Rush Holt (D-NJ) expressed concern for the poor status of domestic rare earth production and that failure to act could lead to “serious repercussions for the military” among other things. Holt reminded the subcommittee of China’s de facto trade embargo of rare earth elements against Japan last fall. Because 97% of our rare earth imports are from the Chinese, Holt warned “China has the ability to shutdown production” in the United States. Allowing the Chinese to position themselves to dominate the entire clean energy technology supply chain is “not a sound approach” for America, Holt said. He mentioned the roles the United States Geological Survey (USGS) and the Department of Energy could play in resolving this crisis by refining geological availability data and developing alternatives. Understanding, however, that alternatives cannot completely replace rare earths, Holt envisioned future domestic mining activities though he argued that they be done using the best environmental practices. Rare earth deposits are typically associated with radioactivity and therefore should be mined prudently, Holt concluded.

Representative Ed Markey (D-MA), Ranking Member of the Full Committee, pointed out that U.S. manufacturing is on the rise and that rare earth production could be a building block of a 21st century high tech industry. As a cosponsor of Representative Hank Johnson’s (D-GA) rare earth legislation, Markey described the RARE Act (H.R. 1314) and the “central” role the USGS could play.

Hal Quinn, President of the National Mining Association, spoke to the subcommittee about the state of the American mining industry and gave numbers to show the value added to the economy. He indicated that the United States’ mineral endowment is immense and enviable but that limited access to federal lands, high tax rates, and delays in permitting has driven American mining companies overseas. Roderick Eggert of the Colorado School of Mines stressed that the problems are broader than just rare earth elements and described other critical minerals including rhenium. As chair of the American Physical Society/Materials Research Society Energy Critical Minerals report from February 2011, Robert Jaffe read the recommendations in the report and told a success story about General Electric scientists developing an alternative to rhenium once the company had anticipated a supply chain disruption. Robert Latiff, who chaired the 2008 National Academy of Sciences report on the poor status of defense stockpiling, *Managing Materials for a 21st Century Military*, brought up the declining materials science workforce in addition to supporting better defense stockpiling. Ed Richardson spoke strongly against unnecessary permitting activities and debunked several myths about rare earth elements. Daniel McGroarty supported permitting reform and told the subcommittee that “projects developed here will lessen if not eliminate the ‘surety of supply’ issue and fear of materials disruption.”

Acting as chairman, Mike Coffman (R-CO) described his efforts in passing rare earth legislation through the RESTART Act (H.R. 1388) and through an amendment to the defense authorization bill (H.R. 1540). His bill would establish a rare earth task force, loan guarantees for commercial applications, a stockpile of some materials and a research program at the USGS. His amendment would require the Administrator of the Defense Logistics Agency Strategic Materials to submit a plan to establish an inventory of rare earth materials to the Secretary of Defense. Eggert, Latiff, and Richardson agreed that a stockpile for the Department of Defense would be a good idea and gave him advice on ways of organizing and defining the defense stockpile. Like Holt, Coffman discussed his concern with China’s recent actions regarding rare earth exports and asked McGroarty his opinion of China as a reliable trade partner. McGroarty, who has traveled to China and met with Chinese industry officials and bureaucrats, suggested that perhaps some Chinese officials did not approve of the actions last fall taken against Japan because it revealed too much about China’s strategic positioning.

Holt asked Eggert to propose what conceivable advances federal research could provide in identifying undetected rare earth ore bodies. Instead of putting money in locating reserves, Eggert argued, it would be more prudent to balance research money on new refinement processes or on developing alternatives. Holt kept pushing Eggert to describe the role government can play moving forward to reinvigorate the industry. Eggert said of federal support there was “significant room for progress in the geological sciences” and that while he supports USGS’s research, the federal government does “very little” in workforce development and education in geology and geological engineering. Representative Bill Flores (R-TX) asked about investments in higher education to which Eggert said he “feels very strongly that we need to reinvigorate and reinvest” in our students studying geology, geological engineering, and materials science.

Congressman Glenn Thompson (R-PA) and Eggert talked about the “specter of unavailability,” or fear of losing access to an otherwise steady supply, that affects prices in the manufacturing industry. A solid, steady domestic supply of any material is better for business, the two men agreed. Thompson asked Jaffe to elaborate on consumer incentives to encourage recycling of rare earth rich electronic waste that Jaffe mentioned in his testimony. Jaffe spoke about companies in Europe that are leasing products to collect the used product and its critical materials after a few years. The panel agreed with Thompson’s final point that government agencies should be required to issue annual reports detailing their reliance on foreign critical minerals and materials.

Congressmen Jeff Duncan (R-SC), Bill Johnson (R-OH), Paul Gosar (R-AZ) and Flores were mainly interested in permitting and the delays these regulations create. Quinn responded that it is not unusual to see a ten year period between submission and approval or disapproval. According to Quinn, there are more permits withdrawn than submitted and that the laws that place federal lands “off-limits” or under various restrictions should be reexamined. He suggested eliminating any federal/state duplications as a way to speed up the permitting process and holding the permittees accountable for their work. Gosar, who recently introduced legislation to

facilitate the development of a large copper mine in his district (H.R. 1904), asked about the negative impacts of the National Environmental Policy Act (NEPA). Quinn said it was “basically” taxpayer money spent “to stop economic development.” Congressman Dan Benishek (R-MI), who represents a mineral-rich district, asked the panel about the high tax rates that mining companies are required to pay. Everyone agreed they were too high (Markey and Holt had left at this point and did not offer their opinions on tax rates).

Written testimony, opening remarks and an archived webcast is available from the subcommittee web page.
