

**TESTIMONY
OF
Jerry Pyatt**

Before the
House Natural Resources Committee
Subcommittee on Energy and Mineral Resources
Wednesday, July 23rd, 2014

Oversight Hearing on American Metals and Mineral Security: An examination of the domestic critical minerals supply and demand chain

Chairman Lamborn, Ranking Member Holt and Members of the Subcommittee, thank you for inviting me to testify on this important topic. My name is Jerry Pyatt and I am the President and Chief Executive Officer of The Doe Run Resources Corporation (dba The Doe Run Company). Doe Run is one of the largest lead producers in the world. We are based in Missouri where our lead mining district is the second-largest in the world.

Until recently, our company represented the complete lead-life cycle, from exploration, mining and milling to producing primary lead metal and alloys for many applications, and finally to recycling lead from batteries and other materials in order to reuse the lead for new batteries and other applications. We currently employ approximately 1400 people and provide an economic impact of more than \$1 billion within our state.

Southern Missouri is blessed with one of the largest high-grade galena deposits in the world, and our mines produce some of the purest lead in the world. Early settlers were drawn to Missouri for its rich mineral deposits.

For the past 150 years, Doe Run has employed Americans in its mines and lead processing facilities. Processed lead produced from Doe Run's mines can be found in various types of batteries for automobiles, wind and solar energy storage, telecommunications, data centers, missile systems and many other applications. In addition, lead is used for radiation protection at airports, hospitals, dental offices and in military applications such as nuclear submarines. Lead is also used for bridge stabilization and ammunition.

Some applications require the highest purity lead. Until last year, this highest quality lead metal (99.99 percent pure) was produced in the United States only by Doe Run. At the end of 2013, pursuant to an agreement reached with the Environmental Protection Agency, we closed the last primary lead smelter in America to comply with new emissions standards. It is important to note, however, that the emissions rate from the now shuttered smelter would have been within the allowable levels *in any other lead-producing country in the world*. At the time of our decision, we were unaware of any existing technology in the world that could meet the current air lead-standard. Prior to the closure, we produced 100 percent of the primary lead metal produced in the U.S. and approximately 20 percent of the nation's total lead demand.

Today we are shipping the majority of our lead concentrate to Europe and Asia. China currently smelts the majority of the world's primary lead. Exports of lead from China are nearly *exclusively finished products*, such as batteries. China's lead metal demand continues to grow, year after year, and will be primarily used to supply the infrastructure of its own society.

Global demand for lead is expected to grow five to six percent annually over the next decade. Without access to primary lead metal in the U.S., America's battery manufacturers are limited in their growth opportunities. In addition, the new emissions regulations that impacted the primary lead metal business are also impacting secondary – or lead recycling – smelters which compete on very small margins not only with other U.S. secondary facilities, but also with smelters in Mexico and Canada. Mexican and Canadian smelters operate under very different (less stringent) air-lead standards than those in the U.S.

Lead recycling facilities are dependent on feed materials from battery manufacturers, and visa-versa. By shutting down the last primary lead metal production facility in the U.S. we have placed the country on a course where lead dependent manufacturing will be motivated to relocate to China or India, and the U.S. will be dependent on imports for finished products containing lead metal.

Missouri has a high-quality lead resource and the unique ability to maintain a closed loop domestic supply chain. It does not make sense to become dependent on other nations for critical products when you consider the jobs and economic benefits the lead industry generates in the US.

Even as stricter environmental regulations have made it impossible to produce primary lead metal in the United States with traditional smelting, Doe Run has invested tens of millions of dollars and more than 350,000 man hours into a technology that will revolutionize the global lead industry as we know it.

Announced in 2010, this New Technology uses wet chemical and electrowinning processes, rather than the traditional high-temperature smelting process, to produce high-quality primary lead. Our New Technology virtually eliminates lead and sulphur dioxide emissions. Similar processes have already been commercialized for other metals processing, including zinc and aluminium.

Our New Technology can return primary lead metal production to the U.S. and provide a technology for future lead processors around the globe.

Doe Run wants to lead the world in environmentally-benign lead production practices in the 21st century, and our game-changing New Technology is the path forward.

The first country to achieve near-zero emissions lead production will enjoy a tremendous global advantage. If the company can retain its first-to-market advantage, Doe Run can make the U.S. a net exporter of proprietary processing technologies, supporting both domestic jobs in Missouri and a cleaner, and less energy-intensive global industry.

Although we have a world-class lead ore body in Missouri, we are not immune to impacts of regulation. Mining is increasingly costly as we have to search farther and deeper for mineral resources, while adhering to standards that in some cases require us to return water to streams at levels that are *cleaner* than drinking water standards. In the last three years, our mid-sized company has spent \$180 million on environmental expenditures (capital, operating and remediation).

We all want clean air, water and soil, however, today's regulatory regime has put the country on an unsustainable path, dependent on foreign nations for jobs, goods and resources. Furthermore, oftentimes these policies are advanced without the benefit of the best science.

The lead industry grew up in the U.S. because the natural resources are here. We view our organization not simply as a mining and metals organization, but as a technology company. Our employees are committed to the safe, sustainable extraction of minerals and production of metals. With our leap-frog, state-of-the-art lead production technology, we have the ability to transform the lead industry and ensure that one of our nation's critical minerals can continue to be produced domestically.

Americans need access to its minerals and metals to sustain our way of life. All we are asking for is a *responsible and reasonable* approach to regulation that respects the principles of sustainability. Without the ability to bring our New Technology to market, we are not only jeopardizing this country's access to a critical metal, but also promoting lead metal production by smelters in foreign lands which have far less environmental control.

Mr. Chairman, thank you again for the opportunity to speak to your Subcommittee today. I appreciate all of your hard work trying to find solutions to very difficult problems that will make our nation stronger for years to come. I welcome any questions that you may have.